

PLANNING, SCHEDULING & RISK

**DESIGN USER GUIDE** 

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# **CONTENTS**

CHAPTER 1 – INEIGHT DESIGN OVERVIEW 1.1 Open Design 1.1.1 Summary 1.1.2 Steps	10 10
CHAPTER 2 – ADMINISTRATION OVERVIEW 2.0.1 Summary	
CHAPTER 3 – ORGANIZATION LEVEL SETTINGS 3.1 Quantity forecasting settings 3.2 Project values 3.2.1 Considerations 3.3 Engineering settings 3.4 Project values 3.4.1 Considerations	15 15 16 17 17
CHAPTER 4 – PROJECT LEVEL SETTINGS 4.1 Quantity forecasting settings 4.1.1 Summary 4.2 General 4.2.1 Considerations 4.2.2 Steps 4.3 Design element setup 4.3.1 Considerations 4.4 Design tracking stages	21 21 25 25 26 26 26
<ul> <li>4.4.1 Considerations</li> <li>4.5 Attributes and project values</li> <li>4.5.1 Attributes</li> <li>4.5.2 Project values</li> </ul>	27 29

4.5.3 Considerations	29
4.6 Component integration	29
4.6.1 Plan Component Integration	29
4.6.2 Considerations	30
4.7 Linked engineering projects	30
4.7.0.1 Integration with Plan	32
4.7.1 Steps	33
Link projects	33
4.8 Engineering settings	33
4.8.1 Summary	33
4.9 Project values	33
4.9.1 Summary	33
4.9.2 Considerations	35
4.9.3 Related links	35
4.10 Account code sets	35
4.10.1 Summary	35
4.10.2 Considerations	36
4.11 Resource types	36
4.11.1 Summary	36
4.11.2 Considerations	37
4.11.3 Related links	38
4.12 Milestones	38
4.12.1 Summary	38
4.12.2 Considerations	39
4.12.3 Related links	39
4.13 Teams	39
4.13.1 Summary	39
4.13.2 Considerations	40
4.13.3 Related links	40
4.14 Resources	40
4.14.1 Summary	40
4.14.2 Steps	41
4.14.3 Considerations	42
4.14.4 Related links	42
4.15 Disciplines	43
4.15.1 Summary	43
4.15.2 Considerations	43
4.15.3 Related links	44
4.16 Design elements	44

4.16.1 Summary	44
4.16.2 Considerations	
4.16.3 Related links	45
4.17 Cause codes (Engineering)	45
4.17.1 Summary	
4.17.2 Considerations	
4.17.3 Related links	46
4.18 Documents	46
4.18.1 Considerations	47
CHAPTER 5 – ENGINEERING MODULE OVERVIEW	49
5.0.1 Summary	49
5.1 Scope items	
5.1.1 Considerations	
5.2 Add a scope item	
5.2.1 Summary	
5.2.2 Considerations	
5.2.3 Steps	
5.2.4 Related links	
5.3 Edit a scope item	54
5.3.1 Summary	54
5.3.2 Considerations	55
5.3.3 Steps	55
5.3.4 Related links	56
5.4 Scope item resources	56
5.4.1 Summary	56
5.4.2 Considerations	58
5.5 Import new scope items	59
5.5.1 Considerations	59
5.5.2 Steps	59
5.5.3 Related links	60
5.6 Claim on a scope item	60
5.6.1 Summary	60
5.6.2 Considerations	60
5.6.3 Steps	61
5.7 Undo claiming	62
5.7.1 Considerations	62
5.7.2 Steps	62
5.7.3 Related links	64
5.8 Import claiming	64

5.8.1 Considerations	64
5.8.2 Steps	64
5.8.3 Related links	65
5.9 Update scope item quantity	65
5.9.1 Summary	65
5.9.2 Considerations	66
5.9.3 Steps	66
5.9.4 Related links	67
5.10 Update scope item quantity by import	67
5.10.1 Summary	67
5.10.2 Considerations	67
5.10.3 Steps	67
5.10.4 Related links	69
5.11 Compliance issues	69
5.11.1 Summary	69
5.11.2 Considerations	70
5.12 Audit log	71
5.12.1 Summary	71
5.13 Actions	73
5.14 Actions overview	73
5.14.1 Considerations	74
5.15 Associate documents	74
5.16 Associate documents overview	74
5.16.1 Considerations	75
5.17 Mappings	75
5.18 Documents	78
5.19 Map documents and scope items	78
5.19.1 Considerations	79
5.19.2 Steps	79
	79
	79
5.20 View associated items	80
5.20.1 Scope item's document count column	80
5.20.2 Document's scope item count column	81
5.20.3 Considerations	81
5.21 Unlink associated items	81
5.21.1 Considerations	82
5.21.2 Steps	82

	Unlink associated items	82
	5.22 Configure claiming schemes	82
	5.22.1 Summary	82
	5.22.2 Considerations	
	5.23 Add a claiming scheme manually	83
	5.23.1 Summary	83
	5.23.2 Considerations	
	5.23.3 Steps	84
	5.23.4 Related links	
	5.24 Copy a claiming scheme	86
	5.24.1 Summary	86
	5.24.2 Considerations	
	5.24.3 Steps	86
	5.24.4 Related links	87
	5.25 Import claiming schemes	87
	5.25.1 Summary	87
	5.25.2 Considerations	88
	5.25.3 Steps	88
	5.25.4 Related links	89
	5.26 Configure Work Packages Overview	90
	5.26.1 Considerations	91
	5.27 Work Packages Overview Page	91
	5.27.1 Considerations	94
	5.28 Configure project values	94
	5.28.1 Steps	94
	5.29 Lock and unlock scope	95
	5.29.1 Considerations	96
	5.30 Role assignment	96
	5.30.1 Summary	96
	5.30.2 Considerations	97
	5.30.3 Steps	97
	5.30.4 Related links	98
С	HAPTER 6 – QUANTITY FORECASTING MODULE OVERVIEW	99
-	6.0.1 Summary	
	6.1 Quantity items	
	6.1.1 Summary	
	6.1.2 Considerations	
	6.2 Add a quantity item	
	6.2.1 Summary	
	,	

6.2.2 Considerations	
6.2.3 Steps	
6.3 Quantity driver	
6.3.1 Summary	
6.3.2 Considerations	
6.4 Data export	
6.4.1 Summary	
6.4.2 Considerations	
6.4.3 Steps	
6.5 Actions	
6.5.1 Considerations	
6.6 Get Control unit rates	
6.6.1 MHrs Delta columns	
6.6.2 Get FC Remaining MHrs/Unit - Manual Rate column	
6.6.3 Considerations	
6.7 Get Plan components	
6.7.1 Considerations	
6.8 Lock and unlock scope	
6.8.1 Considerations	110
6.9 Quantity change notes	110
6.9.1 Considerations	111



# 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.

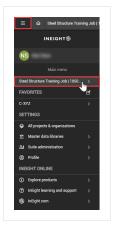
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<ul> <li>InEight learning and support</li> <li>InEight.com</li> </ul>		0 0	) 0 .

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.

				PROJECTS	ORGANIZATIONS					
Ð									()	Q
	ID 🕇 👘	Name	Stat	Organization	Created by	Created on	Original contract	Contract number	Date project start	
	1000	Management i	-	Bar Systems	frager, balling the					
		delite the set	-	And Toppensing	2000 C					
			-	And Supervision						
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		10.00.000	-	Rear Toppensition						
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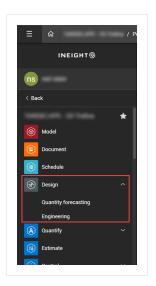
If your project is not shown on the initial screen, you can search by clicking the **Search** icon in the upper right. This search function searches all terms in all columns.

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



TIP

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



# CHAPTER 2 – ADMINISTRATION OVERVIEW

### 2.0.1 Summary

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

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# CHAPTER 3 – ORGANIZATION LEVEL SETTINGS

3.1 Quantity forecasting settings	15
3.2 Project values	15
3.2.1 Considerations	16
3.3 Engineering settings	17
3.4 Project values	17
3.4.1 Considerations	18

# **3.1 QUANTITY FORECASTING SETTINGS**

# **3.2 PROJECT VALUES**

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

		QUANTITY FORECASTING	ENGINEERING	AUDIT LOG	
Proje	ct values	;			
Select wh	ich project values	are to be used in quantity items.			
Name				Include	Required
Area			(	$\overline{\bigcirc}$	$\bigcirc$
Constr	uction commodity	r	(	$\overline{\bigcirc}$	$\bigcirc$
Segme	nt				$\overline{\bigcirc}$
Subsys	tem		(	$\overline{\bigcirc}$	$\bigcirc$
Systen	1		(	$\overline{\bigcirc}$	$\bigcirc$
Turnov	er		(	$\odot$	$\overline{\bigcirc}$
Θ	gn trackir	ng stages			
Desi	gn trackir			î	
Desig	) gn trackir	ng stages		Î J	
Desig	gn trackir	ng stages "Design stage title		8	
Desig	gn trackir Position 04	10 stages <sup>*</sup> Design stage title Enter design stage title			

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

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

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

### 3.2.1 Considerations

Include will be disabled if any quantity item has data maintained or if Required is turned to *On*. Required becomes disabled if quantity item data exists but there are quantity items that do not have that project value type maintained. You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Quantity Forecasting.

### 3.3 ENGINEERING SETTINGS

### **3.4 PROJECT VALUES**

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

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

Project values Disciplines	Resource types Milestones	Design elements Schedule	Teams
Project values			
Select which project values are to be used in engineering scope items.			
Name	Include	Required	
Area	$\bigcirc$	$\bigcirc$	
Construction commodity	Θ		
Segment	$\overline{\bigcirc}$	0	
Subsystem	$\bigcirc$	$\bigcirc$	
System	$\bigcirc$		
Turnover			
Work classification	$\bigcirc$	$\bigcirc$	

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.

QU	ANTITY FORECASTING	ENGINEER	ling			
Project values Account code set	Resource types M	ilestones Sc	hedule Teams	Resources	Control settings	Dates
Project values						
Select which project values are to be use	d in engineering scope	items.				
Name						Include
Area						
Segment						$\bigcirc$
Subsystem						0
System						$\overline{\bigcirc}$
Work classification						$\bigcirc$

### 3.4.1 Considerations

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

# **CHAPTER 4 – PROJECT LEVEL SETTINGS**

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29
29
29
29
29
30
30
33
33
33
33
33
35
35
35
35
36
36
36
37

4.11.3 Related links	38
4.12 Milestones	38
4.12.1 Summary	38
4.12.2 Considerations	39
4.12.3 Related links	39
4.13 Teams	39
4.13.1 Summary	39
4.13.2 Considerations	40
4.13.3 Related links	40
4.14 Resources	40
4.14.1 Summary	40
4.14.2 Steps	41
4.14.3 Considerations	42
4.14.4 Related links	42
4.15 Disciplines	43
4.15.1 Summary	43
4.15.2 Considerations	43
4.15.3 Related links	44
4.16 Design elements	44
4.16.1 Summary	44
4.16.2 Considerations	45
4.16.3 Related links	45
4.17 Cause codes (Engineering)	45
4.17.1 Summary	45
4.17.2 Considerations	46
4.17.3 Related links	46
4.18 Documents	46
4.18.1 Considerations	47

# 4.1 QUANTITY FORECASTING SETTINGS

### 4.1.1 Summary

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

For general information on InEight cloud platform settings, see <u>Organization Settings</u> and <u>Project</u> <u>Settings</u>.

