DESIGN USER GUIDE

PLANNING, SCHEDULING & RISK

INEIGHT

Release 25.1
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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

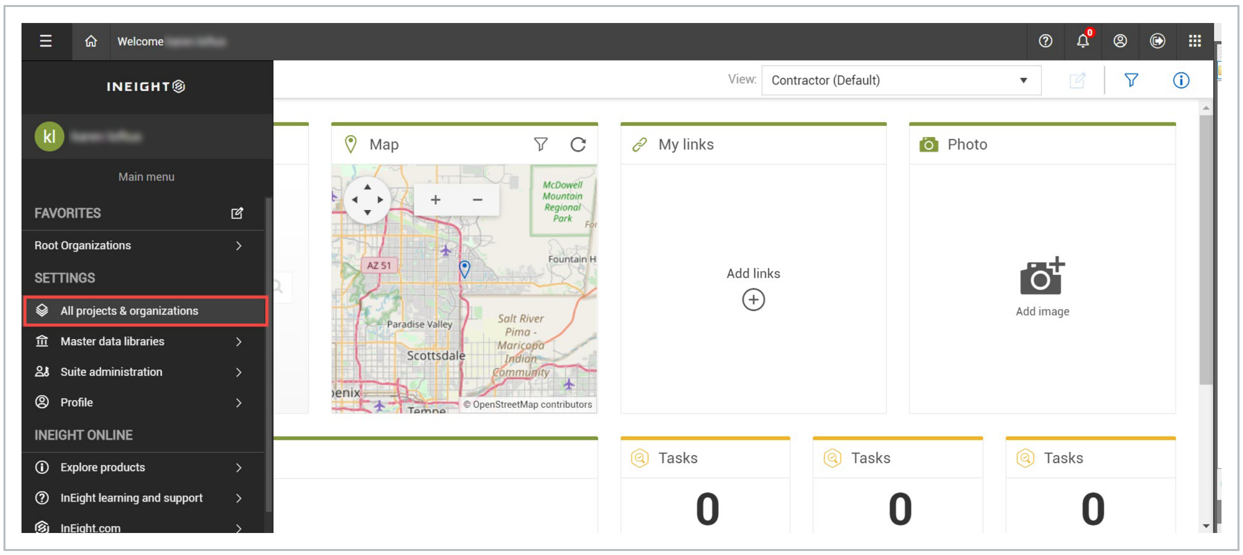
1.1.1 SUMMARY

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

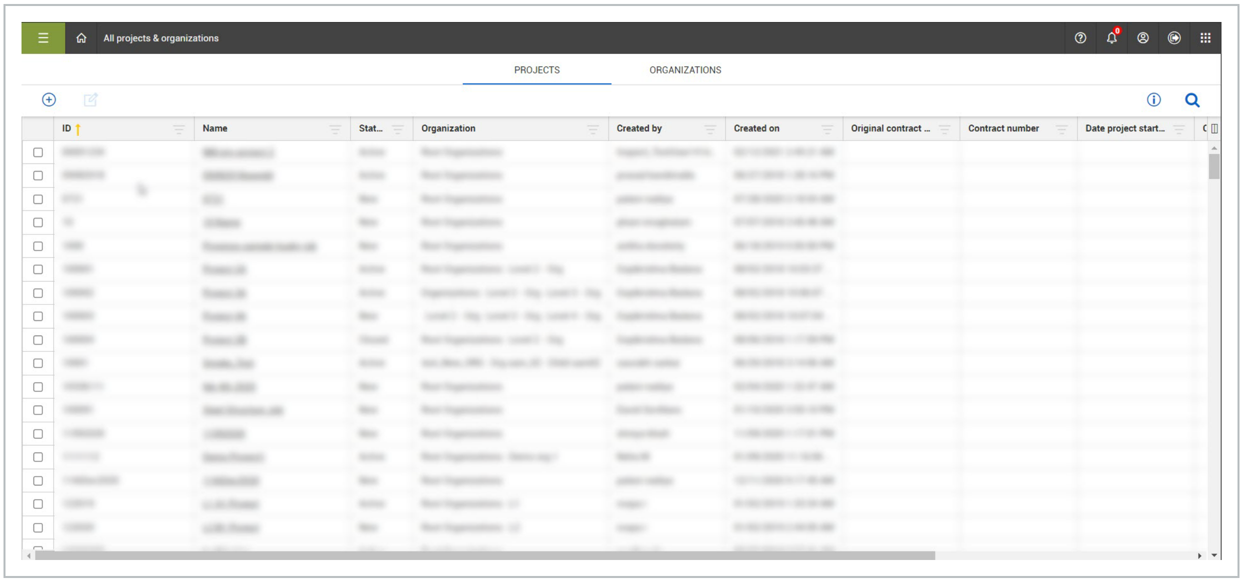
1.1.2 STEPS

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**.

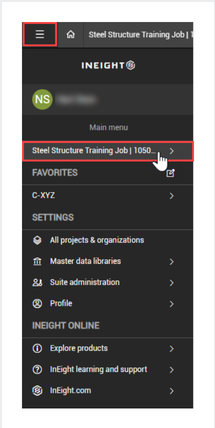


3. From the Projects tab of the All projects & organizations page, select a project by clicking the project name hyperlink. The Project home landing page opens.

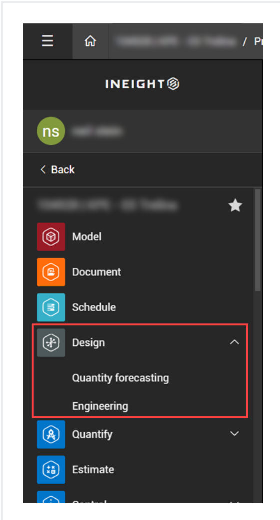


TIP If your project is not shown on the initial screen, you can search by clicking the **Search** icon in the upper right. This search function searches all terms in all columns.

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



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


INEIGHT
ns
Back
Model
Document
Schedule
Design
Quantity forecasting
Engineering
Quantify
Estimate

CHAPTER 2 – ADMINISTRATION

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

CHAPTER 2 – ADMINISTRATION OVERVIEW

You can manage settings for organizations and projects in the Engineering and Quantity Forecasting modules in Design.

- **Organizational settings** - Settings configured are inherited by projects within the organization. You can configure organizational settings in Main menu > <organization> > Settings > **Design**.
- **Project settings** - Settings configured at the project level are applied throughout the project. You can configure Engineering settings for your project in Settings > **Design**.

2.1 ORGANIZATIONAL SETTINGS FOR ENGINEERING

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.

2.1.1 CONSIDERATIONS

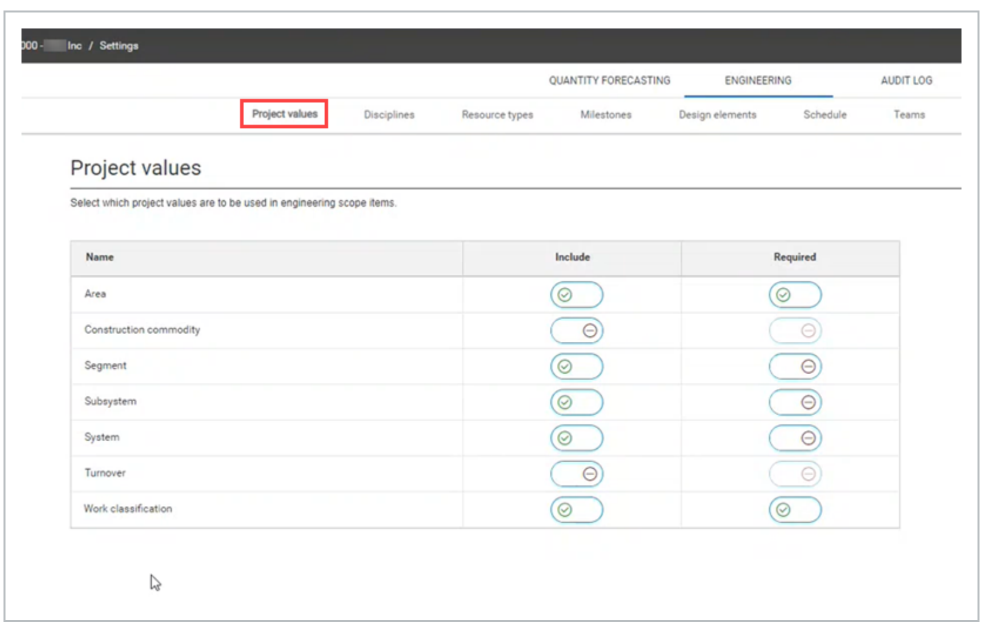
You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Quantity Forecasting.

2.2 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 managed in InEight cloud platform. For more infomation, see Project values.

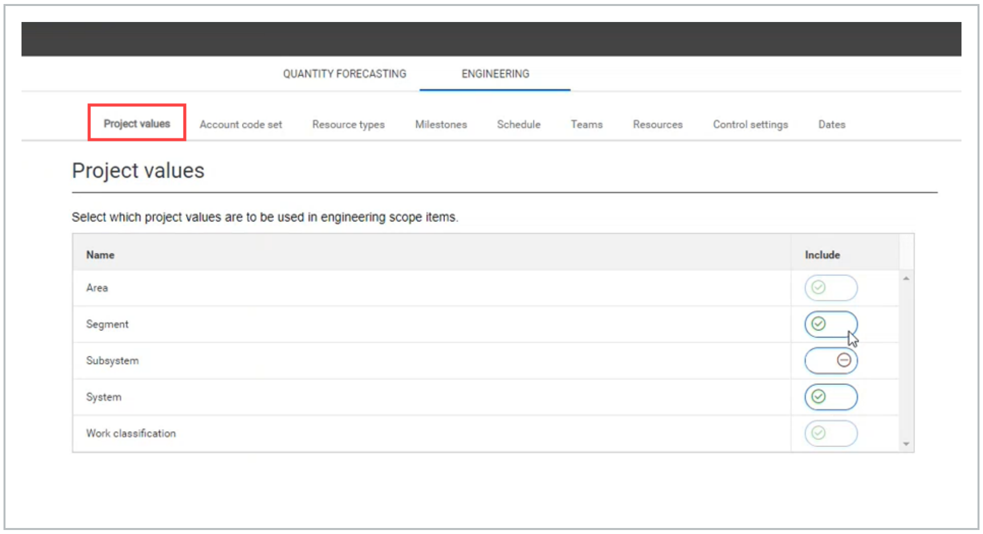
You can configure project values at the organization level in Settings > Design > Engineering > **Project values**. Project values configured at the organization level are available in all projects.

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.



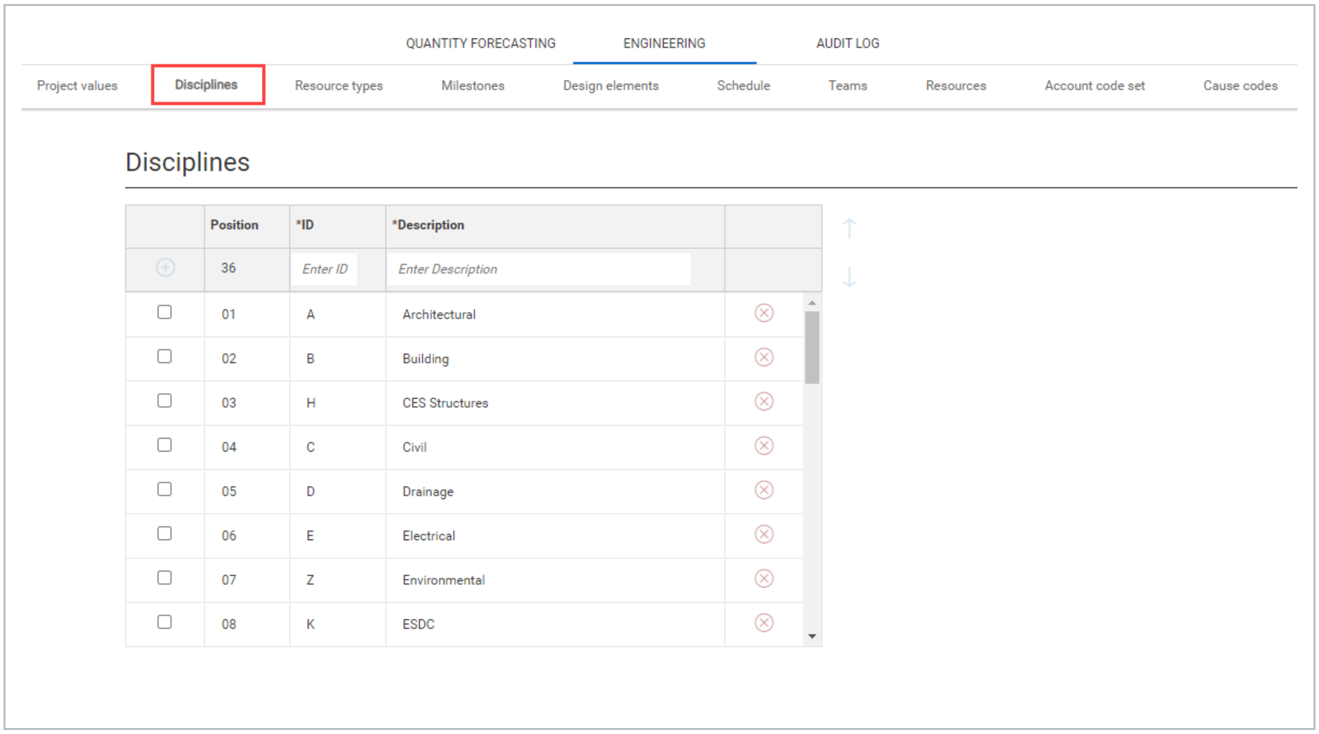
2.2.1 CONSIDERATIONS

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

2.3 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**.



2.3.1 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.

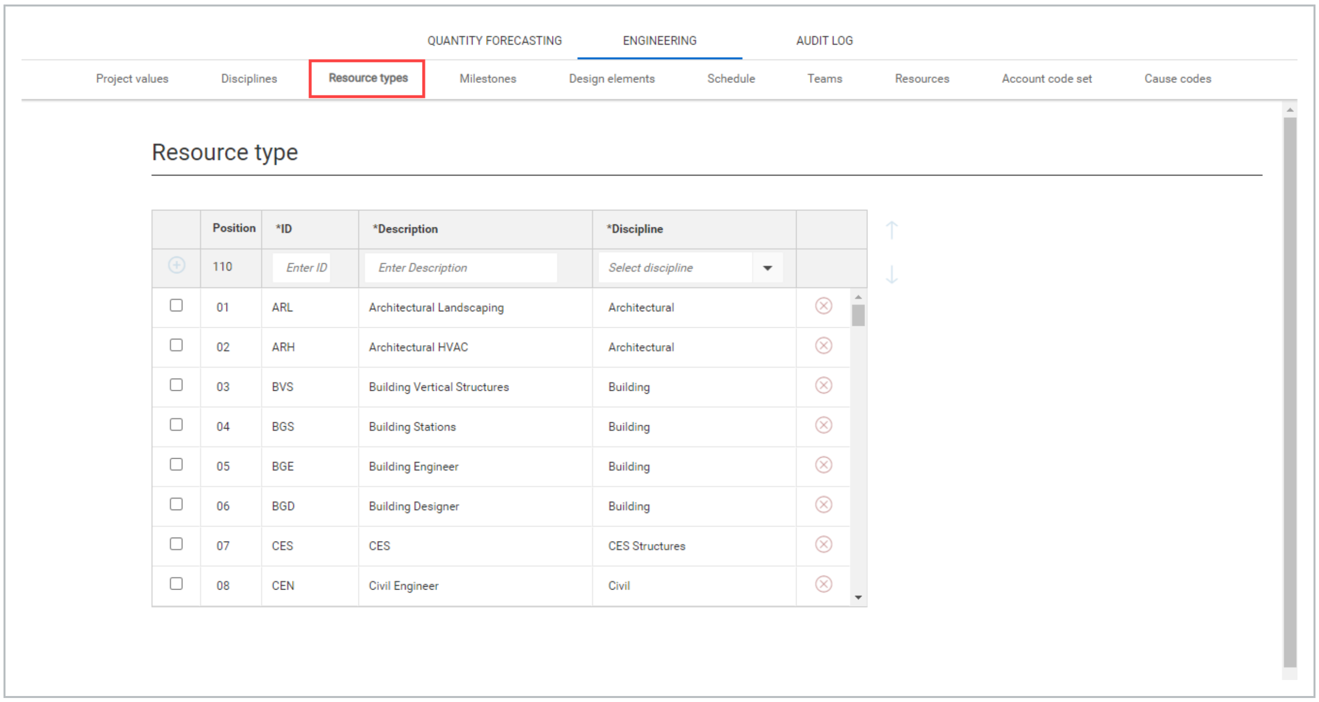
2.3.2 CONSIDERATIONS

- 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.

2.4 RESOURCE TYPES

Resource types are associated with disciplines and must be added to add claiming schemes to projects. For more information, see Configure claiming schemes. Each claiming scheme step must have an assigned resource type. Examples of resource types for an Electrical discipline might include Electrical Designer and Electrical Engineer. All resource types are automatically inherited to all projects in the organization.

You can manage resource types in your organization in Settings > Design > Engineering > **Resource types**.



2.4.1 STEPS

You can do any of the following actions:

- **Add** - Enter a resource ID, Description, select a discipline from the **Select discipline** drop-down list, 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.
- **Edit** - Click in the fields, and then enter text.

- **Sort** - Select a resource type, and then click the up and down arrows to the right of the table to adjust the position of a resource type.

When resource types are created, they become available to add to claiming schemes for projects in the organization.

2.4.2 CONSIDERATIONS

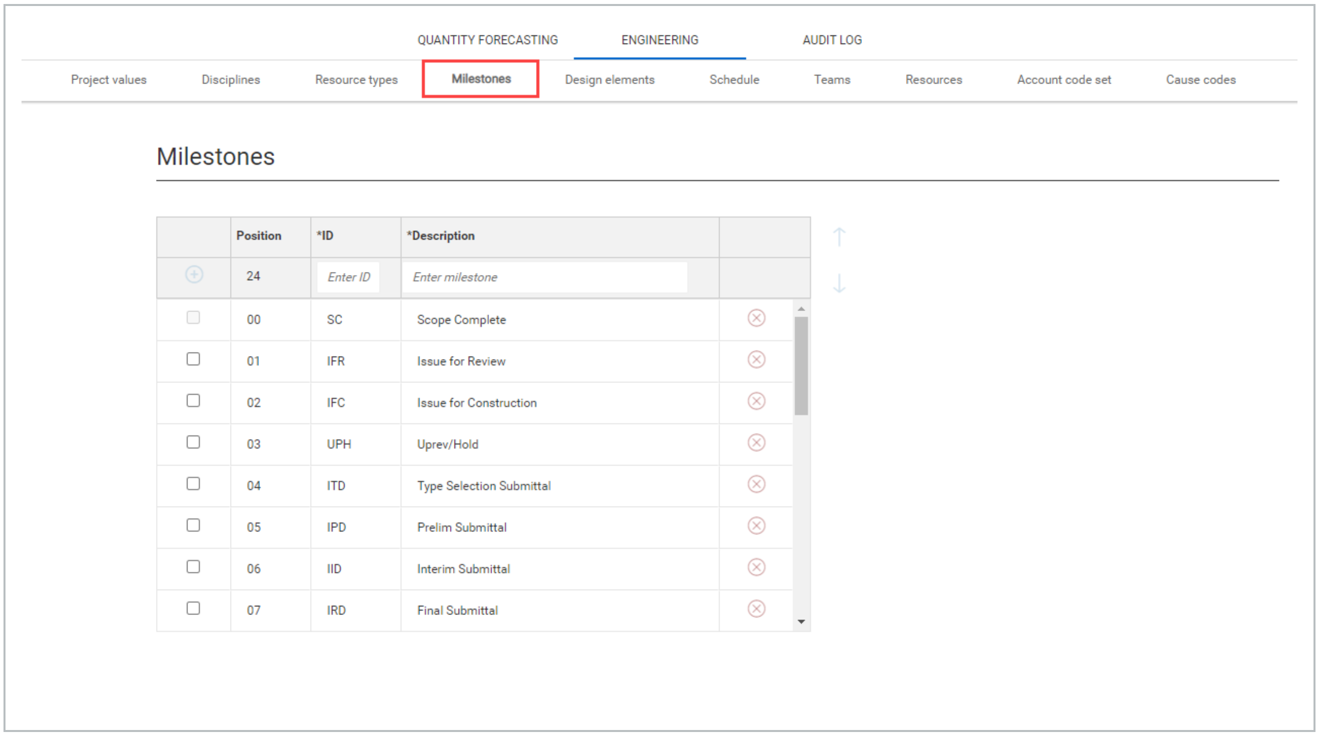
- You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Engineering.
- Disciplines must be added to create resource types.

2.5 MILESTONES

Milestones are attributes for claiming schemes. In projects, you can define completion milestones to be assigned to claiming scheme steps. Examples of completion milestones are Issue for Review or Issue for Construction. At the project level, all milestones from the parent organization are automatically inherited and you can assign or remove milestones as needed.

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

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



2.5.1 STEPS

You can do any of the following actions:

- **Add** - Enter an ID and Description, and then click the **Add milestone** icon.
- **Remove** - Click the **Remove milestone** icon to the right. You cannot remove a milestone that has been assigned to a project.
- **Edit** - Click in the fields, and then enter text.
- **Sort** - Select a milestone, and then click the up and down arrows to the right of the table to adjust the position of the milestone.

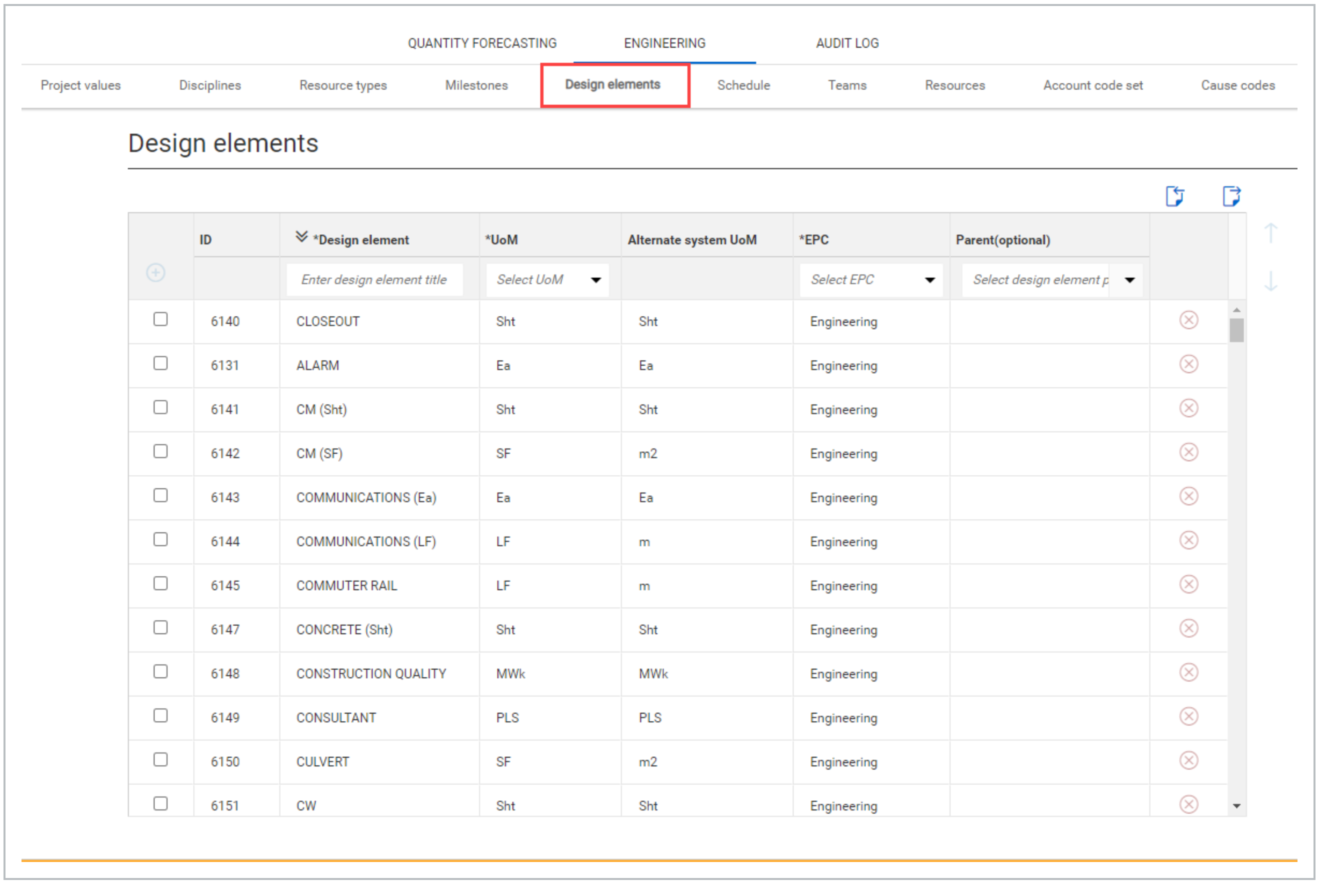
2.5.2 CONSIDERATIONS

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

2.6 DESIGN ELEMENTS

Design elements are subdisciplines that you can associate to scope items. Design elements group labor types above account codes for rolling up data. Design elements configured at the organization level are available to all projects in the organization.

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



Steps

You can do any of the following actions:

- **Add** - Enter a unique name, select a UoM, select an associated EPC option (engineering, procurement, or construction), 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. You cannot edit a design element's UoM when it is assigned to a scope item.
- **Delete** - Click the **Delete design element** icon to the right. You cannot delete a design element, or a terminal design element assigned to a scope item. You cannot delete a parent design

element when it has other design elements associated with it.

- **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.

When Design elements are created, they become available to assign to account codes in the organization settings. For more information, see Account code set.

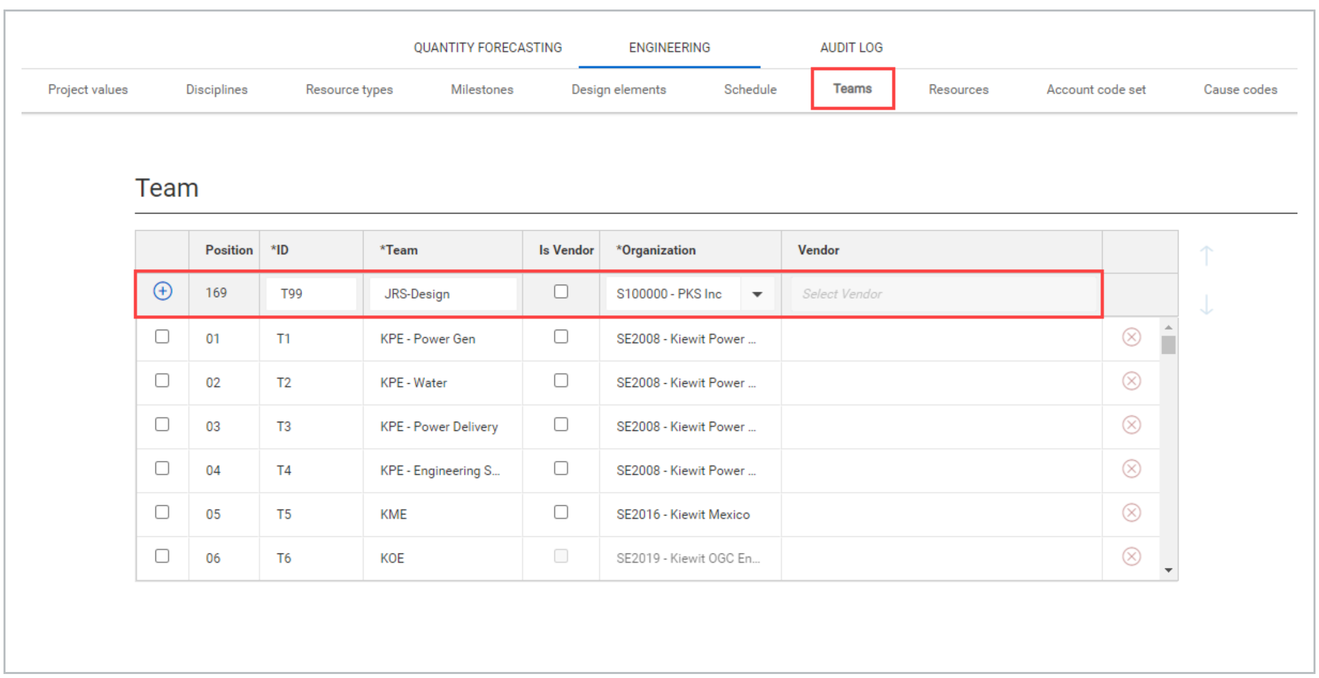
Design elements can be associated to scope items at the resource level for your project. For more information, see Scope item resources.

2.6.1 CONSIDERATIONS

- You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Engineering.
- The Alternate system UoM field is automatically populated according to the units of measure in the InEight Platform master data library.

2.7 TEAMS

Teams are used to group resources to assign to claiming steps for scope items. Teams are associated with either organizations or vendors. You can manage Teams for your organization in Settings > Design > Engineering > **Teams**.



Is Vendor option

When the *Is Vendor* checkbox is not selected, the team can be associated to an organization in InEight Suite. When the *Is Vendor* checkbox is selected, the team can be associated to one-to-many vendors from InEight Platform.

2.7.1 STEPS

You can do the following actions:

- **Add** - Enter an ID, Team name, and either select the **Is Vendor** check box and a vendor, or an organization, and then click the **Add team** icon.
- **Remove** - Click the **Remove team** icon to the right. You cannot remove a team assigned to a project.
- **Edit** - Click in the fields, and then enter text or select an option.
- **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.

In the organization Resource settings, you can assign resource users to a team and add a team when assigning resource users. For more information, see Resources in organization settings.

At the project level, all teams from the parent organization are automatically inherited. For more information, see Teams in project settings.

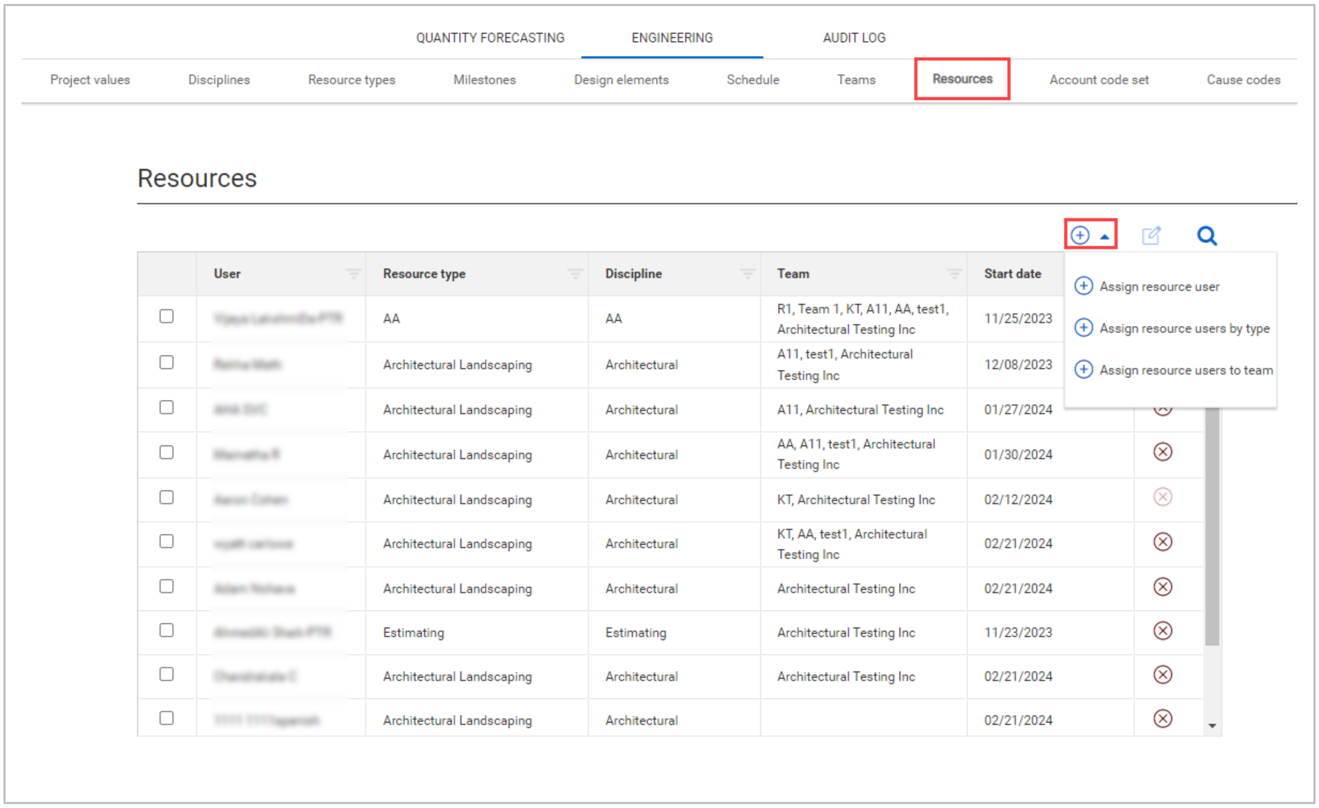
2.7.2 CONSIDERATIONS

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

2.8 RESOURCES

Resource users are used to assign to claiming steps on scope items. Resource users are associated with resource types and can be grouped into teams.

You can create resource users in Settings > Design > Engineering > **Resources**.



2.8.1 STEPS

You can do the following actions:

- **Assign resource user** –Add an individual resource user.
  1. Click the **Add resource** icon, and then select **Assign resource user** from the list. The Add resource slide-out panel opens.
  2. Select a user, start date, and resource type.
  3. Optionally, select a team or teams from the **Enter team** drop-down list, select the start date, and then click the **Add team** icon.
  4. Click **Save**.

  To remove a team, click the **Remove ream** icon to the right.
- **Assign resource users by type** – Add multiple resource users assigned to one resource type.
  1. Click the **Add resource** icon, and then select **Assign resource user by type** from the list. The Assign resource users by type slide-out panel opens.
  2. Click the **Select resource type** drop-down list, and then select a resource type.

3. Click the **Enter resource user** drop-down list, select a resource user from the list, and then select the start date.
4. Click the **Add resource user** icon to add the resource user to the list.
5. Click **Add** to assign resource users by type.

To remove a resource user, click the **Remove resource user** icon to the right.

- **Assign resource users to team** – Add multiple resource users assigned to one team.
  1. Click the **Add resource** icon, and then select **Assign resource users to team** from the list. The Assign resource users to team slide-out panel opens.
  2. Click the **Select team** drop-down list, and then select a team.
  3. Click the **Enter resource user** drop-down list, select a resource user from the list, and then select the start date.
  4. Click the **Add resource user** icon to add the resource user to the list.
  5. Click **Add** to assign resource users to team.

  To remove a resource user, click the **Remove resource user** icon to the right.
- **Delete** – Click the **Delete resource** icon to the right. You cannot delete resources assigned to a project. To remove a resource or team, click the **Remove resource user** or **Remove team** icon to the right.
- **Edit** – Select a resource, and then click the **Edit resource** icon.

In settings at the project level, you can set the **Limit user assignments to only those Teams associated with the project** toggle to *On* to allow only those users who are associated to Teams assigned on the project to be able to assign on the project. For more information, see Resources in project settings.

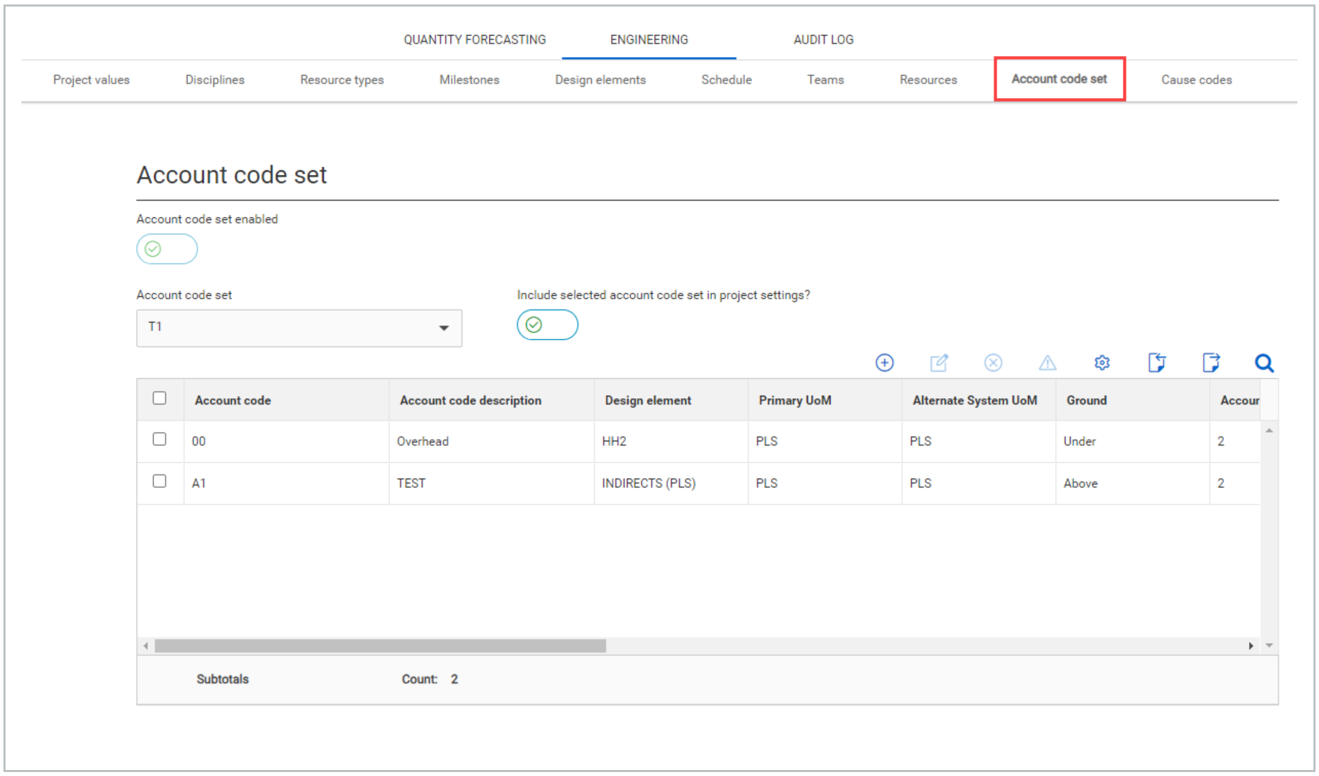
2.8.2 CONSIDERATIONS

- You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Engineering.
- A user can only be assigned as a resource in one organization at a time.
- You can only assign resource users to teams associated with the organization.

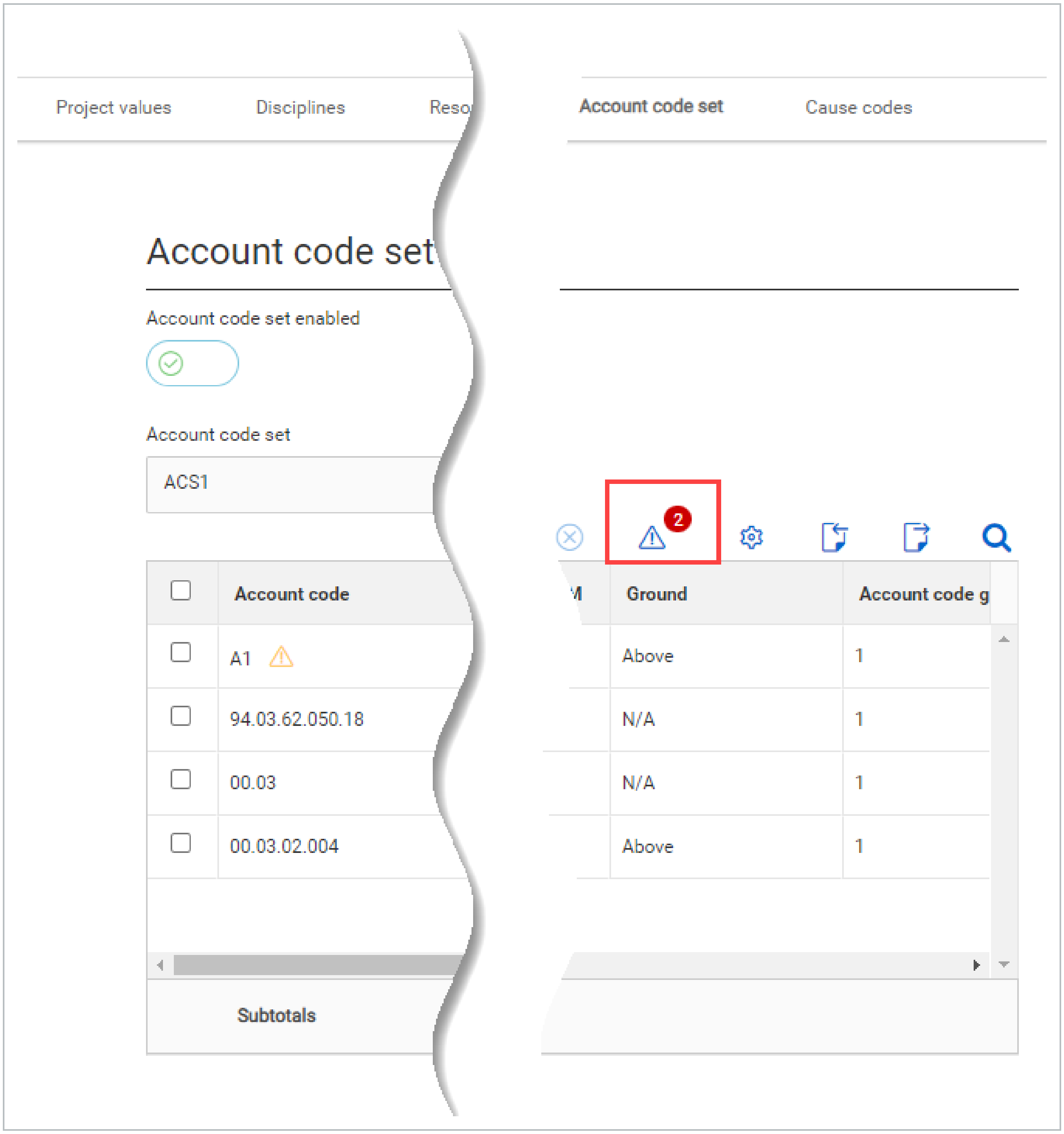
2.9 ACCOUNT CODE SET

You can use account code sets 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. You can only add account codes that exist in Main menu > Master data libraries > **Account codes**.