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

### **4.2 GENERAL**

Design's general settings allow project admin users access to general project configurations.

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

»					QUANTITY FOR	ECASTING	ENGINEERING			
0	Gen	eral De	esign element setup	Design tracking stages	Attributes and pro	ject values	Component integration	Schedule	Linked engineering projects	Cancel Save
<ul><li>Image: Image: Image:</li></ul>	Auto	ID con	figuration							A
*	Automatic	ally generate	a new quantity item's l	D?						
*	$\bigcirc$									
	Αссοι	int co	de set							
	Tied to acco	unt code se	t? *Accour	nt code set locks on upload o	f quantity item structi		t UoM from Account Code Set			
<u>@</u>	0		1Kiew	vit	-		imary UoM ternate System UoM			
3	Contro	ol Inte	gration							
	Inherit WBS vendors)	attributes?	(Account code, Cost se	gment, UoM, Pay item, Assigr	ned					
	$\bigcirc$									
4	Manu	al Unit	Rate Config	guration						
-	Enable editi	ng of OB MH	Hrs/Unit or CB MHrs/Un	it fields?						
	Original Buc	iget 🛈			_	Budget 🛈				
	0				(	9)				
•			onfiguration							
	CE MHrs	/Unit	drive CE MHrs: 🛈							
	CB MHr	/Unit								
6	Notes									
	Tags									
	lugo	Position	ID	*Description						
		10		Select tag	-		↓ ↓			
	0	01	adddddddd	addd		$\otimes$	A			
		02	QG	Quality Growth		$\otimes$				
		03	QR	Quantity Reduction		$\otimes$				
	0	04	A1	A1		$\otimes$				
	0	05	A2	A2		$\otimes$				
	0	06	A3 aaa	A3 888		$\otimes$				
		07	AB	Absolute b		$\otimes$	-			
	n	09	888888888	aaa55555		8	<b>.</b>			

### 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)

#### 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 slideout 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. **Control Integration** Enable integration of InEight Control's WBS attributes for the project. Quantity items will inherit the

3

### General settings tab (continued)

	Title	Description
		Account code, Cost segment, UoM, Pay item, and Assigned attributes. The inherited attributes are disabled in the quantity item fields. To enable Control Integration, the WBS phase code must be selected as <b>Required</b> and <b>Unique</b> in the Quantity Forecasting > <b>Fields and component</b> <b>integration</b> 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 which unit rate should be used to

### General settings tab (continued)

	Title	Description
		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	<b>Tags</b> - Allows project admins to add and remove tags on project which can be added to the individual notes maintained on a Quantity Item. Once a tag is created in the Organization Settings, then it will become available to add to a project through this project settings.

### 4.2.1 Considerations

You must have the applicable permissions in Quantity Forecasting

### 4.2.2 Steps

To navigate to the General tab, from your projects home page go to Settings > Design > Quantity Forecasting > **General**.

## 4.3 DESIGN ELEMENT SETUP

When Design elements are created in organization settings, they are automatically available in the project settings for every project in the organization. Design elements are used to group like scope into specific coding. The quantity, hours, and cost can then be rolled up to the design element level to drive information decision making on a project.

The Design elements are read-only in the project settings. Project administrators can select which Design elements are available on the project. They can also configure which Design elements to include or exclude when rolling up quantities in Quantity forecasting > **Rollup View** tab.

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 about the Account code set, see <u>General</u> settings

	General	Design element a		s and project values Component in	tegration Schedule Linked er	ngineering projects	
		Proje	ect preferences				
		Desi	gn elements				
0			➢ Design elements	UoM	Include quantity i	Available in project	Ŷ
			ті			· · · ·	Ļ
) ) ) ) ) )			T2				
			✓ 30 - Operational Support	PLS			
			✓ 50 - Removals and Demolition				
			✓ 51 - Grading				
			✓ 52 - Civil Utilities	LF			
			<ul> <li>S3 - Aggregates and Paving</li> </ul>	SY			
			✓ 54 - Temporary Work	PLS			
			✓ 60 - Deep Foundations	Ea			
			V 61 - Concrete			12	
			👽 62 - Metals	Ton			

### 4.3.1 Considerations

You must have the applicable permissions in Quantity Forecasting.

# 4.4 DESIGN TRACKING STAGES

Design tracking stages are used to track how scope quantities change throughout the design process. 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.

When Design stages are created in the organization settings, they become available to add in the project settings for every project in the organization. This project setting lets project administrators

configure which Design Stages to add to the project and in what order. Functionality includes adding, reordering, and deleting Design stages from the project.

»				QUANTIT	TY FOREC	ASTING	ENGINEERING			
9	General	Design element s	setup De	sign tracking stages Attributes a	and projec	t values	Component integration	Schedule	Linked engineering projects	Cancel Save
<ul> <li>Image: A state of the state of</li></ul>		Desi	gn trac	king stages						
Ð										
* * * * *			Position	*Design stage title			$\uparrow$			
•			03	Select quantity stage	*		$\downarrow$			
2			01	30% Qty		$\otimes$				
			02	60% Qty		$\otimes$				

### 4.4.1 Considerations

You must have the applicable permissions in Quantity Forecasting.

## 4.5 ATTRIBUTES AND PROJECT VALUES

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

The following image shows the Attributes and project values tab:

Required and unique fields				
Identify the required field for a quanity item, and the combination	n of fields that will make	the quantity item unique		
Name	Include	Required (j)	Unique (j)	Component (j)
Attributes				
ID			$\bigcirc$	$\bigcirc$
Account code			$\bigcirc$	$\odot$
WBS phase code			$\bigcirc$	$\bigcirc$
Discipline				
Work type		Θ		
Cost segment		Θ		
Design element				
UoM				
Ground				
Construction work package		Θ		
Engineering work package		Θ		
Deliverable package		Θ		
Project values				
Area		Θ		
Construction commodity			$\bigcirc$	$\odot$
DemoProject1221	Θ			
Segment		Θ		
Subsystem		Θ		
System		Θ		
test JS	Θ			
TestProjValueType	Θ			
TestRavali12	Θ			
Turnover	$\odot$	Θ		
Work classification		$\bigcirc$		

**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 <u>Component</u> integration tab, you can configure which values will integrate with Plan components. To turn the Component field to *On*, you must first set the field as required and unique. Unique and Component fields must match.

### 4.5.1 Attributes

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

### 4.5.2 Project values

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

### 4.5.3 Considerations

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

## 4.6 COMPONENT INTEGRATION

### 4.6.1 Plan Component Integration

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

»	QUANTITY FORECASTING ENGINEERING
© *	General Design element setup Design tracking stages Attributes and project values Component integration Schedule Linked engineering projects
	Plan component integration
۲	Enable component integration with Plan?
8	
	Components         Completed         Data last refreshed: 12/08/2023 04:07 AM           Deta Refresh Components         Completed         Data last refreshed: 12/04/2023 11:56 PM
<ul> <li>(a)</li> <li>(b)</li> <li>(c)</li> <li>(c)</li></ul>	
© (1)	

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

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

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

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

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

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

### 4.6.2 Considerations

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

### **4.7 LINKED ENGINEERING PROJECTS**

You can link projects with the goal of sharing deliverable and engineering work packages from the Engineering module to the Quantity forecasting module and show Engineering Work Packages in InEight Plan. To navigate to Linked engineering projects, from your projects home page left navigation

menu, go to Settings > Design > Quantity Forecasting. In Quantity Forecasting, select the Linked engineering projects tab.

×			QUANTITY FORECASTING	ENGINEERING				
6		General Design element setup Design trackir	ng stages Attributes and project values	Component integration	Schedule	Linked engineeri	ng projects	1
0	Ð	Linked engineerir	ng projects					
0	3 3 3 3							
	8) 5)	Project ID	Project description	Organization				
(4	3	104783	KIE-WMATA 4	SE5001 - Kiewit Infrastruct	ure Engineers		Ø	*
6								
6								

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

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

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

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

Edit quantity item				
DETAILS	QUANTITIES	COMPONENTS	NOTES	
Select one	*	Select one	•	•
OB MHrs/Unit		CB MHrs/Unit		
		650.00		
Commodity		Construction work page	ckage	
Select one	•	Select one	*	
Deliverable package		Engineering work pac	kage	
PWD	•	Bridge	•	
User defined field 1		User defined field 2		
C1001.01010				
User defined field 3		User defined field 4		
User defined field 5		User defined field 6		
Design Complete				
$\bigcirc$				*
		Can	cel Sav	IP .

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

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

#### 4.7.0.1 Integration with Plan

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

package creation topic.

### 4.7.1 Steps

To navigate to Linked engineering projects, from your projects home page left navigation menu, go to Settings > Design > Quantity Forecasting > Linked engineering projects tab.

#### Link projects

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

NOTE You will only see projects you have permission for.

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

### 4.8 ENGINEERING SETTINGS

### 4.8.1 Summary

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

For general information on InEight cloud platform settings, see <u>Organization Settings</u> and <u>Project</u> <u>Settings</u>.

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

### **4.9 PROJECT VALUES**

### 4.9.1 Summary

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

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

Project value	es Disciplines	Resource types	Milestones	Design elements Schedule	Team
Project values					
Select which project values are to be used in engin	eering scope items.				
Name			Include	Required	
Area			$\bigcirc$	$\bigcirc$	
Construction commodity			0		
Segment			$\bigcirc$	0	
Subsystem			$\bigcirc$	$\bigcirc$	
System			$\bigcirc$		
Turnover			Θ		
Work classification			$\bigcirc$	$\bigcirc$	

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.

	QU	ANTITY FORECASTIN	G ENG	INEERING	_			
Project values Accourt	nt code set	Resource types	Milestones	Schedule	Teams	Resources	Control settings	Dates
Project values								
Select which project values a	re to be use	d in engineering so	cone items					
Name	Te to be use	a in engineering so	ope nema.					Include
Area								
Area Segment								0
Segment								

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.

							_	SCOPE ITEMS AUDIT	.00			view	C Default			
Act	ons	•	• 🖻 🗵										•	C7	D	C
			10. T	*Description	*Claiming scheme	Claiming scheme	% Comp	Edit scope item								6
•	~		243458	test	104783 EW BSTR	Bridge Structures - Early		Summary								^
•	~		D 76464	TESTING1	104783IND	Indirects		ID		* Description		* Claiming scheme				
	~		D 76463	TESTING	104783IND	Indirects		243458		test		104783 EW 85TR		*		
	~		C 76365	details test - import1	104783FHV IFC	Fire Hose Valve addition		Scope item qty	١	* Scope item UoM		Lead Discipline				
	~		C 76364	details test - import2	104783FHV IFC	Fire Hose Valve addition		1.00		Ea	*	Structural				
	~		C 76363	Testing credit 1 updat	104783FHV IFC	Fire Hose Valve addition		OB qty		Deliverable qty		Deliverable UoM				
	~		C 76362	Testing Credit 2.0 new	104783FHV IFC	Fire Hose Valve addition				0.00		Sht				
	~		C 43653	KIE Fire Hose Valve Di	104783IND	Indirects		Deliverable package		Engineering work package		Area				
	~		L 42754	KIE MECH - FHV Minn	104783FHV IFC	Fire Hose Valve addition		Select one	*	Select one	*	09Ltest		*		
	~		L 42753	KIE MECH - FHV New	104783FHV IFC	Fire Hose Valve addition		Segment		System		Work classification				
	~		L 42752	KIE MECH - FHV Land	104783FHV IFC	Fire Hose Valve addition		test	*	test	*	CIV		٠		
	~		L 42751	KIE MECH - FHV Chev	104783FHV IFC	Fire Hose Valve addition		Resources 📩				5				•
	~		L 42750	KIE MECH - FHV Dean	104783FHV IFC	Fire Hose Valve addition		User defined				0				÷
	~		L 42749	Jacobs MECH - FHV	104783FHV IFC	Fire Hose Valve addition		Dates								-
	~		42748	Jacobs MECH - FHV L	104783FHV IFC	Fire Hose Valve addition										
	~		L 42747	Jacobs MECH - FHV C	104783FHV IFC	Fire Hose Valve addition										
	_		~									Cancel	Save		e and (	

### 4.9.2 Considerations

• You must have the Edit engineering settings permission.

### 4.9.3 Related links

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

# 4.10 ACCOUNT CODE SETS

### 4.10.1 Summary

Account code sets are used in the Engineering module 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 in Settings > Design > Engineering > Account code set. To enable account code sets, turn on the toggle at the top of the page.

To view an existing account code, click the Account code set drop-down list, and then select a set. The list of account codes associated with the set opens in the table. To make an account code set available in project settings, select an account code at the organization level, and then turn on the **Include selected account code set in project settings** toggle.

At the organization level, you can perform actions such as:

- Add a new account code set.
- Add an account code to an account code set.
- Edit an account code.
- Remove an account code.
- Update account codes that have been modified in InEight Platform.
- Configure account code groups.
- Configure drawing codes.
- Import and export account codes.

At the project level, you can tie an account code set to your project. If you turn on the Tie to account code set toggle, and then select an account code set, only account codes in that set are available to assign to scope items in the project. You can also set either the primary or alternate system UoM to be used throughout the project.

### 4.10.2 Considerations

- You must have the permission Edit engineering settings.
- To enable or disable the Tie to account code set toggle for a project, the scope items grid must be empty.
- Only account codes available in InEight Platform Master data libraries > Account codes can be added to an account code set.
- You can delete an account code from an account code set only if it is not assigned to a scope item.

## **4.11 RESOURCE TYPES**

#### **4.11.1 Summary**

Resource types are associated with disciplines and are used in the Engineering module to add 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.

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

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

To add a new resource type at the organization level, enter an ID, a description, and a discipline, and then click the **Add resource type** 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.

			Disciplines Re	source types	Milestones	Design elements	Schedul
lesc	ource t	уре					
	Position	*ID	*Description	*Discipl	line		
$\oplus$	138	ARL	Architectural Landscaping	Archite	ctural	-	
	08	CEN	Civil Engineer	Civil		⊗ ^	
	09	CDS	Civil Designer	Civil		$\otimes$	
	10	CMT	Civil MOT	Civil		$\otimes$	
	11	CWL	Civil Walls	Civil		$\otimes$	
	12	CRD	Civil Roadway	Civil		$\otimes$	
	13	CGR	Civil Grading	Civil		$\otimes$	
	14	CSW	Civil Sitework	Civil		$\otimes$	
	15	CRW	Civil ROW	Civil		$\otimes$	

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

#### 4.11.2 Considerations

- You must have the permission Edit engineering settings.
- When you assign a resource type to a claiming scheme step, its associated discipline is automatically populated.
- You cannot edit or remove a resource type when it is assigned to a project.

### 4.11.3 Related links

After resource types are set up, you can configure claiming scheme steps. For more information, see <u>Configure claiming schemes</u>.

### 4.12 MILESTONES

#### 4.12.1 Summary

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

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

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

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

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

						Y FORECASTING	ENGINEERING
			Disciplines	Resource types	Milestones	Design elements	Schedule
ilest	ones						
	Position	*ID	*Description				
+	37	IFC	Issue for Construction		]		
	04	ITD	Type Selection Submittal		 ⊗	•	
	05	IPD	Prelim Submittal		$\otimes$		
	06	IID	Interim Submittal		$\otimes$		
	07	IRD	Final Submittal		$\otimes$		
	08	ICD	IFC Submittal		$\otimes$		
	09	IFA	Issue for Approval		$\otimes$		
	10	IFD	Issue for Design		$\otimes$		
	11	AFC	IFC Approved		$\otimes$		

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

#### 4.12.2 Considerations

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

#### 4.12.3 Related links

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

### 4.13 **TEAMS**

#### 4.13.1 Summary

Teams are used in the Engineering module to group resources for assignment to claiming steps on scope items. Teams can be associated with either organizations or vendors.

Teams are created at the organization level in Settings > Design > Engineering > Teams.

To add a new team at the organization level, enter an ID, a name, and either select an organization or select the Is Vendor check box and a vendor. Click the **Add team** icon. To edit teams, click in the fields, and then enter text or select an option. To remove a team, click the **Remove team** icon to the right. To adjust the position of a team in the list, select the team, and then click the up or down arrows to the right of the table.

At the project level, all teams from the parent organization are automatically inherited and you can add or remove teams as necessary.

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

There are two additional check boxes at the project level:

- 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.

#### 4.13.2 Considerations

- You must have the permission Edit engineering settings.
- The Limit Claiming to Team check box is only available if the Limit user assignment to only those Teams associated with the project toggle is turned on in the Resources project settings.
- You cannot remove a team if it is already assigned to a scope item.

#### 4.13.3 Related links

You can assign a planned team to a scope item in the Resources section of the Add and Edit scope item dialog boxes. See <u>Scope item resources</u> for more information.

For more information about resource users, see <u>Resources</u>.

### 4.14 RESOURCES

#### 4.14.1 Summary

Resource users are used in the Engineering module to for assignment to claiming steps on scope items. Resource users are associated with resource types and can be grouped into teams. Resource users are created at the organization level in Settings > Design > Engineering > **Resources**.

There are multiple methods to create resource users:

- Assign resource user Add an individual resource user.
- Assign resource users by type Add multiple resource users assigned to one resource type.
- Assign resource users to team Add multiple resource users assigned to one team.

At the project level, there is a toggle called Limit user assignment to only those Teams associated with the project. When this toggle is disabled, you can assign any user with the applicable permissions to the project. When this toggle is enabled, only users assigned to teams that have been added to the project are available to assign. By default, this toggle is disabled. To enable the toggle, at least one team must be added to the project.

#### 4.14.2 Steps

To add an individual resource user:

1. From the Resources organization settings page, click the **Add resources** icon, and then select **Assign resource user** from the drop-down menu. The Add resource slide-out panel opens.

				QUANTITY	FORECASTING	ENGINEERING	AUD	T LOG		
		Disciplines R	esource types	Milestones	Design element	s Schedule	Teams	Resources	Account code set	Cause coo
esou	Irces									
	User 😇	Resource type		Discipline		Team		Start date	<b>⊕</b> ▲ 🗹	
		Building Vertical Structu	res	Building				04/04/2022	Assign res     Assign res	ource user ource users by typ
		Building Vertical Structu	res	Building				12/03/2022		ource users to tea
		Building Vertical Structu	res	Building				04/03/2022		
		Geotechnical Walls		Geotechnical				04/03/2022	8	
		Systems FLS		Systems				04/03/2022	8	
		Geotechnical Engineer		Geotechnical				03/04/2022	$\otimes$	
		Building Vertical Structu	res	Building				05/13/2022	$\otimes$	
		Geotechnical Engineer		Geotechnical		KIE, Water		06/15/2015	$\otimes$	
		Building Stations		Building		KIE, Water		08/19/2019	$\otimes$	
		Building Stations		Building		KIE		08/15/2005	$\otimes$	

- 2. Select a user, start date, and resource type.
- 3. You can add one or more teams and select a start date for the resource user on that team. Click the **Add team** icon.

*User			*Start date	
Select u	ıser	± •	06/30/2022	- 1
*Resource	e type		Discipline	_
Select r	resource type	•		
	Team		*Start date	
	Enter team	-		
	No	teams have been a	added to this resource	*
				- 11

4. Click Save.

#### 4.14.3 Considerations

- You must have the permission Edit engineering settings.
- 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.
- If you enable the Limit user assignment to only those Teams associated with the project toggle after the project has started, the system validates that all users assigned to incomplete claiming steps are associated with teams added to the project.

#### 4.14.4 Related links

For more information about teams, see <u>Teams</u>.

# 4.15 DISCIPLINES

#### 4.15.1 Summary

You can define disciplines for the Engineering module to associate with resource types and claiming schemes. Examples of disciplines might be architectural, civil, or drainage. The list of available disciplines are configured at the organization level in Settings > Design > Engineering > **Disciplines**. Disciplines configured at the organization level are available to all projects.

To add a new discipline, enter an ID and a description, and then click the **Add discipline** icon.

			Disciplines	Resource types	Milestones	Design elements	Schedule
scip	lines						
	Position	*ID	*Description			<b>↑</b>	
+	58	W	Water				
	02	A5	Architectural		$\otimes$	A	
	03	н	CES Structures		$\otimes$		
	04	с	Civil		$\otimes$		
	05	D	Drainage		$\otimes$		
	06	E	Electrical		$\otimes$		
	07	z	Environmental		$\otimes$		
	08	к	ESDC		$\otimes$		
	09	x	Estimating		$\otimes$		

To edit disciplines, click in the fields, and then enter text. To remove a discipline, click the **Remove discipline** icon to the right. To adjust the position of a discipline in the list, select the discipline, and then click the up or down arrows to the right of the table.

#### 4.15.2 Considerations

- You must have the permission Edit engineering settings.
- You cannot remove a discipline when it is assigned to a resource type or assigned to a claiming scheme.

### 4.15.3 Related links

After disciplines are set up, you can configure claiming schemes. For more information, see <u>Configure</u> <u>claiming schemes</u>.