You can enable and create account code sets for your organization in Settings > Design > Engineering > **Account code set**. To enable account code sets, set the **Account code set enabled** toggle to *On*.



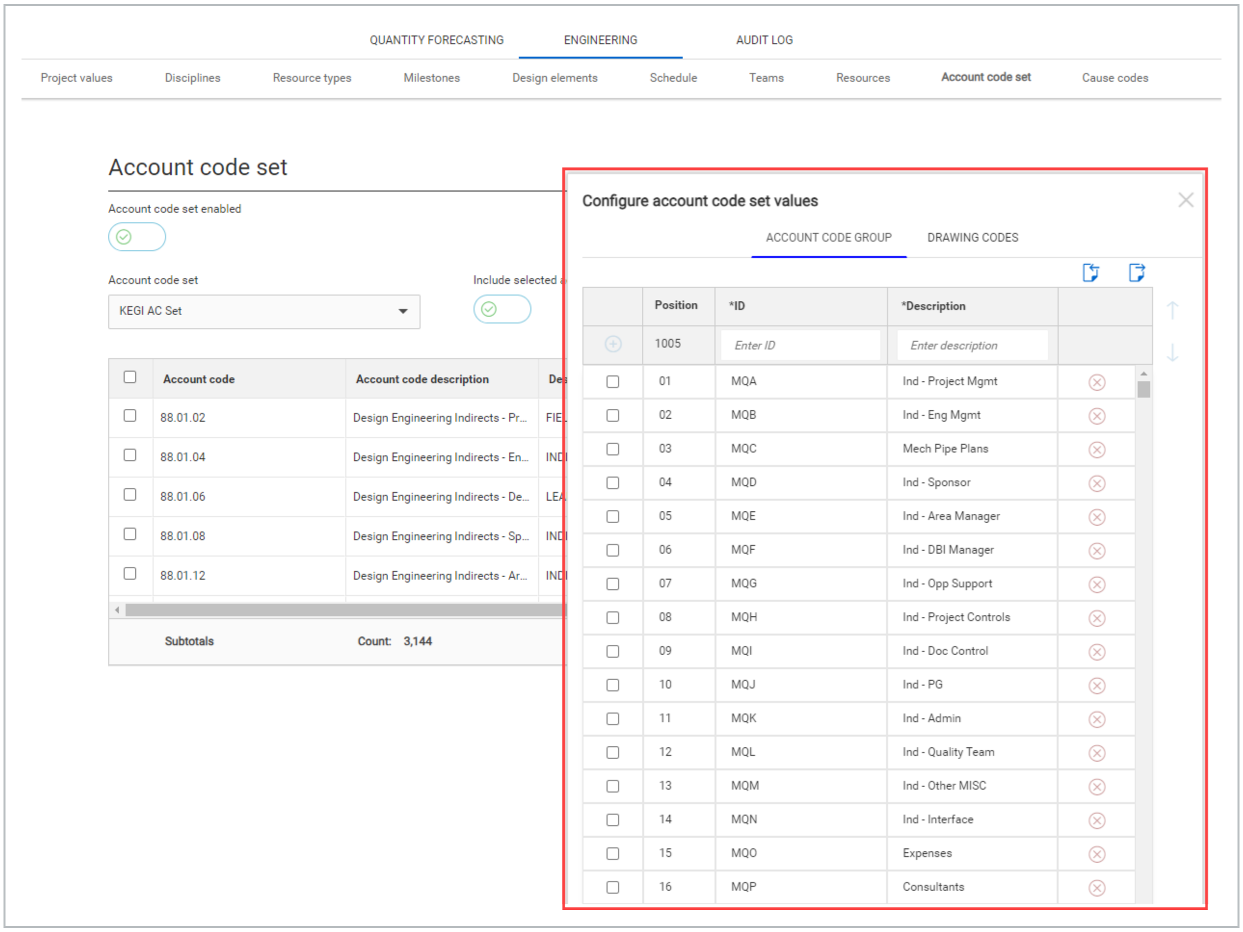
Update account codes - The Update account codes feature alerts you of any account code updates made to the master account code library in Platform that impacts any account code in an ACS, such as deleted account codes or modified UoMs.



2.9.1 STEPS

You can do the following actions:

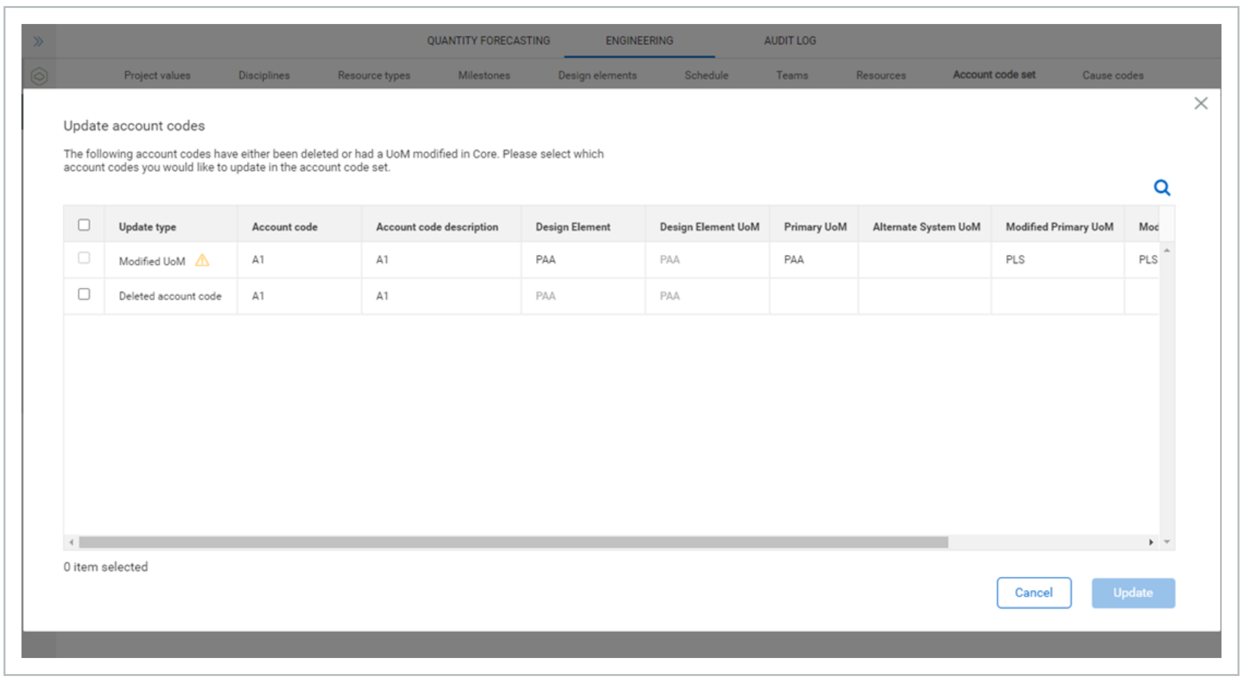
- **Create a new account code set** - Click the **Account code set** drop-down list, and then select **New account code set** from the list. Enter a new name, and then click **Create**.
- **Add account code set values to an account code set group** - Click the **Configure account code group** icon, enter 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.



- **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**. After an account code is assigned to a project it cannot be removed.
- **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 on 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 account codes or groups** - 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** - Click the **Update account codes** icon to open the Update account codes dialog box.



Select the account codes to update, and then click **Update**.

- **Add drawing codes** – Click the **Configure account code group** icon, enter an ID and description, and then click **Add** icon. Drawing codes can be added individually or in bulk using the import process.
- **Remove a drawing code** - Click the **Remove drawing code** icon to the right. You cannot remove drawing codes that have been assigned to a project.
- **Sort drawing codes** - Select the item, and then click the up and down arrows to the right of the table to adjust the position of the drawing code.

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

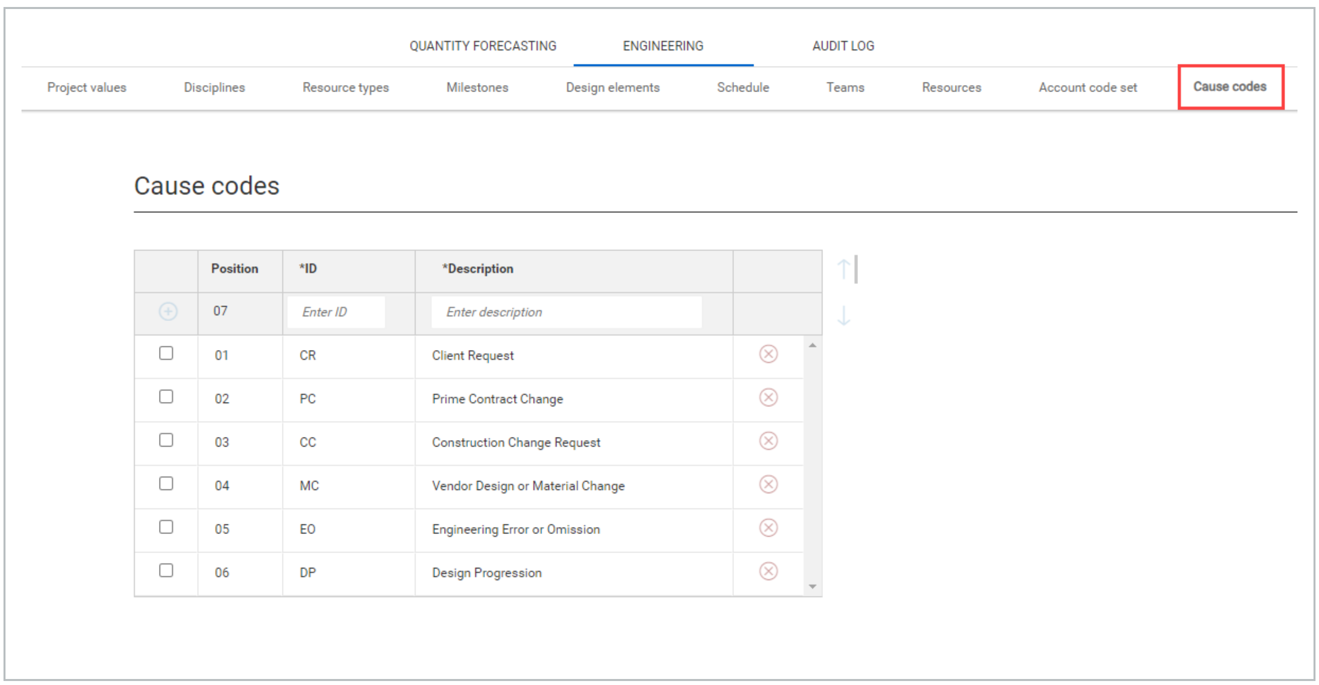
2.9.2 CONSIDERATIONS

- You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Engineering.
- To enable or disable the Tie to account code set toggle for a project, the scope items grid must be empty.
- Only account codes that are available in InEight Platform Master data libraries > Account codes can be added to an account code set.
- You cannot delete an account code from an account code set assigned to a scope item.

2.10 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**.



2.10.1 STEPS

You can do the following actions:

- **Add** - Enter and 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.

2.10.2 CONSIDERATIONS

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

2.11 PROJECT SETTINGS FOR ENGINEERING

As an administrator, you can configure settings for the Engineering module at the project level. 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.

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

The Design project settings gives you access to the following project configurations:

Project values

Account code set

Resource types

Milestones

Teams

Resources

Control settings

Dates

Documents

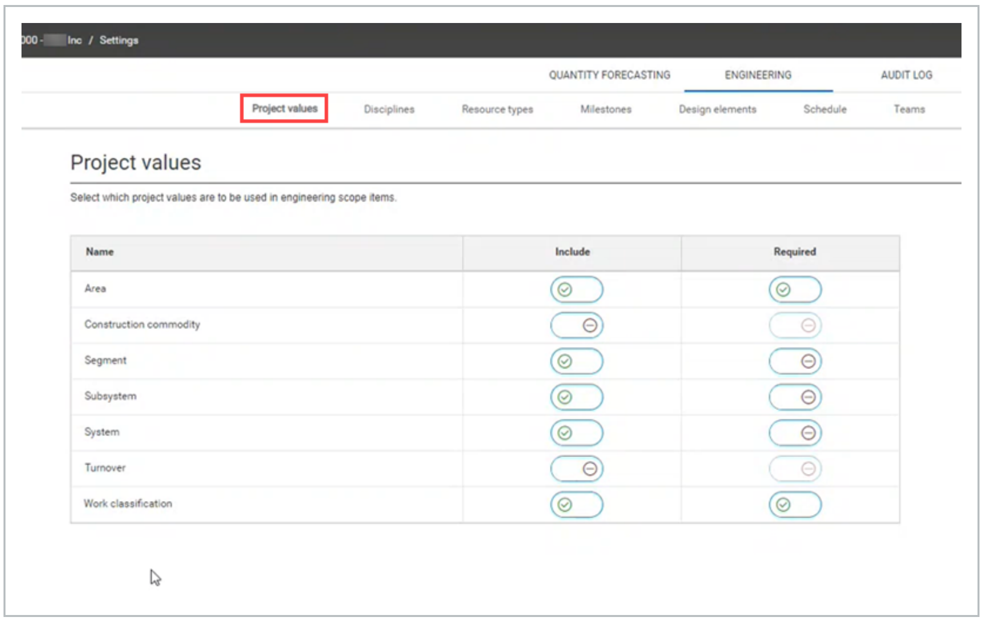
For general information on InEight cloud platform settings, see Project Settings.

2.12 PROJECT VALUES

2.12.1 SUMMARY

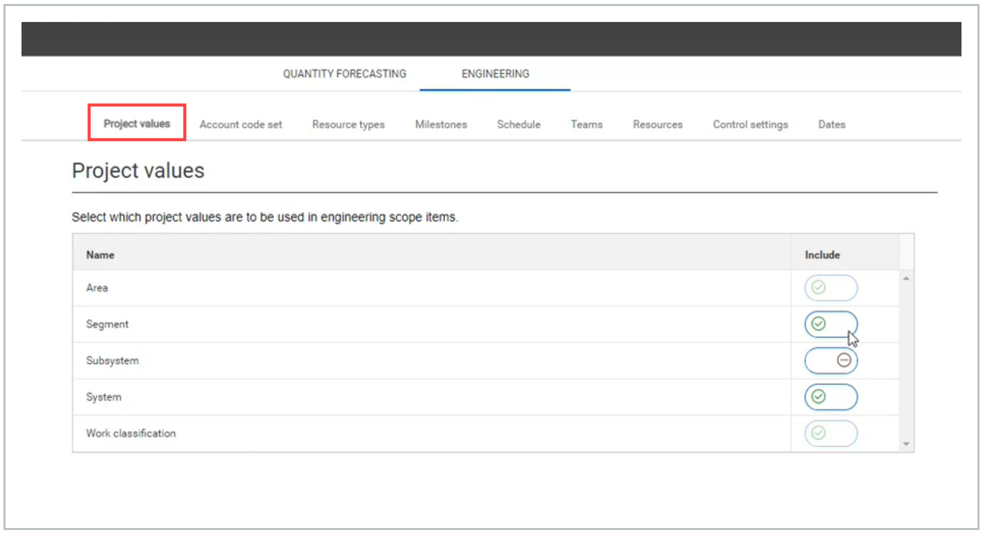
You can select which project values can be associated to engineering scope items and if they are required in a project. The values are configured at the organization level in Settings > Design > Engineering > **Project values**. Project values configured at the organization level are available in all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

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

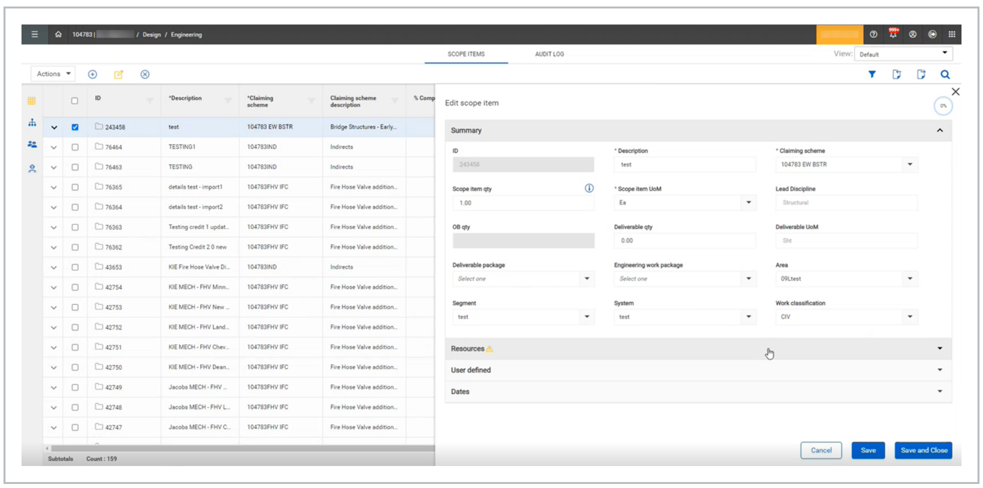


When you include project values, those values are available for selection in Settings at the project level. You can select or deselect the values that are not required for the project.

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.



2.12.2 CONSIDERATIONS

- You must have the Edit engineering settings permission.

2.12.3 RELATED LINKS

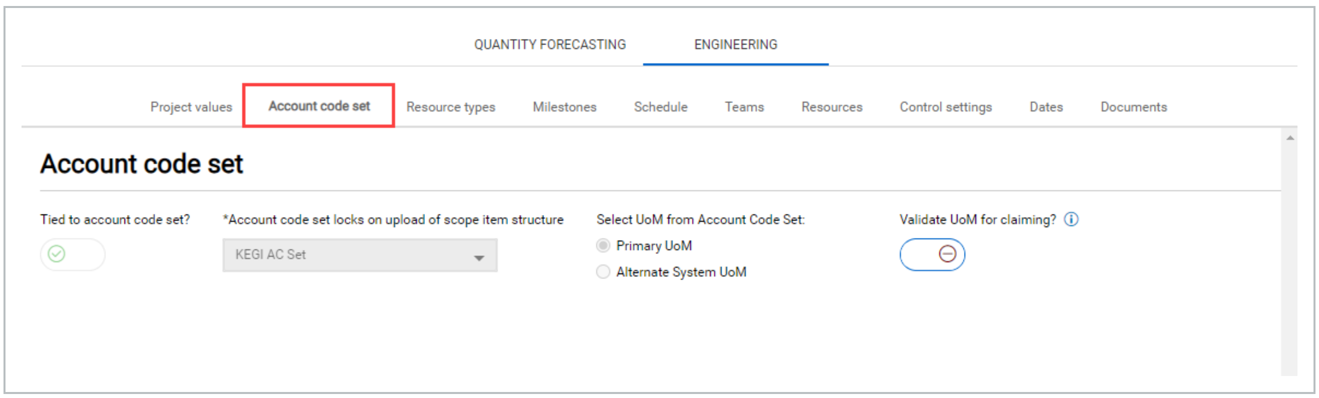
After project values are set up, you can configure **disciplines**. For more information on how to configure disciplines, see Disciplines.

2.13 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**.



Tied to account code set - You can tie an account code set to your project by setting 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 set 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.

2.13.1 CONSIDERATIONS

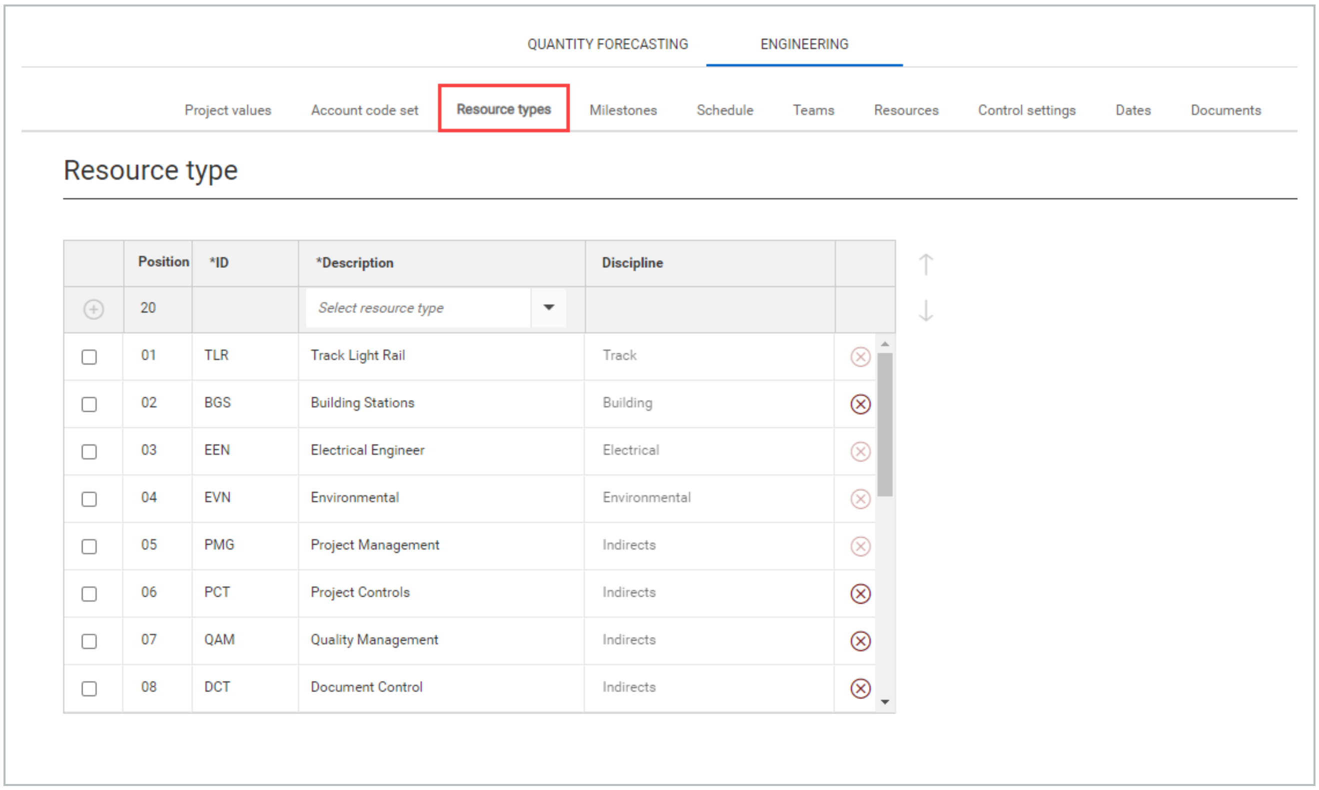
- You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Engineering.

- To set the **Tied to account code set** toggle to *On* or *Off*, the scope items grid for the project must be empty.

2.14 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**.



2.14.1 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.

2.14.2 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.

2.15 MILESTONES

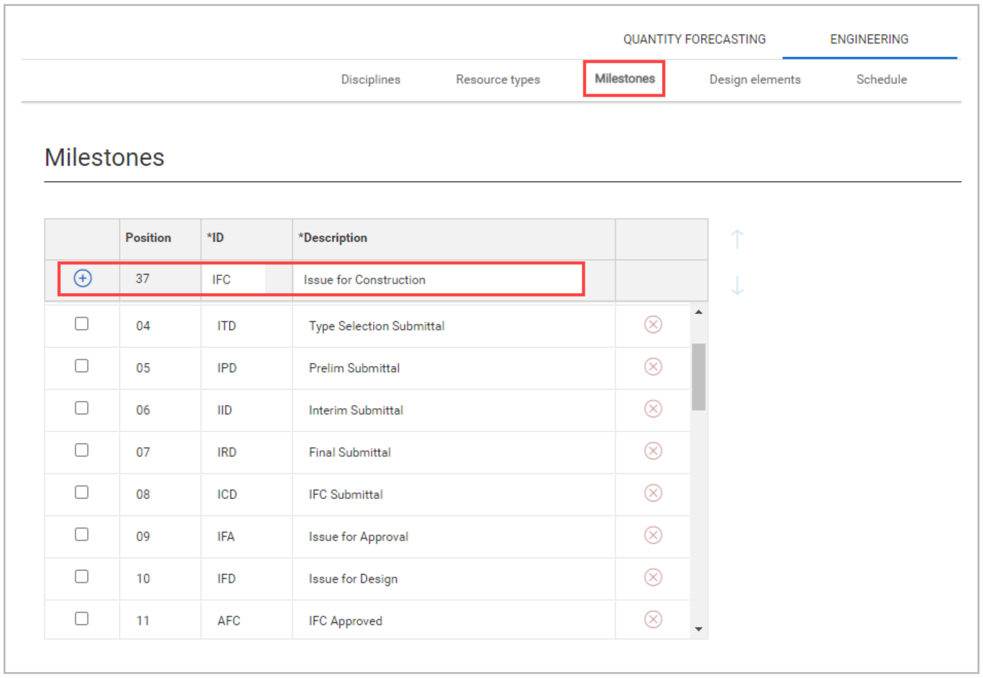
You can define completion milestones in the Engineering module to assign to claiming scheme steps. Examples of completion milestones might be Issue for Review or Issue for Construction.

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.



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.

2.15.1 CONSIDERATIONS

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

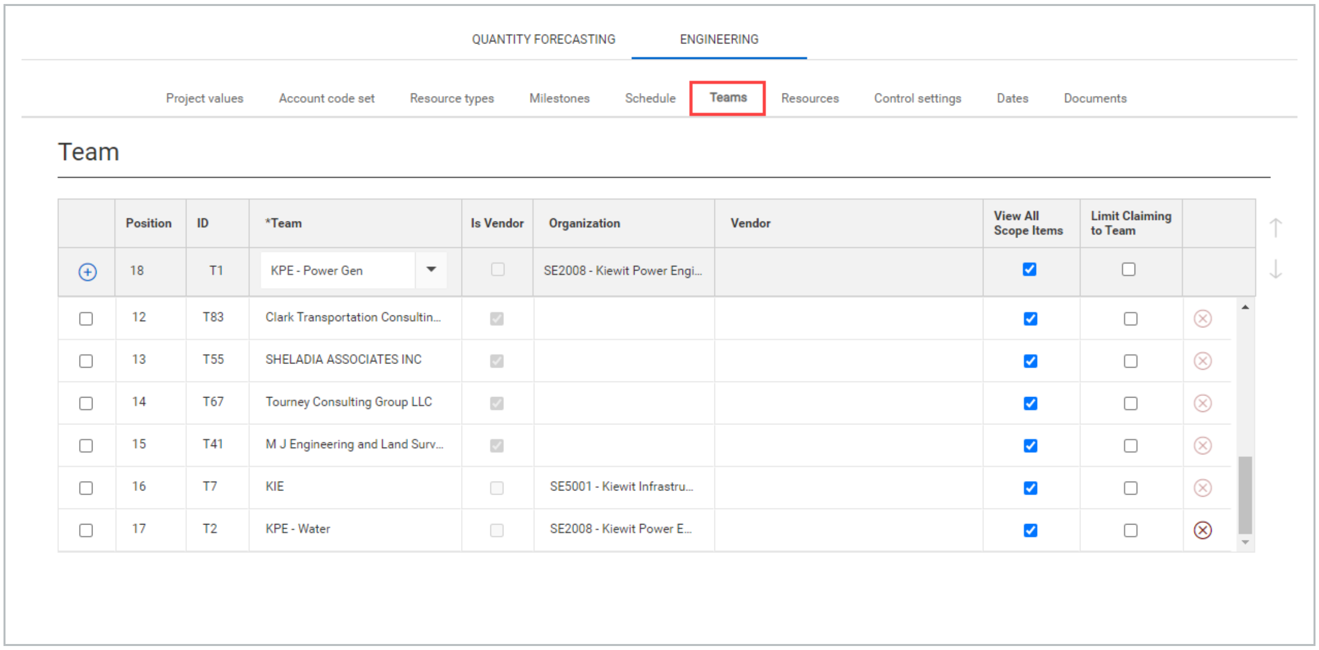
2.15.2 RELATED LINKS

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

2.16 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**.



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.

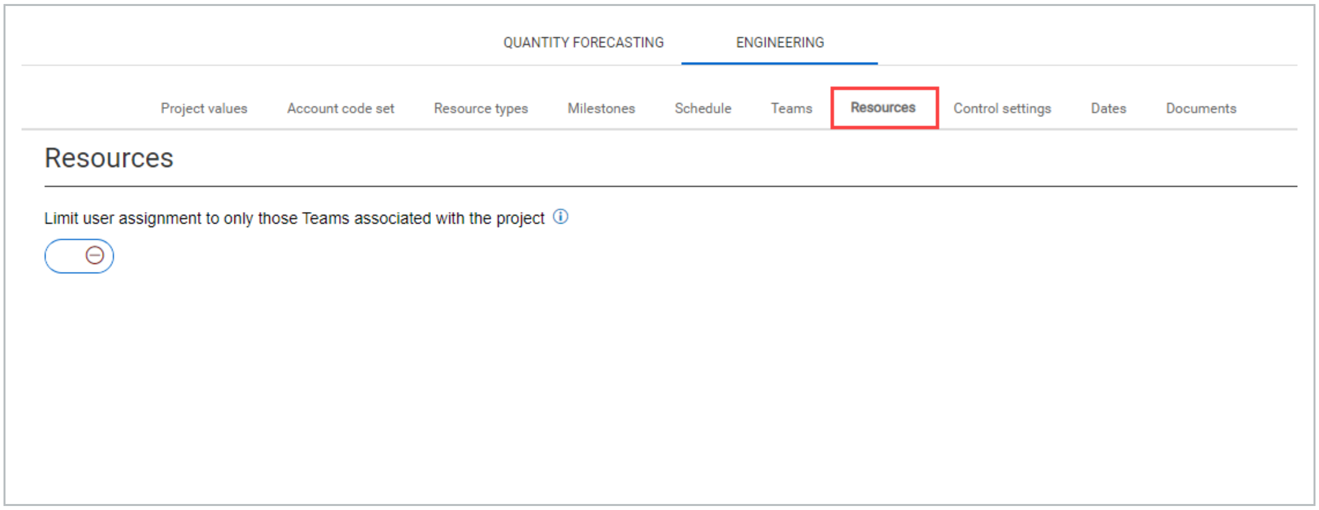
2.16.1 CONSIDERATIONS

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

2.17 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.

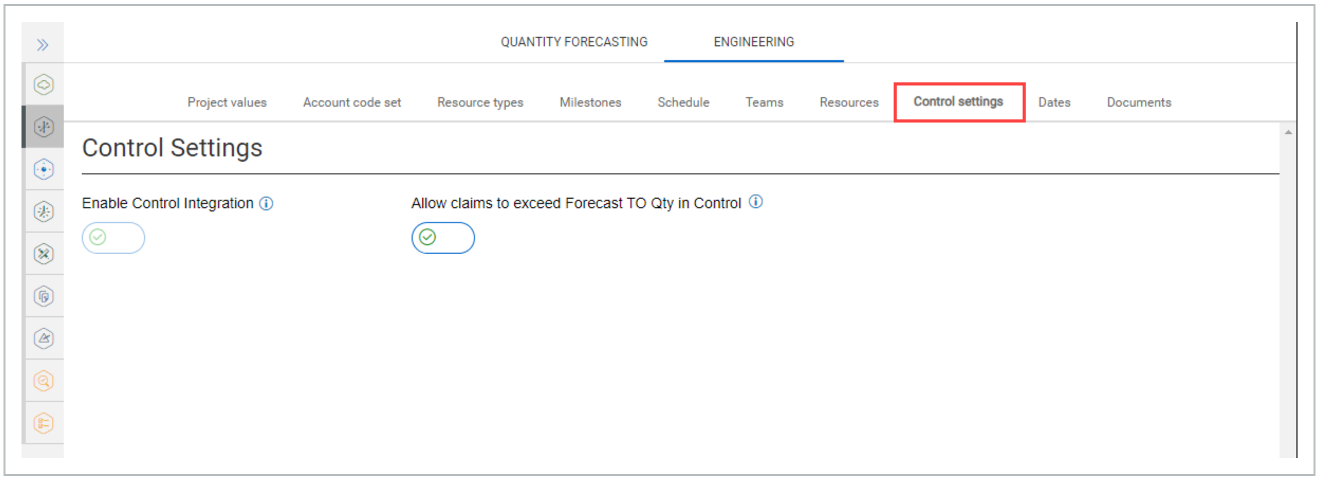
By default, this toggle is set to *Off*. To set the toggle to *On*, at least one team must be added to the project.

2.17.1 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.

2.18 CONTROL SETTINGS

As a project administrator, you can enable InEight Control integration and functionality for your project in Settings > Engineering > **Control** settings tab. You can enable the integration of Design with Control and allow for claims to exceed the forecast TO quantity in Control.



2.18.0.1 ENABLE CONTROL INTEGRATION

When the Enable Control Integration toggle is set to *On*, a WBS code must be assigned for each Resource Type on a scope item to enable claiming on the scope item. This allows for WBS phase codes to be assigned to scope items. Also, scope item's steps are claimed and synced with Control to track the quantity completion progress on the associated WBS phase codes.

The Get TC Remaining MHrs/Unit action is also made available. For more information, see Actions overview in the Engineering module.

When the Enable Control Integration toggle is set to *Off*, the WBS assignment is not needed to enable claiming on a scope item. Claims made in Engineering are not sent to Control. Also, all WBS related columns and fields are hidden.

The setting is set to On by default for all new projects. The setting can only be updated when no scope items exist on the project. The setting is locked once a scope item is added on the project. All scope items must be deleted to update the setting.

2.18.0.2 ALLOW CLAIMS TO EXCEED FORECAST TO QUANTITY IN CONTROL

You can configure whether to allow claims to exceed the forecast TO quantity in Control. When the Allow claims to exceed Forecast TO Qty in Control setting is set to *On*, Design validates whether any claims exceed the remaining Forecast TO quantity on the associated WBS in Control. A warning banner is shown to indicate that a claim exceeds the forecast TO quantity in Control before sending the claim to Control.

When set to *Off*, Design will not allow any claim to save when it exceeds the remaining Forecast TO Qty on the associated WBS in Control. A warning banner is shown to indicate that the claim exceeds the remaining Forecast TO Qty.

The Allow claims to exceed Forecast TO Qty in Control setting shows only when the Enable Control Integration setting is set to *On*. Otherwise, the setting will be hidden. This setting is set to *Off* by default and can be set to *On* at any point during the project. The setting will apply to the claims thereafter.

2.18.1 CONSIDERATIONS

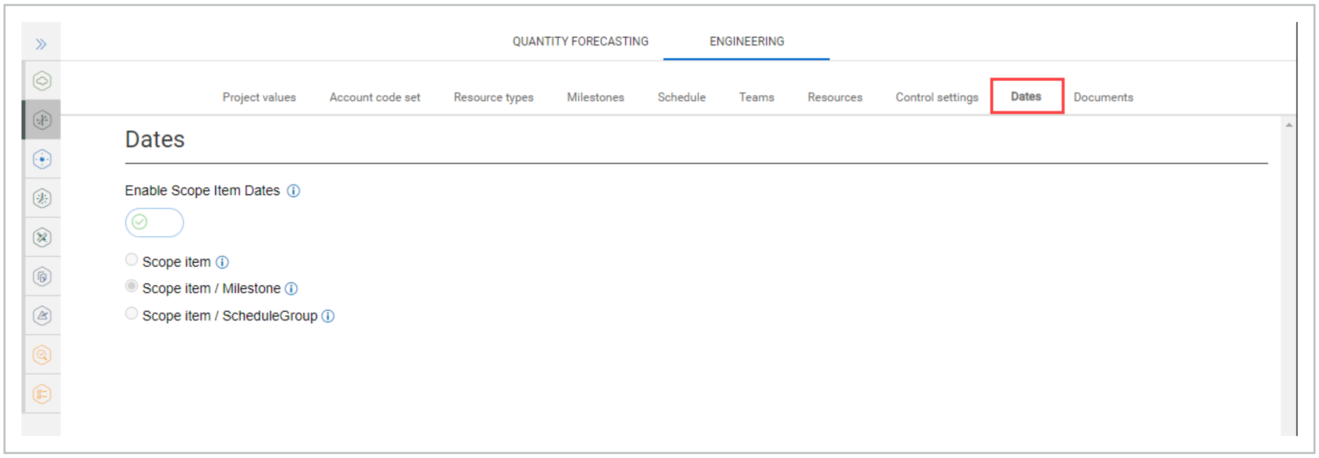
You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Engineering.

2.18.2 RELATED LINKS

For more information about updating scope item quantity, see Update scope item quantity and Update scope item quantity by import.

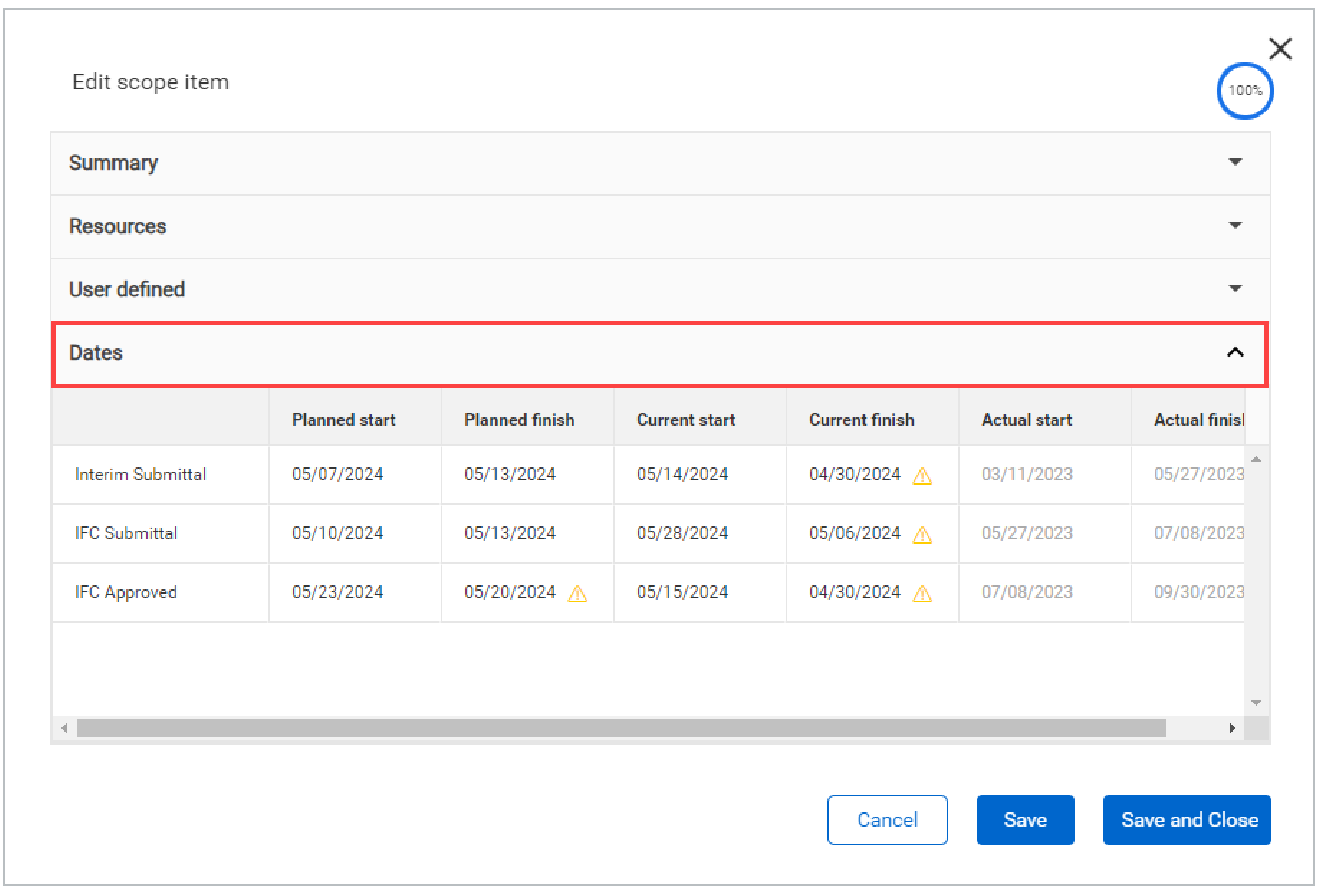
2.19 DATES

As a project administrator, you can configure scope item dates values for your project in Settings > Engineering > **Dates** tab.



2.19.0.1 ENABLE SCOPE ITEM DATES

When you set the Enable Scope Item Dates toggle to *On*, you must select from the three available options for dates. The Dates panel also shows for scope items.