### 4.16 DESIGN ELEMENTS

#### 4.16.1 Summary

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

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

		Disciplines Resource typ	es Milestones Design e	elements Schedule Teams	Resources Account code	e set Cause codes		
sign	elements							0
	ID		"UoM	Alternate system UoM	"EPC	Parent(optional)	C,	
Ð		ALARM	Ea 🗸 🗸	Ea	Engineering -	Select design element p 💌		
	6140	CLOSEOUT	Sht	Sht	Engineering		$\otimes$	î
	6141	CM (Sht)	Sht	Sht	Engineering		$\otimes$	
	6142	CM (SF)	SF	m2	Engineering		$\otimes$	
	6143	COMMUNICATIONS (Ea)	Ea	Ea	Engineering		$\otimes$	
	6144	COMMUNICATIONS (LF)	LF	m	Engineering		$\otimes$	
	6145	COMMUTER RAIL	LF	m	Engineering		$\otimes$	
	6146	CONCRETE (Ea)	Ea	Ea	Engineering		$\otimes$	
	6147	CONCRETE (Sht)	Sht	Sht	Engineering		$\otimes$	
	6148	CONSTRUCTION QUALITY	MWk	kW	Engineering		$\otimes$	
	6149	CONSULTANT	PLS	PLS	Engineering		$\otimes$	
	6150	CULVERT	SF	m2	Engineering		$\otimes$	
	6151	cw	Sht	Sht	Engineering		$\otimes$	

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

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

#### 4.16.2 Considerations

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

#### 4.16.3 Related links

You can assign a design element to a scope item in the Resources section of the Add and Edit scope item dialog boxes. See <u>Scope item resources</u> for more information.

### 4.17 CAUSE CODES (ENGINEERING)

#### 4.17.1 Summary

In the Engineering module, cause codes are required when a quantity change occurs. The list of available cause codes are configured at the organization level in Settings > Design > Engineering > **Cause codes**. Cause codes configured at the organization level are available to all projects.

To add a new cause code, enter an ID and a description, and then click the Add Cause code icon.

				QUANTITY F	ORECASTING	ENGINEERING	AUDIT LOG		
			Disciplines Resource types	Milestones	Design elements	Schedule	Teams Res	Account code set	Cause cod
aus	e codes	;							
	Position	*ID	*Description						
+	25	OtherRequest	Other Request						
	01	EngineeringErr	Engineering Error or Omission	$\otimes$	A				
	02	DesignProgres	Design Progression	$\otimes$					
	03	CR	Design Growth	$\otimes$			45		
				$\otimes$					

To edit cause codes, click in the fields, and then enter text. To delete a cause code, click the **Delete cause code** icon to the right. To adjust the position of a cause code in the list, select the cause code, and then click the up or down arrows to the right of the table.

#### 4.17.2 Considerations

You must have the permission Edit engineering settings.

#### 4.17.3 Related links

For more information about updating scope item quantity, see <u>Update scope item quantity</u> and <u>Update</u> <u>scope item quantity by import</u>.

### 4.18 DOCUMENTS

You can associate InEight Document documents and scope items by enabling Document integration. Document integration can be enabled on the project's settings > Engineering > **Documents** tab.

When Document integration is enabled, the Document Types grids are shown. This is where you can select the document types.

	Project values	Account code set	Resource types	Milesto	nes	Schedule	Teams	Resources	Control settings	Dates Do
Docu	ments									
Enable [	Oocument integration	I								
	hich document types nt Types	are to be shown in o	document associati i Refresh documen				t types are in Document T			
Search				Q		Search	Document	, pes		
	Document type						Document ty	уре		
	РНОТО			•						
	REPORT						MAN			
	SCHED				<b>&gt;</b>		REG			
					÷					
							SKETCH			
							SPEC			

The Associate documents action is also made available in Engineering > Scope Items > Actions dropdown.

#### **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 <u>Associate documents</u>.

#### 4.18.1 Considerations

- To enable Document integration, you must first setup the project in InEight Platform > Suite Administration > Application integrations.
- You must have the appropriate permissions to enable Document integration.

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# CHAPTER 5 – ENGINEERING MODULE OVERVIEW

#### 5.0.1 Summary

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

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

# 5.1 SCOPE ITEMS

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

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

	Title	Description
1	Actions menu	Do any of the following: <ul> <li>Configure claiming schemes</li> <li>Configure work packages</li> <li>Configure project values</li> </ul>

#### **Overview - Scope items page**

### **Overview - Scope items page (continued)**

	Title	Description
		<ul><li>Unlock Budget</li><li>Role assignment</li></ul>
2	Scope item buttons	Add, edit, and delete scope items.
3	View	Select, save, rename, and delete views.
4	Upper right toolbar	<ul> <li>Create query filter - Opens the query builder</li> <li>Import and Export - Import and export sets of data</li> <li>Find - Search scope items</li> </ul>
5	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.

	ID	*Description	*Claiming scheme	Claiming scheme description	% Complete	Lead discipline	Scope item qty	*Scope item UoM	OB qty	Deliverable qty	U
~	154897	Piping Example	Piping	Piping	0.0	Piping	1.00 (i)	Ea		0.00	s
~	154896	Mechanical Example	Mechanical	Mechanical	100.0	Mechanical	1.00 ()	Ea		0.00	5
~	154895	Process Example - Do	Process CS	Process CS	0.0	Process	1.00 (i)	Ea	1.00	0.00	s
~	154894	Process Example - Do	Process CS	Process CS	55.0	Process	1.00 (i)	Ea	1.00	0.00	\$
~	154893	Process Example - Do	Process CS	Process CS	54.9	Process	1.00 ()	Ea	1.00	0.00	s
~	154892	Process Example - Do	Process CS	Process CS	62.0	Process	1.00 (i)	Ea	1.00	0.00	s

#### 5.1.1 Considerations

You must have the permission View scope items.

### 5.2 ADD A SCOPE ITEM

#### 5.2.1 Summary

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

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

- Summary Basic details of the scope item, including:
  - ID This field is automatically populated.
  - Description Must be unique.
  - Claiming scheme Must be set up on the Configure claiming schemes page.
  - Scope item qty and UoM If an account code set in enabled for the project, the UoM must match the UoM of the resource type's associated account code in the Resources tab, which is automatically populated after you select a claiming scheme. Scope item UoM must also match WBS phase code UoM to claim progress.
  - Lead Discipline This field is automatically populated based on the claiming scheme.
  - OB qty This field is initially populated by the Scope Item qty field when the budget is locked. It is not editable but is shown for tracking purposes. If you edit the scope item qty, you must enter a reason to explain the difference. See <u>Update scope item quantity</u> 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 <u>Scope item resources</u> 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:

		QU	ANTITY FORECASTING	ENG	INEERING	_			
	Project values	Account code set	Resource types	Milestones	Schedule	Teams	Resources	Control settings	Dates
Dates									
Enable Scope Item Dates ()									
Scope item ① Scope item / Milestone ③									
Scope item / ScheduleGro									

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

#### 5.2.2 Considerations

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

#### 5.2.3 Steps

To add a scope item:

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

Ac	tions	•	• 🗹 🤅							<b>T</b> 🕻		
			ID	*Description	*Claiming scheme	Clair desc	Add scope item					
	~		332364				Summary					^
	~		332357				ID	* Description		* Claiming scheme		
	~		332255							Select one	*	
	~		332254				Scope item qty	* Scope item UoM		Lead Discipline		
							0.00	Each	-			
	~		217635			_	OB qty	Deliverable qty		Deliverable UoM		
	~		135173					0.00		Sht	*	
	~		123799				Deliverable package	Engineering work package		Area		
	~		123798				Select one		-	Select one	*	
	~		123797									
	~		113859				Construction commodity Select one	Segment Select one	-	Subsystem Select one	*	
	~		113858									
							Turnover	Included in schedule?				
	~		113857				Select one	$\odot$				
	~		113856			-	December					Ŧ
	~		113855				Resources					•
	~		113854			-	User defined					*
	~		113853			-						

- 2. Fill out the required fields:
  - Description
  - Claiming scheme
  - Scope item UoM

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

3. Click Add.

#### 5.2.4 Related links

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

### **5.3 EDIT A SCOPE ITEM**

#### 5.3.1 Summary

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

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

- Summary Basic details of the scope item, including:
  - ID This field is automatically populated.
  - Description Must be unique.
  - Claiming scheme Cannot be edited after claiming has been made.
  - Scope item qty and UoM If you edit the quantity after claiming has been made, you must enter a reason in the Update scope item qty dialog box. See <u>Update scope item quantity</u> 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 <u>Update scope item quantity</u> 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 <u>Scope item resources</u> 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:

		QU	ANTITY FORECASTING	ENG	INEERING	_			
	Project values	Account code set	Resource types	Milestones	Schedule	Teams	Resources	Control settings	Dates
Dates									
Enable Scope Item Dates ()									
<ul> <li>Scope item ()</li> <li>Scope item / Milestone ()</li> </ul>									
Scope item / ScheduleGro	oup 🕕								

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

#### 5.3.2 Considerations

You must have the permission Edit scope items.

#### 5.3.3 Steps

To edit a scope item:

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

							SCOPE ITEMS	AUDIT	LOG		View: Def	ault			•
Ac	ctions	•	÷	C	$\otimes$							T	C7		Q
∎ ħ			ID			*Description	Edit scope item								0%
"	~		C) 3	32505		lock - creating n	Summary								^
2	~		C 3	32504		Lock function ex	ID		* Description		* Claiming scheme				
e,	~		C 3	32503		unlock first- exis			lock - creating new		104783IND			*	
	~		C) 3	32502		1	Scope item qty	(j)	* Scope item UoM		Lead Discipline				
	$\sim$		C) a	32497		A5	30.00		Each	•	Indirects				
	~		C) a	32496		A4	OB qty		Deliverable qty		Deliverable UoM				
	~		C) 3	32492		a3			0.00		Sht			•	
	~		0:	32491		a2	Deliverable package		Engineering work package		Area				
		0		32490		al	Select one	*	Select one	•	Select one			*	
	~						Construction commodity		Segment		Subsystem				
	~			132467		S13	Select one	•	Select one	•	Select one			*	
	~		C) 3	32466		S12									
	~		C) 3	32465		S11	Turnover Select one	*	Included in schedule?						
	~		C) 3	132464		S10									
	~		C 3	32463		S9	Resources 🖄								*
	~		C) 3	132462		S8	User defined								•
	~		C 3	32461		S7	Dates								•
	~		C 3	132460		S6	Documents								•
	~		C 3	32459		S5							_	ve and	

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

#### 5.3.4 Related links

For more information about the Resource section, see Scope item resources.

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

### **5.4 SCOPE ITEM RESOURCES**

#### 5.4.1 Summary

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

The Resources section is organized into a grid.

ummary							•
esources							^
Resource type	WBS phase code	Account code	UoM	Design element	Role	Planned team	
Civil Engineer	1245	88.40.46.006.04	EA	PERMIT (Ea)			^
Civil Designer	1244	88.40.46.006.02	EA	PERMIT (Ea)			
							*
ser defined							•
ser defined							•
ser defined							•
ser defined							•

Role	Planned team	Assigned user	% Complete	WBS % Claim Ratio	CE MHrs/Unit	Scope item qty	Scope iten MHrs
			0.00	90.00	16.00	1.00	16.0
			0.00	10.00	144.00	1.00	144.0

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

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

#### 5.4.2 Considerations

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

### 5.5 IMPORT NEW SCOPE ITEMS

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

### 5.5.1 Considerations

You must have the permission Import scope items.

#### 5.5.2 Steps

To import new scope items:

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

SCOP	'E ITEN	IS AUDIT L	.06				View: Default	•
							y y 🕄 🕽	Q
omplete		Lead discipline	Scope item	Scope item	OB qty	Deliverable qty	Export scope item template	Eng
0	.00	Electrical	1.00 (j	LF			Export scope item data	
0	.00	Electrical	1.00 (j)	Ea			Export claiming Export schedule template	
0	.00	Electrical	1.00 (j)	Ea			Export schedule spread template	
60	.00	Electrical	1.00 (j)	Ea			0.00 Sht	
10	.00	Electrical	1.00 (j)	Ea			0.00 Sht	
0	.00	Electrical	1.00 ()	Ea			0.00 Sht	
0	.00	Electrical	1.00 (j)	Ea			0.00 Sht	
0	.00	Electrical	1.00 ()	Ea			0.00 Sht	
0	.00	Electrical	1.00 (j)	Ea			0.00 Sht	

- 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**.

SCOPE ITEMS	S AUDIT LO	DG				View: Unsaved (Default)		•
						<b>T</b>	٦	Q
ing scheme	% Complete	Lead discipline	Scope item	Scope item UoM	OB qty	Import scope items	Ŧ	Deli UoN
Structure 3 Step	0.00	Structural	0.00 (j)			Import claiming	0.00	Sht
Structure 3 Step	0.00	Structural	25.00 (i)	Ea		Import schedule spread	1.00	Sht
age 3 Step (AB)	100.00	Drainage	0.50 (i)	Ea			0.60	Sht
cts	100.00	Indirects	38.00 ()	MWk			38.00	Sht
cts	100.00	Indirects	20.00 (i)	MWk			20.00	Sht
sta	0.00	Indirects	1.00 (i)	MWk			1.00	Sht
ts	0.00	Indirects	1.00 (i)	MWk			1.00	Sht
ts	0.00	Indirects	1.00 (j)	MWk			1.00	Sht

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

#### 5.5.3 Related links

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

### **5.6 CLAIM ON A SCOPE ITEM**

#### 5.6.1 Summary

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

#### 5.6.2 Considerations

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

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

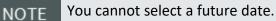
#### 5.6.3 Steps

To claim a step on a scope item:

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

						cherse	description	heme 🚽	% Complete	Lead discipline		Scope item qfy		*Scope item UoM		OB qty		Deliverable qty		Deliverable UeM	5
h 🔨 0		D 14784			2	0061			0.00	Civil			1.00 🛈	EA			1.00		0.00	Sht	
۹.									CLAIMING	DETAILS		HISTORY									
s	Step	Complete	Step na	me				% Claim	Partial claiming	Claim qty	Date		Mileston	e completion	Reso	rce type	A	tual Team		Claimed by	
			Review	Applicable Standards an	d Lesson	Learned - Engineering		45.000	12	0.00	04/18/	/2022			Civil E	ngineer					
			Review	Contract Requirements a	nd Owne	r Provided Documents - Er	ngineering	45.000	12	0.00	10/22/	/2021			Civil B	ngineer					
	3		Review	Applicable Standards an	d Lesson	Learned - Design		5.000	12	0.00	04/18/	/2022			Civil C	esigner					
	4		Review	Contract Requirements a	nd Owne	Provided Documents - D	esign	5.000	13	0.00	04/18/	/2022			Civil C	esigner					

- 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.



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

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

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

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

You can also claim on scope items in bulk. For more information, see Import claiming.

## **5.7 UNDO CLAIMING**

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

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

#### 5.7.1 Considerations

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

#### 5.7.2 Steps

To undo claim for a step:

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

A dialog box shows all claims for the step.

								_	CLAIMING		DETAILS	HIST	JKT
s	Step	Complete	Step name				% Claim	Partial c	laiming Cla	im qty Cl	aim qty %	Undo claim	Date
	1		Prelim-Procure	e Mapping; ROW 8	Survey Co	ontrols	1.50	0 8		2,354.04	100.00	5	11/11/2021
	2		Prelim-Horizon	ntal Alignments			1.50	0 8		2,354.04	100.00	G Undo	laim /2021
	3		Prelim-Profile:	3			2.50	0		2,354.04	100.00	¢	11/11/2021
7234		Roadwa	y Ramp/Brdg	Roadway		Roadway 4 Milestones		23.25	2,354	.0/ (i) LF			2,354.04
nplete	Step			Undo clain Claim ID		or the following steps Step name	Claimed	Claimed	Claimed date	Undo	Undo cred		d Undo claimed by
			ping; ROW &	Claim ID	Step	Step name	Claimed qty	Claimed credit	Claimed date	Undo increment qty		lit Undo claime date	d Undo claimed by
			ignments	46580	1	Prelim-Procure Mapping;	2,354	3.53	11/11/2021	-235.40	-3.53	3 11/11/2021	Julio Salguero
				46579	1	Prelim-Procure Mapping;	2,118	3.53	10/28/2021	-235.41	-3.53	3 10/28/2021	Julio Salguero
				46578	1	Prelim-Procure Mapping;	1,883	7.06	10/21/2021	-470.81	-7.06	5 10/21/2021	Julio Salguero
_				46577	1	Prelim-Procure Mapping;	1,412	3.53	10/14/2021	-235.40	-3.53	3 10/14/2021	Julio Salguero
			ons	46576	1	Prelim-Procure Mapping;	1,177	17.65	10/02/2021	-1,177.02	-17.65	5 10/02/2021	Julio Salguero
			LF CHECKS										
			DISCIPLINA	Displayed	Results: 5	5							
		1-DQCP 24 - IN	TERDISCIPLI										ncel Save
												Ca	Save

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.

	₽ 7234	Roadway Ramp/Brdg	Roadway		Roadway 4 Milestones		23.25	2,354.	04 (j) LF			2,354.04
Step	Complete	Step name	Undo clair	ning fo	or the following steps							
		Prelim-Procure Mapping: ROW &	Claim ID	Step	Step name	Claimed qty	Claimed credit	Claimed date	Undo increment qty	Undo credit	Undo claimed date	Undo claimed by
		Prelim-Horizontal Alignments	84043	15	Interim-Grading Plans	588.51	20.59	03/10/2022	-588.51	-20.59	03/10/2022	Julio Salguero
		Prelim-Profiles	84037	16	Interim- Roadway, Ramp a	588.51	4.11	03/10/2022	-117.70	-4.11	03/10/2022	Julio Salguero
4		Prelim-Modeling	59109	16	Interim- Roadway, Ramp a	470.80	16.47	01/27/2022	-470.80	-16.47	01/27/2022	Julio Salguero
	-	1	59108	14	Interim-DQCP 40 - ALL CO	2,354	70.62	01/27/2022	-2,354.04	-70.62	01/27/2022	Julio Salguero
		Prelim-Typical Sections	57226	13	Prelim-DQCP 40 · CLIENT	2,354	0.00	01/21/2022	-2,354.04	0.00	01/21/2022	Julio Salguero
6		Prelim-Plan Package	54424	12	Prelim-DESIGN SUBMITTAL	2,354	11.77	12/28/2021	-2,354.04	-11.77	12/28/2021	Julio Salguero
		Prelim-DQCP 07 - SELF CHECKS	48116	11	Prelim-DQCP 16 - QA REVI	2,354	11.77	12/22/2021	-2,354.04	-11.77	12/22/2021	Julio Salguero
8		Preim DQCP 01 - QC DISCIPLINA	Displayed	Results: 2	26							
9		Prelim-DQCP 24 - INTERDISCIPLI										
		Prelim-DOCP 25 - CONSTRUCTAL									Cance	Save

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



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

#### 5.7.3 Related links

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

### **5.8 IMPORT CLAIMING**

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

#### 5.8.1 Considerations

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

#### 5.8.2 Steps

To import claiming:

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

SCOPEI	TEMS	AUDIT L	OG				View:	Default	•
								Y 🖳 🗊	Q
mplete		Lead discipline	Scope item	Scope item UoM	OB qty	Deliverable qty		cope item template	Eng wor
0.0		Electrical	1.00 (i)	LF			Export scope item data Export claiming		
0.0	)	Electrical	1.00 (i)	Ea				aiming chedule template	
0.0		Electrical	1.00 (i)	Ea				chedule template	
60.0		Electrical	1.00 (i)	Ea			0.00	Sht	1
10.0		Electrical	1.00 (j)	Ea			0.00	Sht	
0.0		Electrical	1.00 (j)	Ea			0.00	Sht	
0.0		Electrical	1.00 (j)	Ea			0.00	Sht	
0.0		Electrical	1.00 (j)	Ea			0.00	Sht	
0.0	)	Electrical	1.00 (i)	Ea			0.00	Sht	

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

SCOPE ITEMS	AUDIT LO	DG				View: Unsaved (Default)		•
						<b>T</b> 🖳	٦	Q
ing scheme —	% Complete	Lead discipline 🚽	Scope item	Scope item 🚽	OB qty	Import scope items		Deli UoN
Structure 3 Step	0.00	Structural	0.00 (i)			Import claiming	0.00	Sht
Structure 3 Step	0.00	Structural	25.00 (i)	Ea		Import schedule spread	1.00	Sht
age 3 Step (AB)	100.00	Drainage	0.50 (i)	Ea			0.60	Sht
ts	100.00	Indirects	38.00 (i)	MWk			38.00	Sht
ts	100.00	Indirects	20.00 (i)	MWk			20.00	Sht
sta	0.00	Indirects	1.00 (i)	MWk			1.00	Sht
ts	0.00	Indirects	1.00 (i)	MWk			1.00	Sht
ts	0.00	Indirects	1.00 (i)	MWk			1.00	Sht

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

#### 5.8.3 Related links

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

### 5.9 UPDATE SCOPE ITEM QUANTITY

#### 5.9.1 Summary

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

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

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

Scope item qty		*Scope item UoM Scope item qty cha	anges (2 total)	- Deliverable UoM	Engineering work nackage More details
4.00	<b>i</b>	Scope item qty	Cause code	Changed by	Changed date
148.00	i	148.00	Design Progres		02/12/2022 03:22:18
148.00	(j	1.00	Sample		01/13/2022 11:12:39
148.00	<b>(</b> )				
148.00	i				
148.00	(i)			0.00 011	

#### 5.9.2 Considerations

You must have the permission Edit scope items.