Actual start dates are an aggregated value based on the claim date that you specify when you begin claiming. The Actual start date is based on the Dates settings shown in the following table:

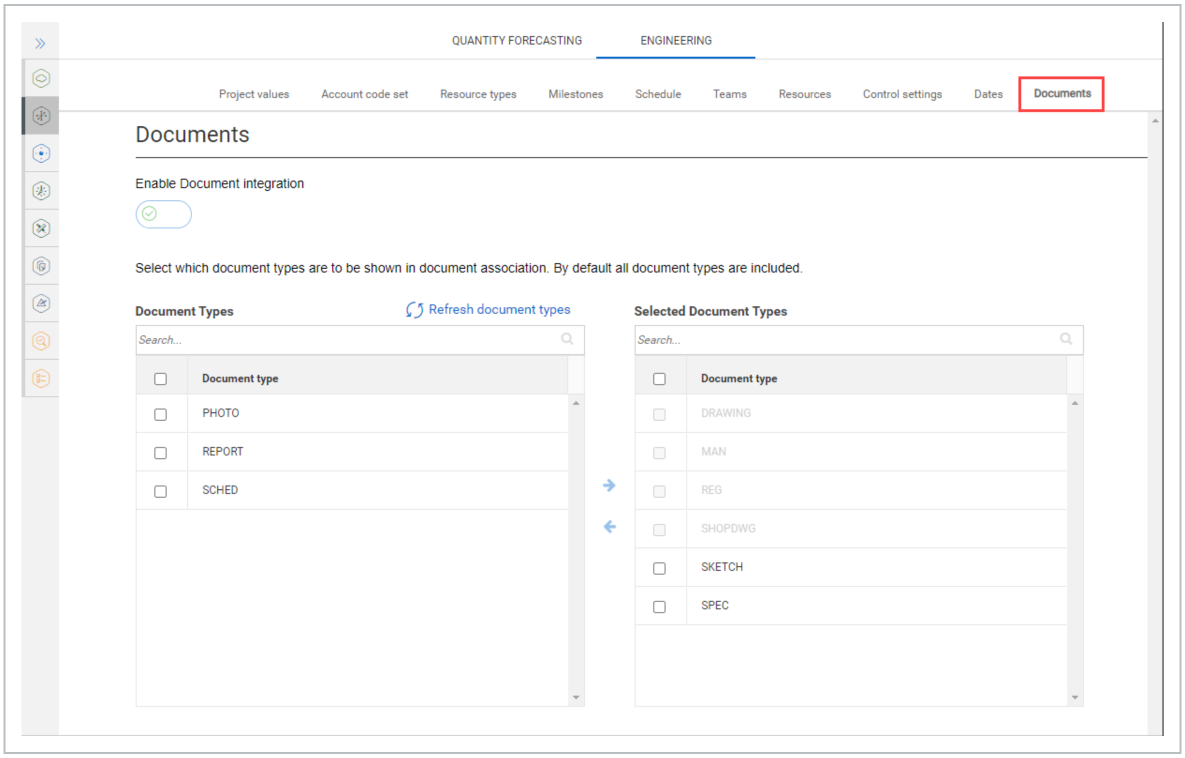
Setting	Description
Scope item	Generates one set of Planned, Current, and Actual Start and Finish Dates per scope item. The system captures the first claim date made on the scope item in the Actual Start Date field.
Scope item / Milestone	Generates one set of Planned, Current, and Actual Start and Finish Dates per unique milestone associated with the assigned claiming scheme. The system captures the first claim date made on each milestone on a claiming scheme in the Actual Start Date field.
Scope item / ScheduleGroup	Generates one set of Planned, Current, and Actual Start and Finish Dates per unique Scheduled Group associated with the assigned claiming scheme. The system captures the first claim date made on each schedule group on a claiming scheme in the Actual Start Date field.

2.19.1 CONSIDERATION

- You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Engineering.
- Scope item Dates values can only be updated when no dates are present on any scope item.

2.20 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, set 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.

2.20.1 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.

CHAPTER 2 – ORGANIZATIONAL SETTINGS FOR QUANTITY FORECASTING

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

- Project values
- Account code set and Discipline set
- Design tracking stages
- Design elements
- Notes
- 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.

2.0.1 CONSIDERATIONS

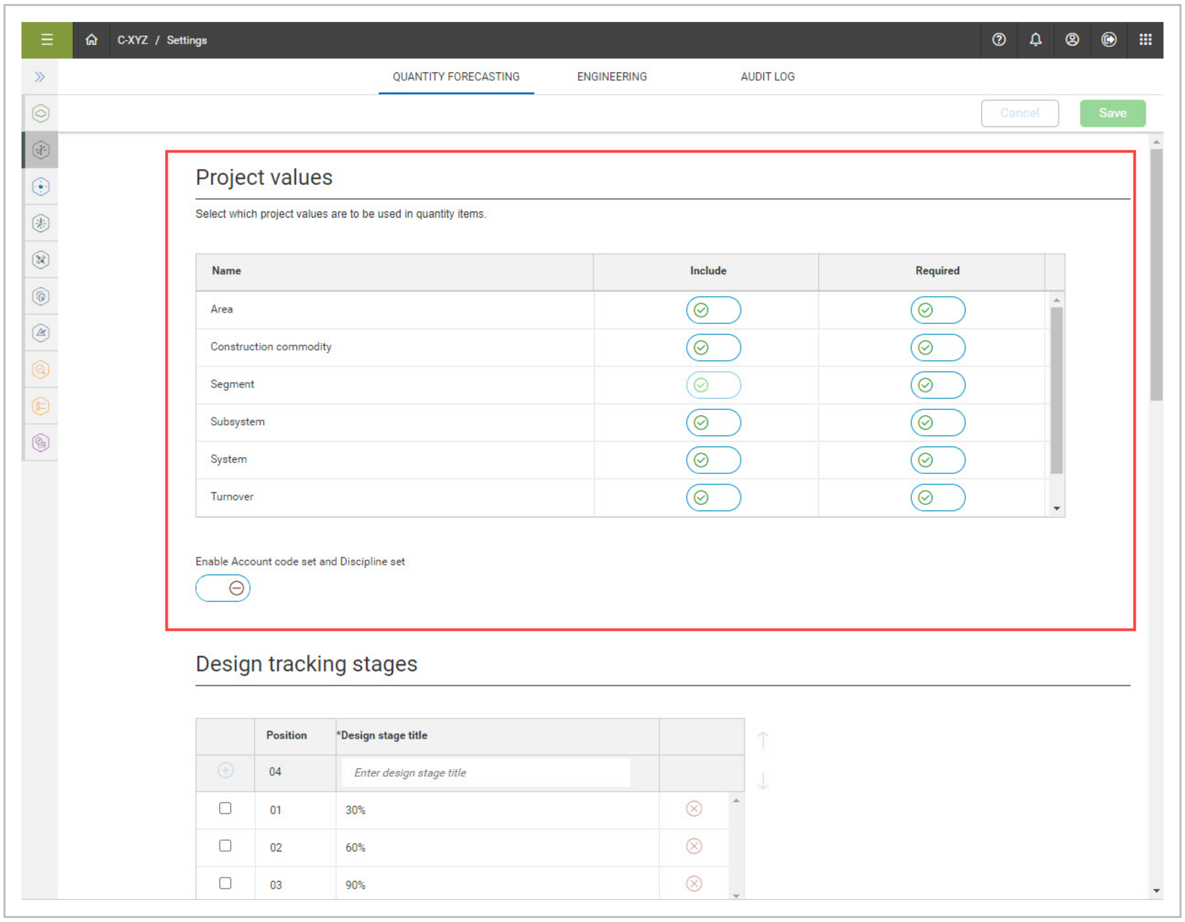
You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Quantity Forecasting.

2.1 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 are managed in InEight cloud platform. For more infomation, see Project values.

The values that have Include set to *On* show as optional in all projects within the organization. The values that have Required set to *On* show as required in all projects in the organization.



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 set 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 set to *Off* in the project. You have the option to set the Include option to *On*.

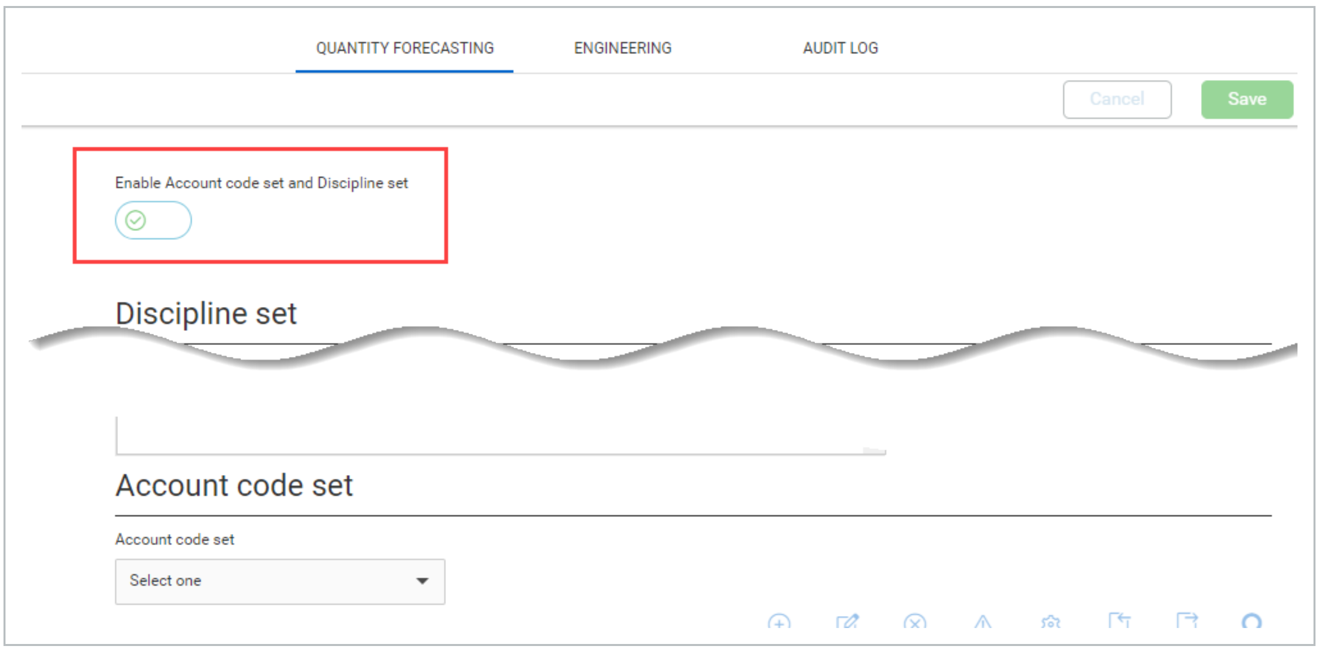
Required - When you set the Required option to *On* for a project value, the project value type is a required attribute on the quantity item. The project-level toggles for these values are automatically set to *On* and cannot be changed. The system will check that these required fields are maintained 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.

2.1.1 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 set to *On*. Required becomes disabled if quantity item data exists but there are quantity items that do not have that project value type maintained.

2.2 ACCOUNT CODE AND DISCIPLINE SETS

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



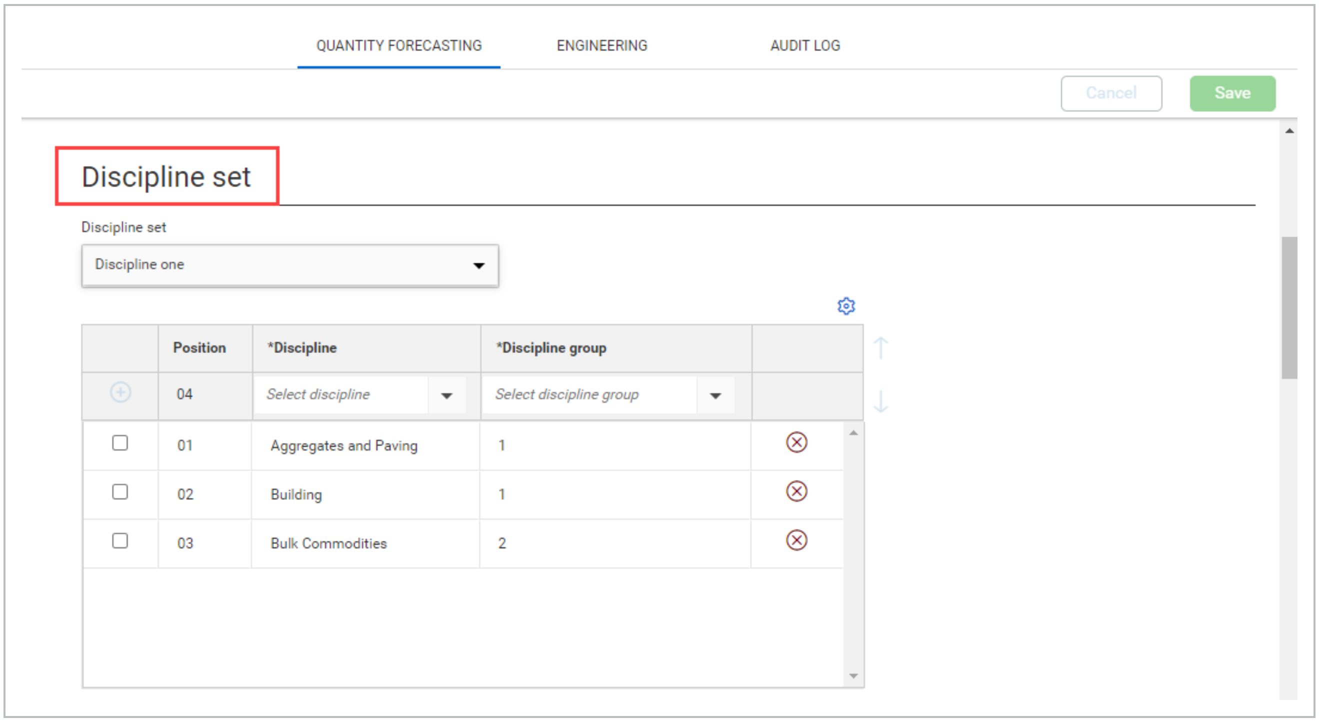
When the feature is set to *On*, you can manage disciplines sets and account code sets. You must first create discipline sets to create account code sets.

2.2.1 CONSIDERATIONS

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

2.3 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**.

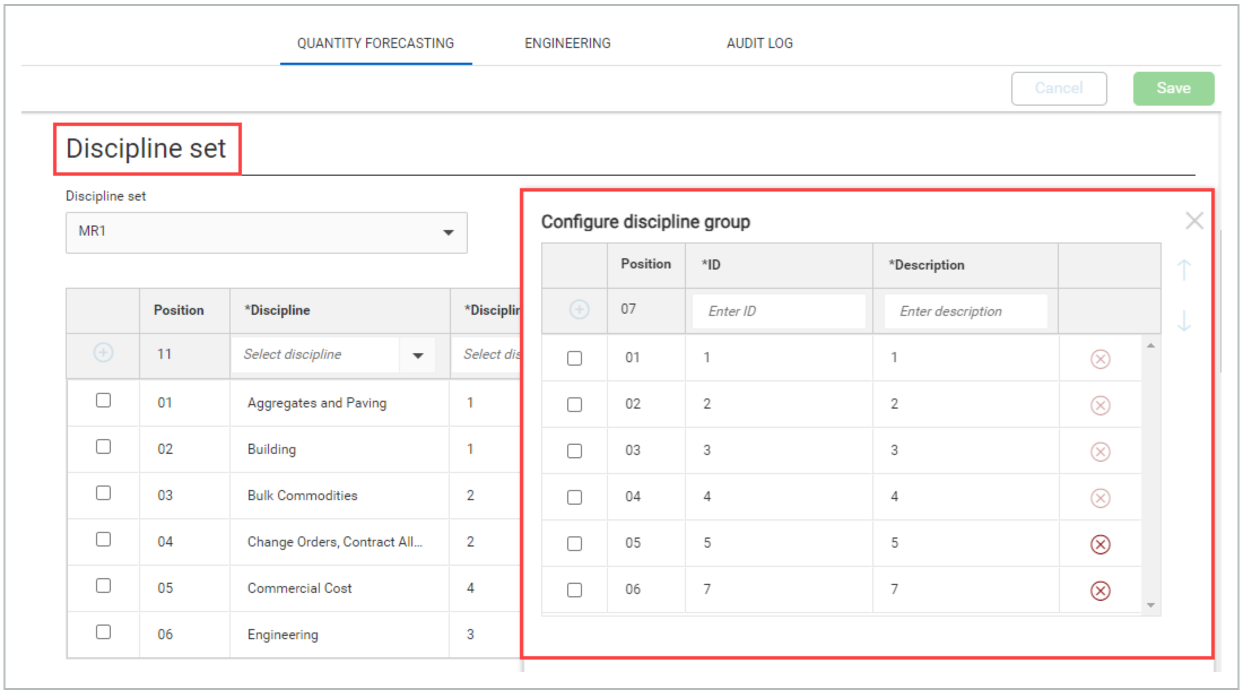


The standard disciplines can be added or removed from a set to limit which disciplines are available. When disciplines are added to a set, they must be associated to a Discipline Group.

2.3.1 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.



- **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.

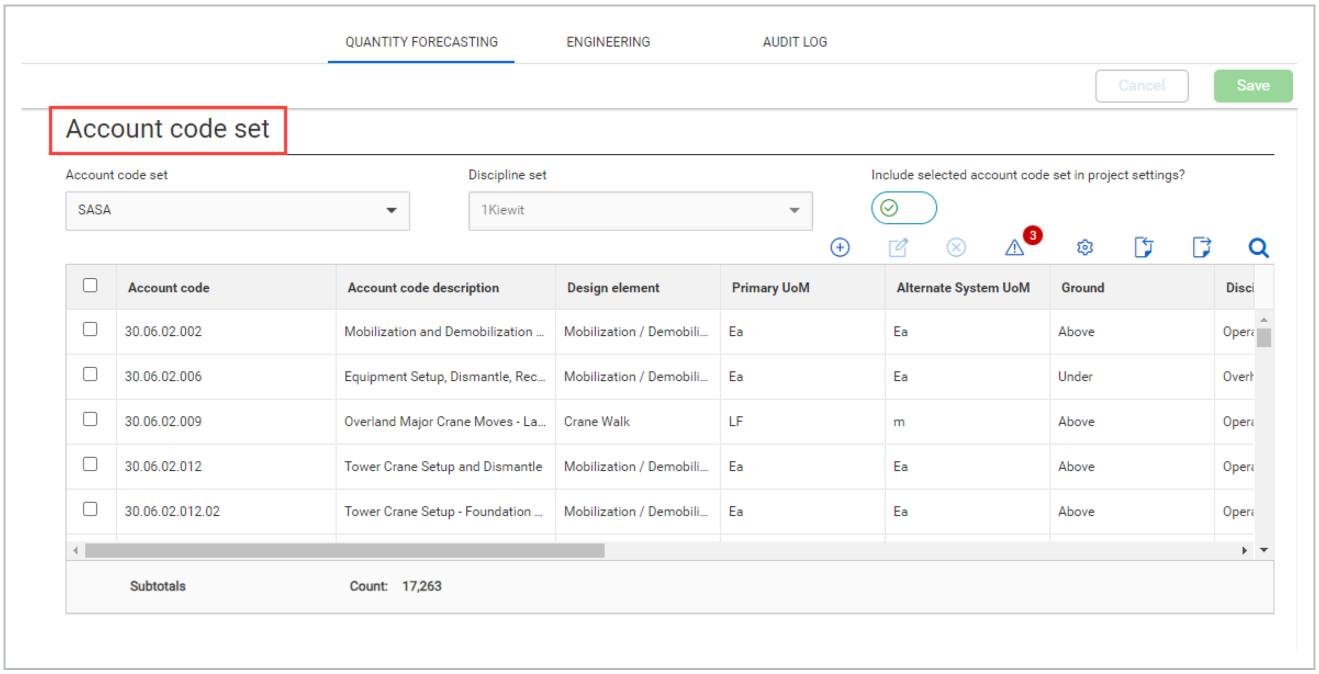
2.3.2 CONSIDERATIONS

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

2.4 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**.

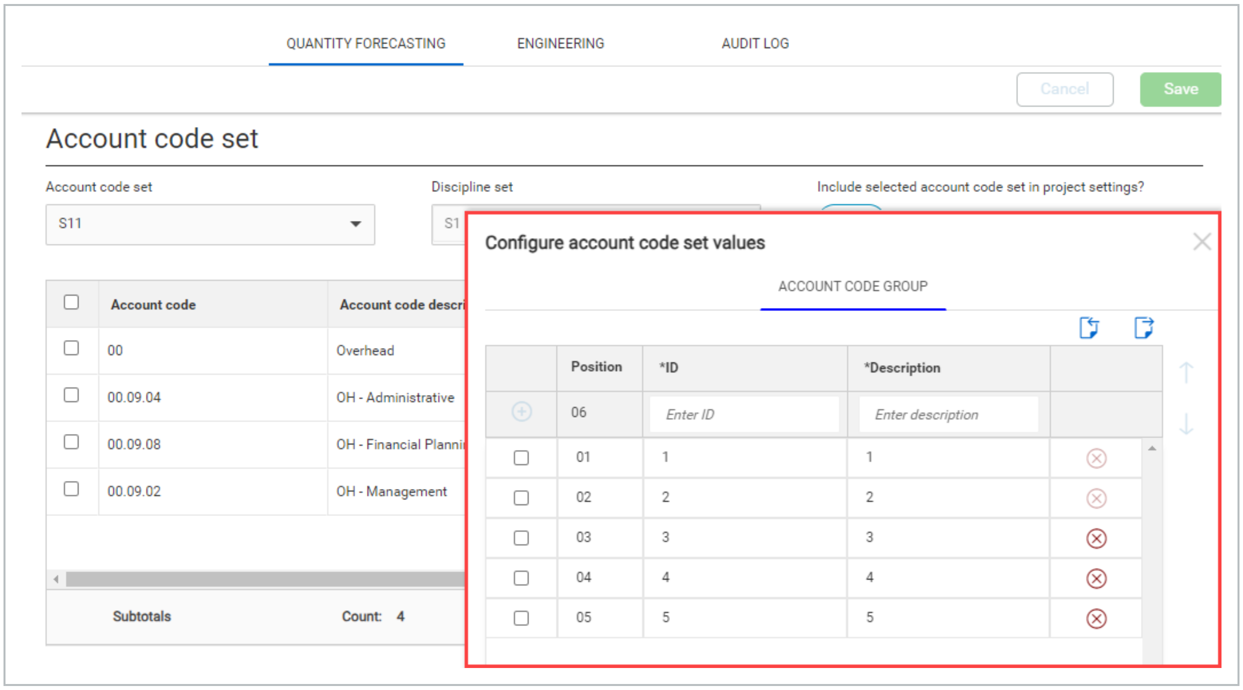


2.4.1 STEPS

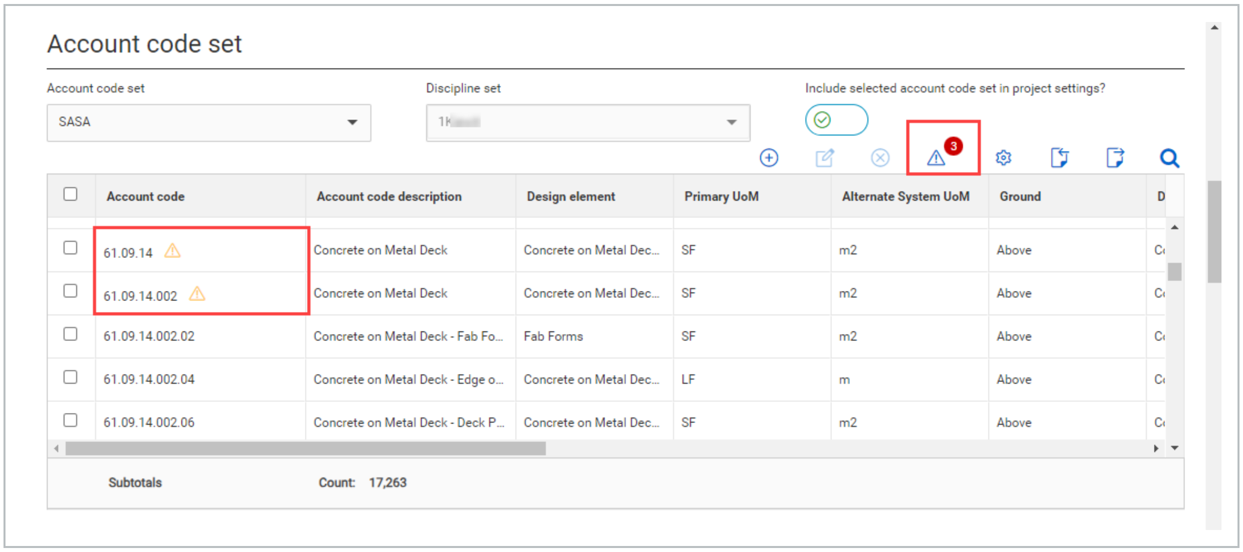
You can do any of the following actions:

- **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

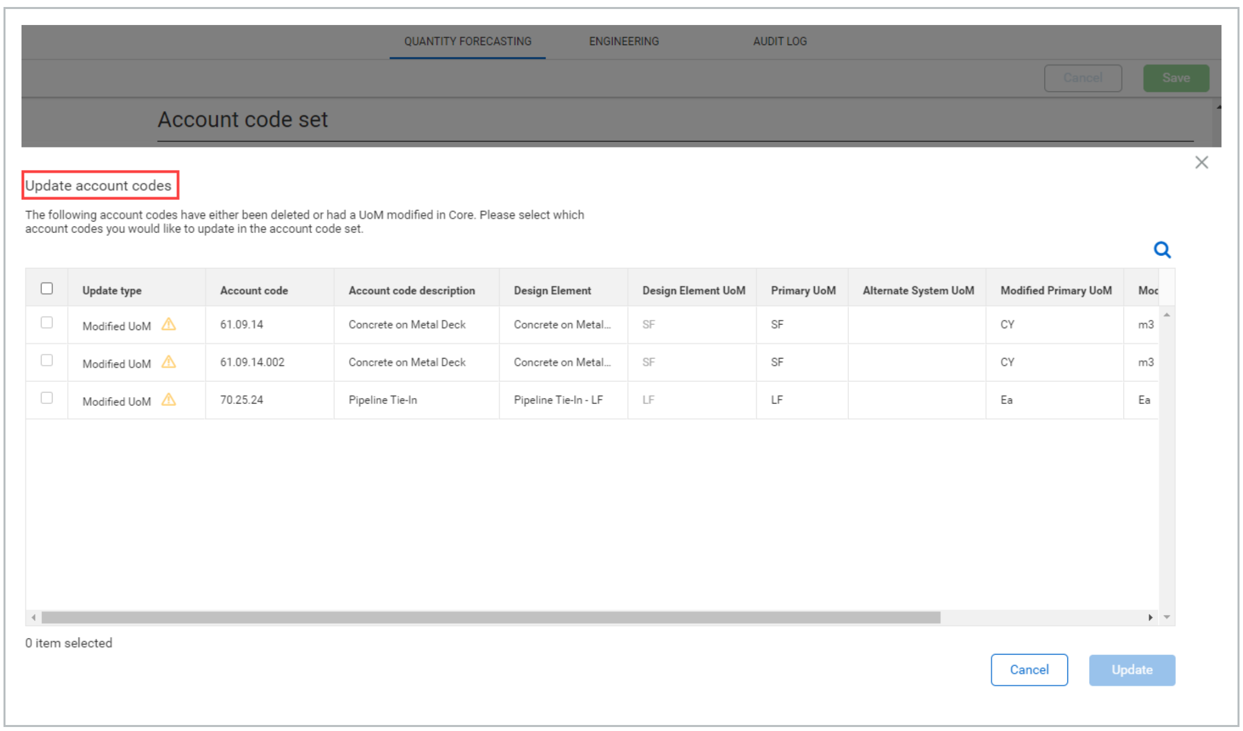
the set. Account code values assigned to an account code in the set cannot be removed.



- **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.



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.



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*.

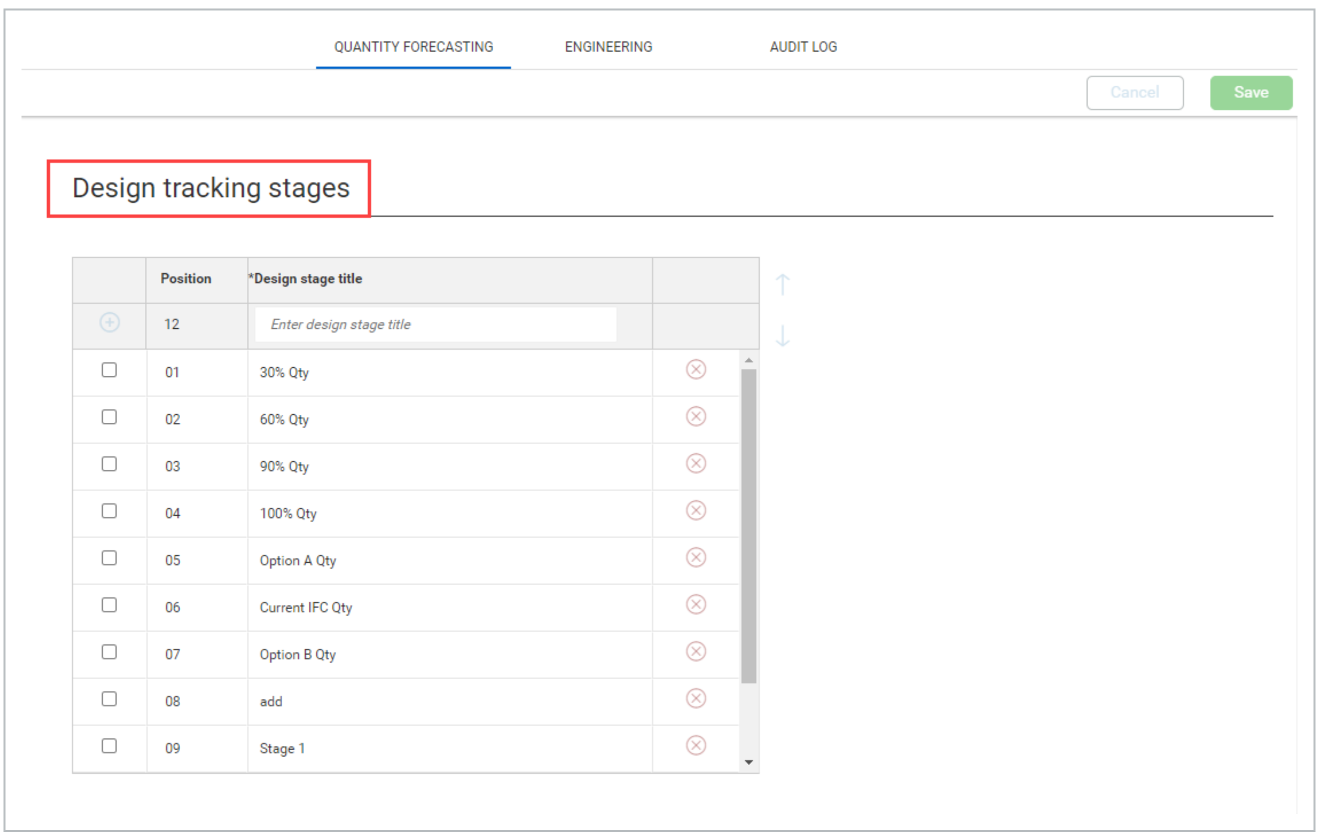
At the project level, you can tie an account code set to your project. For more information, see **Account code set** in the Generalsettings.

2.4.2 CONSIDERATIONS

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

2.5 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**.



2.5.1 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.

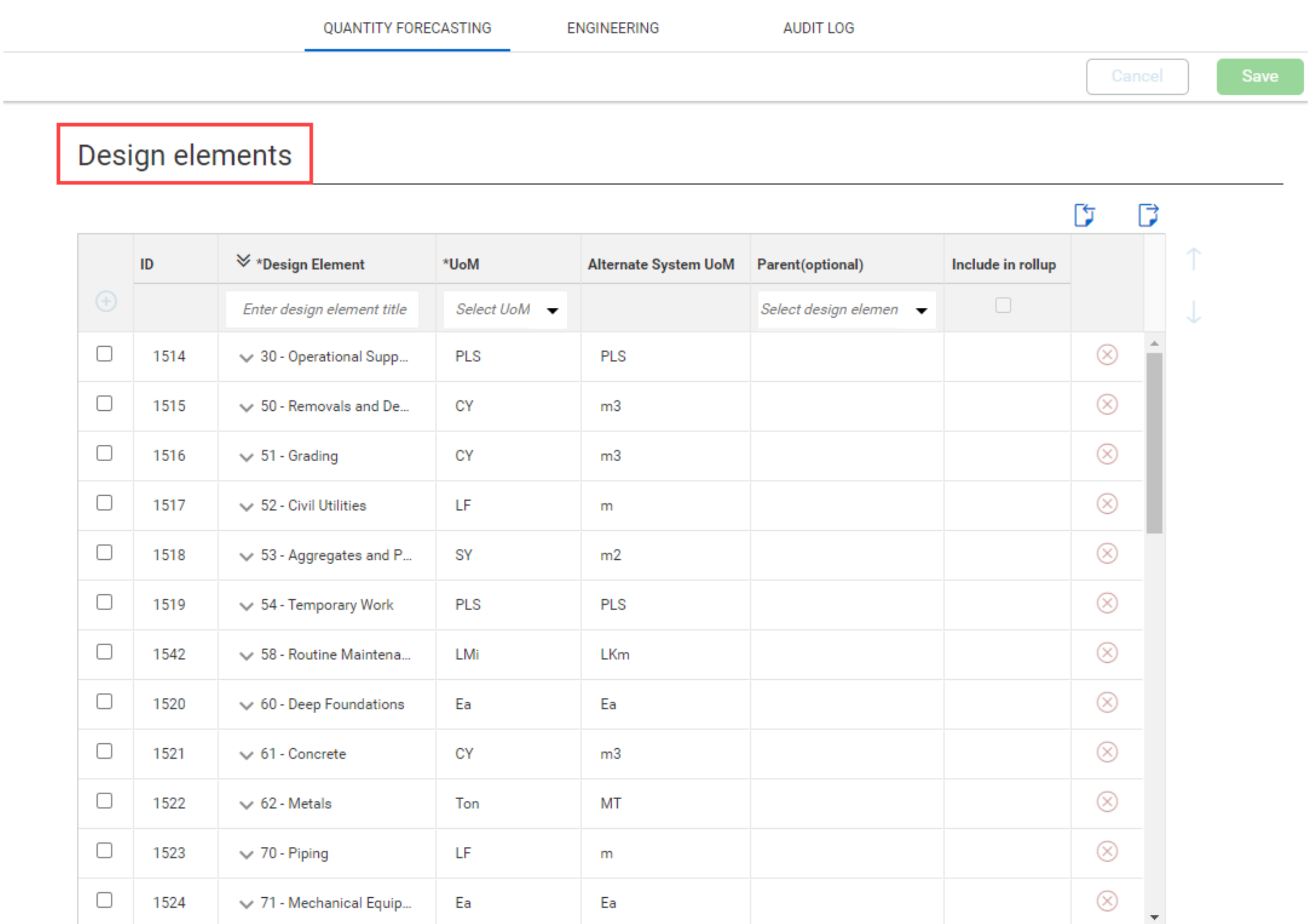
2.5.2 CONSIDERATIONS

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

2.6 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**.



2.6.1 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.

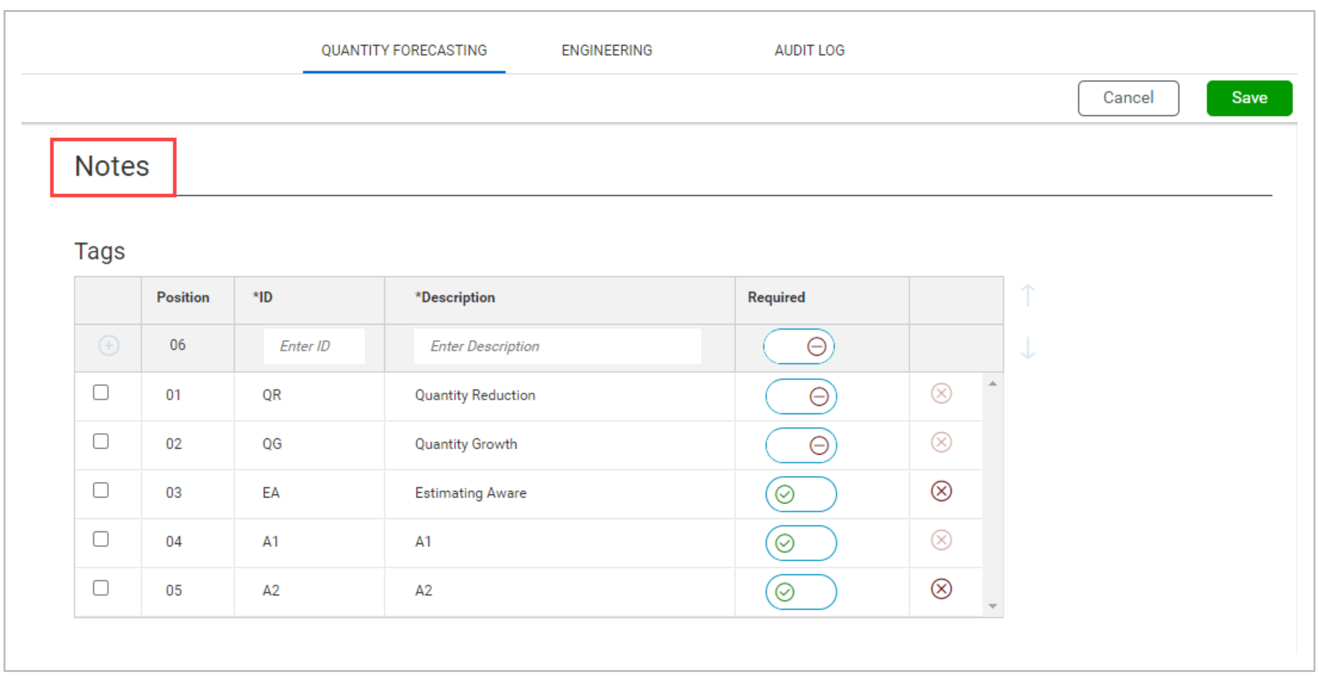
2.6.2 CONSIDERATIONS

- 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.

2.7 NOTES

2.7.1 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**.



2.7.2 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.

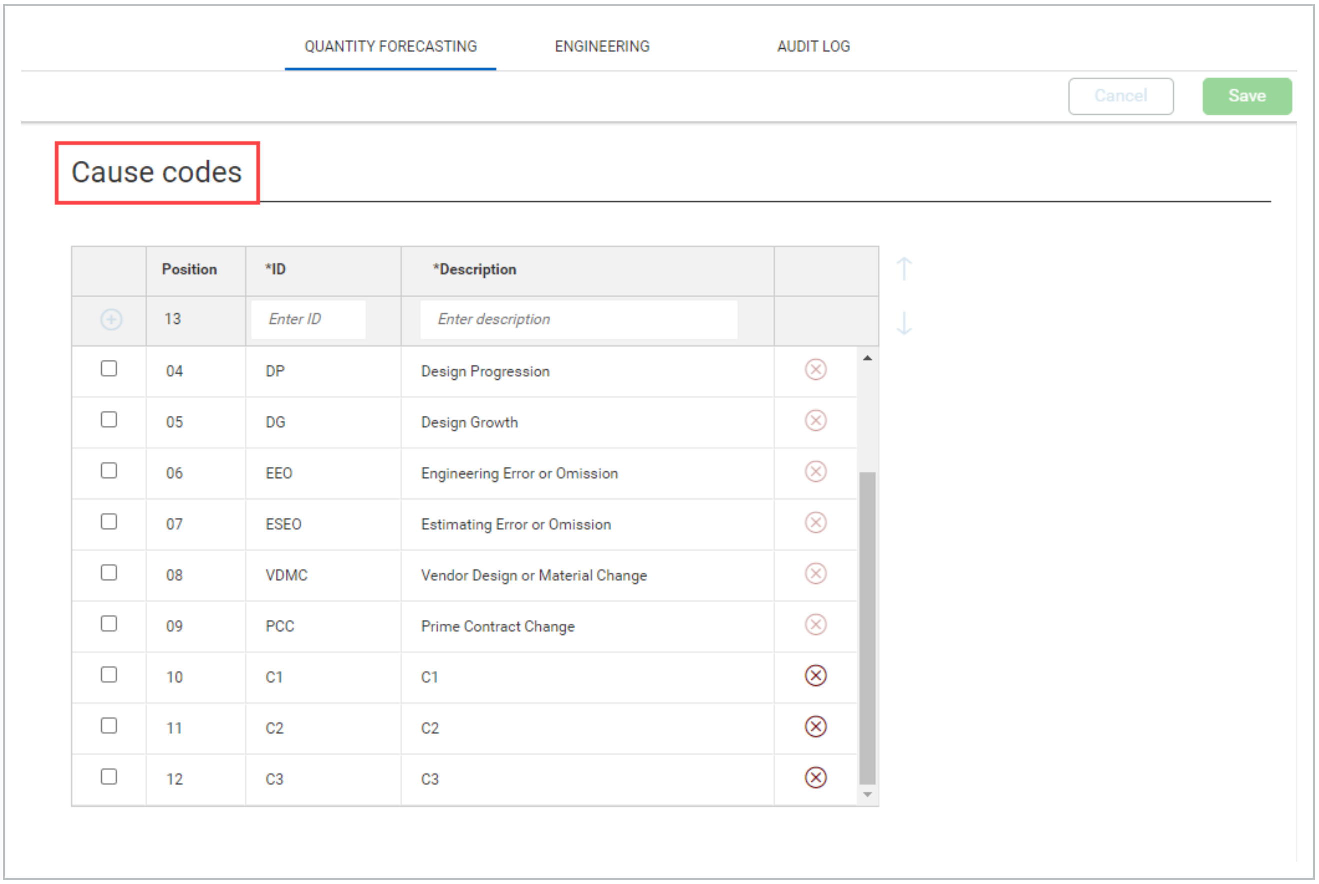
2.7.3 CONSIDERATIONS

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

2.8 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**.



2.8.1 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.

2.8.2 CONSIDERATIONS

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

CHAPTER 2 – PROJECT SETTINGS- QUANTITY FORECASTING

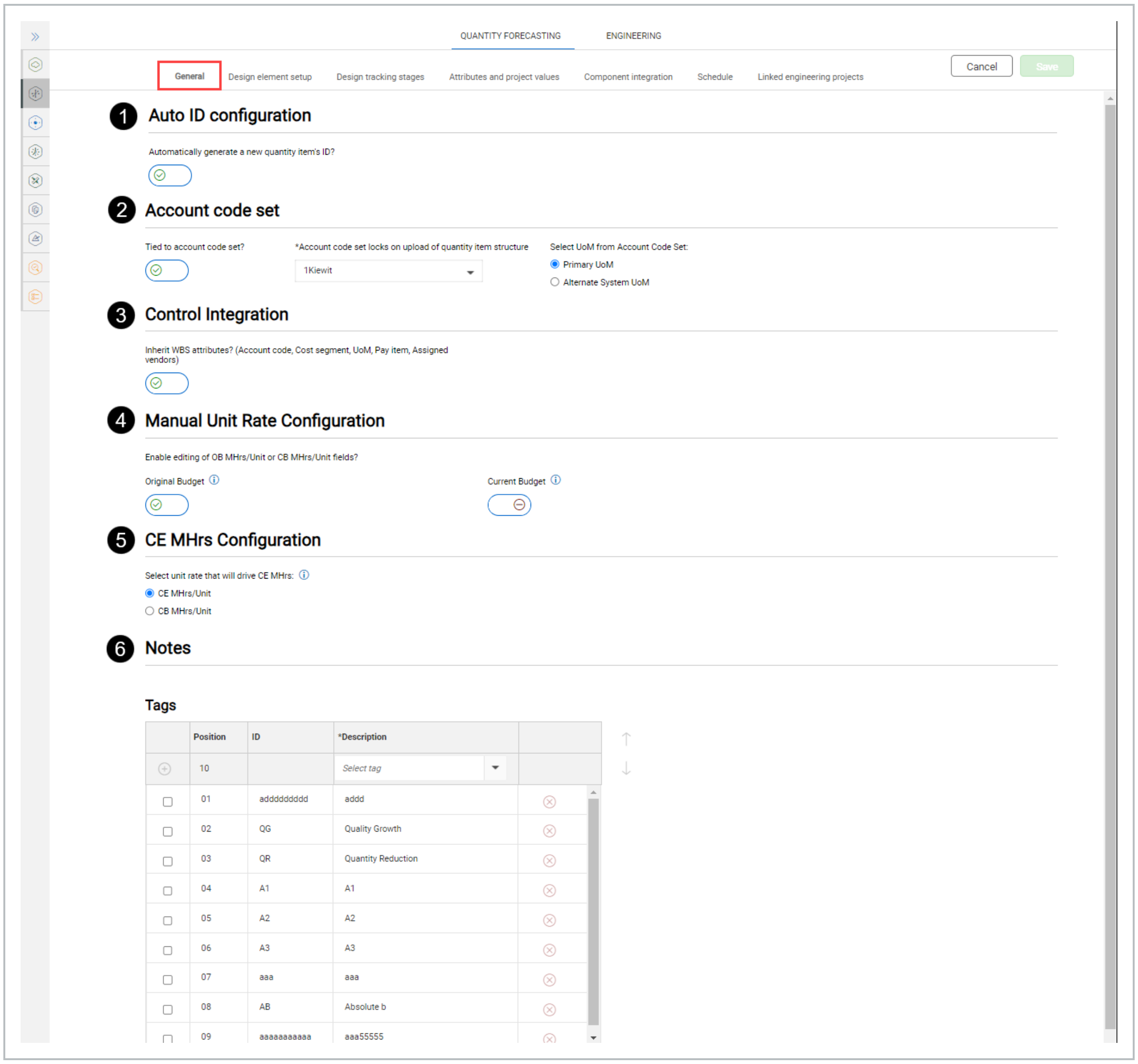
You can configure Project quantity forecasting settings and Engineering settings for your project. The settings configured at the project level are applied throughout your project.

You can access project settings in project > settings > **Design**.

2.1 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	**Auto ID configuration**	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	**Account code set**	Allows project admins to enable the use of Account Code Sets on a

General settings tab (continued)

	Title	Description
		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.
3	**Control Integration**	Enable integration of InEight Control's WBS attributes for the

General settings tab (continued)

	Title	Description
		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 **Required** and **Unique** in the Quantity Forecasting > **Fields and component integration** settings tab and existing data must align with Control's WBS attributes.
4	**Manual Unit Rate Configuration**	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.
5	**CE MHrs Configuration**	Allows project admins to specify

General settings tab (continued)

	Title	Description
		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.
6	**Notes**	**Tags** - 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.

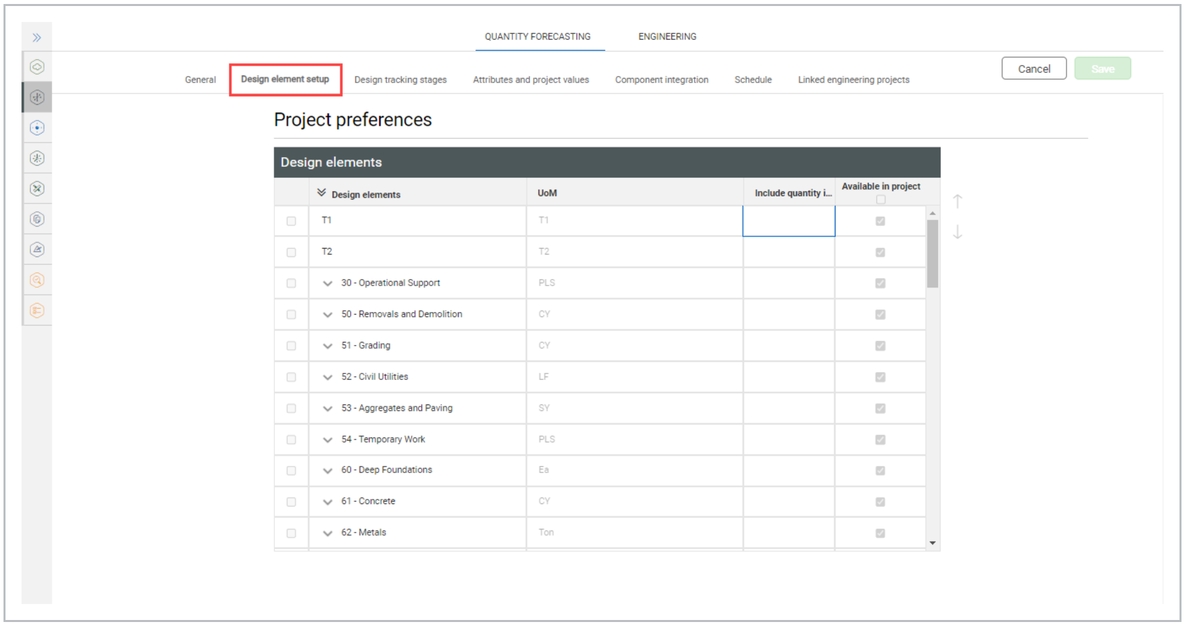
2.1.1 CONSIDERATIONS

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

2.2 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.

2.2.1 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.

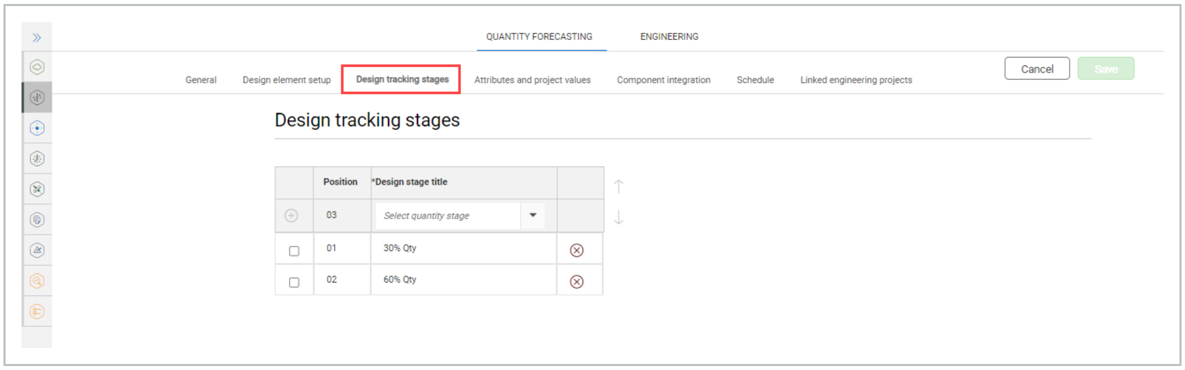
2.2.2 CONSIDERATIONS

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

2.3 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.

2.3.1 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.

2.3.2 CONSIDERATIONS

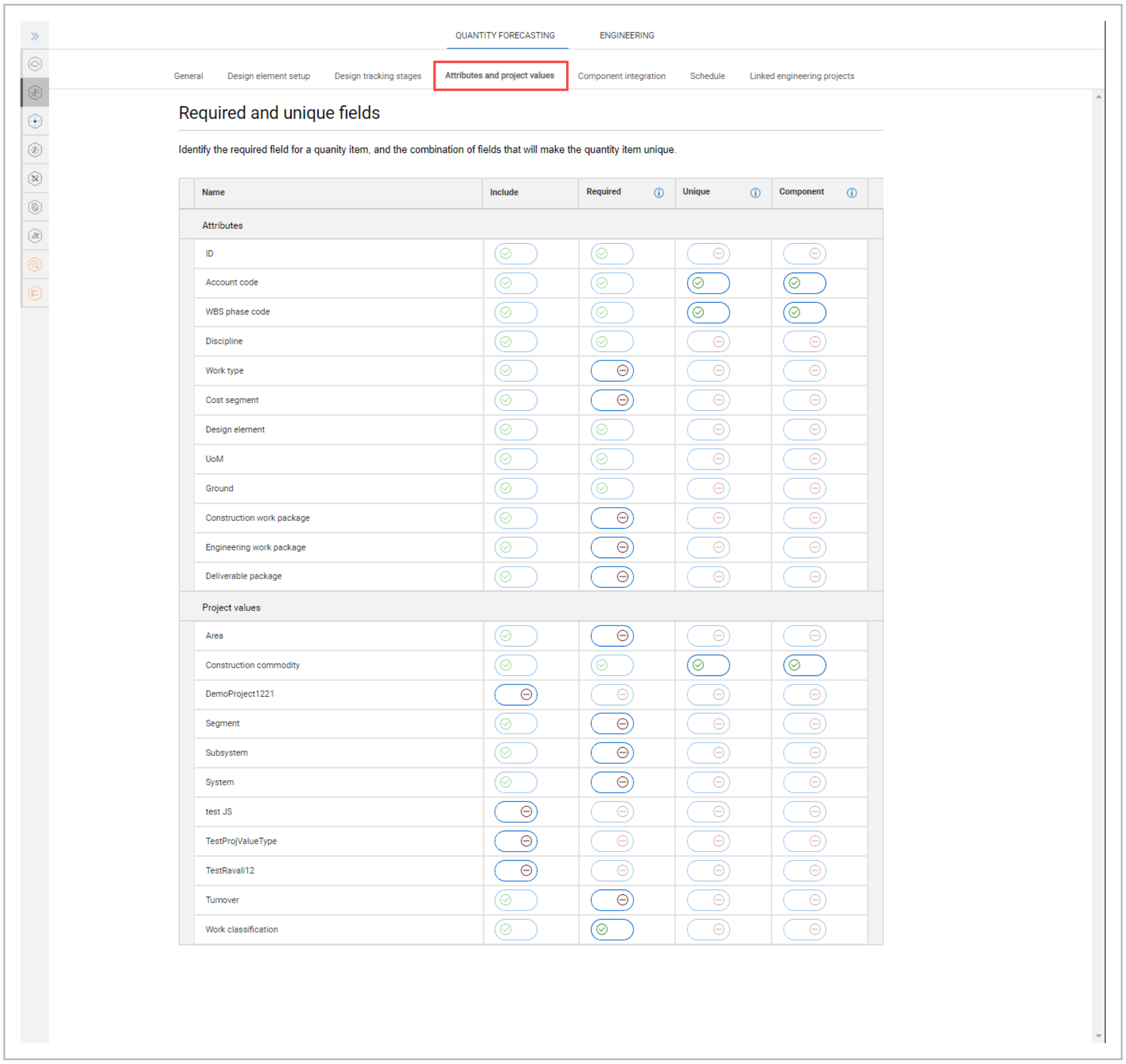
You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Quantity Forecasting.

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

2.4 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.

2.4.1 ATTRIBUTES

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

2.4.2 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.

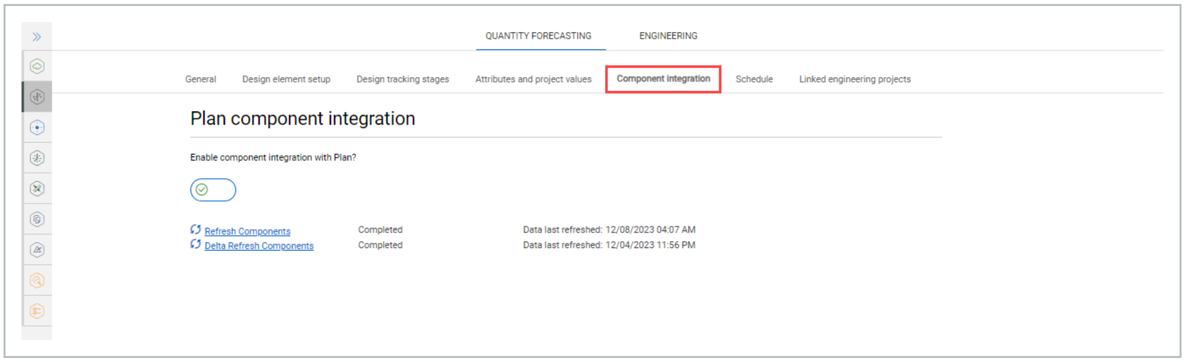
2.4.3 CONSIDERATIONS

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

2.5 COMPONENT INTEGRATION

2.5.1 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 set 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.

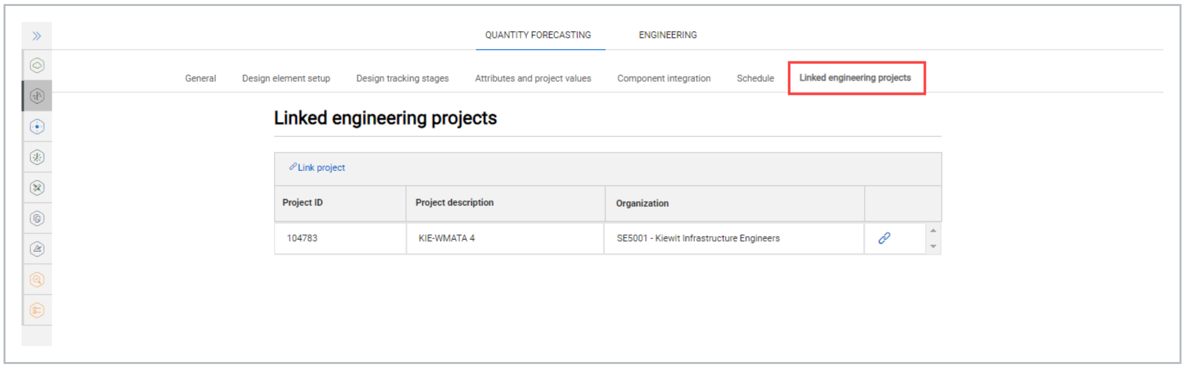
2.5.2 CONSIDERATIONS

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

2.6 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).

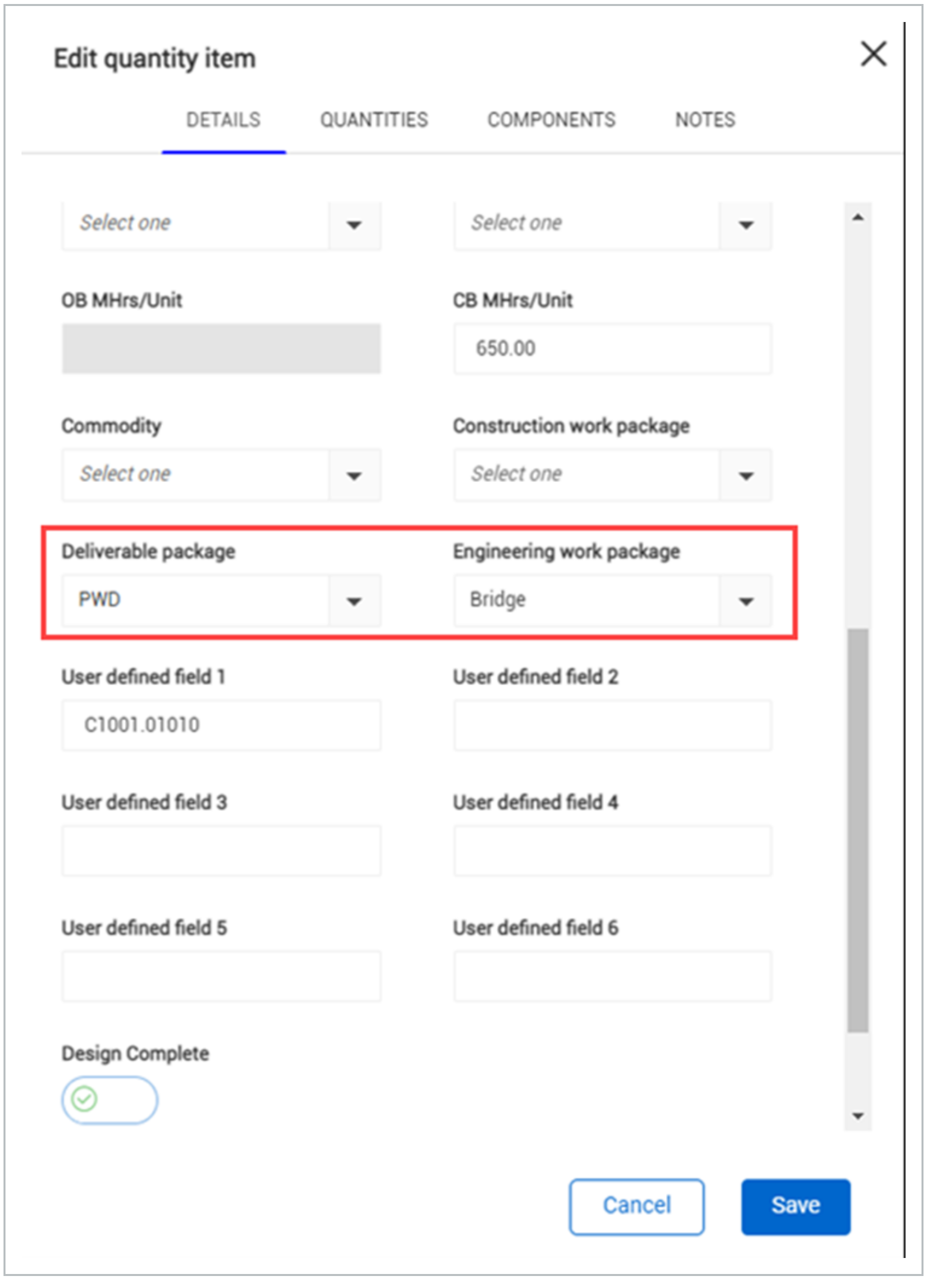


To share engineering work packages between different projects and Plan, you must link the projects.

> 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.



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.

2.6.0.1 INTEGRATION WITH PLAN

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

2.6.1 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.

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CHAPTER 3 – ENGINEERING MODULE OVERVIEW

3.0.1 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.

3.1 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.

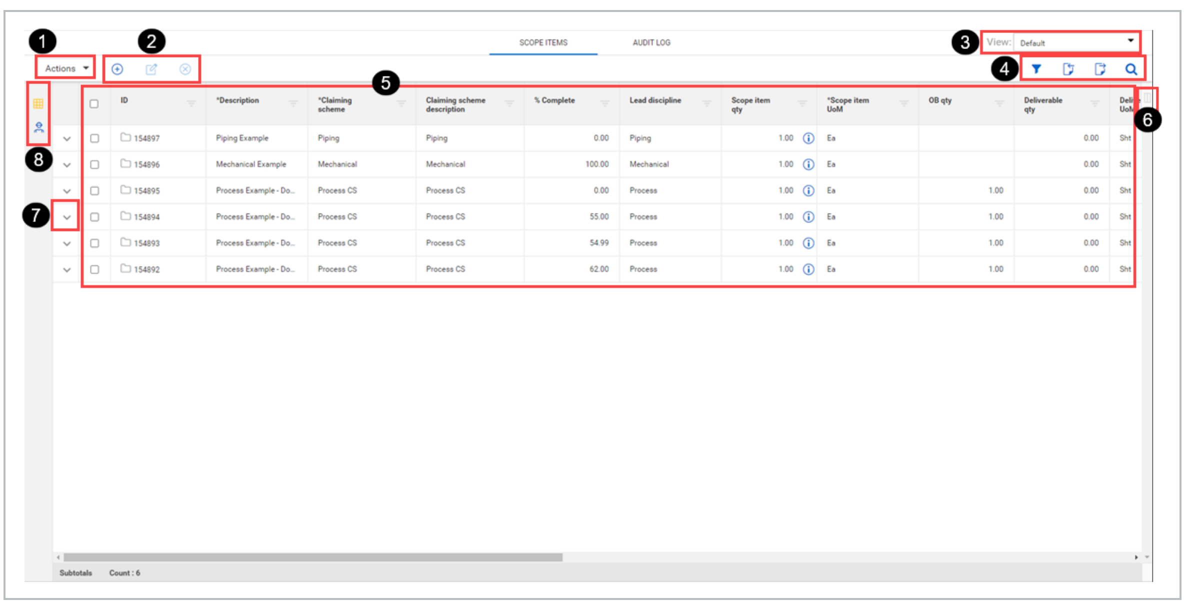
The following table and image give an overview of each section of the Scope items page and what can be performed there.

Overview - Scope items page

Title		Description
1	**Actions menu**	Do any of the following: • Configure claiming schemes • Configure work packages • Configure project values

Overview - Scope items page (continued)

Title		Description
		• Unlock Budget • Role assignment
2	**Scope item buttons**	Add, edit, and delete scope items.
3	**View**	Select, save, rename, and delete views.
4	**Upper right toolbar**	• Create query filter - Opens the query builder • Import and Export - Import and export sets of data • Find - Search scope items
5	**Scope items**	Grid showing scope items and related information organized by columns.
6	**Column chooser**	Select which columns are shown or hidden.
7	**Show/Hide claiming steps**	Shows claiming scheme steps, details, and history. It also lets you claim completion for each scope item.
8	**Additional views**	Choose whether to view all scope items or only those Assigned to Me.



3.1.1 CONSIDERATIONS

You must have the permission View scope items.

3.2 ADD A SCOPE ITEM

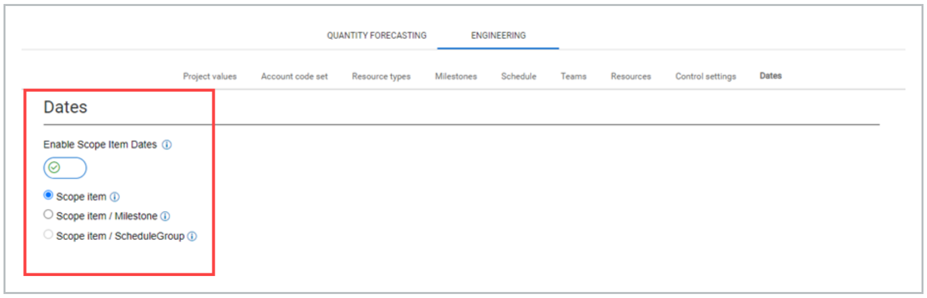
3.2.1 SUMMARY

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:



  - Scope item - The system captures the first claim date made on the scope item in the Actual start field.
  - Scope item / Milestone - The system captures the first claim date made on each milestone on a claiming scheme in the Actual start field.
  - Scope item / ScheduleGroup - The system captures the first claim date made on each schedule group on a claiming scheme in the Actual start field.

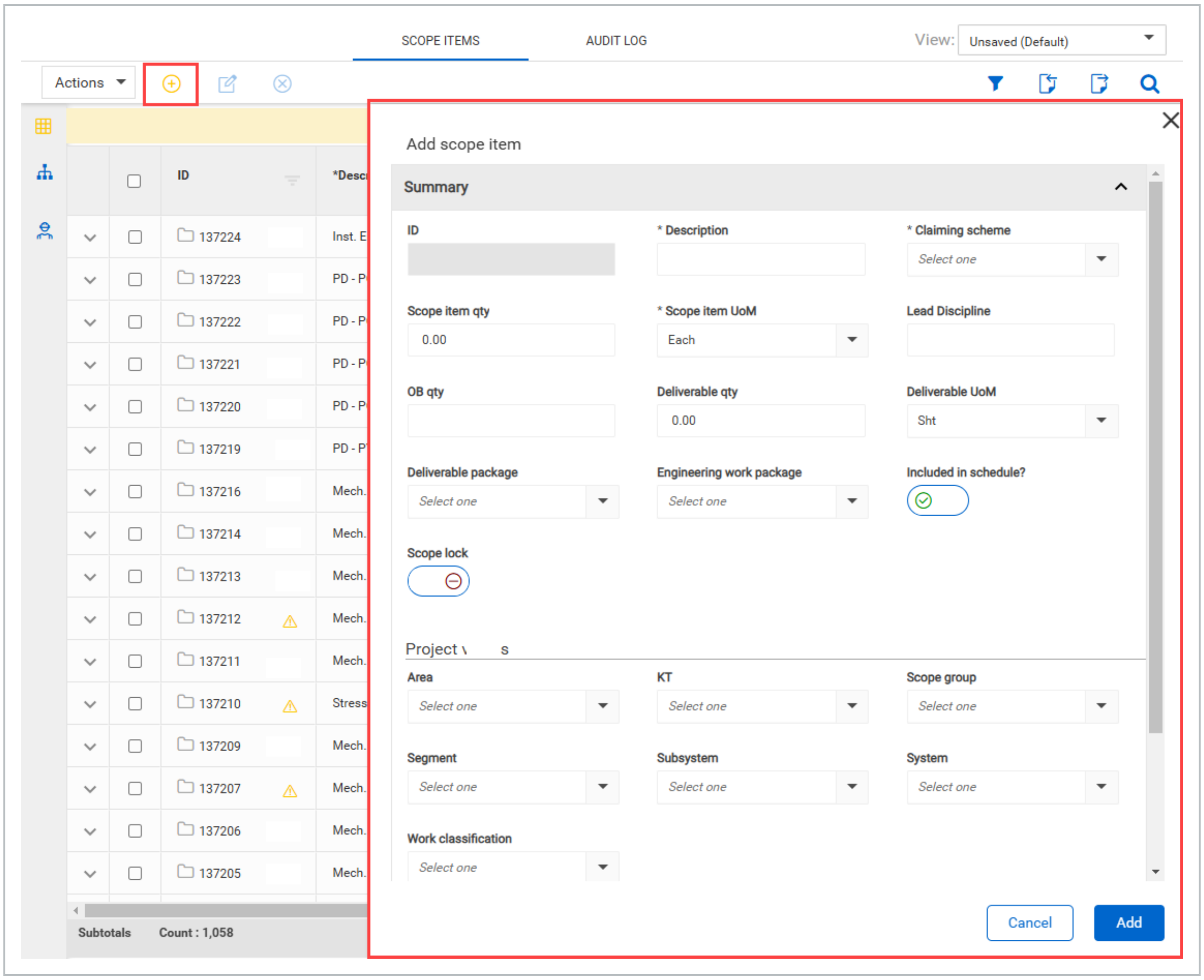
3.2.2 CONSIDERATIONS

- 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.

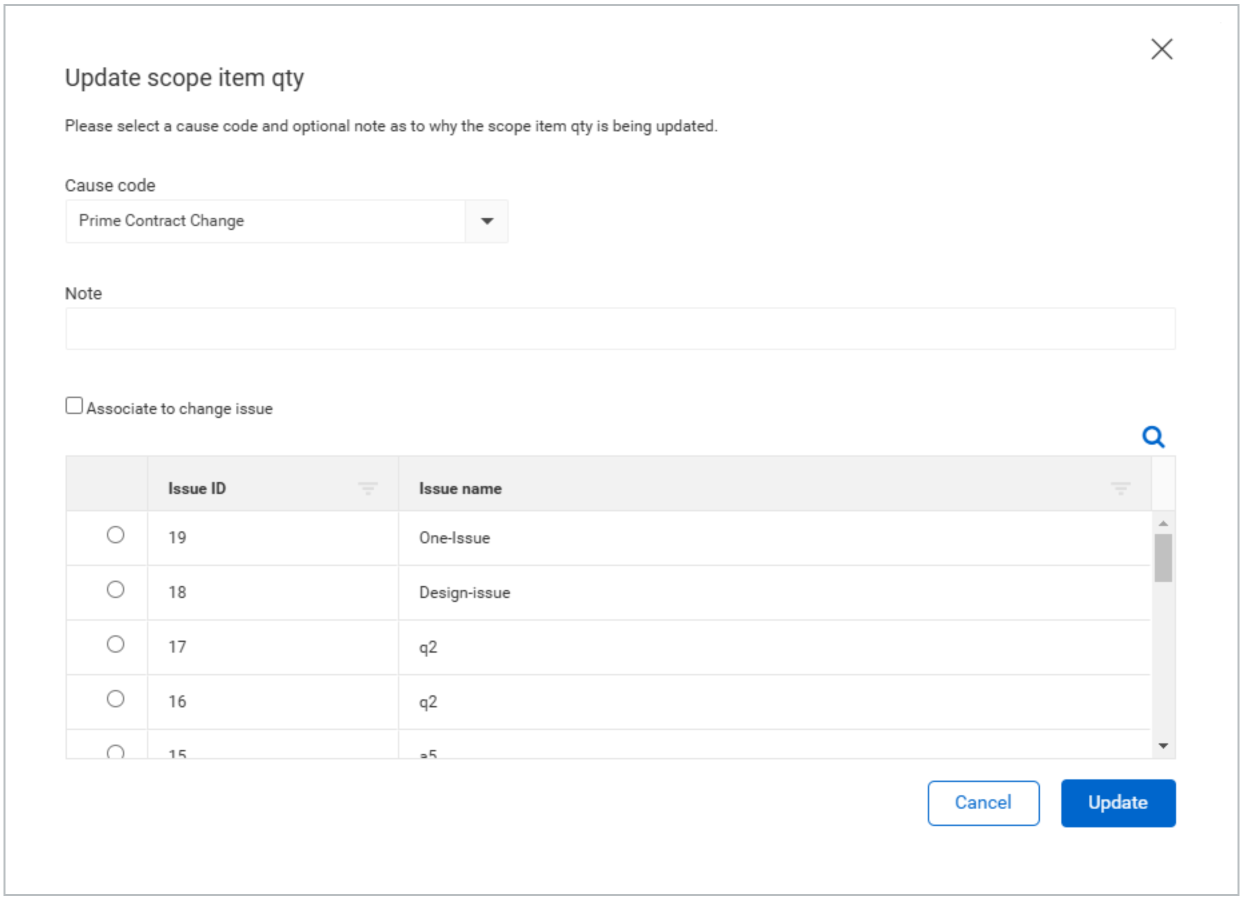
3.2.3 STEPS

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 following required fields:
   - **Description**
   - **Claiming scheme**
   - **Scope item UoM**
3. Click **Add**. The Update scope item qty dialog box shows.



4. Select a cause code from the **Cause code** drop-down list, and then optionally enter a note.

   When integrated with InEight Change, you can optionally select the **Associate to change issue** check box, and then select an issue from the grid.

5. Click **Update**.

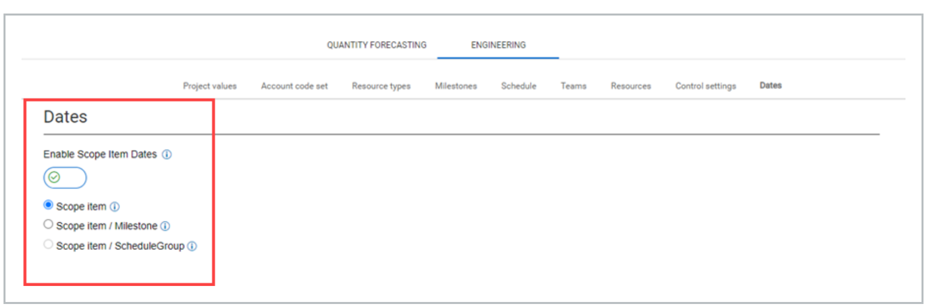
3.3 EDIT A SCOPE ITEM

3.3.1 SUMMARY

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

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

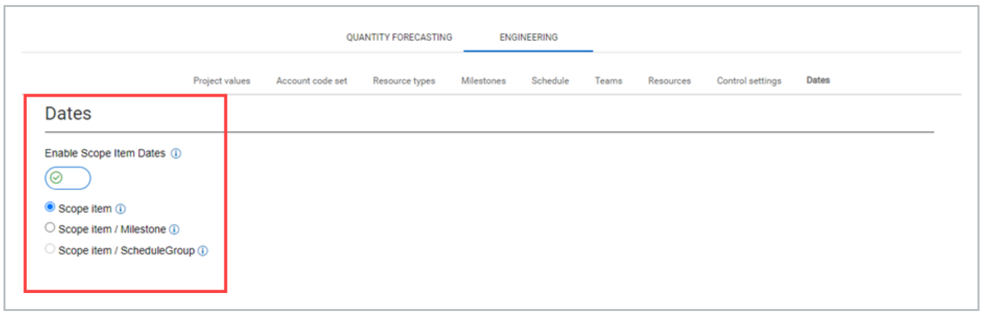
- **Summary** – Basic details of the scope item, including:
  - ID – This field is automatically populated.
  - Description - Must be unique.
  - Claiming scheme – Cannot be edited after claiming has been made.
  - Scope item qty and UoM – If you edit the quantity after claiming has been made, you must 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:



- Scope item - The system captures the first claim date made on the scope item in the Actual start field.
- Scope item / Milestone - The system captures the first claim date made on each milestone on a claiming scheme in the Actual start field.
- Scope item / ScheduleGroup - The system captures the first claim date made on each schedule group on a claiming scheme in the Actual start field.

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.

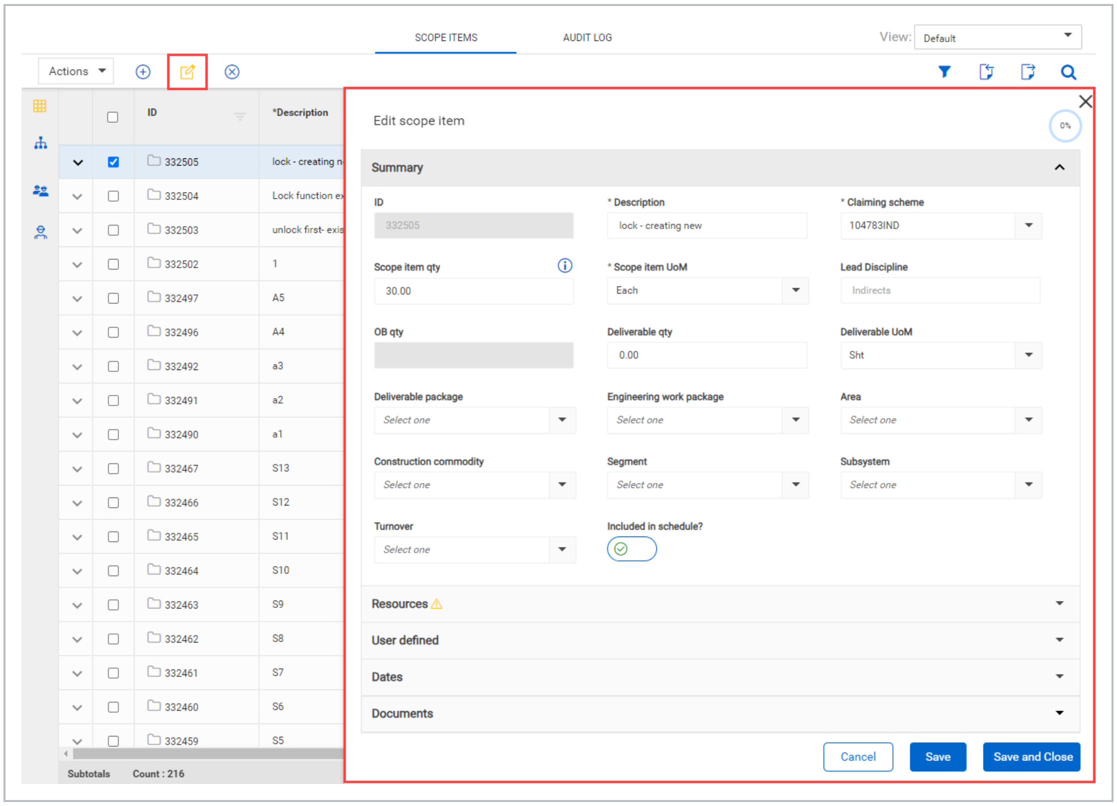
3.3.2 CONSIDERATIONS

You must have the permission Edit scope items.

3.3.3 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.

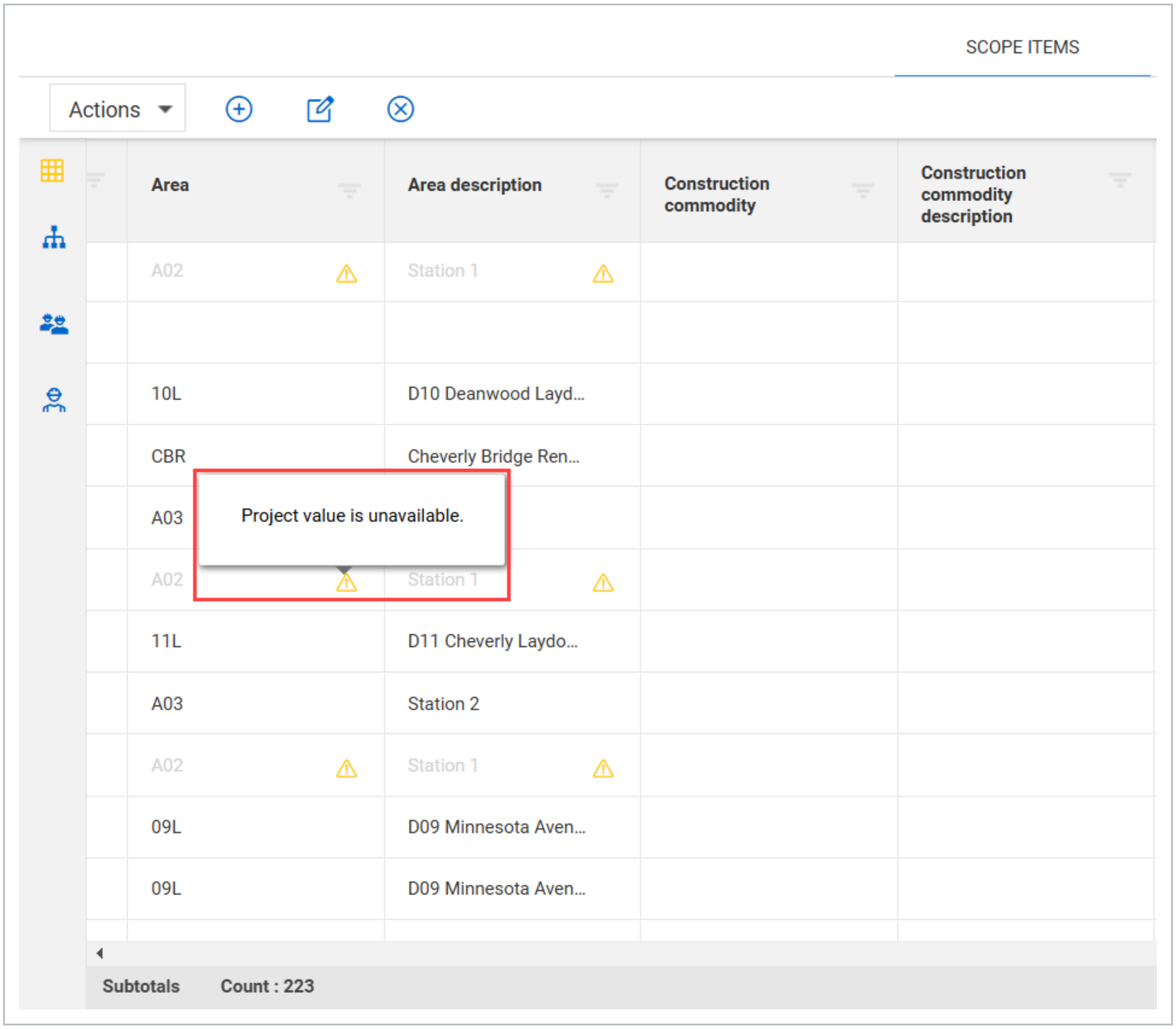


2. Edit the fields you want to update.
3. Click **Save** or **Save and Close**.

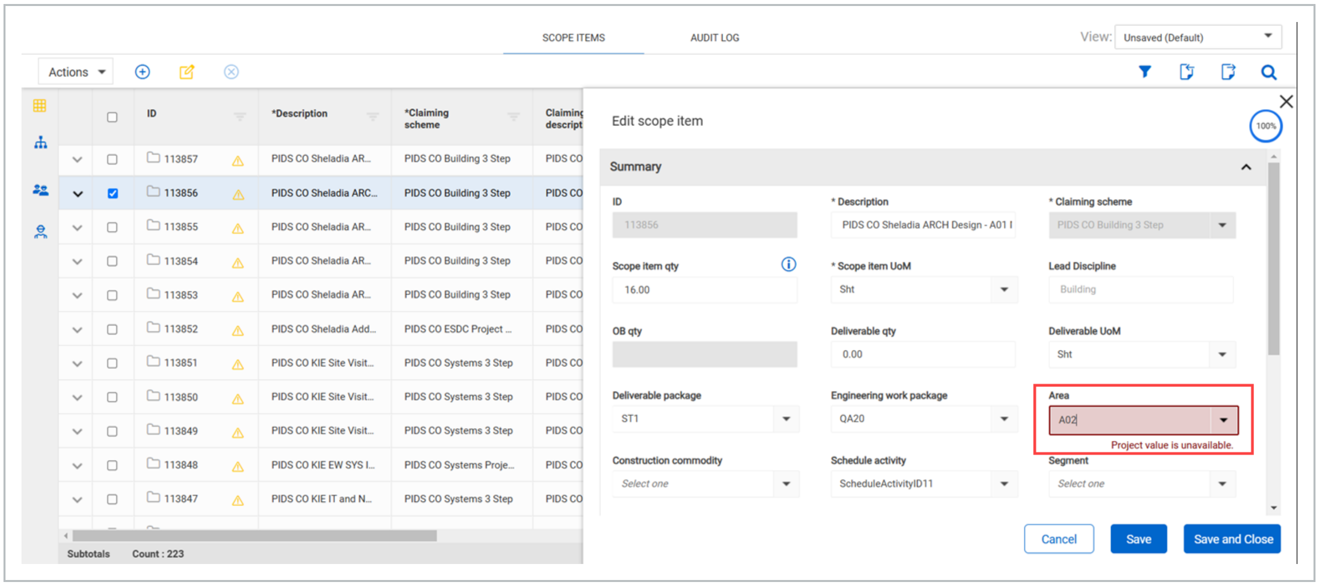
When you update the Scope item qty on a scope item that has no claiming, the Update scope item qty dialog box will guide you through the process of the update. You have the option to associate the quantity change to InEight Change. For more information, see Update scope item quantity.