#### 5.9.3 Steps

To update scope item quantity:

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

Sel		2 ew steps									
For part partial o	ion will update the claimed qty on ial claiming steps the "New claim laiming step was not previously or w claim qty" field.	gty" will be editable f	or further claiming adju	stments. If the part	ial claiming step was	previously comple	te, then the New cla	im qty will be defau	Ited to the New scop t will be complete ba	e item qty amount. Ised on qty specifie	. If the ed in
Claim o 04/1	iate 8/2022	*Cause code Constructi	on Change Request	• Note							
Step	Step name	Partial claiming	New scope item qty	Claimed to date	Claimed to date %	New claim qty	New claim qty %	Claim qty delta	Actual Team	Claimed by	
1	Start Activity		100.00	1.0000000	100.00%	100.00	100.00%	99.00			^
2	Generate Deliverable/Model		100.00	1.0000000	100.00%	100.00	100.00%	99.00			
3	Generate Deliverable/Model		100.00	1.0000000	100.00%	100.00	100.00%	99.00			
3	Check for IFR		100.00	1.0000000	100.00%	100.00	100.00%	99.00			
4			100.00	1.0000000	100.00%	100.00	100.00%	99.00			

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

#### 5.9.4 Related links

You can also update scope item quantity for multiple scope items through the import process. For more information, see <u>Update scope item quantity by import</u>

### 5.10 UPDATE SCOPE ITEM QUANTITY BY IMPORT

#### 5.10.1 Summary

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

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

#### 5.10.2 Considerations

You must have the permission Edit scope items.

#### 5.10.3 Steps

To update scope item quantities by import:

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

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.

Imp	ort history > Scope ite	m error resolution	
$\otimes$	\$5		
	Scope item ID	Description	Number of errors
_	14328	Electrical Engineering L	2

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

This acti	cope items on will update the clai ional claim will be ma	Select steps imed qty on each of the previously of de on on each step to capture the q	laimed step for the selected so ty delta.	ope items.				
Only thos scope ite	se scope items impor ems will need to be co	ted with no other errors will be disp rrected individually through the erro	layed to select in the grid below. In resolution grid in order to updi	If any other errors exist on ir ate the scope item qty and as	nported scope items, the djust claiming.	n the		-
	Scope item ID	Scope item description	Existing scope item qty	New scope item qty	Claim date	Cause code	Cause code note	C
	14328	Electrical Engineering Lead	45.00	50.00	04/19/2022		D	
	14329	Electrical Designer Lead	45.00	55.00	04/19/2022		D	
	14333	Inverter and MV Transform	1.00	2.00	04/19/2022		D	

- 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.

(1)-		2										
Select scope it		elect st		claimed aten for th	e selected scope	a itama. An addition	al claim will be made	on on each sten	to capture the cturd	alta		
For partial claim	ing steps the "New	claim q	ty" will be editable fo	r further claiming as	justments. If the	e partial claiming st	ep was previously cor	mplete, then the M	vew claim gty will be	defaulted to the I	New scope item	gty amount. If
the partial claim	ing step was not p "New claim qty" fie	revioush	complete, then the	New claim qty will b	e defaulted to th	e Claimed to date a	mount. The "New clai	im qty %" reflects	the percentage of th	e step that will be	complete base	d on qty
												C
Scope item ID	Scope item d	Step	Step name	Partial claiming	New scope	Claimed to date	Claimed to date %	New claim qty	New claim qty %	Claim qty delta	Actual Team	Claimed by
14328	Electrical En	1	FTE Week		50.00	15.16	33.70%	15.17	30.33%	0.00		-
14329	Electrical De	1	FTE Week		55.00	15.16	33.70%	15.17	27.58%	0.00		
14333	Inverter and	1	Start Activity		2.00	1.00	100.00%	2.00	100.00%	1.00		
14333	Inverter and	2	Generate Deliv		2.00	1.00	100.00%	2.00	100.00%	1.00		
14333	Inverter and	3	Generate Deliv		2.00	1.00	100.00%	2.00	100.00%	1.00		
14333			Check for IFR		2.00	1.00	100.00%	2.00	100.00%	1.00		

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

#### 5.10.4 Related links

You can also update scope item quantity manually through the interface. For more information, see Update scope item quantity

Administrators can configure cause codes at the organization level. For more information, see <u>Cause</u> <u>codes (Engineering)</u>.

# 5.11 COMPLIANCE ISSUES

#### 5.11.1 Summary

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

	Viev	V: Unsav	ed (Default)		•
		Ţ	5		Q
Deliverable package	Deliverable package description		Compliant	æ î	÷ [
PWD	Project Wide			^	4

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

Summary					•
Resources					^
Resource type	WBS UoM of <b>MWk</b> does not align with the scope item UoM. Please resolve to enable claiming	UoM	Design element	Role	Plar
Project Management	1012 👗 88.01.20.00	MWk	INDIRECTS (MWk)		KIE
					*

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

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

#### 5.11.2 Considerations

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

# 5.12 AUDIT LOG

#### 5.12.1 Summary

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

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

							UDIT LOG						
													Q
Scope item	Audit type	Scope item ID	Scope item description	Resource ype	Step	Step name	Milestone	Schedule group	Attribute 👳	Value before	Value after	Changed -	Changed
Claiming history	Scope	1741	SE - ENV CS		•	•	÷		IsOBQu	False	True		05/31/20
Import history	Scope	1741	SE - ENV CS	•	•	•	•	•	OBQua		1.0000		05/31/20
	Scope	1746	AB Laydown		•		+	•	IsOBQu	False	True		05/31/20
Scope item quantity history	Scope	1746	AB Laydown						OBQua		0.4000		05/31/20

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

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

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

					SCOPE ITEMS	AUDIT LO	10					
		Import type	File name	Status	Total record count	Successful record	Failed record count	Fixed record count	Deleted record cou	Imported by	Started on	Ended on
Scope item		ClaimingScheme	Export Claiming Scheme Tem	A Completed with errors	1	0	1	0	0		06/20/2022 12:4	06/20/2022 12:4
Claiming history	0	Schedule	Export Schedule Template (1	8 Failed	1	0	1	0	0		06/17/2022 04:1	06/17/2022 04:1
Import history	0	Schedule	Export Schedule Template.xlsx	Completed	1	1	0	0	0		06/15/2022 11:1	06/15/2022 11:2
Scope item quantity history		Schedule	Export Schedule Template.xlsx	Completed	1	1	0	0	0		06/15/2022 11:1	06/15/2022 11:1

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

Claiming scheme ID 0123 EW BSTR	Resolv • ID	e claim	ing scheme		Descrip	tion		• Lead	Discipline		
$\langle \rangle$	01238	EW BSTR		±	Bridg	e Structures - Early Wo	rks	Stru	ctural		
	×						STEPS				
		-Step	+Step name	+% Claim	Partial claim	*Resource type	*Resource Discipline	Milestone Completion	•Schedule group	<ul> <li>Activity ID format</li> </ul>	
		12	Enter step name	Enter % ci		Select resourc		Select milestone	Select sche	Select acti	
	0	1	Final Design Development	5 0		Structural Engineer	Structural		RD	AccountCode/	×
	0	2	Final Design Development	5 0		Structural Engineer	Structural		RD	AccountCode/	$\otimes$
	0	3	Final Design Development	5		Structural Engineer	Structural		RD	AccountCode/	$\otimes$
	0	4	Final Design Development	5 0	0	Structural Engineer	Structural		RD	AccountCode/	$\otimes$
	0	5	Final Design Development	5 0		Structural Engineer	Structural		RD	AccountCode/	$\otimes$
	0	6	Final Design Development	5 0	0	Structural Engineer	Structural		RD	AccountCode/	$\otimes$
		7	Final Design Development	5 0		Structural Engineer	Structural		RD	AccountCode/	$\otimes$
			Sub	ototal:50.000%	0						

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

			SC	OPE ITEMS	AUDIT LOG			
								Q
Scope item	Scope item ID	Scope item escription	Scope item qty before	Scope item 🚽	Cause code	Note	Changed by	Changed 🚽
Claiming history	1829	CSIE ELECTRICAL Ch	1.00000000000	0.00000000000	Sample			04/27/202
Import history	1713	STR - STEEL GIRDE	2,148.000000	2,149.000000	Engineering Error or O	couldn't claim up at previous qty		03/01/202
Scope item quantity history	1713	STR - STEEL GIRDE	2,147.560000	2,148.000000	Design Progression			02/25/202
	1767	MECH - HVAC Minn	12.000000000	13.00000000	Design Progression			02/14/202

# 5.13 ACTIONS

# **5.14 ACTIONS OVERVIEW**

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

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 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 " <i>Scope is unlocked</i> ".
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.

#### **Overview - Actions**

					SCOPE ITEMS	AUDIT LOG		View: JS View	
Actions	•	<ul> <li></li></ul>	(3)					•	
Configure claiming schemes Configure work packages Configure project values Unlock Scope			*Description	*Claiming	Claiming scheme	% Complete 🚽	Compliance	Lead discipline	
			Piping Example	Piping	Piping	0.00		Piping	
			Mechanical Example	Mechanical	Mechanical	100.00		Mechanical	
Role ass	ignment			Process Example - Do	Process CS	Process CS	0.00		Process
~		154894		Process Example - Do	Process CS	Process CS	55.00		Process
~		154893		Process Example - Do	Process CS	Process CS	54.99		Process
~		154892		Process Example - Do	Process CS	Process CS	62.00		Process

### 5.14.1 Considerations

You must have applicable permissions in Engineering.

# **5.15 ASSOCIATE DOCUMENTS**

# 5.16 ASSOCIATE DOCUMENTS OVERVIEW

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

					SCOPE ITEMS	AUDIT LOG
Actions	•	• C	$\otimes$			
Associa	ite docum	ients				/ Scope is ur
-	re claimin re work p	ng schemes ackages	-	*Description	*Claiming	Claiming schem description
Configure project values				ID * Description	104783IND	Indirects
	Get FC Remaining MHrs/Unit			e	104783IND	Indirects
Lock Sc Role as:	signment			d	104783IND	Indirects
Run rep	-		•	PIDS CO Sheladia STR	PIDS CO Building 3 Step	PIDS CO Buildin
~		123798		PIDS CO Sheladia STR	PIDS CO Building 3 Step	PIDS CO Buildin
~		123797		PIDS CO Sheladia STR	PIDS CO Building 3 Step	PIDS CO Buildin
~		🗀 113859		PIDS CO Sheladia EW	PIDS CO Systems Proje	PIDS CO System
~		🗀 113858		PIDS CO Sheladia AR	PIDS CO Building 3 Step	PIDS CO Buildin
~		113857		PIDS CO Sheladia AR	PIDS CO Building 3 Step	PIDS CO Buildin
~		113856		PIDS CO Sheladia AR	PIDS CO Building 3 Step	PIDS CO Building

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

### 5.16.1 Considerations

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

# 5.17 MAPPINGS

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

Scope	items	1				5 <sub> O</sub> A	ito hide mapped		ments	2			5	Auto hide mappe	
K M	ap scope it	24					6	<b>X</b> M	lap docume	∝ & <b>4 5</b> 7					
	8	ID =	Description	Document count	% Complete	Lead discipline 🚽	Engineering work package		8	Document	Title 👻	Scope item	Revision	Status	Discipli
0	×	165182	QA2	2	0.00	Architectural		•	*	().#SS#S#	W#3423	2	10	VDR	PD
0	×	165181	QA1	1	0.00	Architectural		0	23	1349_DOC	1349_Doc	1	в	VDR	CNST
0	×	165180	TEST2	1	0.00	Building	test - test	0	23	1353_DOC	1353Doc	1	c	IFI	GEN
0	×	165179	TEST1	1	0.00	Indirects		0	*	234234234234234	234234234234234	1	A	IFC	BLDG
0	ø	123799	PIDS CO Sheladia		63.85	Building		0	*	33332	SS title	1	10	WTH	ELE
0	ø	123798	PIDS CO Sheladia		52.35	Building		0	×	33335	test tilte	2	A	IFI	CNST
0	8	123797	PIDS CO Sheladia		63.85	Building		0	8	33336	SS test1		10	WTH	STR
0	8	113859	PIDS CO Sheladia		99.85	Systems		0	8	33337	test doc		A	AB	GEN
0	8	113858	PIDS CO Sheladia		99.85	Building		0	8	55555	bug validation		00	PLH	GEN
0	ø	113857	PIDS CO Sheladia		99.85	Building		0	8	66666	feb01		в	IFI	CNST
0	8	113856	PIDS CO Sheladia		99.85	Building		0	8	CALDOC	Testing_Document		A	IFC	CIV
0	8	113855	PIDS CO Sheladia		99.85	Building	test - test	0	8	D1-PLM1	D1-PLM1		в	VDR	CNST
0	8	113854	PIDS CO Sheladia		99.85	Building		0	8	D1-PLM2	D1-PLM2		в	VDR	CNST

	ltem	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 a single scope item Map many scope items to single document	Select to map many documents to a single scope item, or many scope items to a 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.