3.4 PROJECT VALUES

Project values configured for the project in Project settings are available to use in the project. When the status of a project value is changed to *Unavailable* in InEight cloud Platform, a yellow caution icon shows in the project value field. To save the scope item, you must select an available project value from the list.



To update to an available project value, select to edit the scope item, and then select an available project value from the drop-down list. For more information about editing a scope item, see Edit a scope item.



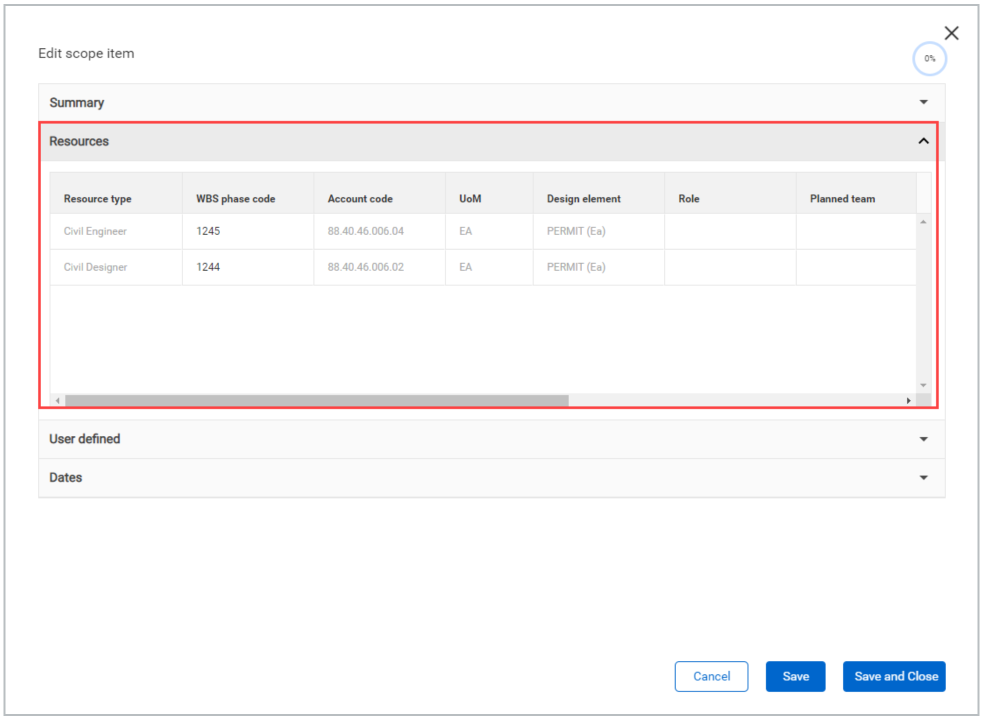
For more information about project values, see Project values in Engineering.

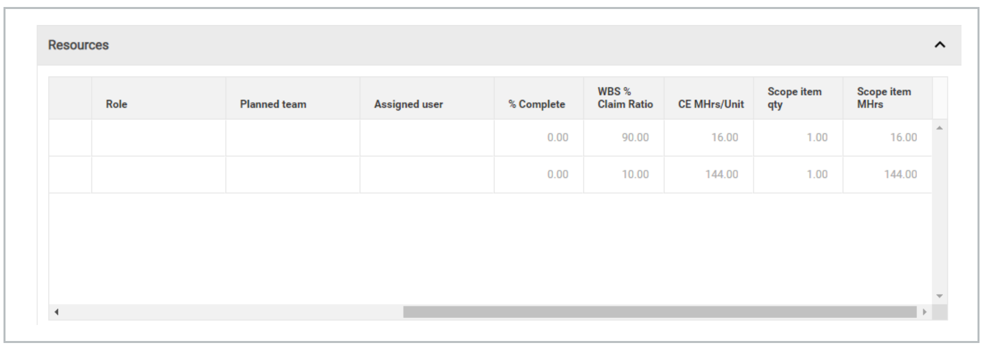
3.5 SCOPE ITEM RESOURCES

3.5.1 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.





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.

3.5.2 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.

3.6 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**.

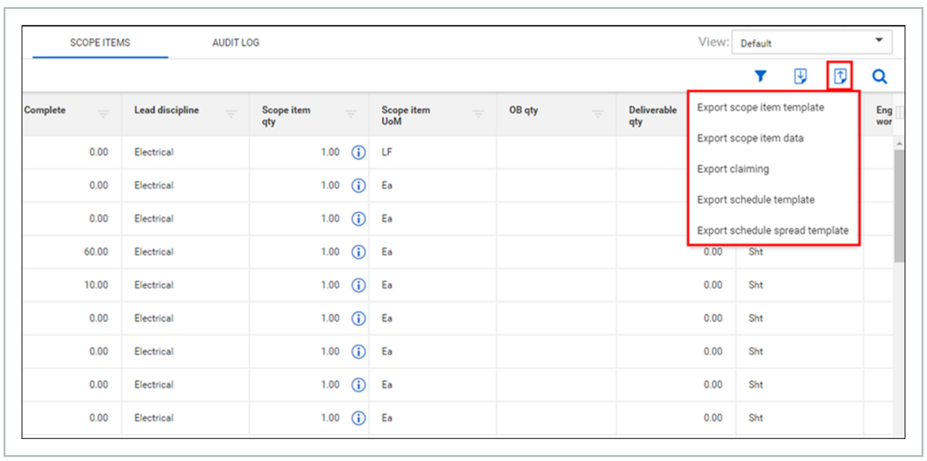
3.6.1 CONSIDERATIONS

You must have the permission Import scope items.

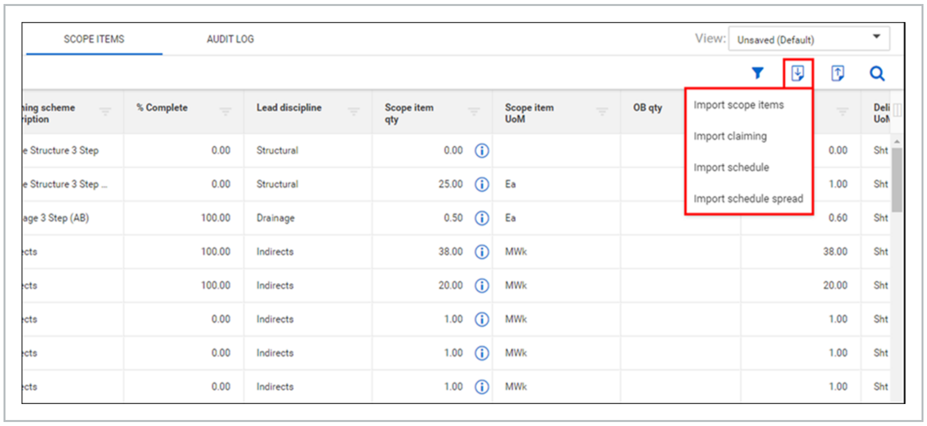
3.6.2 STEPS

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**.



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.

3.6.3 RELATED LINKS

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

3.7 CLAIM ON A SCOPE ITEM

3.7.1 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.

3.7.2 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

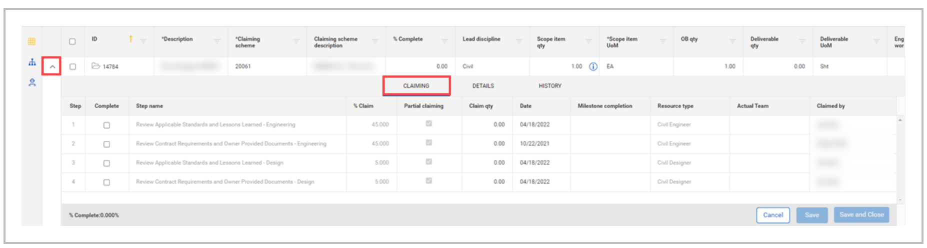
selected.

- 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.

3.7.3 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.



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](#).

3.8 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.

3.8.1 CONSIDERATIONS

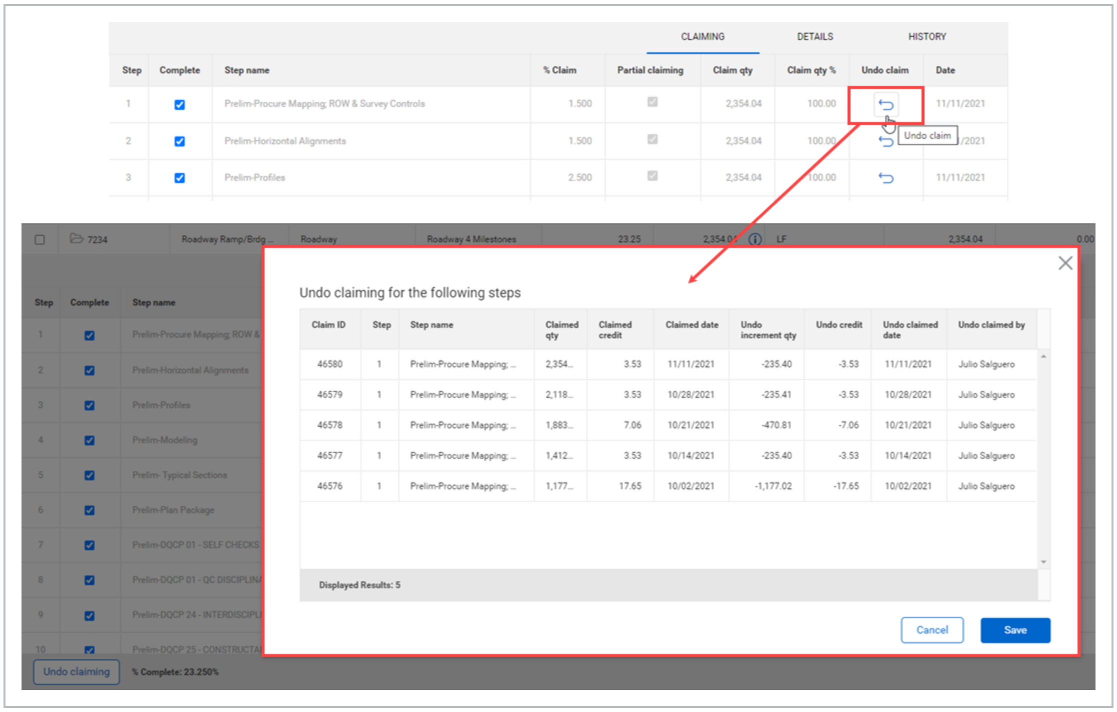
- You must have the permission Edit claiming.
- You can undo claiming for a step or an entire scope item. See the steps below for more information.
- When a step or scope item has not been claimed and is at 0%, the undo claiming icons do not show.

3.8.2 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.

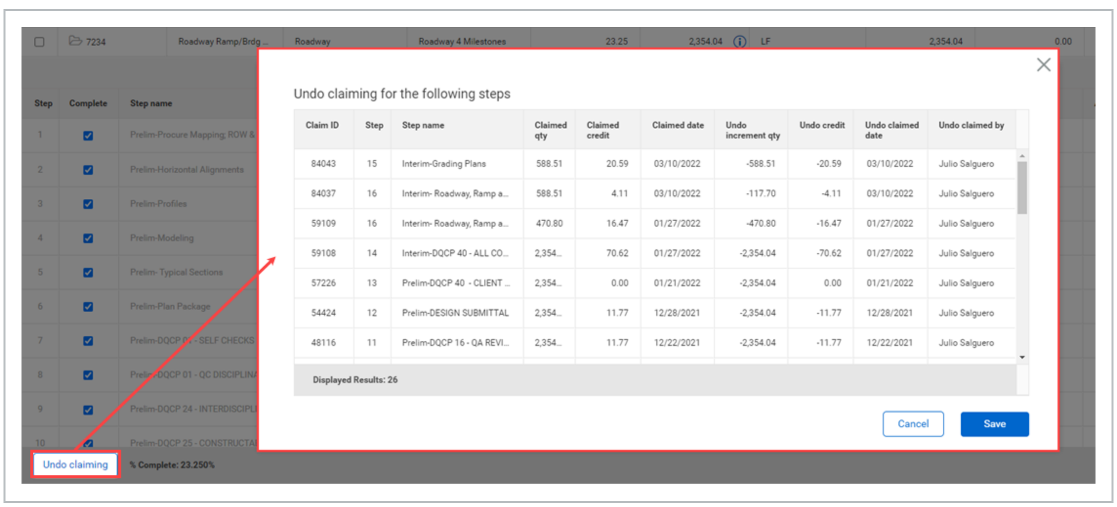


2. Click **Save** to undo claiming for the steps shown.

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.

3.8.3 RELATED LINKS

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

3.9 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**.

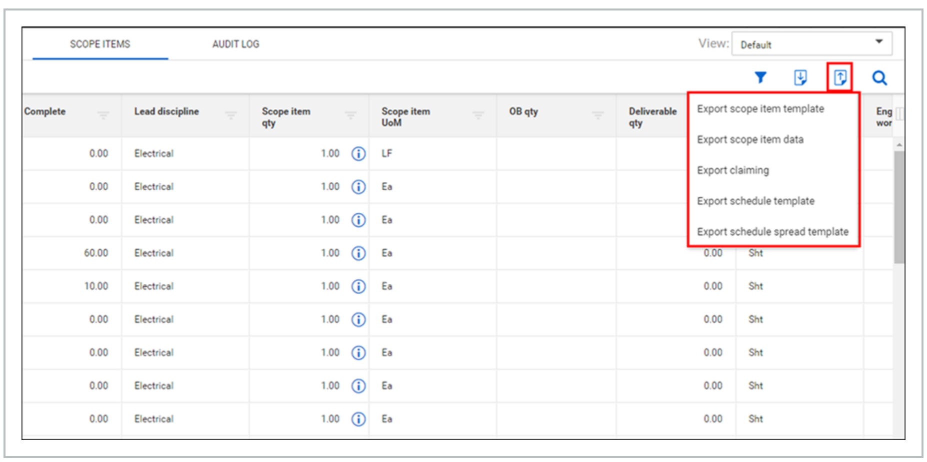
3.9.1 CONSIDERATIONS

- 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.

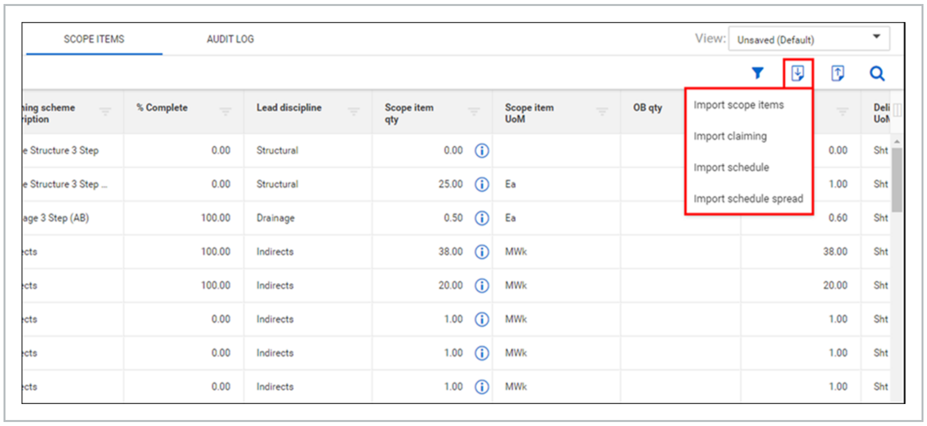
3.9.2 STEPS

To import claiming:

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



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**.



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.

3.9.3 RELATED LINKS

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

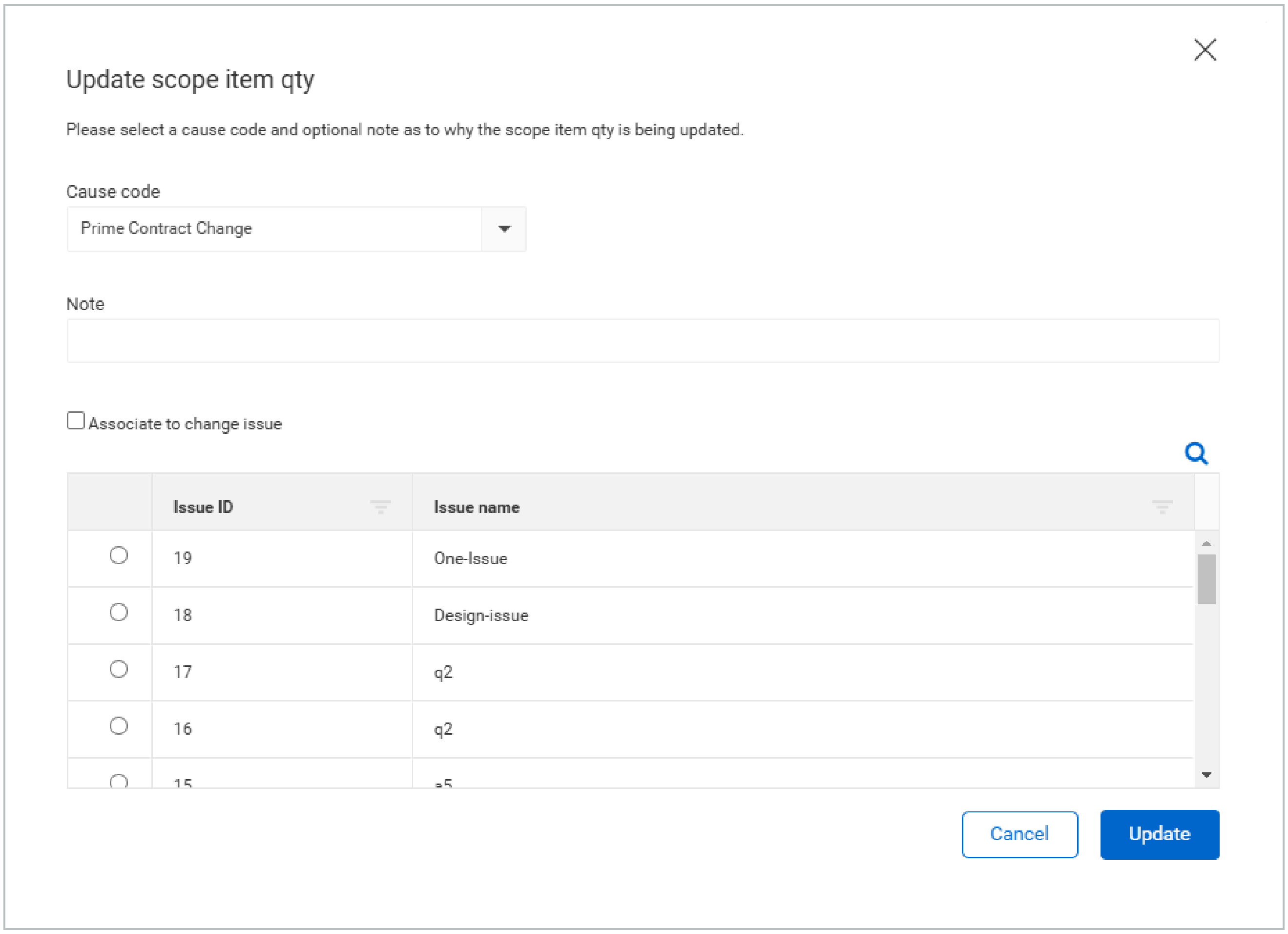
3.10 UPDATE SCOPE ITEM QUANTITY

You can update a scope item quantity to adjust the claiming on any previously claimed steps to reflect the new scope item quantity.

3.10.1 SCOPE ITEM WITH NO CLAIMING

The Update scope item qty dialog box guides you through the process when you update the scope item quantity for an item that has no claiming.

In the Update scope item qty dialog box, you must select a Cause code and optionally enter a note as to why the scope item quantity is being updated.

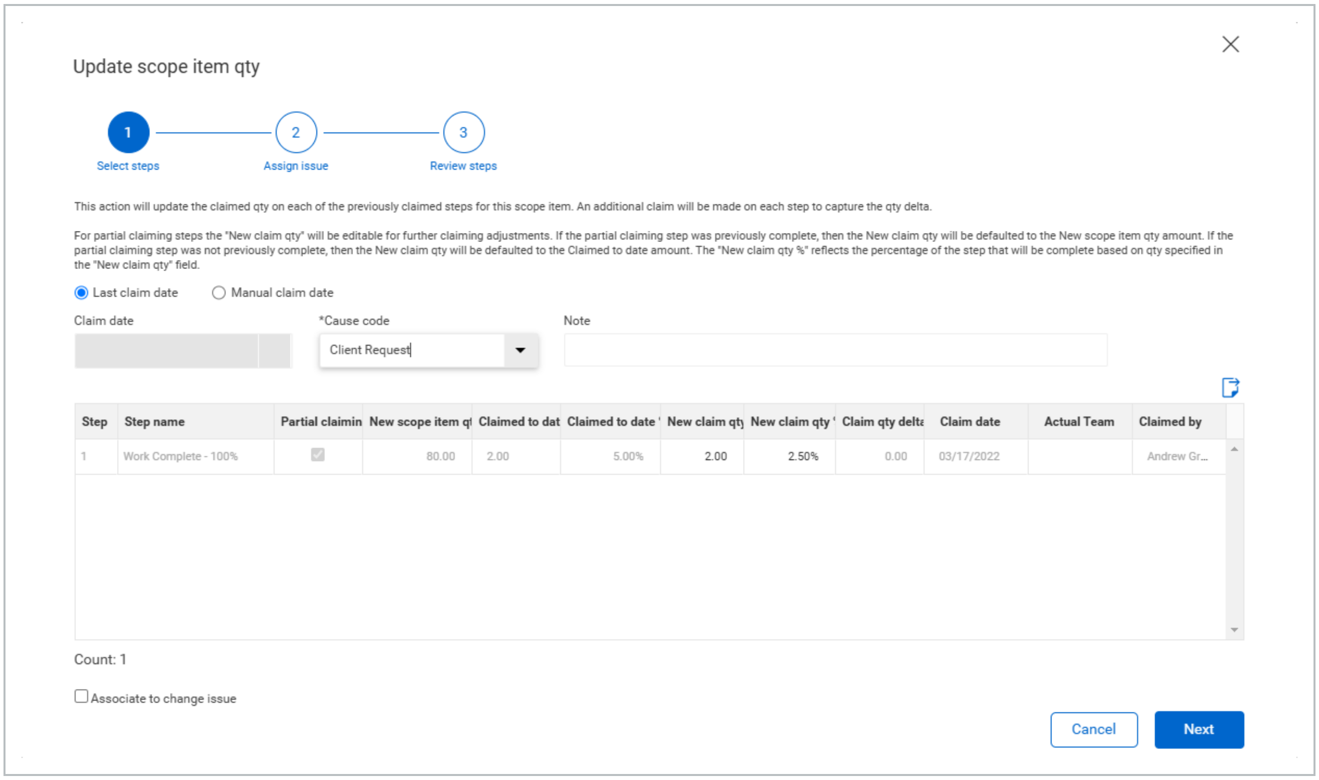


InEight Change integration

When you integrate with Change, you have the option to select the **Associate to change issue** check box to associate the quantity change to an issue in Change. You must select an issue from the grid to update the scope item.

3.10.2 SCOPE ITEM WITH CLAIMING

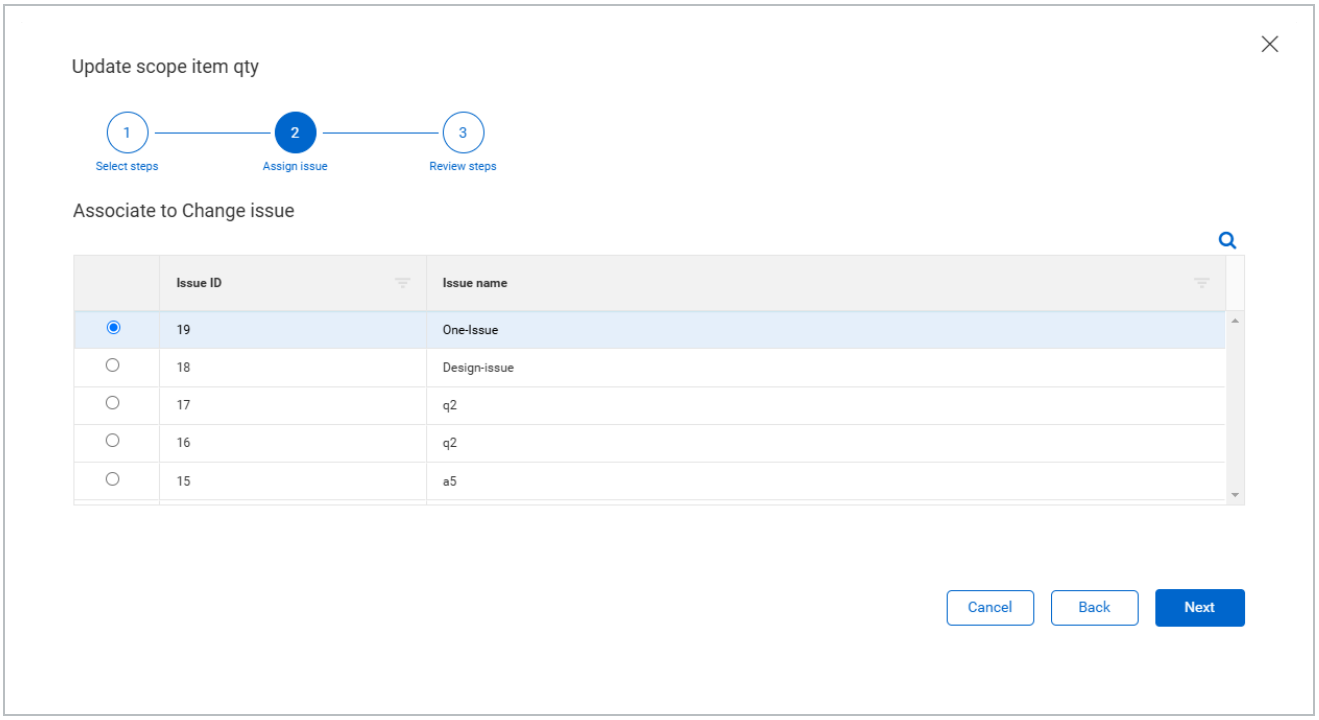
When you edit a scope item that has claiming and update the claimed quantities, the Update scope item qty wizard guides you through adjusting the claiming.



The Update scope item qty wizard 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.

InEight Change integration

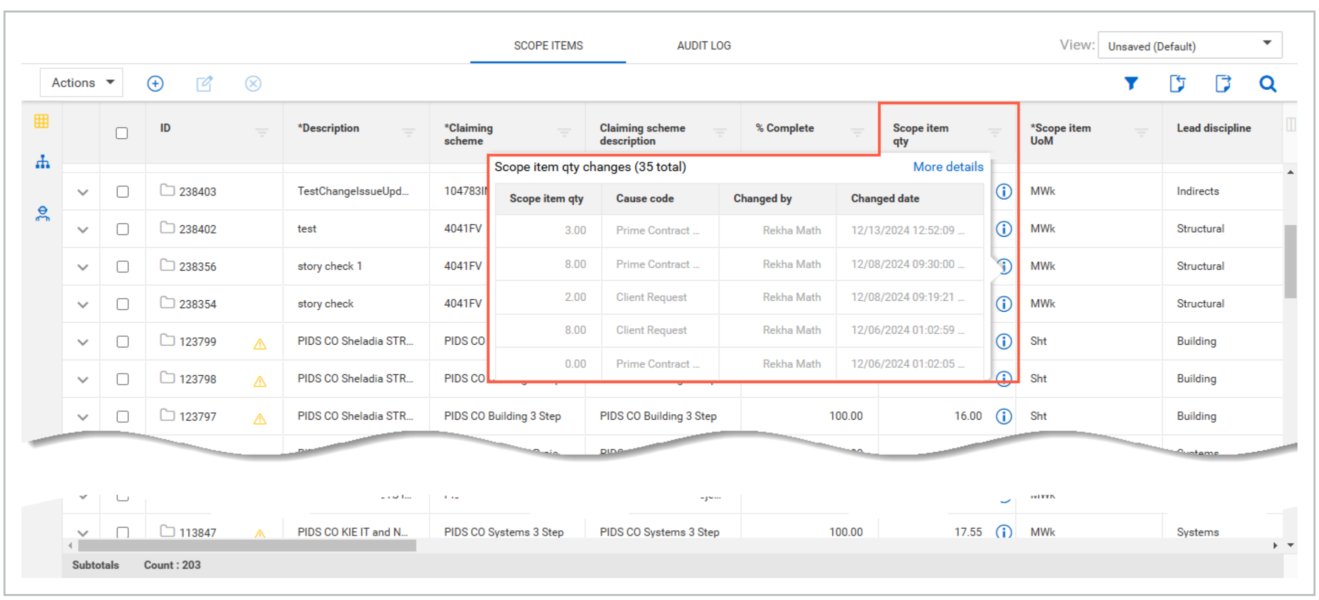
When you integrate with Change and update the scope item quantity, you have the option to select the **Associate to change issue** check box to associate the quantity change to an issue in Change. In Assign issue (step 2), select an issue from the grid.



After the Update scope item qty wizard is completed, the issue is associated to the remaining steps of the scope item.

3.10.3 SCOPE ITEM QUANTITY HISTORY

You can view previous scope item quantity changes in the Scope Items page by hovering over the **Information** icon in the Scope item qty column. Click **More details** to view the Scope item quantity history in the **Audit Log** tab.

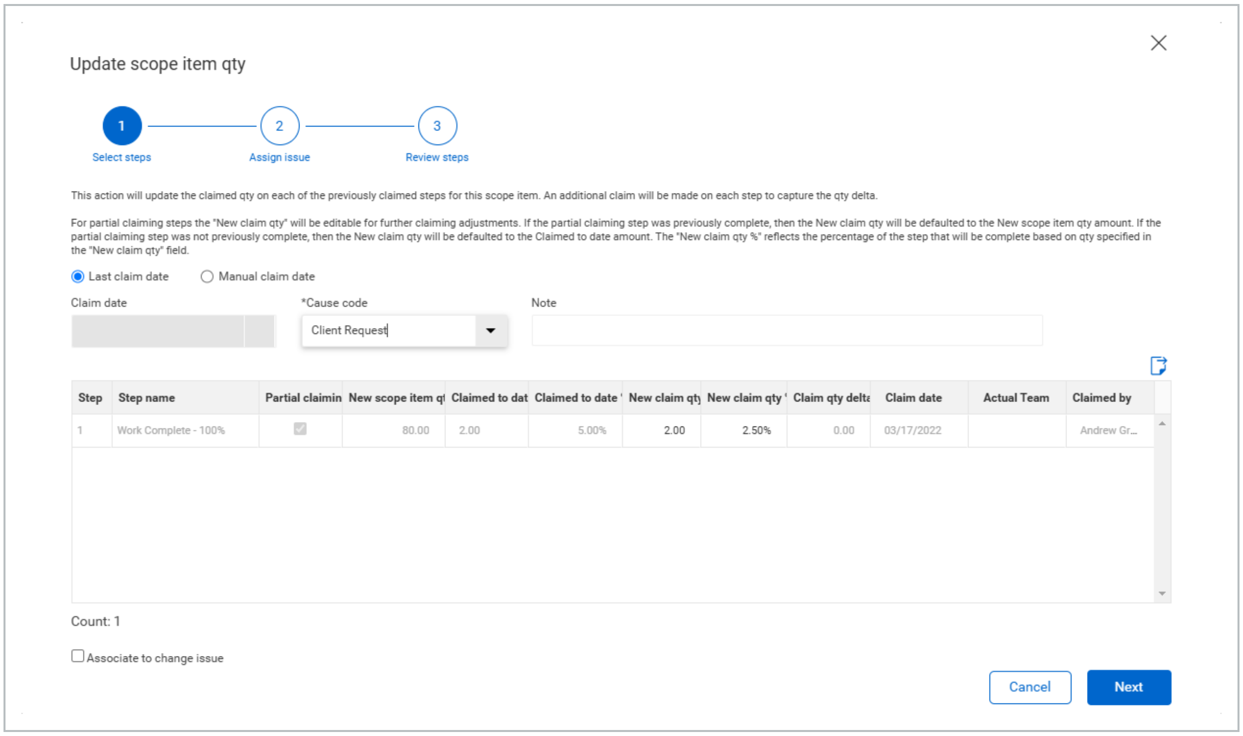


3.10.4 CONSIDERATIONS

You must have the permission Edit scope items.

3.10.5 STEPS

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 wizard dialog box opens.



3. Select **Last claim date** or **Manual claim date**.

> **NOTE** The Last claim date option lets you attribute the updated claims to the date the last claims were made on each step, reflecting more accurately in your reporting. Manual claim date is selected to today's date by default. The claim date selected is reflected for all steps.

4. Select a cause code from the **Cause code** drop-down list, and then optionally add a note.
5. Edit the **New claim qty**, **New claim qty percentage**, or **Actual Team** when applicable.

When integrated with InEight Change, you can select the **Associate to change issue** check box to associate the quantity change to a Change issue.

6. Click **Next**.

   When associated to a change issue, select the Change issue in **Assign issue** (step 2).

7. Review the changes (step 3), and then click **Update**.

3.11 UPDATE SCOPE ITEM QUANTITY BY IMPORT

3.11.1 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.

3.11.2 CONSIDERATIONS

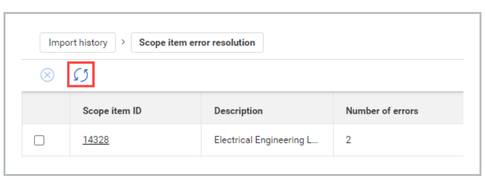
You must have the permission Edit scope items.

3.11.3 STEPS

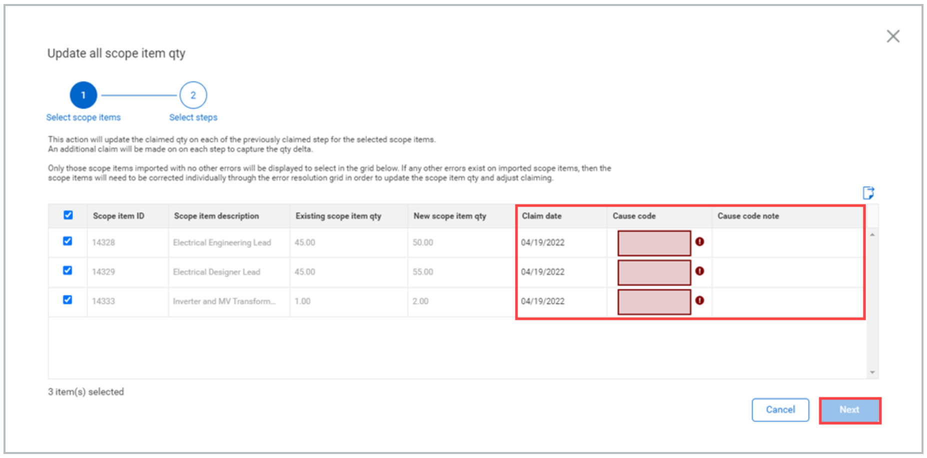
To update scope item quantities by import:

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

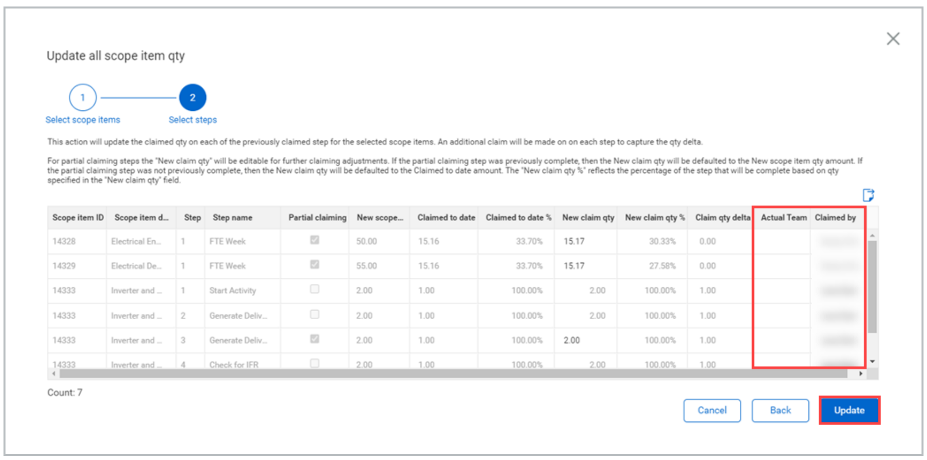
2. In Import history > **Scope item error resolution**, click the **Update all scope item qty** icon at the top of the grid. The Update all scope item qty dialog box opens.



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



4. Select a cause code. Optionally, add a note.
5. Optionally, edit the Claim date. By default, it is set to today's date. This claim date is reflected for all steps.
6. 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**.

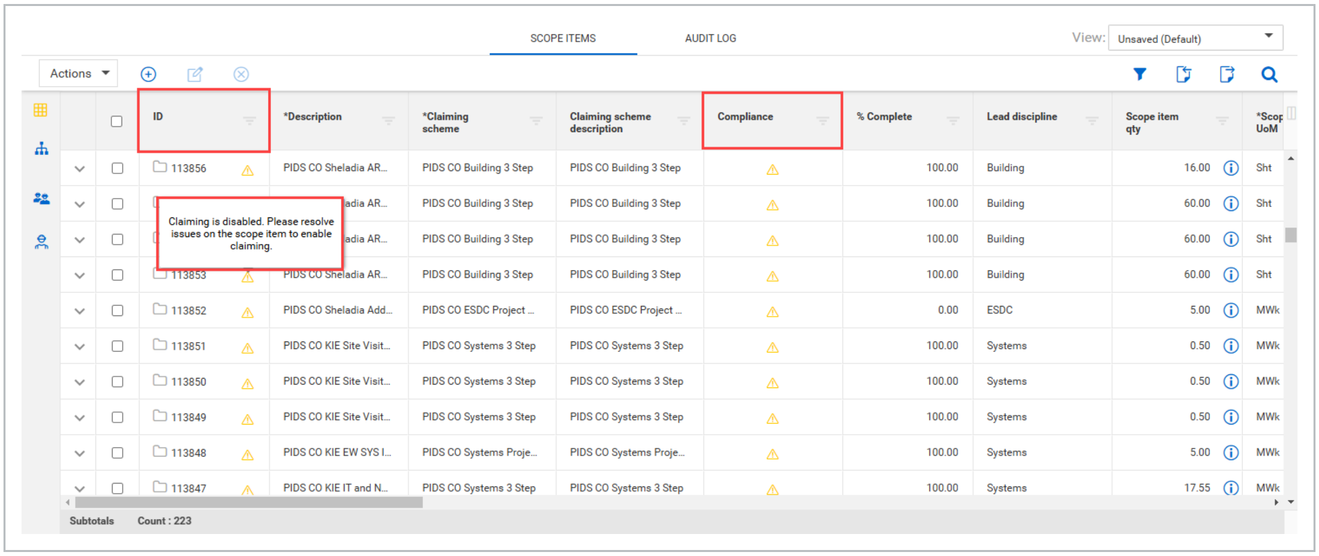
3.11.4 RELATED LINKS

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).

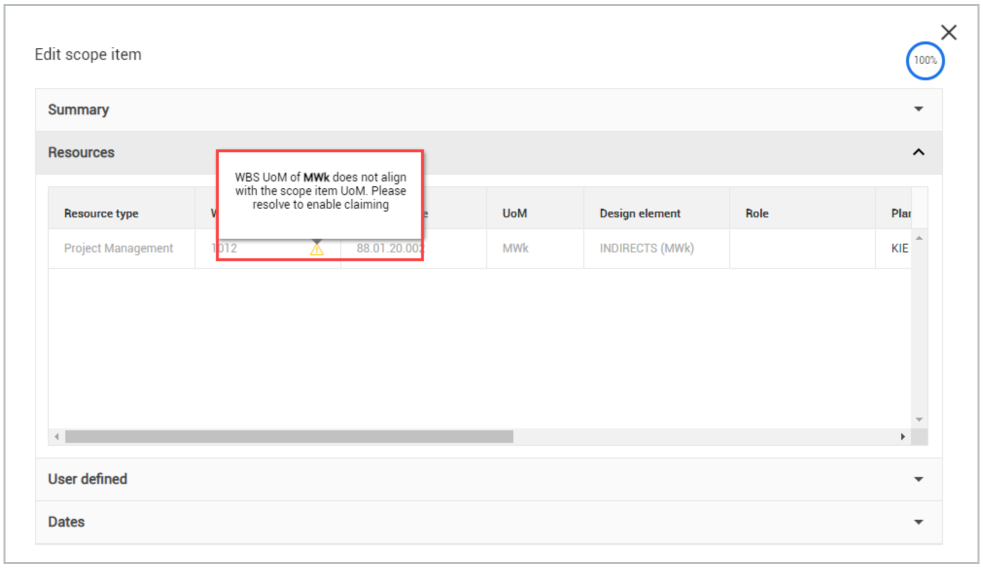
3.12 COMPLIANCE ISSUES

Compliance yellow caution icons show on scope items where claiming is disabled due to missing data or cost item data discrepancies with the scope item. The caution icon shows in the ID column and the Compliance column on the Scope Items page.



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

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 caution icons. When you hover over a caution 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.



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

- Claiming is disabled when a 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.
- 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.

The following compliance issues show only when ACS is enabled on the project:

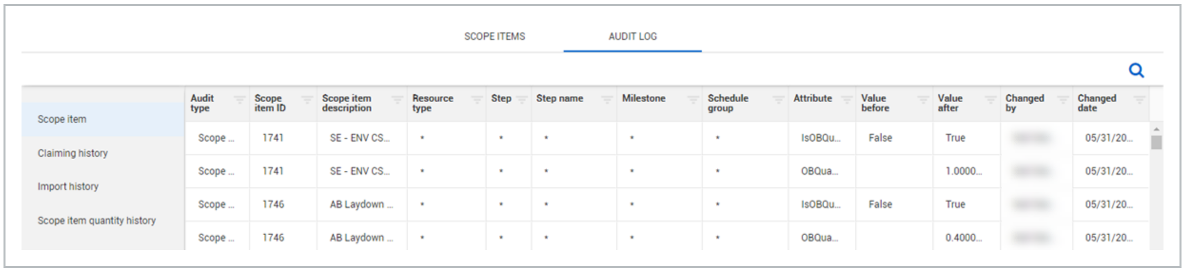
- Account code UoM does not match the scope item UoM. Update the scope item UoM to match the account code UoM or assign a different account code with an associated UoM that matches the scope item UoM.
- Account code UoM does not match the scope item UoM. Update the scope item UoM to match the account code UoM or assign a different account code with an associated UoM that matches the scope item UoM. This is applicable only if account code sets are enabled for the project.

3.13 AUDIT LOG

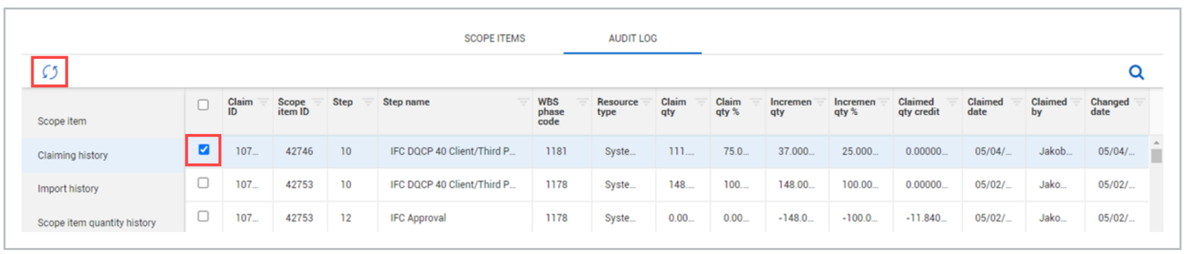
3.13.1 SUMMARY

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

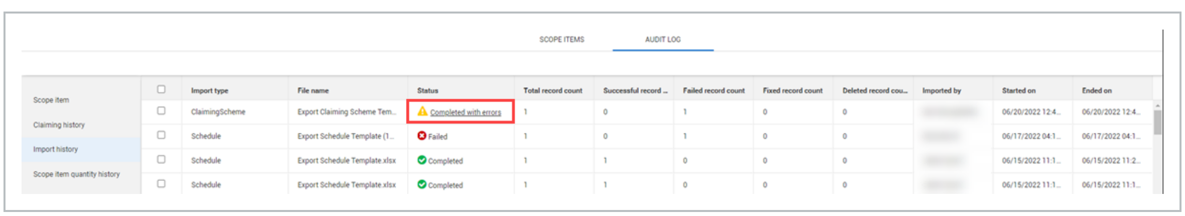
The Scope item page shows changes made to any attribute field on a scope item, scope item resource type, or step details. This log also records the creation and deletion of scope items. For each change, the values before and after, the user who made the change, and the time and date the change was made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



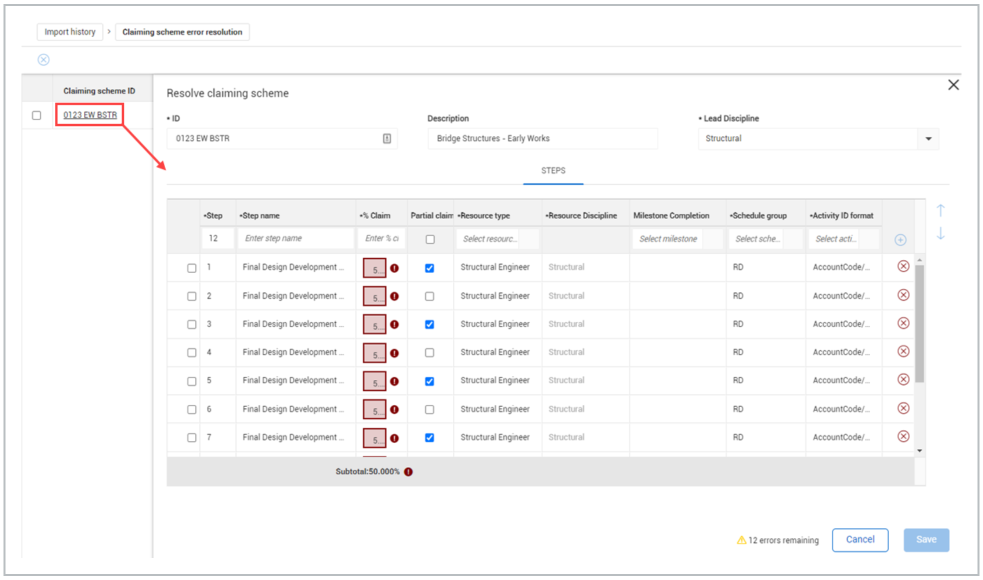
The Claiming history page shows all the claims made on scope items in the project. On this page, you can resend individual claims to InEight Control. When a claim is saved in the Engineering module, the claiming record is immediately sent to Control to consume the claim quantity on the associated WBS. 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.



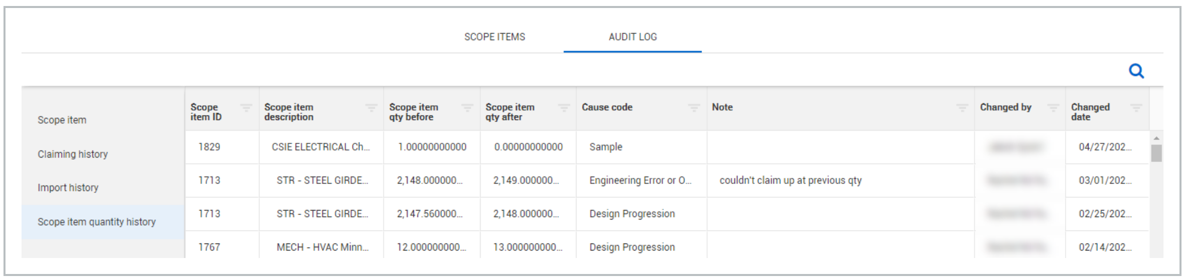
The Import history page shows all the imports started on the project. If a file has any errors when it is imported, then the Failed record count column shows the number of records in error and the Status column has a value of Completed with errors, in a link.



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.



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



3.14 ACTIONS

3.15 ACTIONS OVERVIEW

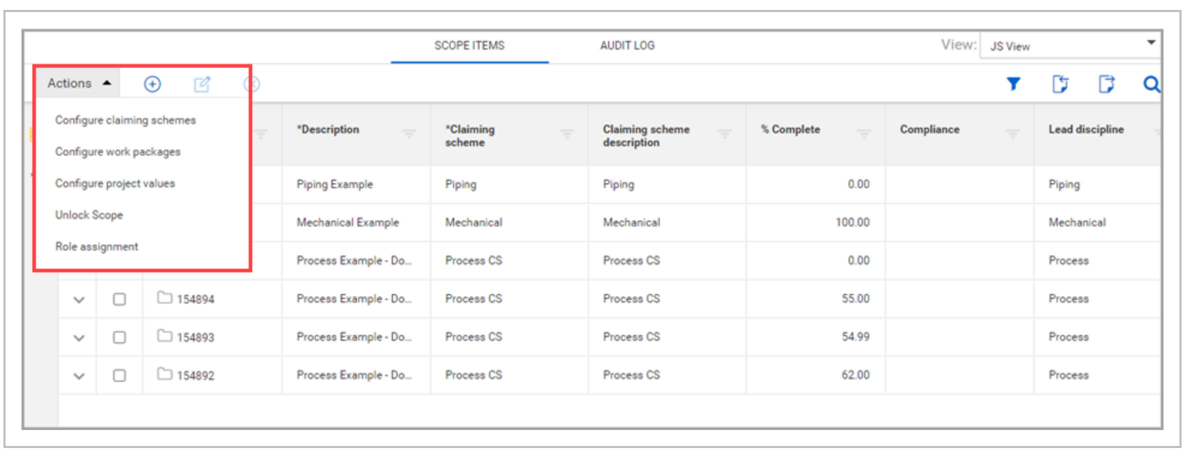
In the Scope items page, you can perform various actions on an engineering project. The following table provides an overview of each action.

Overview - Actions

Action	Description
Configure claiming schemes	You can manage claiming schemes as the first step in setting up a project in the Engineering module. Claiming schemes are required to

Overview - Actions (continued)

Action	Description
	be configured prior to creating a scope item.
Configure work packages	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.
Configure project values	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.
Get FC Remaining MHrs/Unit	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.
Lock and Unlock Scope	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 "*Scope is unlocked*".
Role assignment	Manage role assignments in a project in the Current and Future Assignments tab and view its history in the User Assignment History tab.



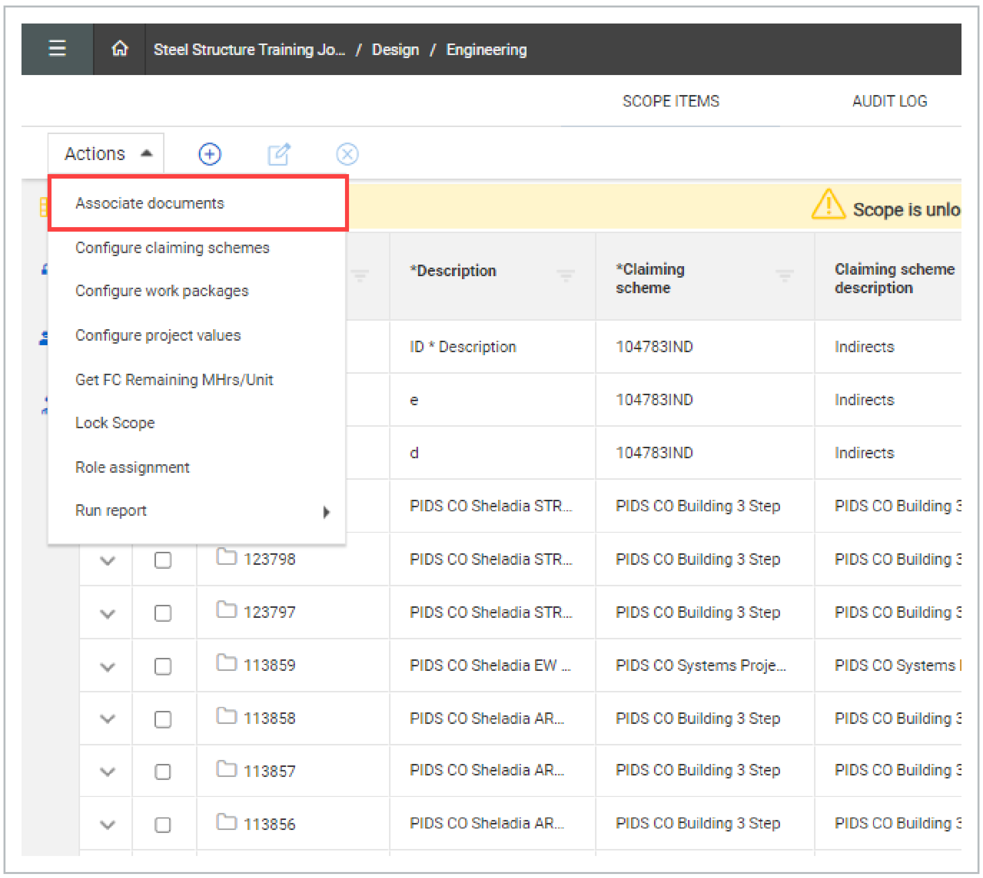
3.15.1 CONSIDERATIONS

You must have applicable permissions in Engineering.

3.16 ASSOCIATE DOCUMENTS

3.17 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.



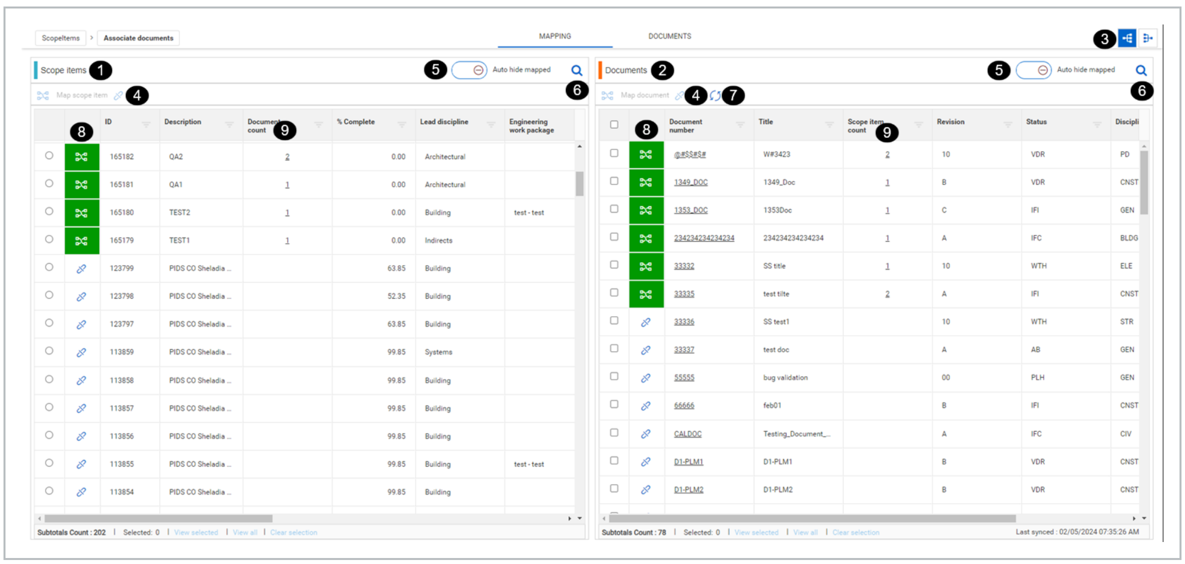
In the Associate documents page, you can view the Mappings and Documents tabs.

3.17.1 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.

3.18 MAPPINGS

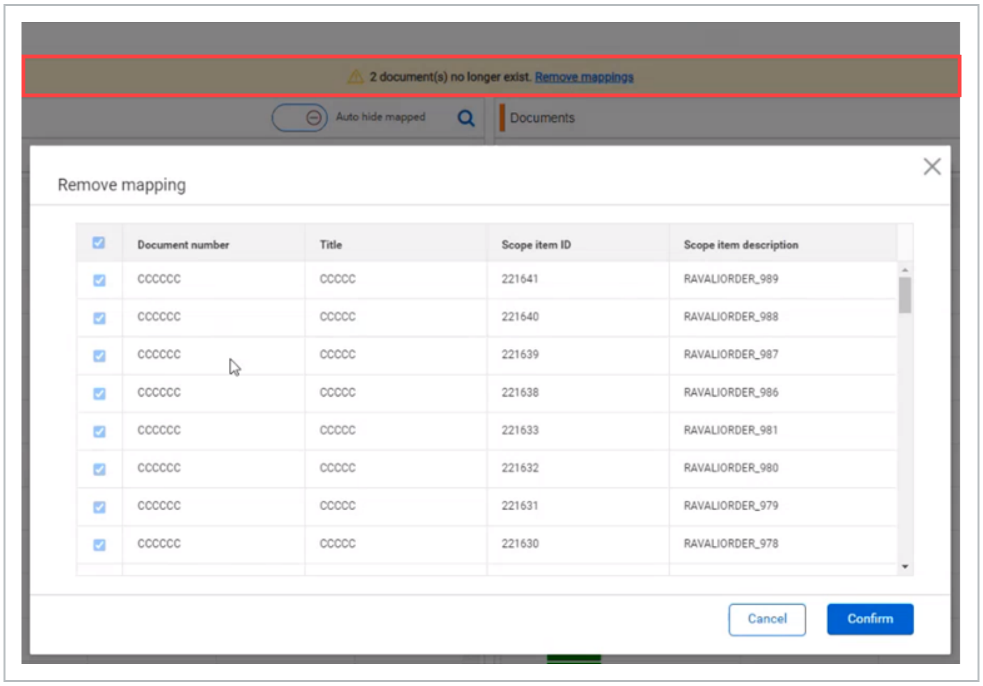
The image and table below are a summary of the Mappings tab:



	Item	Description
1	**Scope Items grid**	The left grid shows the project's list of scope items.
2	**Documents grid**	The right grid shows the list of documents synced from Document.
3	**Map many documents to**	Select to map many documents to a single scope item, or many scope items to a single document.

	Item	Description
	a single scope item Map many scope items to single document	
4	**Map scope item and Map document** **Unlink scope items or documents**	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	**Auto hide mapped**	Auto hide mapped scope items or documents to filter them out from the grid.
6	**Search**	Use to search scope items in the Scope items grid or search documents in the Documents grid.
7	**Document sync**	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	**Mapped and unlinked items column**	View of mapped and unlinked items. Mapped items show a green mapped icon. Unlinked items show the Unlink icon.
9	**Document count** **Scope item count**	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.

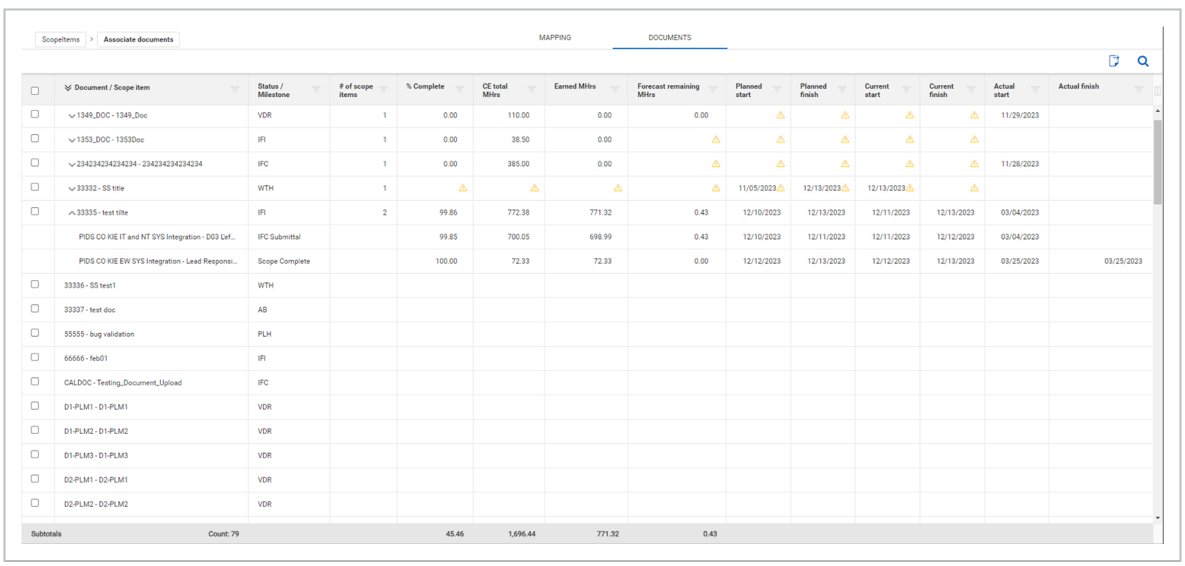
When mapped documents are deleted in Document, a warning shows at the top of the page showing the number of documents that no longer exist.



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

3.19 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.

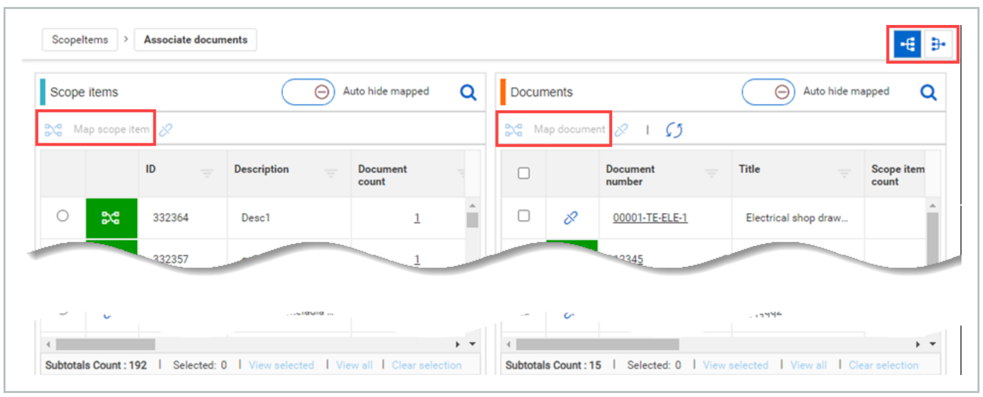


The Documents tab functions similarly to the work package feature, such as the percent complete column, the warning icon that shows when there are missing values, and the summary overview of all documents in the document register at the bottom of the window. The scope item;s data that's associated to 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.

3.20 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.



3.20.1 CONSIDERATIONS

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

3.20.2 STEPS

MAP DOCUMENTS TO SCOPE ITEMS

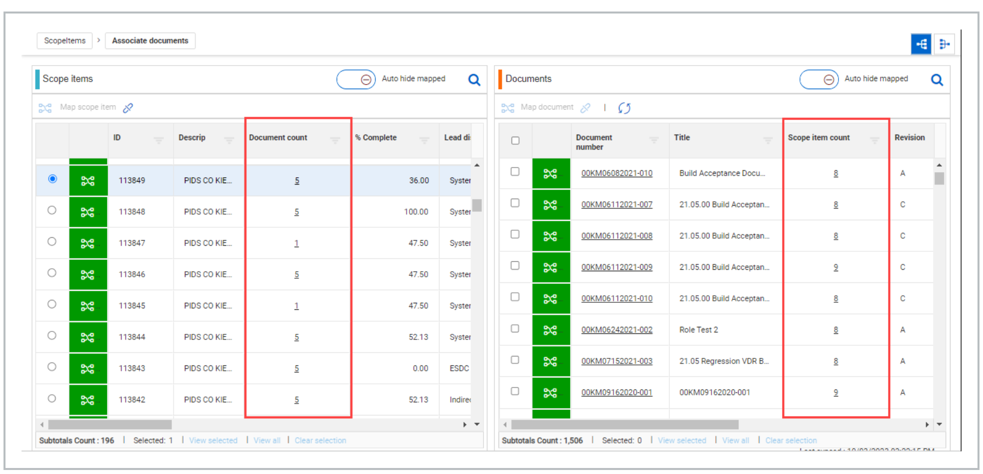
1. Click **Map many documents to a single scope item** at the top right of the page.
2. Select a single scope item in the Scope items panel, and then select one to multiple documents in the Documents panel.
3. Click the **Map document** button in the Documents panel to complete the mappings. The green 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.

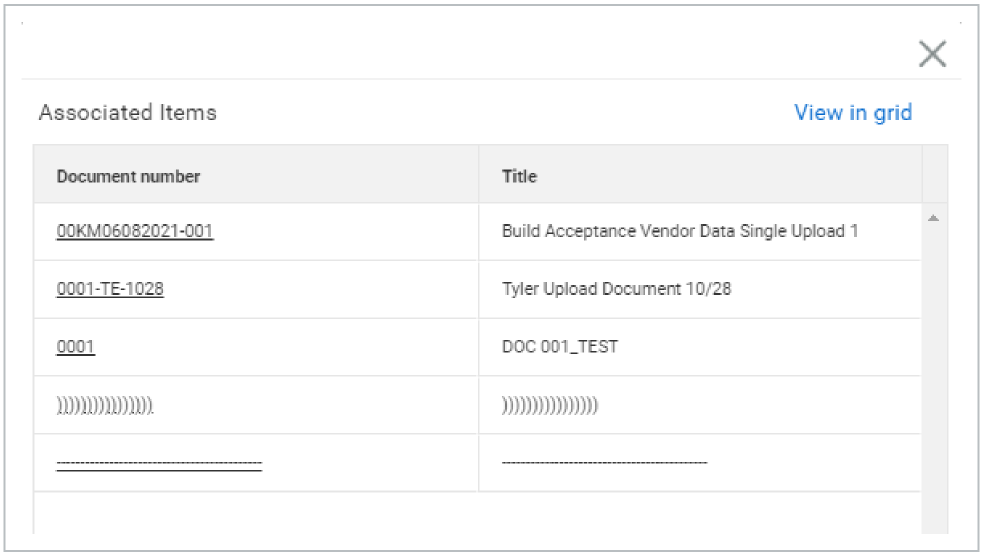
3.21 VIEW ASSOCIATED ITEMS

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.



3.21.1 SCOPE ITEM'S DOCUMENT COUNT COLUMN

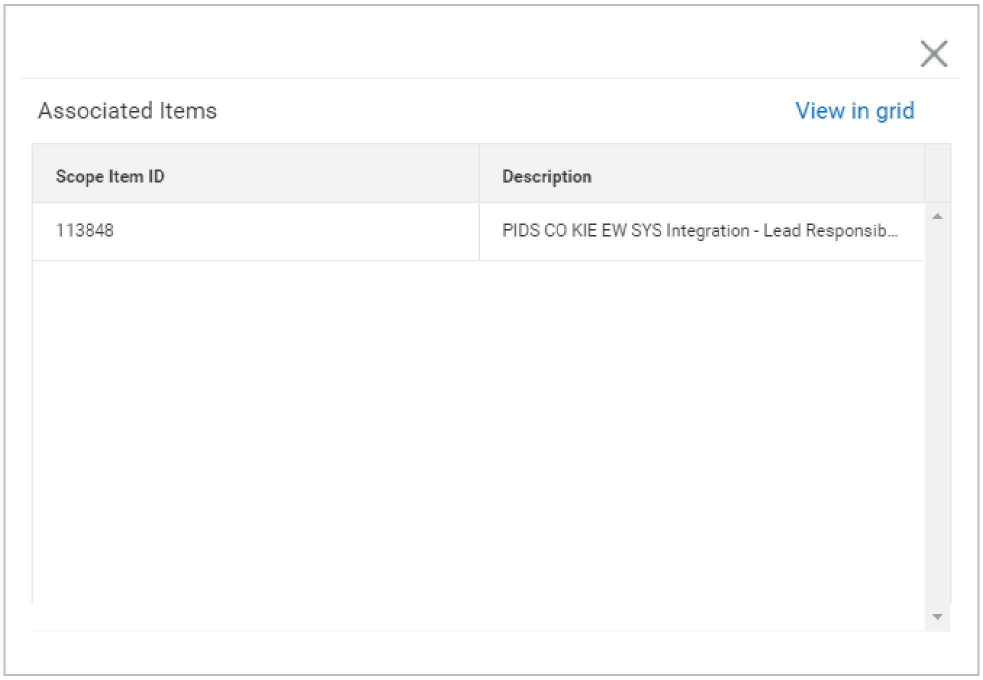
In the Scope items panel, the Document count column shows the number of documents associated to scope items. Click the document count hyperlink to open the Associated Items dialog box.



- **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.

3.21.2 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.



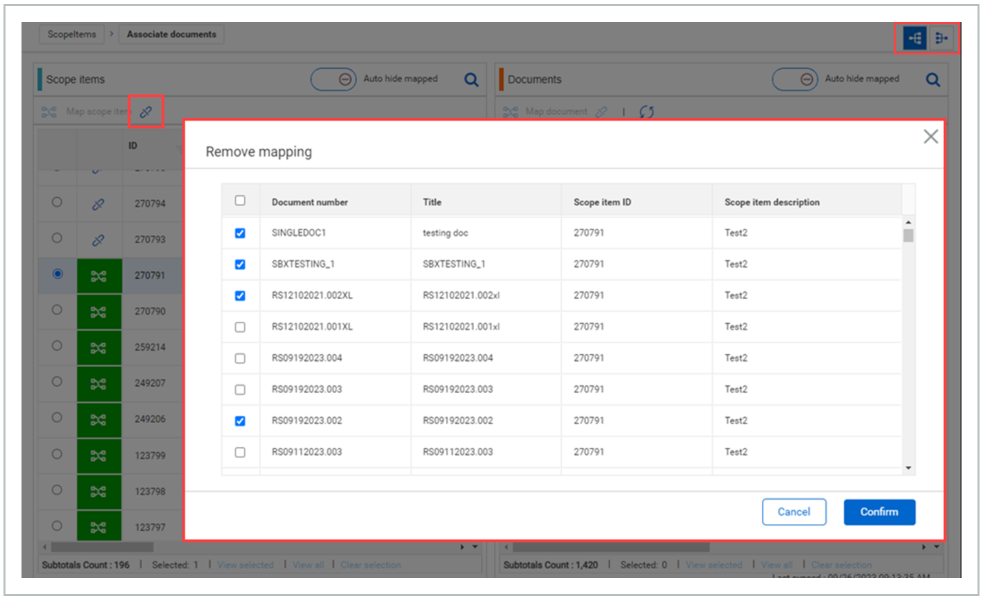
- **Scope Item ID** – Unique identifier for the scope item.
- **Description** – Unique description for the scope item.
- **View in grid** - Filter the documents and view them in the Documents grid.

3.21.3 CONSIDERATIONS

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

3.22 UNLINK ASSOCIATED ITEMS

You can unlink associated items from scope items and documents.



3.22.1 CONSIDERATIONS

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

3.22.2 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 may 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**.

3.23 CONFIGURE CLAIMING SCHEMES

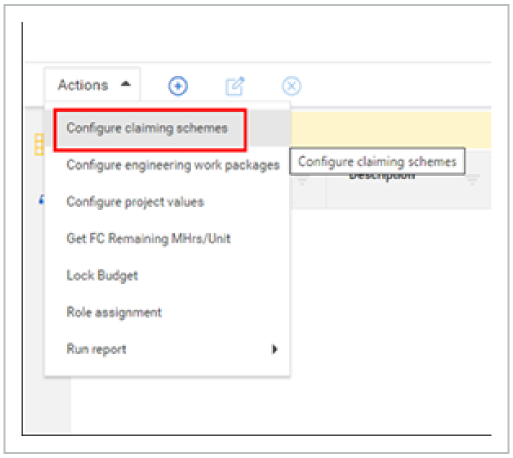
3.23.1 SUMMARY

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

3.23.2 CONSIDERATIONS

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

3.24 ADD A CLAIMING SCHEME MANUALLY

3.24.1 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.

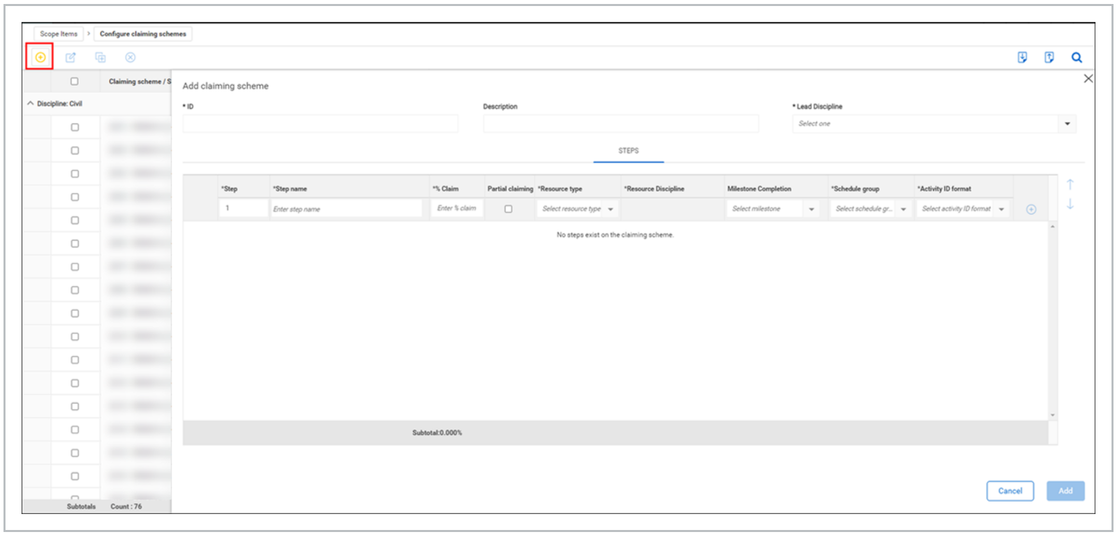
3.24.2 CONSIDERATIONS

- 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.

3.24.3 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**.

3.24.4 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 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.

3.25 COPY A CLAIMING SCHEME

3.25.1 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.

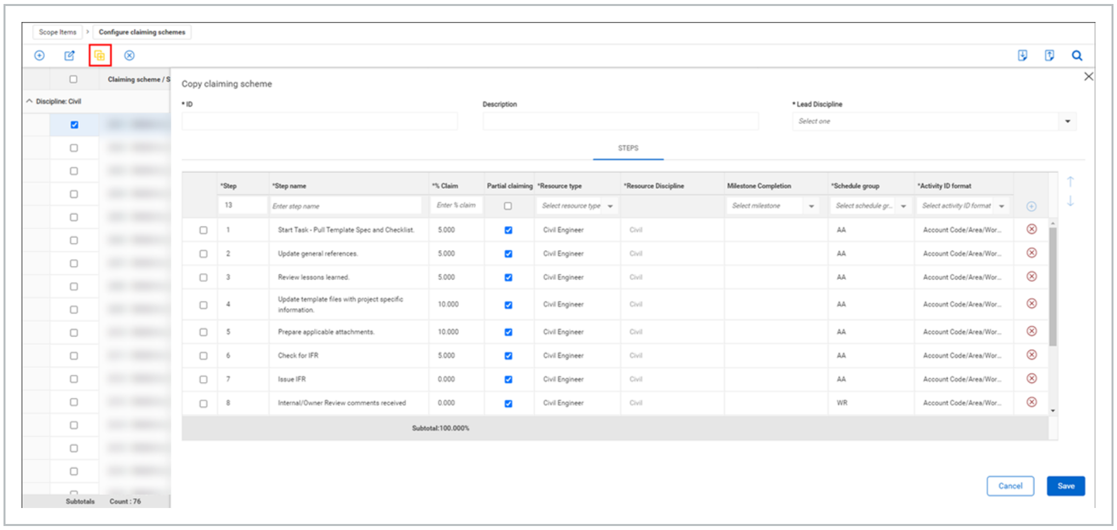
3.25.2 CONSIDERATIONS

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

3.25.3 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.



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**.

3.25.4 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 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.

3.26 IMPORT CLAIMING SCHEMES

3.26.1 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**.

3.26.2 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.

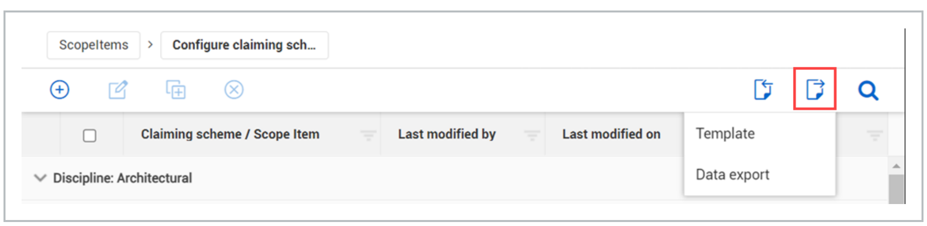
You can only import new claiming schemes, not edit existing ones. To edit an existing claiming scheme on the Configure claiming schemes page, select a claiming scheme, and then click the **Edit claiming scheme** icon.

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.

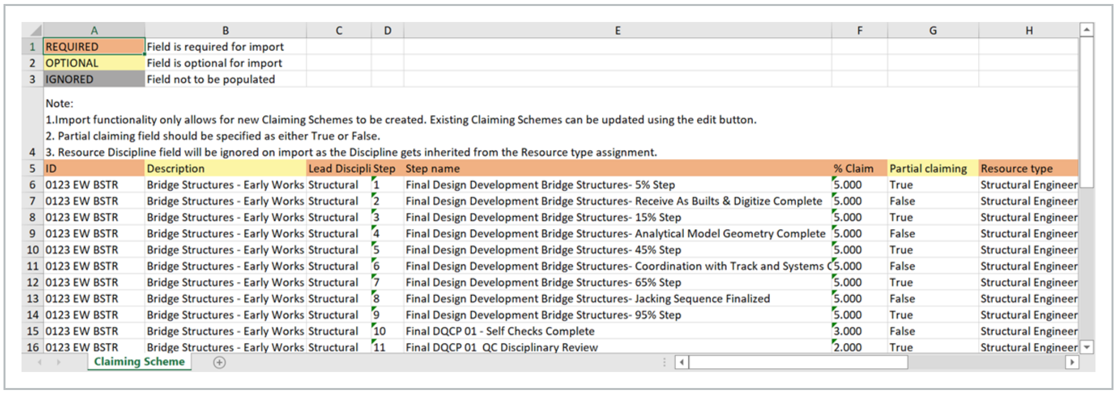
3.26.3 STEPS

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.



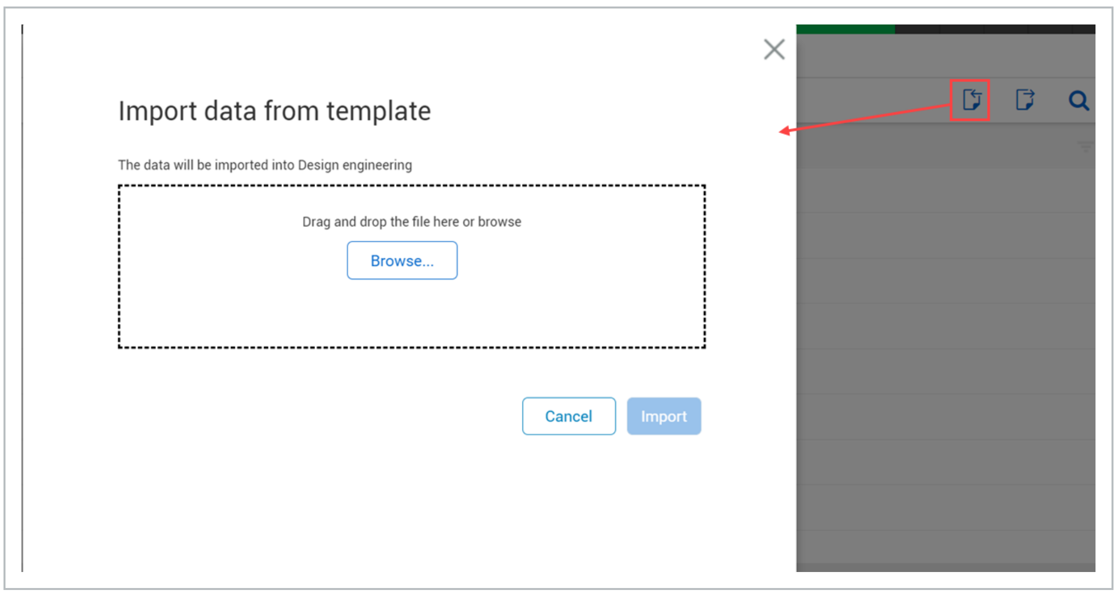
2. Open the template in Excel.
3. Fill out the required fields for each claiming scheme and step. Each row represents one step. The ID column is the name of the claiming scheme.



	A	B	C	D	E	F	G	H
1	REQUIRED	Field is required for import						
2	OPTIONAL	Field is optional for import						
3	IGNORED	Field not to be populated						
4	Note: 1.Import functionality only allows for new Claiming Schemes to be created. Existing Claiming Schemes can be updated using the edit button. 2. Partial claiming field should be specified as either True or False. 3. Resource Discipline field will be ignored on import as the Discipline gets inherited from the Resource type assignment.							
5	ID	Description	Lead Discipli	Step	Step name	% Claim	Partial claiming	Resource type
6	0123 EW BSTR	Bridge Structures - Early Works	Structural	1	Final Design Development Bridge Structures- 5% Step	5.000	True	Structural Engineer
7	0123 EW BSTR	Bridge Structures - Early Works	Structural	2	Final Design Development Bridge Structures- Receive As Builts & Digitize Complete	5.000	False	Structural Engineer
8	0123 EW BSTR	Bridge Structures - Early Works	Structural	3	Final Design Development Bridge Structures- 15% Step	5.000	True	Structural Engineer
9	0123 EW BSTR	Bridge Structures - Early Works	Structural	4	Final Design Development Bridge Structures- Analytical Model Geometry Complete	5.000	False	Structural Engineer
10	0123 EW BSTR	Bridge Structures - Early Works	Structural	5	Final Design Development Bridge Structures- 45% Step	5.000	True	Structural Engineer
11	0123 EW BSTR	Bridge Structures - Early Works	Structural	6	Final Design Development Bridge Structures- Coordination with Track and Systems C	5.000	False	Structural Engineer
12	0123 EW BSTR	Bridge Structures - Early Works	Structural	7	Final Design Development Bridge Structures- 65% Step	5.000	True	Structural Engineer
13	0123 EW BSTR	Bridge Structures - Early Works	Structural	8	Final Design Development Bridge Structures- Jacking Sequence Finalized	5.000	False	Structural Engineer
14	0123 EW BSTR	Bridge Structures - Early Works	Structural	9	Final Design Development Bridge Structures- 95% Step	5.000	True	Structural Engineer
15	0123 EW BSTR	Bridge Structures - Early Works	Structural	10	Final DQCP 01 - Self Checks Complete	3.000	False	Structural Engineer
16	0123 EW BSTR	Bridge Structures - Early Works	Structural	11	Final DQCP 01 QC Disciplinary Review	2.000	True	Structural Engineer

Claiming Scheme

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.