	Item	Description
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.

		Auto hide mapped     Q	Documents	
move	mapping			
	Document number	Title	Scope item ID	Scope item description
	cccccc	ccccc	221641	RAVALIORDER_989
	CCCCCC	CCCCC	221640	RAVALIORDER_988
	cccccc	CCCCC	221639	RAVALIORDER_987
	cccccc	00000	221638	RAVALIORDER_986
	CCCCCC	00000	221633	RAVALIORDER_981
	cccccc	CCCCC	221632	RAVALIORDER_980
	CCCCCC	00000	221631	RAVALIORDER_979
	CCCCCC	00000	221630	RAVALIORDER_978

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

# 5.18 DOCUMENTS

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

	⊗ Document / Scope item	Status /	# of scope	% Complete	CE total -	Earned MHrs	Forecast remaining	Planned -	Planned -	Current -	Current	Actual	Actual finish
)	∨1349_DOC-1349_Doc	VDR	1	0.00	110.00	0.00	0.00			▲		11/29/2023	
)	↓1353_DOC - 1353Dec	IFI	1	0.00	38.50	0.00	۵	۵	Δ	۵			
)	v 234234234234234 · 234234234234234	IFC	1	0.00	385.00	0.00	۵	۵	۵	۵		11/28/2023	
)	√ 33332 - SS title	WTH	1	۵	۵	۵		11/05/2023	12/13/2023	12/13/2023	۵		
)	∧ 33335 - test tilte	IFI	2	99.86	772.38	771.32	0.43	12/10/2023	12/13/2023	12/11/2023	12/13/2023	03/04/2023	
	PIDS CO KIE IT and NT SYS Integration - D03 Lef	IFC Submittal		99.85	700.05	698.99	0.43	12/10/2023	12/11/2023	12/11/2023	12/12/2023	03/04/2023	
	PIDS CO KIE EW SYS Integration - Lead Responsi	Scope Complete		100.00	72.33	72.33	0.00	12/12/2023	12/13/2023	12/12/2023	12/13/2023	03/25/2023	03/25/202
)	33336 - SS test1	WTH											
)	33337 - test doc	AB											
)	55555 - bug validation	PLH											
)	66666 - feb01	IFI											
)	CALDOC - Testing_Document_Upload	IFC											
)	D1-PLM1 - D1-PLM1	VDR											
)	D1-PLM2 - D1-PLM2	VDR											
)	D1-PLM3 - D1-PLM3	VDR											
)	D2-PLM1 - D2-PLM1	VDR											
)	D2-PLM2 - D2-PLM2	VDR											

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

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

# **5.19 MAP DOCUMENTS AND SCOPE ITEMS**

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

Scope items			uto hide mapped	Q	Docur	nents		Auto hide r	mapped Q
🔀 Map scop	e item 🔗				\$% M	ap documer	nt 🔗 I 💭		
	ID 🛒	Description	Document count				Document	Title	Scope item count
o 😪	332364	Desc1	1	-		æ	00001-TE-ELE-1	Electrical shop draw	^
	332357		1				2345		
~ ~					-	\$			

### 5.19.1 Considerations

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

### 5.19.2 Steps

#### Map documents to scope items

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

#### Map scope items to documents

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

# **5.20 VIEW ASSOCIATED ITEMS**

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

Scope	e items			C	Auto hide mapp	ed Q	Docur	ments		Auto hide mapped		
26 M	ap scope it	em 🔗					2% M	ap docume	nt 🔗 I 💭			
		ID -	Descrip 🚽	Document count 🚽	% Complete 🚽	Lead di			Document	Title	Scope item count 🛛 🛫	Revision
۲	**	113849	PIDS CO KIE	5	36.00	Syster		**	00KM06082021-010	Build Acceptance Docu	8	A
0	24	113848	PIDS CO KIE	5	100.00	Syster		8	00KM06112021-007	21.05.00 Build Acceptan	8	с
0	**	113847	PIDS CO KIE	1	47.50	Syster	0	<b>\$</b> \$	00KM06112021-008	21.05.00 Build Acceptan	8	с
0	84	113846	PIDS CO KIE	5	47.50	Syster		83	00KM06112021-009	21.05.00 Build Acceptan	2	с
0	828 -	113845	PIDS CO KIE	1	47.50	Syster		83	00KM06112021-010	21.05.00 Build Acceptan	8	с
0	84 -	113844	PIDS CO KIE	5	52.13	Syster	0	**	00KM06242021-002	Role Test 2	8	A
0	84	113843	PIDS CO KIE	5	0.00	ESDC	0	**	00KM07152021-003	21.05 Regression VDR B	8	A
0	**	113842	PIDS CO KIE	5	52.13	Indire	0	84	00KM09162020-001	00KM09162020-001	2	A

### 5.20.1 Scope item's document count column

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

	×
Associated Items	View in grid
Document number	Title
00KM06082021-001	Build Acceptance Vendor Data Single Upload 1
0001-TE-1028	Tyler Upload Document 10/28
0001	DOC 001_TEST
	00000000000

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

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

### 5.20.2 Document's scope item count column

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

	×
Associated Items	View in grid
Scope Item ID	Description
113848	PIDS CO KIE EW SYS Integration - Lead Responsib
	· · · · · · · · · · · · · · · · · · ·

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

#### 5.20.3 Considerations

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

### 5.21 UNLINK ASSOCIATED ITEMS

You can unlink associated items from scope items and documents.

Scope	items			O Auto	hide mapped Q Docum	ients	O Auto hid	e mapped
		ter &			Na Ma	p document 🔗 I 🚺		
	<i>.</i>	ID	Remove	mapping				×
	8	270794		Document number	Title	Scope item ID	Scope item description	
	2	270793		SINGLEDOC1	testing doc	270791	Test2	î
۲	24	270791		SBXTESTING_1	SBXTESTING_1	270791	Test2	
		270790		RS12102021.002XL	RS12102021.002xl	270791	Test2	
	*			RS12102021.001XL	RS12102021.001xl	270791	Test2	
	**	259214		RS09192023.004	RS09192023.004	270791	Test2	
	**	249207		RS09192023.003	RS09192023.003	270791	Test2	
	*	249206		RS09192023.002	RS09192023.002	270791	Test2	
	**	123799		RS09112023.003	RS09112023.003	270791	Test2	
	**	123798						
	**	123797					Cancel	Confirm

### 5.21.1 Considerations

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

### 5.21.2 Steps

#### Unlink associated items

- 1. To unlink documents from a scope item, select **Map many documents to single scope item**. To unlink scope items from a document, select **Map 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**.

### **5.22 CONFIGURE CLAIMING SCHEMES**

#### 5.22.1 Summary

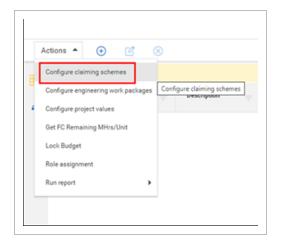
A claiming scheme is a sequence of steps and milestones used to record progress of engineering deliverables called scope items. Steps and milestones are assigned a completion percentage based on

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

Claiming schemes are broken out into engineering disciplines, which are set up at the organization level. See <u>Disciplines</u> for more information.

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

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



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

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

#### 5.22.2 Considerations

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

### 5.23 ADD A CLAIMING SCHEME MANUALLY

#### 5.23.1 Summary

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

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

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

### 5.23.2 Considerations

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

#### 5.23.3 Steps

To add a claiming scheme manually:

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

Ľ	<b>⊡</b> ⊗										3	1
	Claiming scheme / S	Add claiming sche	eme									
iscipline: Civil		* ID			Description				Lead Discipline			
0									Select one			*
0							STEPS					
0						-						1
0		*Step	*Step name	*% Claim Enter % claim	Partial claiming	*Resource type	*Resource Discipline	Milestone Completion	*Schedule group	*Activity ID format     Select activity ID format		
0			Enter step name	Enter % claim	U	Select resource type 👻		serect milestone		<ul> <li>Select activity /D format </li> </ul>		
0						No steps exist on the	e claiming scheme.					
0												
0												
0												
0												
				Substal 5.00%								×
				Substal 0.000%								×
				Substal 0.000%								*

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

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

7. Click Add.

### 5.23.4 Related links

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

You can also create a claiming scheme by copying an existing one. For more information, see <u>Copy a</u> <u>claiming scheme</u>.

You can also create claiming schemes in bulk by importing. For more information, see <u>Import claiming</u> <u>schemes</u>.

# 5.24 COPY A CLAIMING SCHEME

### 5.24.1 Summary

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

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

### 5.24.2 Considerations

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

### 5.24.3 Steps

To copy an existing claiming scheme:

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

Ð	ľ	<b>a</b> 🙁											9	) Q
		Claiming scheme / S	Copy cla	iming sche	eme									
Discipli	ine: Civil		* ID				Description			•.	ead Discipline			
											Select one			*
									STEPS					
														1
				*Step	"Step name	*% Claim	Partial claiming		*Resource Discipline	Milestone Completion	*Schedule group	*Activity ID format		
				13	Enter step name	Enter % claim		Select resource type 👻		Select milestone	✓ Select schedule gr ✓	Select activity ID format 👻	۲	Ť
	0		0	1	Start Task - Pull Template Spec and Checklist.	5.000		Civil Engineer	Civil		AA	Account Code/Area/Wor	×	
				2	Update general references.	5.000		Civil Engineer	Civil		AA	Account Code/Area/Wor	$\otimes$	
	0			3	Review lessons learned.	5.000		Civil Engineer	Civil		AA	Account Code/Area/Wor	$\otimes$	
	0		0	4	Update template files with project specific information.	10.000		Civil Engineer	Civil		AA	Account Code/Area/Wor	$\otimes$	
				5	Prepare applicable attachments.	10.000		Civil Engineer	Civil		AA	Account Code/Area/Wor	8	
				6	Check for IFR	5.000	2	Civil Engineer	Civil		AA	Account Code/Area/Wor	8	
				7	Issue IFR	0.000		Civil Engineer	Civil		AA	Account Code/Area/Wor	$\otimes$	
				8	Internal/Owner Review comments received	0.000		Civil Engineer	Civil		WR	Account Code/Area/Wor	8	
					Sub	total:100.000%								

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

### 5.24.4 Related links

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

You can also create a claiming scheme from scratch. For more information, see <u>Add a claiming scheme</u> manually.