3.26.4 RELATED LINKS

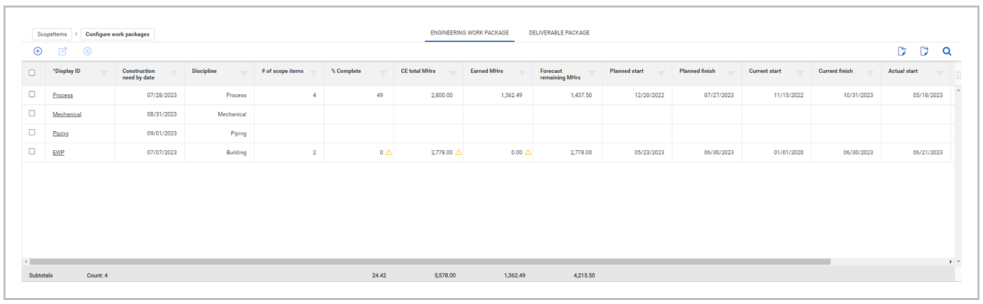
After claiming schemes are added, you can add scope items associated with claiming schemes. For more information, see Scope items and Add a scope item.

You can also create claiming schemes manually. For more information, see Add a claiming scheme manually.

3.27 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**.

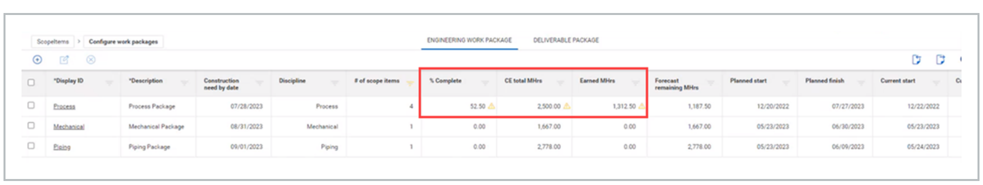


The Engineering Work Package and Deliverable Package have the same functions. For example, you can create the same work packages in each tab, and then group them so they roll up differently. You can choose to define and group the work packages based on your business process.

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.



3.27.1 CONSIDERATIONS

You must have the applicable permissions in Engineering.

3.28 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

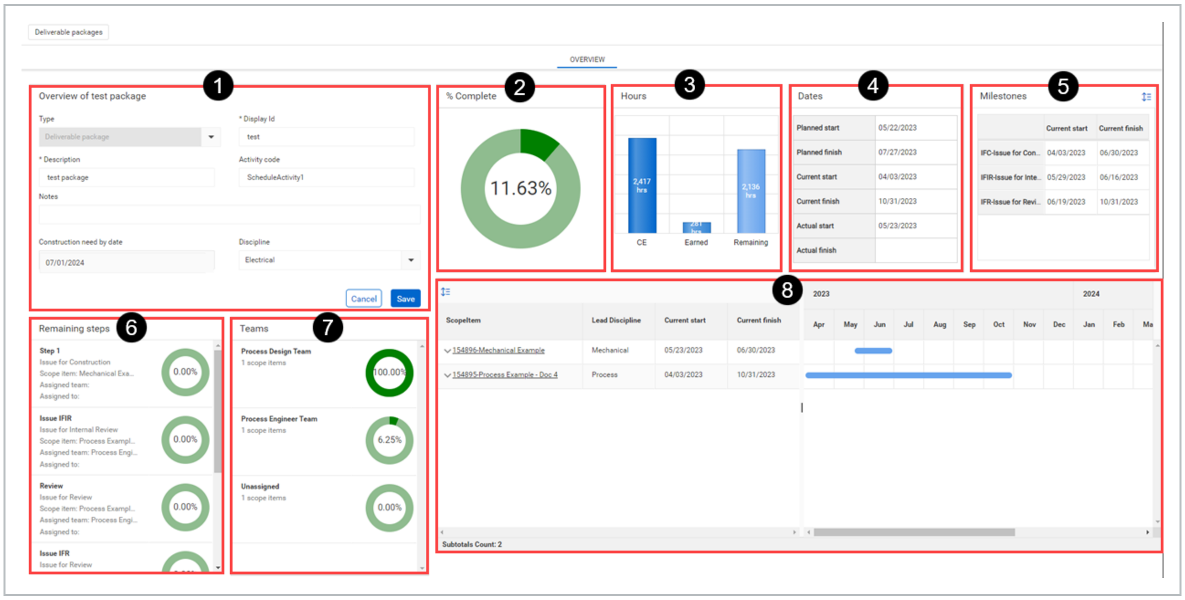
	Title	Description
1	**Overview of test package**	View and edit the current work package attributes.
2	**% Complete**	% complete is based on the scope item hours and earned progress on scope items within the work package. ((Earned Qty x CE MHRs ÷ Unit) ÷ CE Hours).
3	**Hours**	• CE - Sum of the scope item man hours for all scope items within a package (Scope Item Qty x CE MHRs ÷ Unit). • Earned - Sum of the scope item earned hours for all scope items within a package (Earned Qty x CE MHRs ÷ Unit). • Remaining - Sum of the scope item forecast remaining man hours for all scope items within a package (CE Hours - Earned Hours) if Control integration is off and ((Scope Item Qty - Earned Qty) x CE MHRs ÷ Unit) if Control integration is on.
4	**Dates**	Start dates show the earliest date, and finish date will show the latest date from the

Overview - Work package overview page (continued)

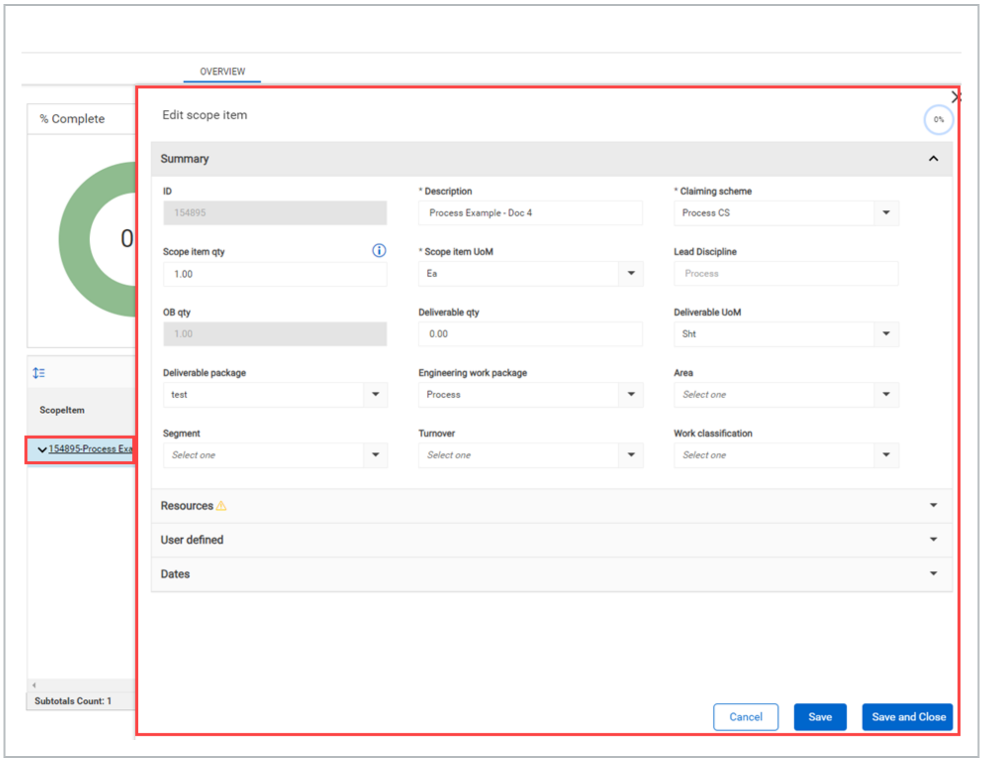
	Title	Description
		related scope items.
5	**Milestones**	When the Project Settings - Dates setting is configured with Scope Item/Milestone, the milestones window will show. You can use the **Dates Chooser** icon to toggle between the following dates: • Planned start/finish • Current start/finish • Actual start/finish • Completion
6	**Remaining steps**	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	**Teams**	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 (Earned Hours ÷ Scope Item Hours). An unassigned team will show for scope items that does not have a team assigned.
8	**Gantt**	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 **Dates Chooser** icon to toggle between the following dates: • Planned start/finish • Current start/finish • Actual start/finish

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.



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.



3.28.1 CONSIDERATIONS

You must have the applicable permissions in Engineering.

3.29 CONFIGURE PROJECT VALUES

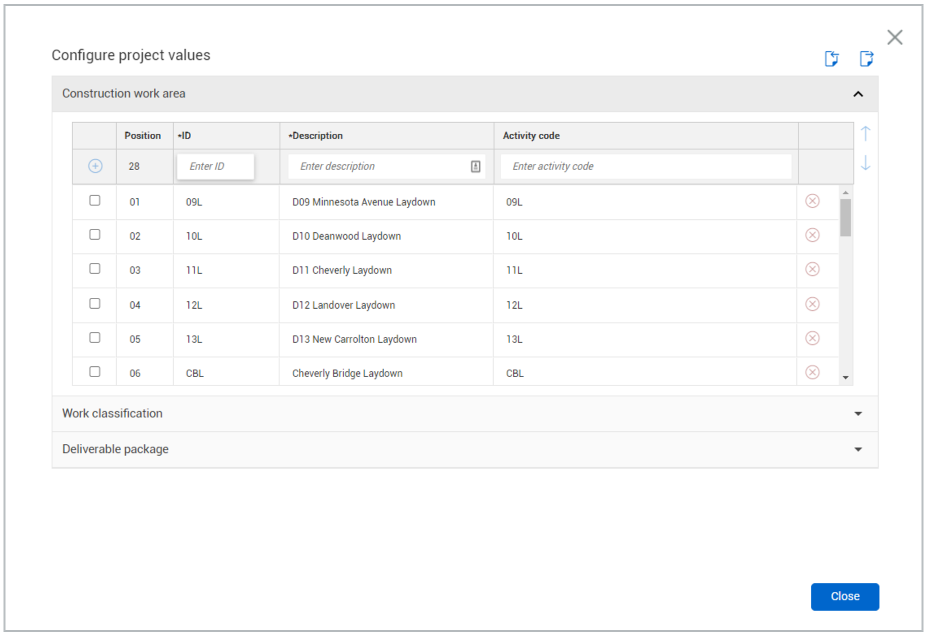
You can define project-specific values to assign to scope items in the project. Types of project values are construction work areas, work classifications, and deliverable packages. You define the values for each of these. For example, a construction work area might be named Main St NE bridge, a work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

3.29.1 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.



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**.

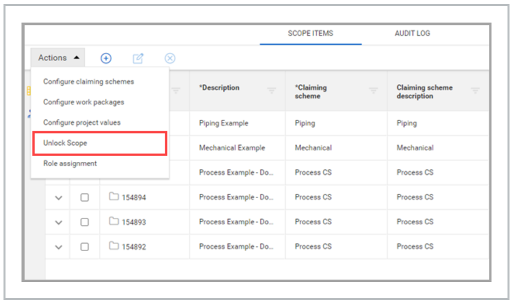
3.30 LOCK AND UNLOCK SCOPE

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.



3.30.1 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.

3.31 ROLE ASSIGNMENT

3.31.1 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.

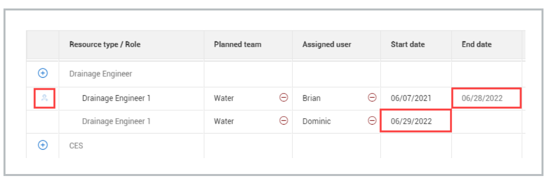
The Role assignment dialog box shows the Current and future assignments tab by default when opened. On this tab, you can add roles and assign teams and users. There is also a User assignment history tab, which shows a record of all user assignment changes made.

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.

3.31.2 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.



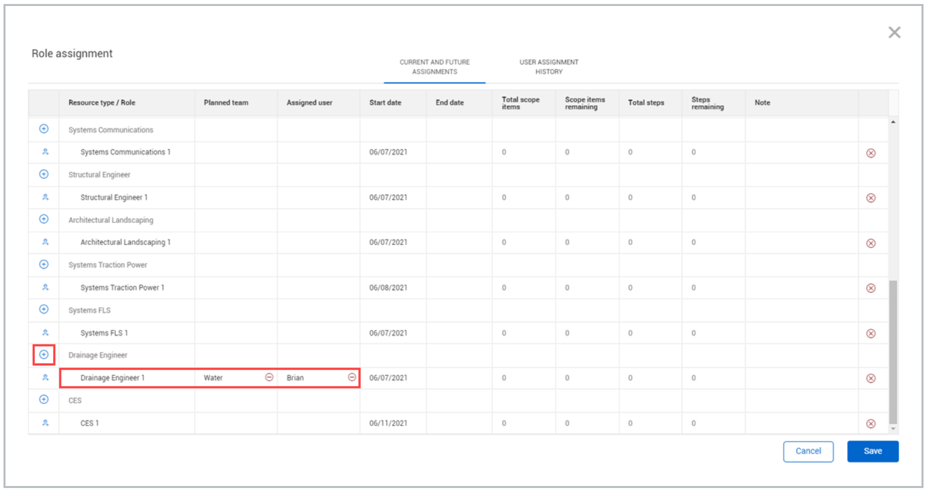
    - Each role can have only one future user at a time.

3.31.3 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.



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**.

3.31.4 RELATED LINKS

For more information about assigning a resource type to a scope item, see Scope item resources.

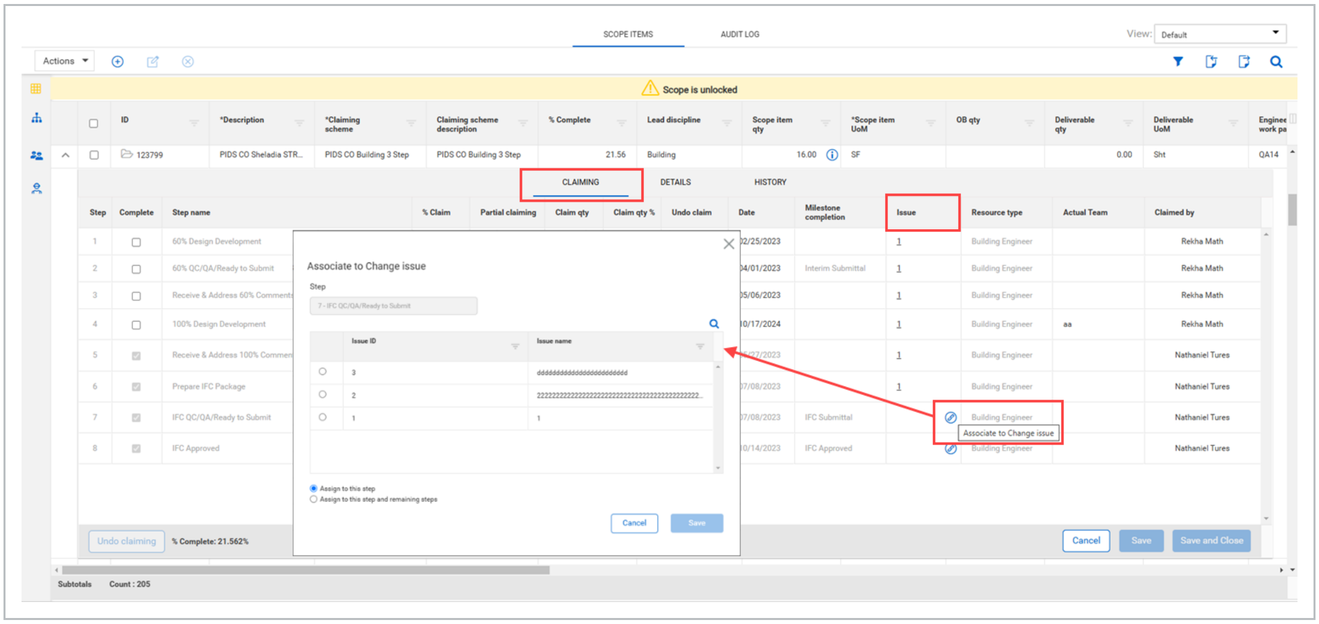
3.32 CHANGE INTEGRATION

3.33 ASSOCIATE SCOPE ITEMS TO ISSUES IN CHANGE

You can associate the steps of a scope item to an issue to mitigate risks in deliverables.

3.33.1 ASSOCIATE A CHANGE ISSUE

To associate and issue, expand the scope item, and then in the Issue column click the **Associate to Change issue** icon to open the Associate to Change issue dialog box.

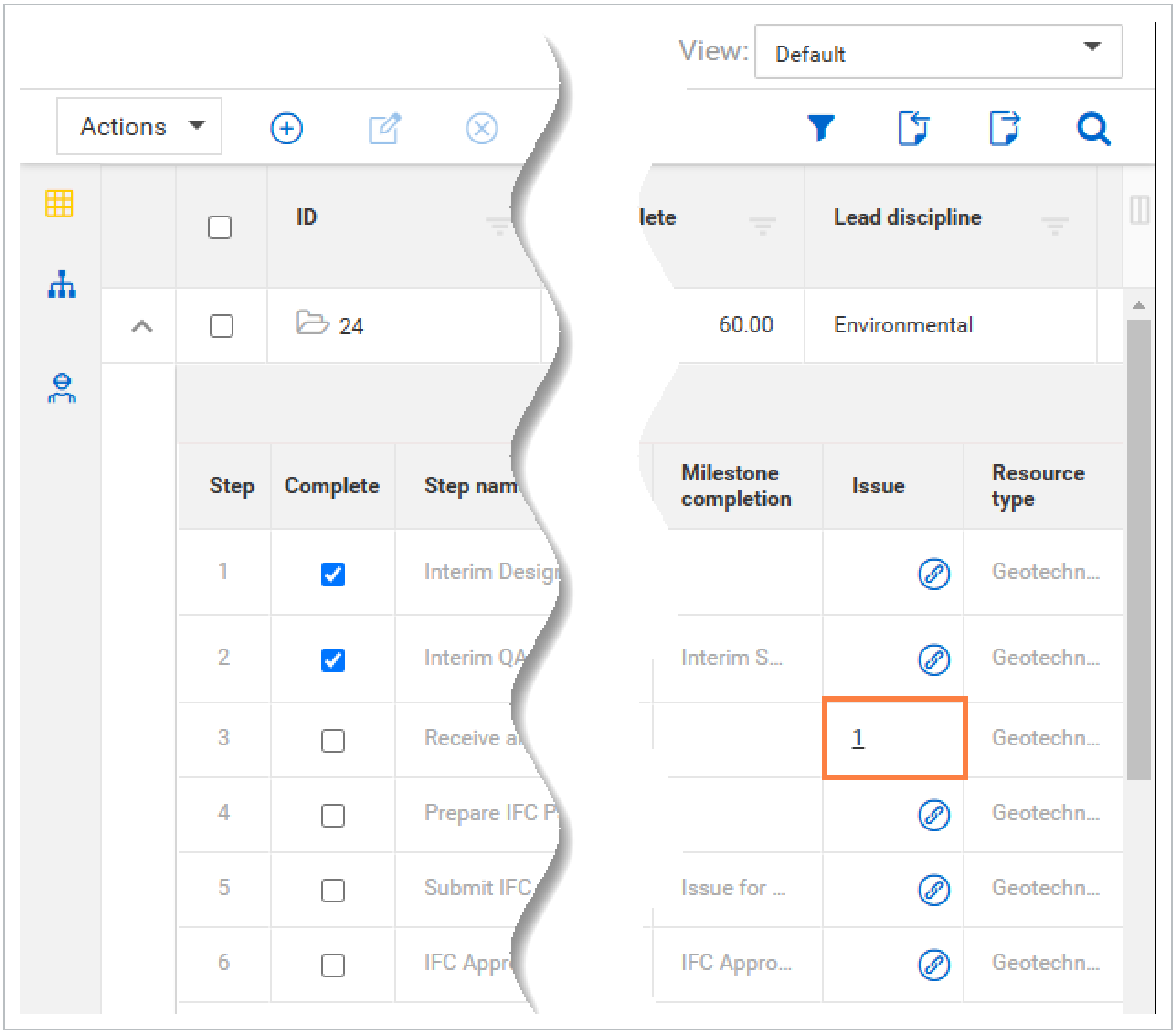


In the Associate to Change issue dialog box, you can select Change issues to assign to the scope item. You can select a single issue at a time and then assign to the current step or to the current step and the remaining non-completed steps of the scope item.

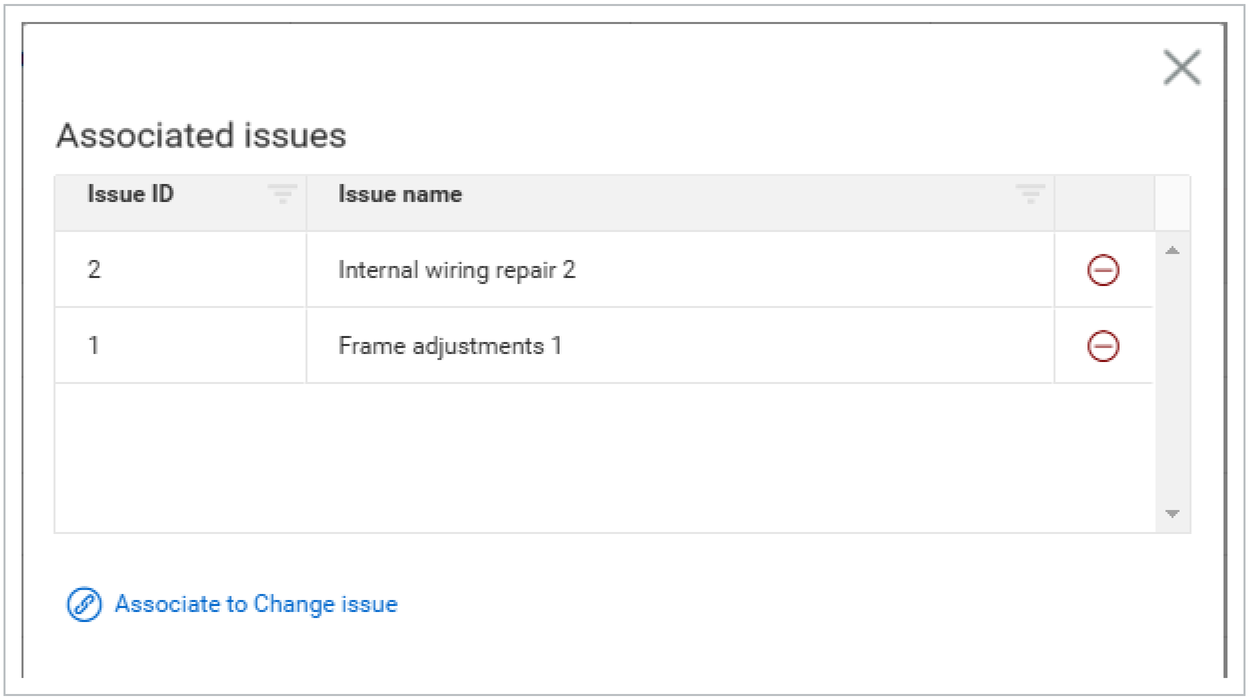
After your issue selection, select **Assign to this step** or **Assign to this step and remaining steps**, and then **Save**.

3.33.2 VIEW NUMBER OF ASSIGNED ISSUES

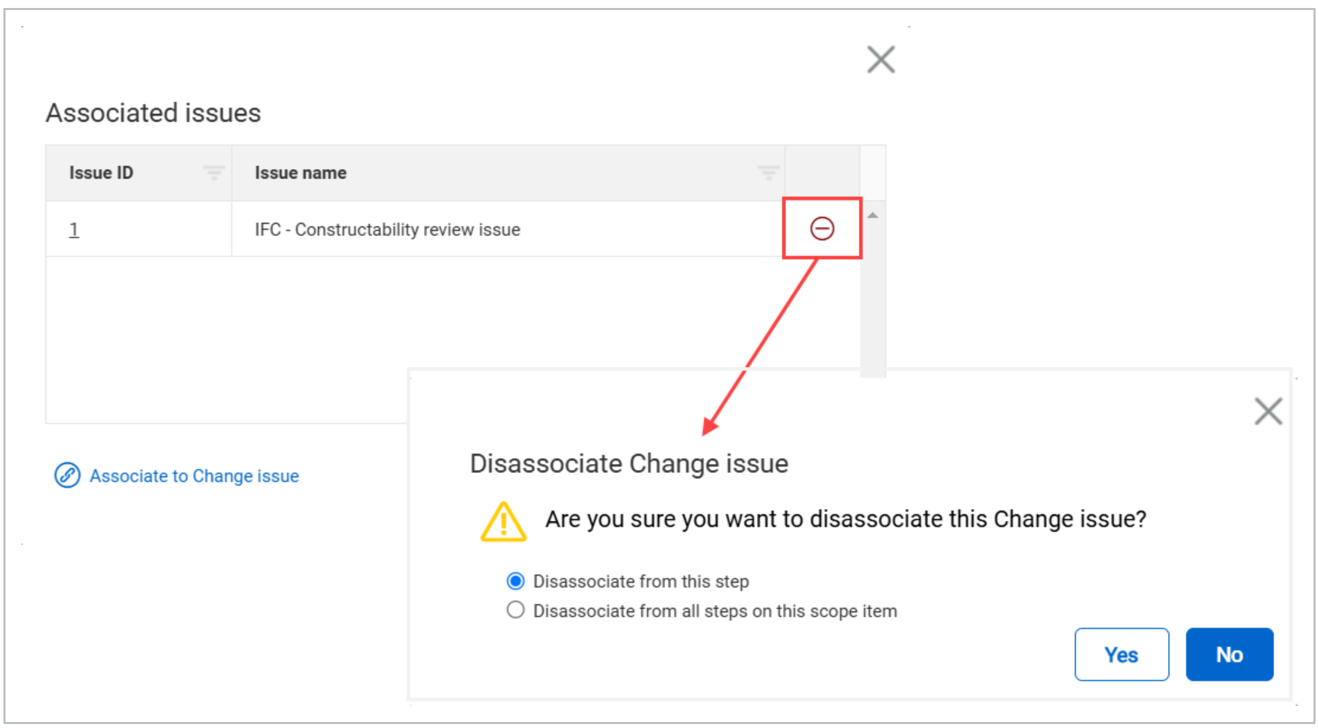
After you associate issues to a scope item, a *number* count link shows in the Issue column with the number of issues assigned to the scope item.



Click the *number* link to view the associated issues. In the dialog box you can remove issues or return to the Associate to Change issue dialog box to manage issues.



To remove the issues, click the **Disassociate Change issue** icon, and then select to **Disassociate from this step** or **Disassociate from all steps on this scope item**.



To return to associate change issues for the scope item, click the **Associate to Change issue** button.

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CHAPTER 4 – QUANTITY FORECASTING MODULE OVERVIEW

4.0.1 SUMMARY

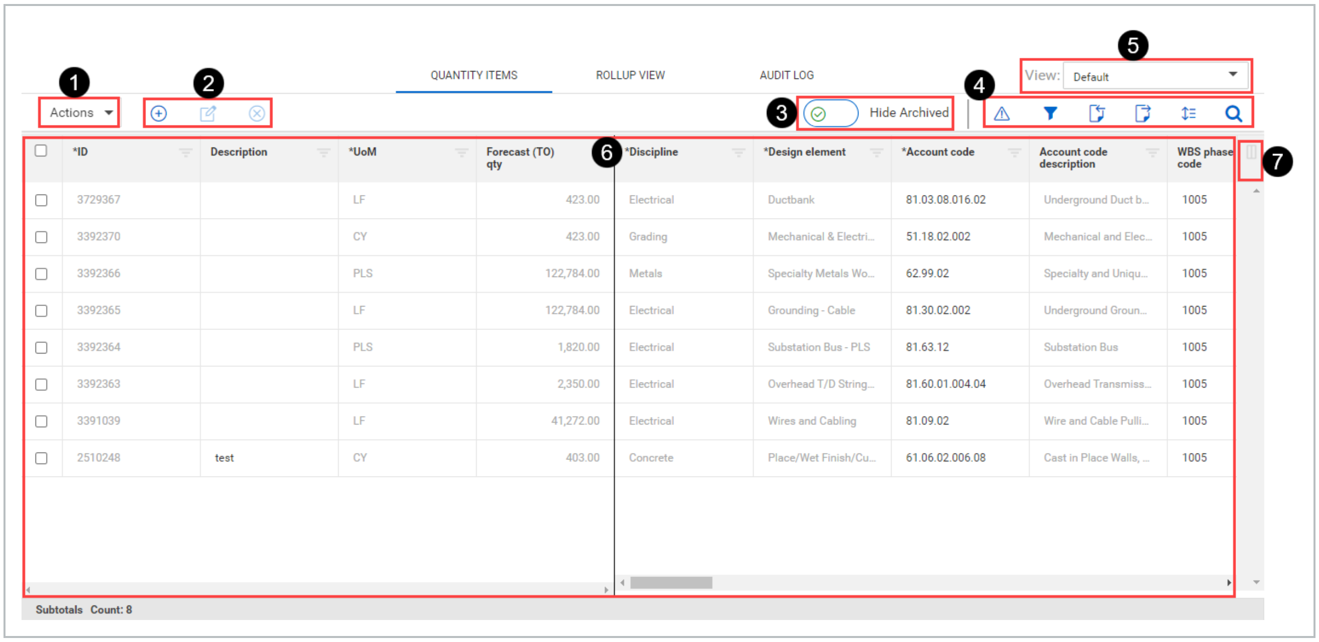
The Quantity forecasting module lets you maintain a continuous integration of quantities, man-hours, and schedule for design-build and EPC work. Quantity forecasting lets you configure a project to track quantities that are being driven by estimate, design, and construction phases on a project.

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

4.1 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	**Actions menu**	Do any of the following: • Get Control unit rates • Run report • Lock and unlock scope • Quantity change notes
2	**Quantity item buttons**	Add, edit, and delete quantity items.
3	**Hide archived**	When a quantity item is set to archived and the toggle is set to *On*, the quantity item no longer loads nor shows 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 *Off*. After turning the toggle to *Off*, the items marked as archived load. The toggle is set to *On* by default.
4	**View**	Select, save, rename, and delete views.
5	**Upper right toolbar icons**	• Data conflicts - Show whether conflicts exist. • Create Query Filters – Open the query builder. • Import and Export - Import and export sets of data. • Row density lets you adjust the spacing of grid rows • Find lets you search quantity items.
6	**Quantity items**	Grid showing quantity items and related information organized by column.
7	**Column chooser**	Select which columns are shown or hidden.

4.1.1 CONSIDERATIONS

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

4.2 ADD A QUANTITY ITEM

4.2.1 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](#).

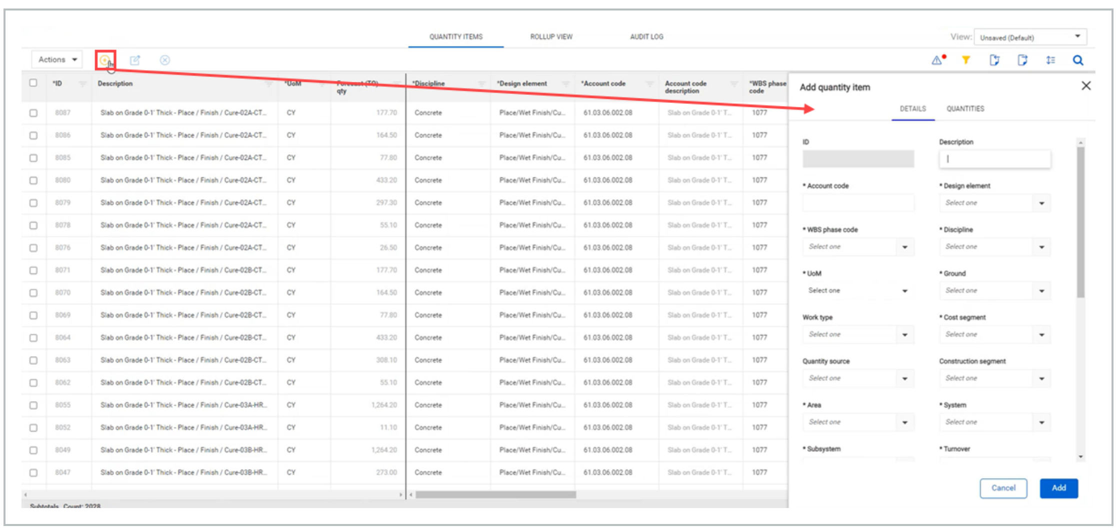
4.2.2 CONSIDERATIONS

You must have the permission Add quantity items.

4.2.3 STEPS

To add a quantity item:

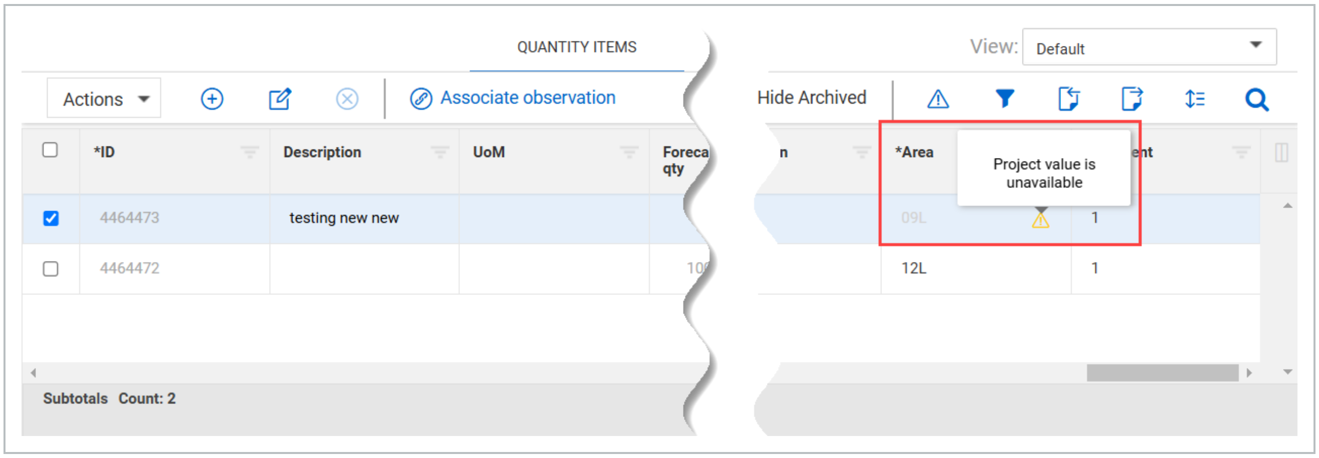
1. Click the **Add quantity item** button in the upper left. The Add quantity item slide-out panel opens.



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

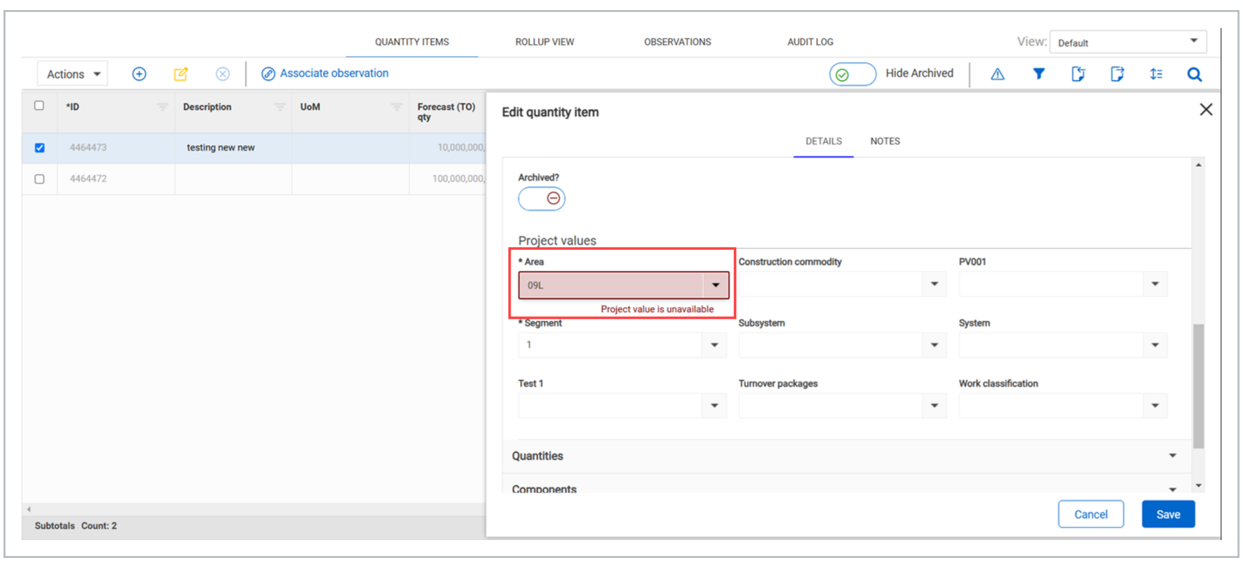
4.3 PROJECT VALUES

Project values configured for the project in Project settings are available to use in the project. When the status of a project value is changed to *Unavailable* in InEight cloud Platform, a yellow caution icon shows in the project value field. To save the quantity item, you must select an available project value from the list.



UPDATE A PROJECT VALUE

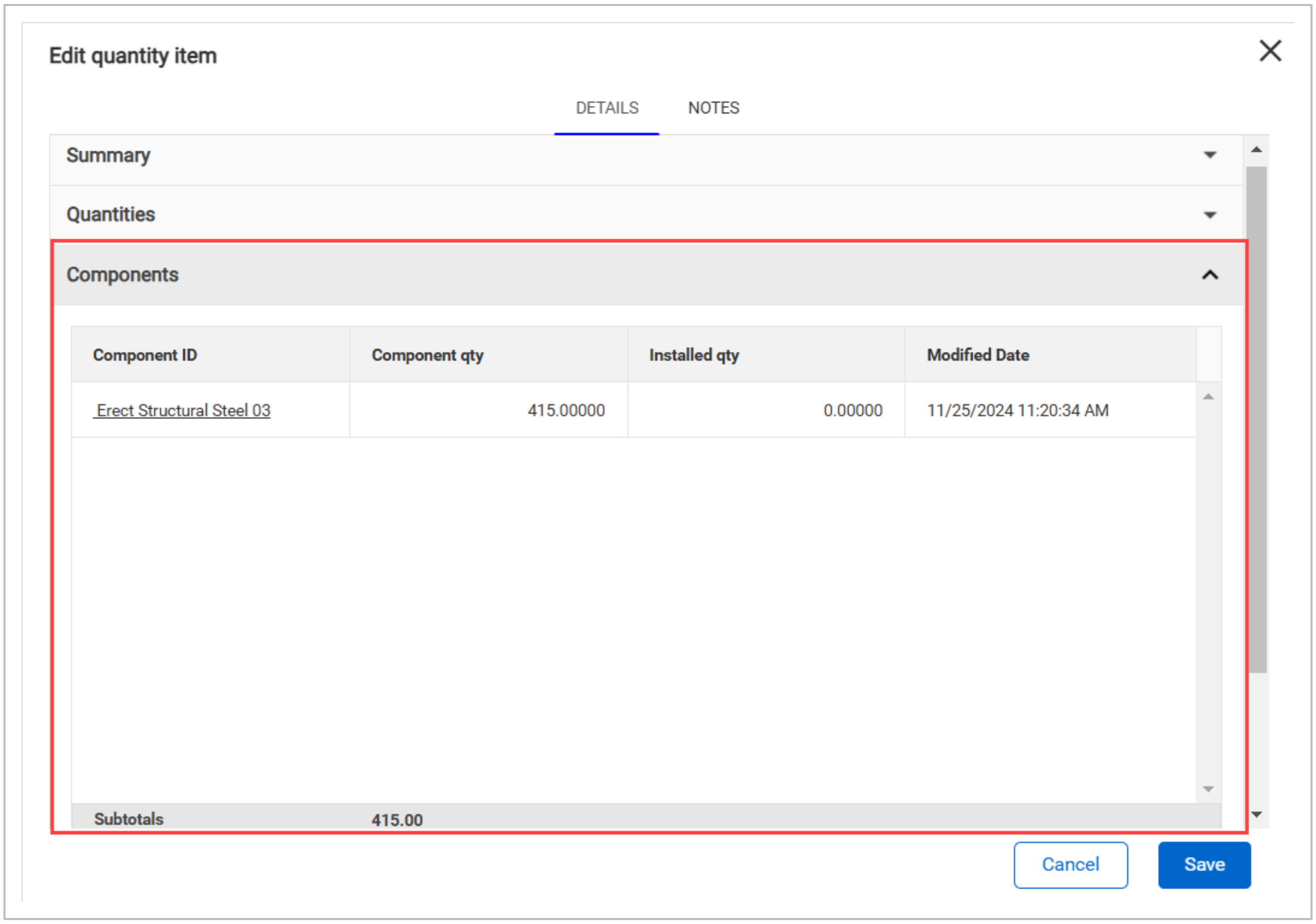
1. Select the quantity item, and then click the **Edit quantity item** icon.
2. Select an available project value from the project value drop-down list, and then click **Save**.



For more information about project values, see Project values in Quantity Forecasting.

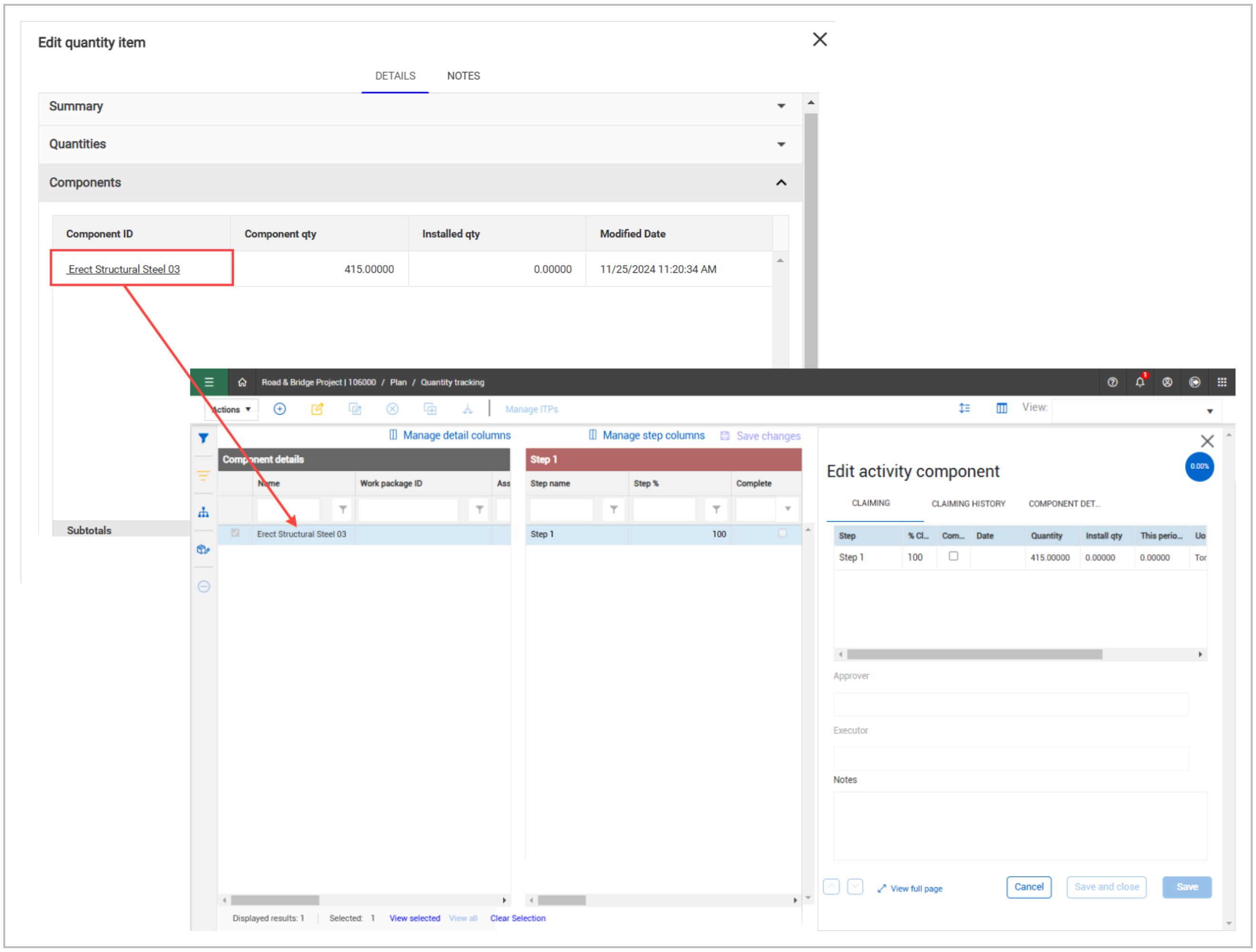
4.4 COMPONENTS SECTION

The components section of a quantity item shows the associated InEight Plan components. When project administrators enable the integration and configure the criteria for how Plan components associate to quantity items, Plan components are automatically associated to quantity items.



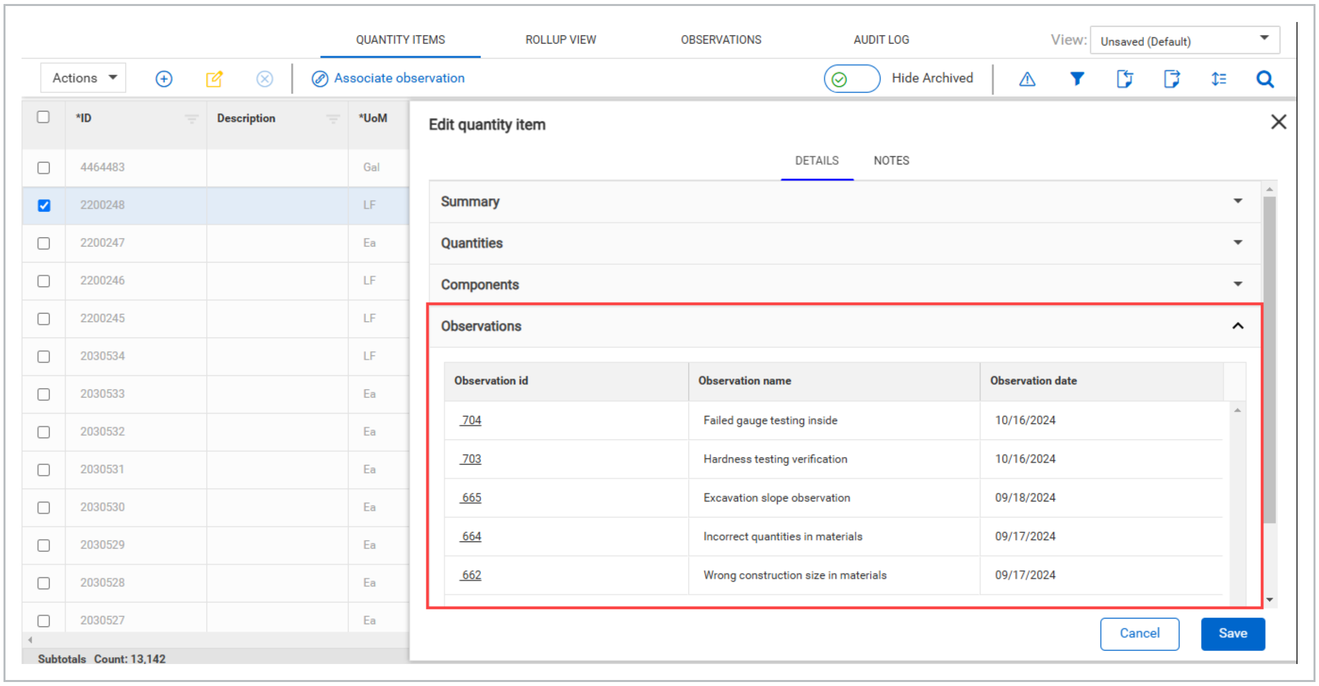
4.4.1 COMPONENT ID LINK

Click the **Component ID** link to open the component in Plan. A new tab opens where you can manage the component in Plan's Quantity tracking module.



4.5 OBSERVATIONS SECTION

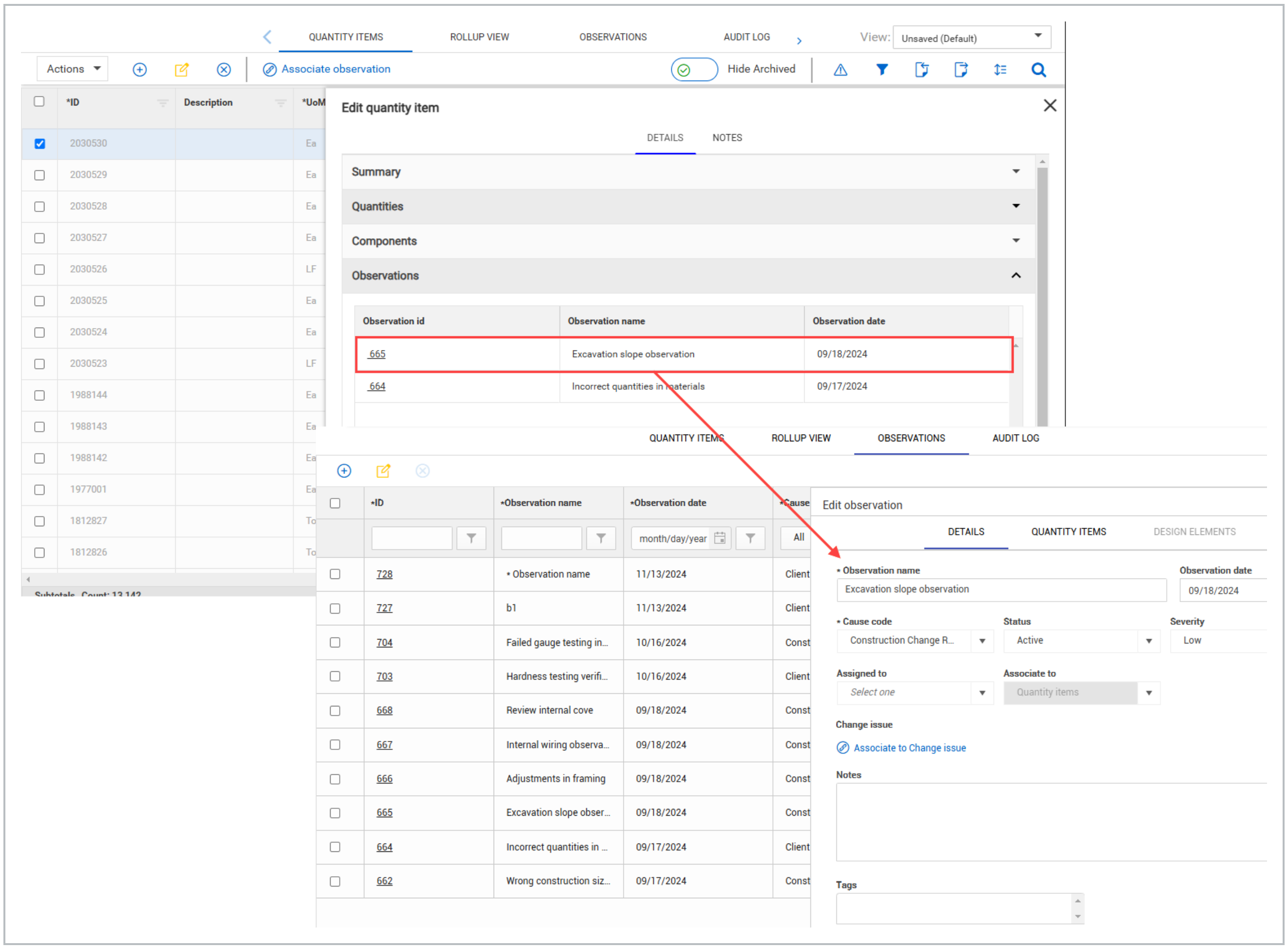
In the Observations section, you can view observations assigned to quantity items.



You can view the observation ID, observation name, and observation date.

4.5.1 OBSERVATION ID LINK

Click the **Observation ID** link to open the observation in the Observations tab. A new tab opens where you can manage the observation.



4.6 QUANTITY DRIVER

4.6.1 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
45609		CY	158.00	Component Qty					158.00	0.00
45605		Ea	24.00	Component Qty					24.00	0.00
45604		LF	19.37	Component Qty					19.37	0.00
45603		LF	13.73	Component Qty					13.73	0.00
45602		Ea	1,905.00	90% Qty	0.00		1,905.00		1,905.00	0.00
45601		SF	20.16	Component Qty					20.16	0.00

4.6.2 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.

4.7 DATA EXPORT

4.7.1 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.

4.7.2 CONSIDERATIONS

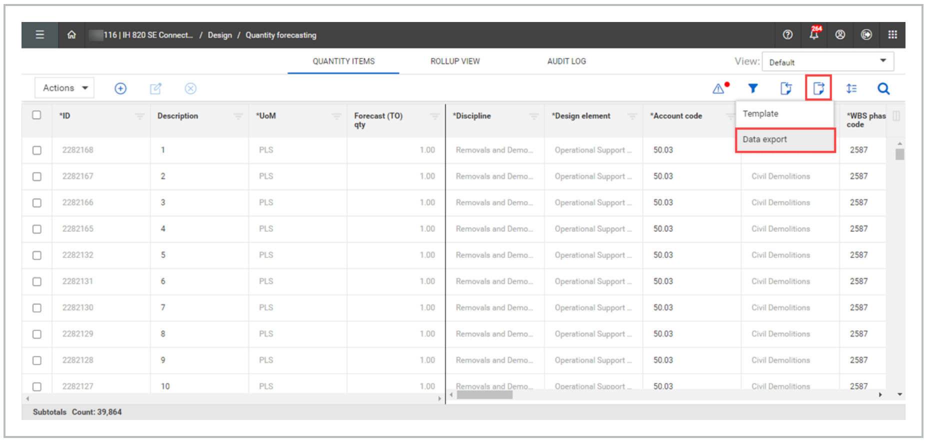
- You must have View quantity forecasting settings permission.
- Other users of Design with the same permission can download the file.
- The file will be available for 60 days. After 60 days, the Download export file icon is disabled.

4.7.3 STEPS

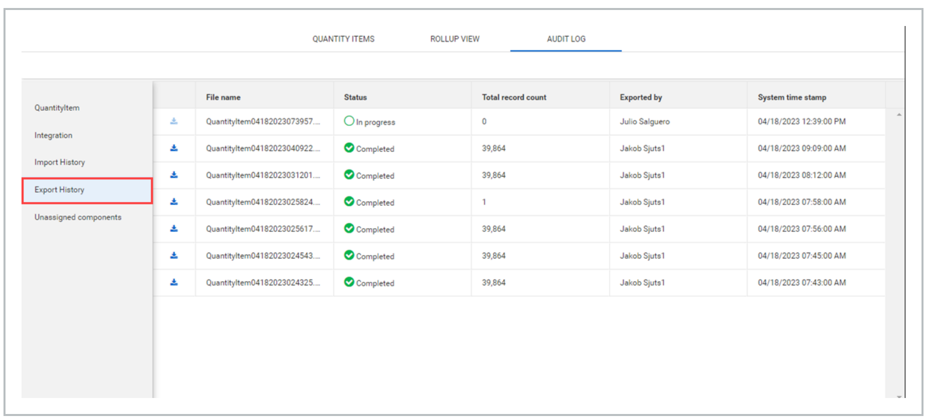
To export all quantity items:

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**.



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



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

4.8 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

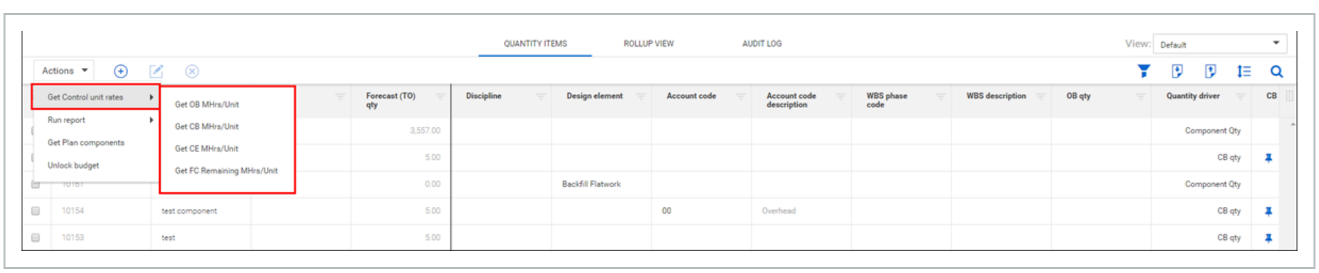
Action	Description
Get Control unit rates	Update the OB MHrs/Unit, CB MHrs/Unit, CE MHrs/Unit, and Forecast Remaining MHrs/Unit on the Quantity Items with current rates from InEight Control. For more information, see Get Control unit rates.
Run report	Run the Design Activity Report in a new tab. For more information, see Run report.
Get Plan components	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.
Lock and Unlock scope	Lock and unlock scope on a project.A warning will show when scope is unlocked that reads "*Scope is unlocked*". For more information, see Lock and unlock scope.

4.8.1 CONSIDERATIONS

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

4.9 GET CONTROL UNIT RATES

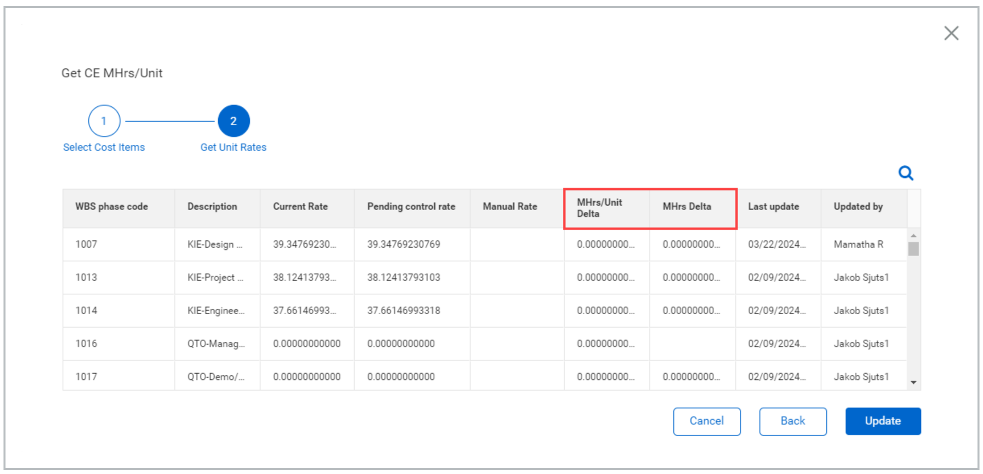
You can update the OB MHrs/Unit, CB MHrs/Unit, CE MHrs/Unit, and Forecast Remaining MHrs/Unit for quantity items with current rates from InEight Control. This lets you use the latest budget unit rates from Control multiplied by the latest forecasted Design quantity to understand the impacts to man hours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



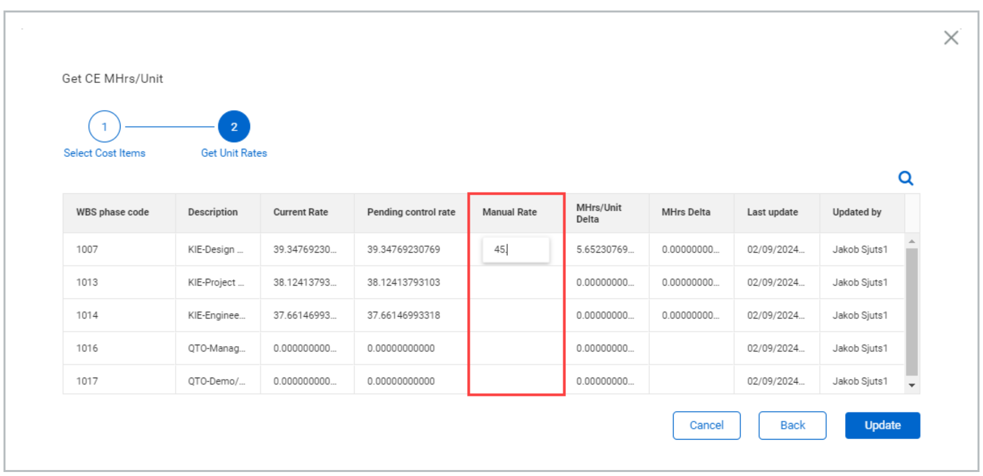
With Quantity Items tagged with a WBS from Control, the action lets you select which cost items to update the unit rates in Design. Control then shows the current unit rate applied in Design, the pending unit rate from Control, when the unit rate was last updated, and who performed the last update. Unit 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.

4.9.1 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.

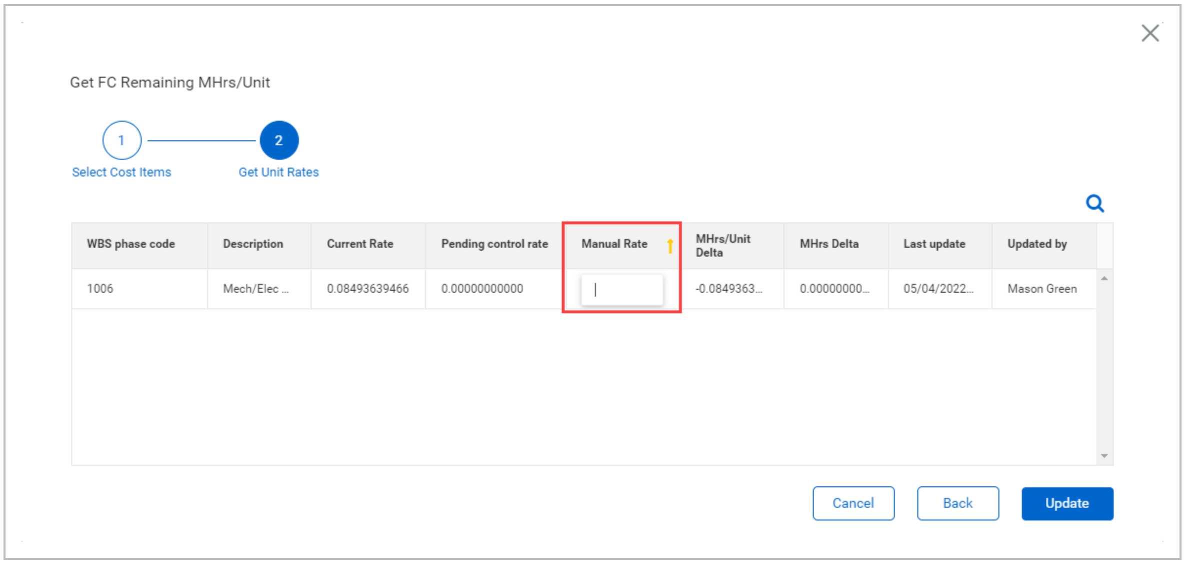


The Manual Rate column lets you specify a manual CE MHrs unit rate for a WBS phase code, while still allowing other WBS phase codes to function off the unit rate from Control.



4.9.2 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.



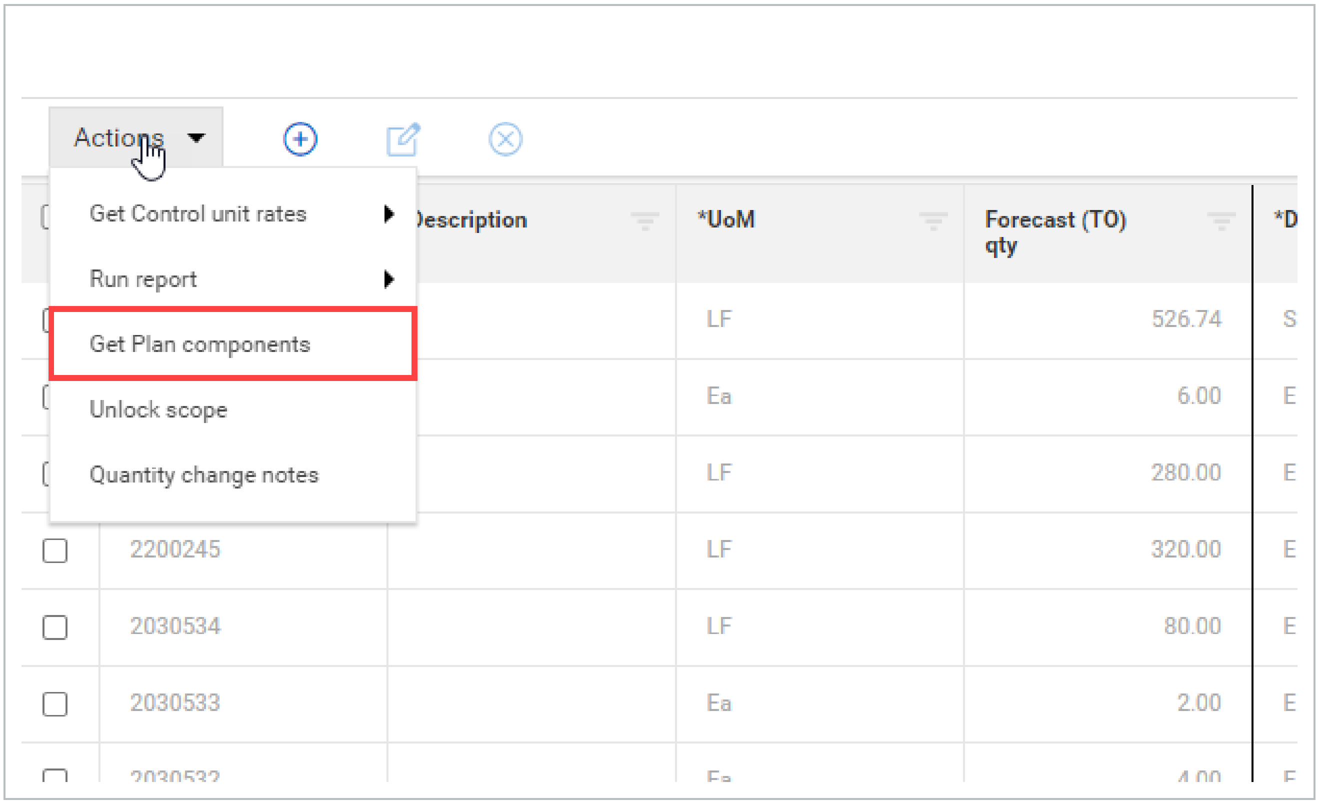
4.9.3 CONSIDERATIONS

- 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.

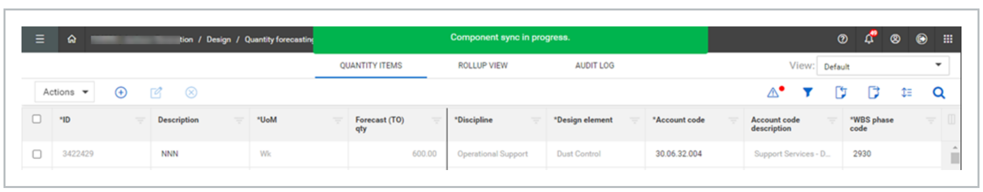
4.10 GET PLAN COMPONENTS

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**.



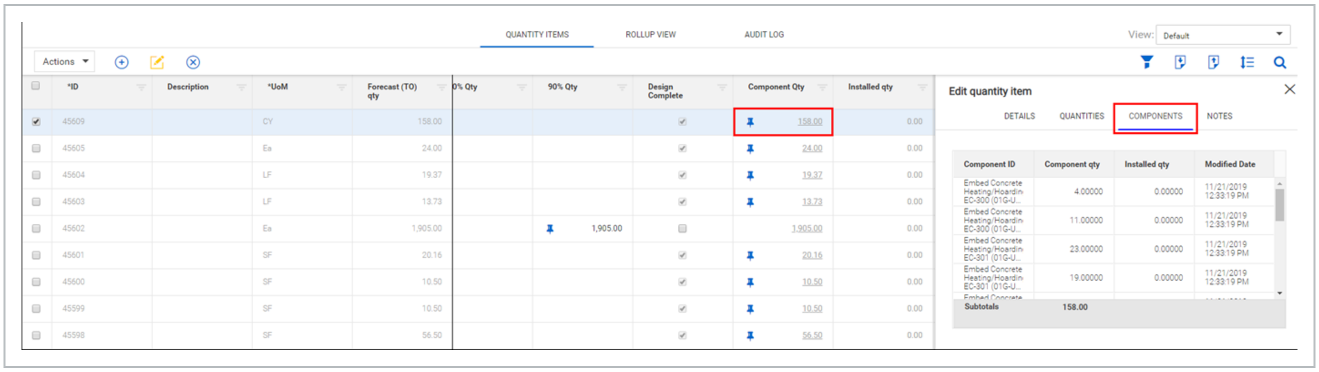
A banner shows when the sync is in progress after you select **Get Plan components**.



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.



4.10.1 CONSIDERATIONS

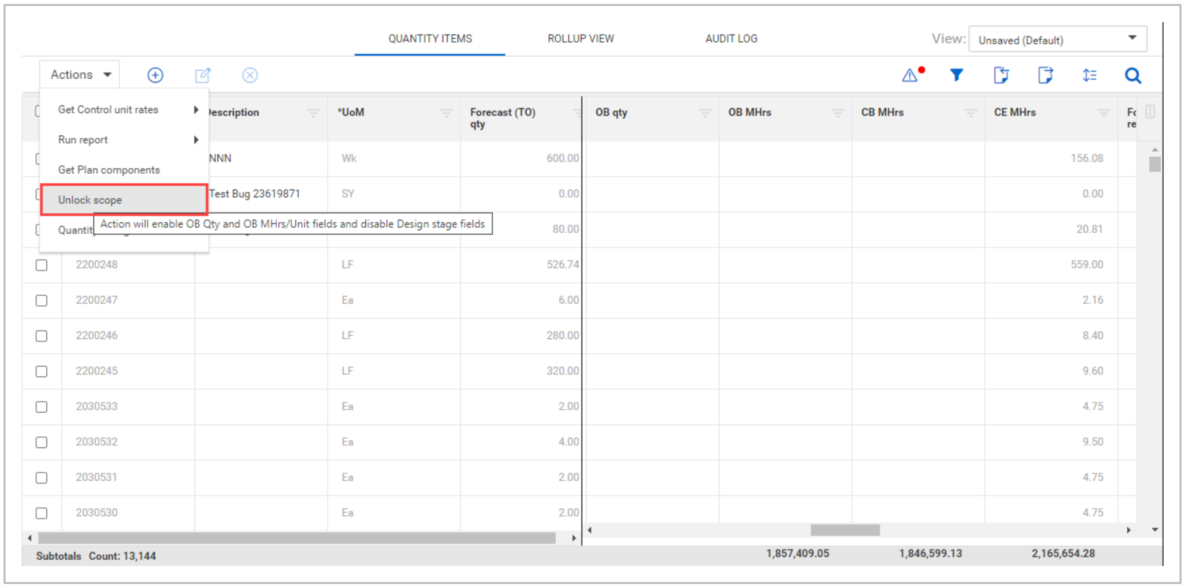
- You must have applicable permissions in Quantity forecasting.
- The Get Plan components action is available when Enable component integration with Plan is enabled and configured in the project settings > Quantity forecasting > Component integration > **Plan component integration**.

4.11 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.



4.11.1 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.

4.12 OBSERVATIONS

When changes occur in the design’s scope, you can create observations to capture the changes and associate them to quantity items or design elements. Observations lets you document changes throughout the life of the project to capture details of those changes.

The following table shows items you can add to an observation:

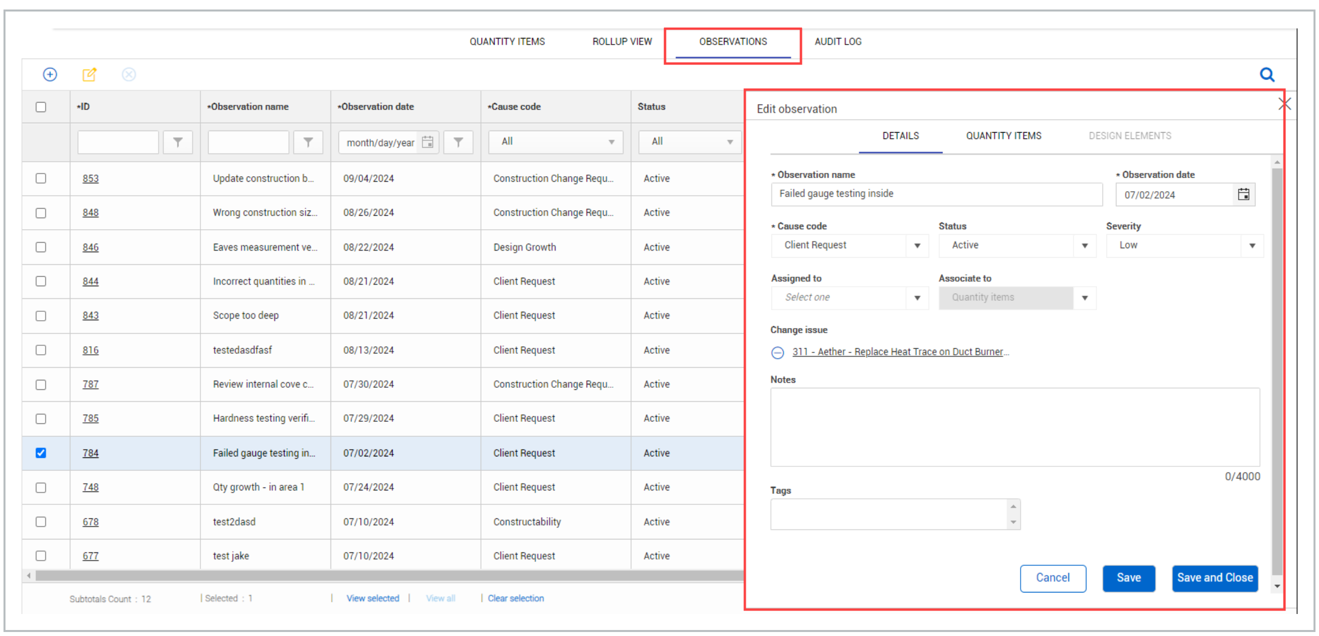
Observations

Field	Description
Name	Enter a required observation name.
Date	Enter a required observation date.

Observations (continued)

Field	Description
Cause code	Select a required cause code from the list.
Status	Select an observation status of *Active*, *Removed*, or *Closed*.
Severity	Select a severity of *Low*, *Medium*, or *High*.
Assign to	Assign a user to the observation.
Associate to	Associate the observation to quantity items or design elements. You can associate multiple quantity items or design elements. Quantity items must first be associated in the Quantity items page.
Change issue	When integrated with Change, you can link the observation to a InEight Change issue.
Notes	Add notes that relate to the observation.
Tags	Select tags related to the observation.

The following image shows the Observation tab with an existing observation opened:



RELEVANT LINKS

Quantity items

Video - Observations

4.13 ADD OBSERVATIONS

You can add observations on the Observations page. The Add observation slide-out panel contains the Details, Quantity Items, and Design Elements tabs.

On the Details tab, in the Associate to field, you can select Quantity items or Design elements. When you select Quantity items, the Quantity Items tab is made available. When you select Design elements, the Design Elements tab is made available. The observation name must have a unique value.

ADD AN OBSERVATION

1. Click the **Add observation** icon.
2. In the **Add observation** slide-out panel, enter the required and optional information
3. Select **Quantity items** or **Design elements**in the **Associate to** field.
   - Quantity items or design elements can be added to the observation after the observation is created.
4. Click **Add** to add the new observation.

4.13.1 CONSIDERATIONS

- To add quantity items, you must first add the observation, and then associate quantity items in the Quantity items page.
- You can add design elements after the observation is added.

4.14 ASSOCIATE TO QUANTITY ITEMS

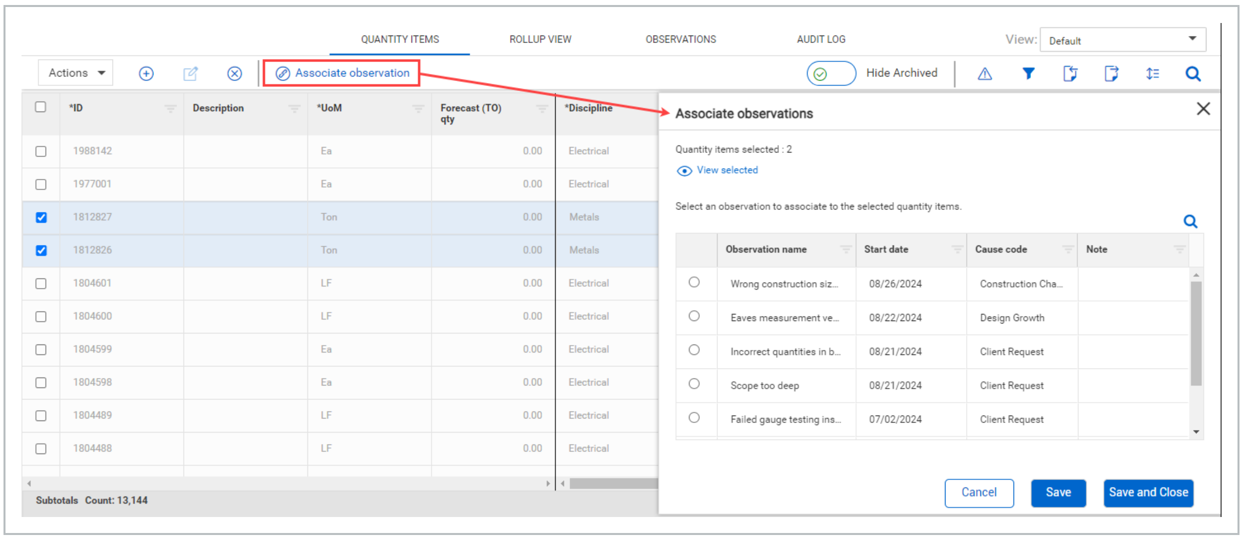
You can associate multiple quantity items to an observation in the Quantity Items page.

4.14.1 CONSIDERATIONS

You must first add the observation and have Quantity items selected in the Associate to field to associate quantity items in the Quantity Items page.

ASSOCIATE QUANTITY ITEMS TO AN OBSERVATION FROM THE QUANTITY ITEMS PAGE

1. In the Quantity Items page, select the quantity items you want to associate to the observation.
2. Click **Associate observations**. The Associate observations slide-out panel opens.



3. Select the observations to associate the quantity items to, and then click **Save**.

ASSOCIATE QUANTITY ITEMS TO AN EXISTING OBSERVATION

NOTE You must first associate quantity items to your observation in the Quantity Items page.

1. In the Observation page, click an observation **ID**.
2. Select the **Quantity Items** tab.
3. Select the quantity items you want to associate to the observation, and then click **Save**.

To remove quantity item associations, select the quantity items, and then click **Remove association**.

4.15 ASSOCIATE TO DESIGN ELEMENTS

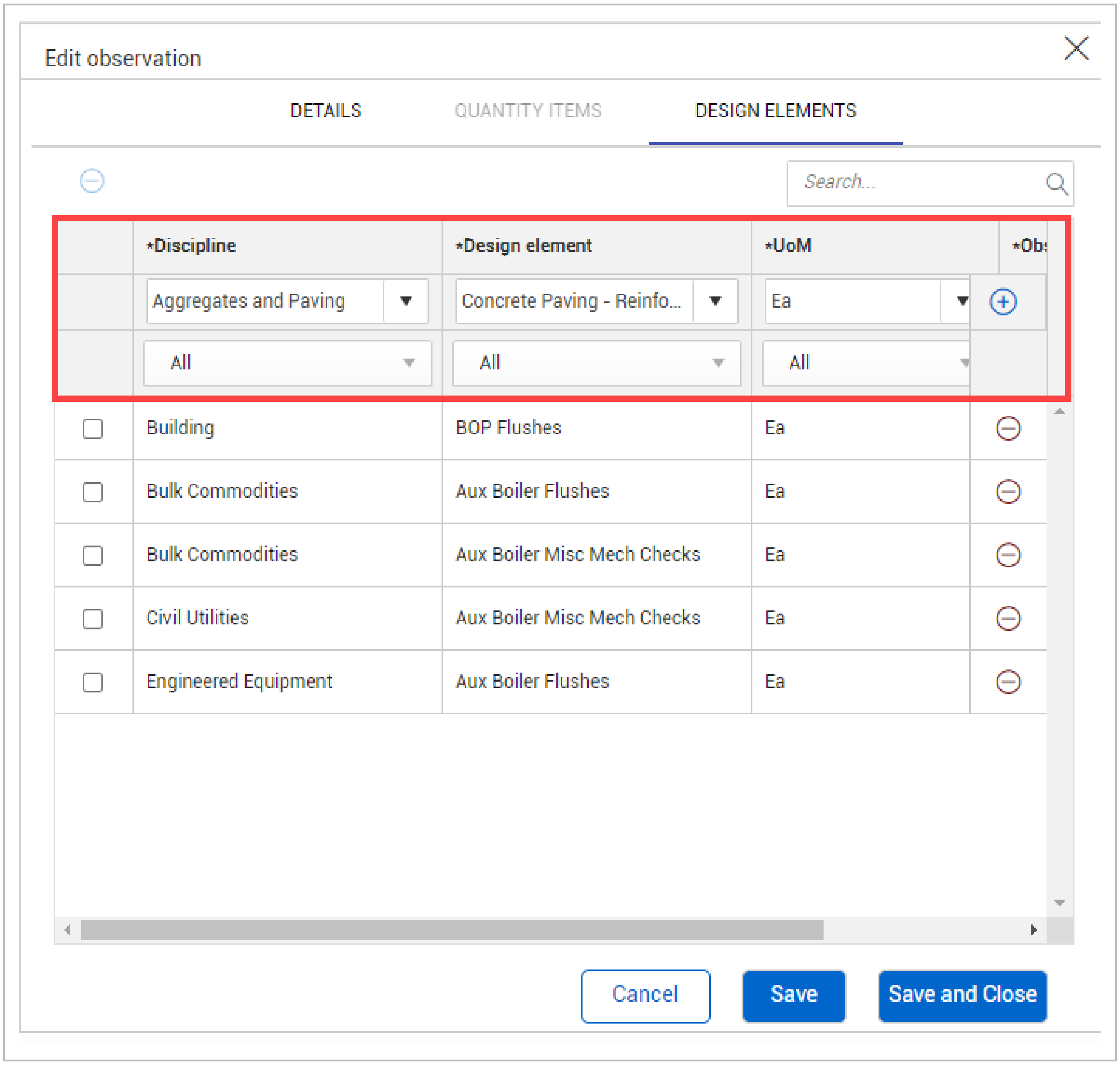
You can associate multiple design elements to an observation.

4.15.1 CONSIDERATIONS

You must add the observation and have Design elements selected in the Associate to field to associate design elements.

ASSOCIATE DESIGN ELEMENTS TO AN EXISTING OBSERVATION

1. In the Observations page, click an observation **ID**.
2. Select the **Design elements** tab.
3. Select discipline, design element, UoM, and observation quantity to associate to the observation.



4. Click the **add Associate observation** icon. You can add additional design elements to associate the observation to.
5. Click **Save**.

To remove design element associations, select the design elements, and then click **Remove association**.