You can also create claiming schemes in bulk by importing. For more information, see <u>Import claiming</u> <u>schemes</u>.

# **5.25 IMPORT CLAIMING SCHEMES**

#### 5.25.1 Summary

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

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

#### **5.25.2 Considerations**

• You must have the permission Import claiming schemes.

There are two export options:

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

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

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

#### 5.25.3 Steps

To import claiming schemes using the Excel template:

 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	В	C	D	E	F	G	н
1	REQUIRED	Field is required for import						
2	OPTIONAL	Field is optional for import						
3	IGNORED	Field not to be populated						
	Note:							
		lity only allows for now Claiming	Schomor to	ho cro	ated. Existing Claiming Schemes can be updated using the edit button.			
		field should be specified as eithe			ated. Existing claiming schemes can be updated using the edit button.			
					gets inherited from the Resource type assignment.			
	ID		Lead Discipl			% Claim	Partial claiming	Resource type
	0123 EW BSTR	Bridge Structures - Early Works		1		5.000	True	Structural Engineer
	0123 EW BSTR	Bridge Structures - Early Works		5		5.000	False	Structural Engineer
	0123 EW BSTR	Bridge Structures - Early Works		3		5.000	True	Structural Engineer
	0123 EW BSTR	Bridge Structures - Early Works		4		5.000	False	Structural Engineer
	0123 EW BSTR	Bridge Structures - Early Works		5		5.000	True	Structural Engineer
	0123 EW BSTR	Bridge Structures - Early Works		6	Final Design Development Bridge Structures- Coordination with Track and Systems C		False	Structural Engineer
	0123 EW BSTR	Bridge Structures - Early Works		5		5.000	True	Structural Engineer
	0123 EW BSTR	Bridge Structures - Early Works		8		5.000	False	Structural Engineer
	0123 EW BSTR	Bridge Structures - Early Works		9		5.000	True	Structural Engineer
	0123 EW BSTR	Bridge Structures - Early Works		10		3.000	False	Structural Engineer
	0123 EW BSTR	Bridge Structures - Early Works		11		2.000	True	Structural Engineer
5					: (			

- 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.

Import data from template	
The data will be imported into Design engineering	
Drag and drop the file here or browse Browse	
Cancel Import	

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

#### 5.25.4 Related links

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

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

### 5.26 CONFIGURE WORK PACKAGES OVERVIEW

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

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

	*Display ID	Construction need by date	Discipline	# of scope items 🚽	% Complete 🚽	CE total MHrs	Earned MHrs 🚽	Forecast remaining MHrs	Planned start	Planned finish	Carrent start	Current finish	Actual start
)	Process	07/28/2023	Process	4	49	2,800.00	1,362.49	1,437.50	12/20/2022	07/27/2023	11/15/2022	10/31/2023	05/18/2023
	Mechanical	08/31/2023	Mechanical										
	Piging	09/01/2023	Piping										
)	EWP	07/07/2023	Building	2	۵ 🛆	2,778.00 🛆	0.00 🛆	2,778.00	05/23/2023	06/30/2023	01/01/2020	05/30/2023	06/21/2023

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.

		ork packages				ENGINEERING WORK PAC	KAGE DELIVERABLE					
•	r 🙁											D D
	*Display ID	*Description	Construction need by date	Discipline	F of scope items 🔶	% Complete	CE total MHrs	Earned MHrs 🚽	Forecast remaining MHrs	Planned start 🦷	Planned finish	Current start
)	Process	Process Package	07/28/2023	Process	4	52.50 📥	2,500.00 📩	1,312.50 📥	1,187.50	12/20/2022	07/27/2023	12/22/2022
)	Mechanical	Mechanical Package	08/31/2023	Mechanical	1	0.00	1,667.00	0.00	1,667.00	05/23/2023	06/30/2023	05/23/2023
	Pieios	Piping Package	09/01/2023	Piping	1	0.00	2,778.00	0.00	2,778.00	05/23/2023	06/09/2023	05/24/2023

### 5.26.1 Considerations

You must have the applicable permissions in Engineering.

# 5.27 WORK PACKAGES OVERVIEW PAGE

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

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

	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	<ul> <li>CE - Sum of the scope item man hours for all scope items within a package (Scope Item Qty x CE MHRs ÷ Unit).</li> <li>Earned - Sum of the scope item earned hours for all scope items within a package (Earned Qty x CE MHRs ÷ Unit).</li> <li>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.</li> </ul>
4	Dates	Start dates show the earliest date, and finish date will show the latest date from the

#### **Overview - Work package overview page**

### Overview - Work package overview page (continued)

	Title	Description
		related scope items.
5	Milestones	<ul> <li>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:</li> <li>Planned start/finish</li> <li>Current start/finish</li> <li>Actual start/finish</li> <li>Completion</li> </ul>
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 <b>Dates Chooser</b> 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.

			c	WERVIEW										
Overview of test package	0		% Complete	Hours	-3		Dates	4			Milestones	-6	)	
ype	* Display Id													
Deliverable package	▼ test						Planned start	05/22/		-11				arrent finis
escription	Activity code						Planned finish	07/27/	2023	-11	IFC-Issue for (	on 04/03/2	023 06	5/30/2023
test package	ScheduleActivity1		11.63%	2,417 brs		2,136	Current start	04/03/	2023	_11	IFIR-Issue for	nte 05/29/2	023 06	5/16/2023
ites			11.00%			bra	Current finish	10/31/	2023	11	IFR-Issue for I	evi 06/19/2	10	0/31/2023
					281		Actual start	05/23/	2023					
onstruction need by date	Discipline			CE	Earned	Remaining	Actual finish			-11				
07/01/2024	Electrical	*								_ 1				
temaining steps 6	Teams	Cancel Save	Scopeltern	Lead Discipline	Current start	Current finish	Apr M	y Jun	Jul Aug	g Sep	Oct	lov Dec	Jan	Feb
tep 1 sue for Construction	Process Design Team		√ <u>154896-Mechanical Example</u>	Mechanical	05/23/2023	06/30/2023								
cope item: Mechanical Exa ssigned team: ssigned to:		100.00%	√ <u>154895-Process Example - Doc 4</u>	Process	04/03/2023	10/31/2023					-			
ssue IFIR ssue for Internal Review	Process Engineer Team 1 scope items	6.25%					I							
sue for internal Review cope item: Process Exampl ssigned team: Process Engi ssigned to:														

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.

	OVERVIEW								
nplete	Edit scope item								
	Summary								
	ID		* Description		* Claiming scheme				
	154895		Process Example - Doc 4		Process CS 🔹				
0	Scope item qty	<b>(i)</b>	* Scope item UoM		Lead Discipline				
	1.00		Ea	*	Process				
	OB qty		Deliverable qty		Deliverable UoM				
	1.00		0.00		Sht	*			
	Deliverable package		Engineering work package		Area				
m	test	*	Process	*	Select one	•			
	Segment		Turnover		Work classification				
5-Process Exa	Select one	*	Select one	*	Select one	*			
	Resources A								
	User defined								
	Dates								

### 5.27.1 Considerations

You must have the applicable permissions in Engineering.

# **5.28 CONFIGURE PROJECT VALUES**

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

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

#### 5.28.1 Steps

To add a project value manually:

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

	Position	*ID	*Description	Activity code	
+	28	Enter ID	Enter description	Enter activity code	
	01	09L	D09 Minnesota Avenue Laydown	09L	8
	02	10L	D10 Deanwood Laydown	10L	$\otimes$
	03	111.	D11 Cheverly Laydown	11L	$\otimes$
	04	12L	D12 Landover Laydown	12L	$\otimes$
	05	13L	D13 New Carrolton Laydown	13L	$\otimes$
	06	CBL	Cheverly Bridge Laydown	CBL	8.
D ork cla		CBL			

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

### 5.29 LOCK AND UNLOCK SCOPE

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

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

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

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

				SCOPE ITEMS	AUDIT LOG		
Actions	•	•					
Configur		ng schemes ackages	*Description	*Claiming	Claiming scheme		
Configur	e project	values	Piping Example	Piping	Piping		
Unlock \$	icope		Mechanical Example	Mechanical	Mechanical		
Role assignment		Process Example - Do	Process CS	Process CS			
~		154894	Process Example - Do	Process CS	Process CS		
~		154893	Process Example - Do	Process CS	Process CS		
~		154892	Process Example - Do	Process CS	Process CS		

### 5.29.1 Considerations

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

### **5.30 ROLE ASSIGNMENT**

#### 5.30.1 Summary

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

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

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

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

### 5.30.2 Considerations

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

	Resource type / Role	Planned team	•	Assigned user		Start date	End date
Ð	Drainage Engineer						
2	Drainage Engineer 1	Water	Θ	Brian	Θ	06/07/2021	06/28/2022
	Drainage Engineer 1	Water	Θ	Dominic	Θ	06/29/2022	
Ð	CES						

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

#### 5.30.3 Steps

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

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

To change the name, click on the role name, edit the name, and then press Enter.

ole a	issignment					RENT AND FUTURE ASSIGNMENTS	USER ASSI HISTO					
	Resource type / Role	Planned team		Assigned user	Start date	End date	Total scope items	Scope items remaining	Total steps	Steps remaining	Note	
€	Systems Communications											
٨	Systems Communications 1				06/07/2021		0	0	0	0		8
•	Structural Engineer											
٨	Structural Engineer 1				06/07/2021		0	0	0	0		8
Ð	Architectural Landscaping											
٨	Architectural Landscaping 1				06/07/2021		0	0	0	0		8
Ð	Systems Traction Power											
٨	Systems Traction Power 1				06/08/2021		0	0	0	0		8
•	Systems FLS											
٨	Systems FLS 1				06/07/2021		0	0	0	0		8
€	Drainage Engineer											
2	Drainage Engineer 1	Water	Θ	Brian 🤆	06/07/2021		0	0	0	0		8
•	CES											
٨	CES 1				06/11/2021		0	0	0	0		8

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

#### 5.30.4 Related links

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



# CHAPTER 6 – QUANTITY FORECASTING MODULE OVERVIEW

### 6.0.1 Summary

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

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

# 6.1 QUANTITY ITEMS

### 6.1.1 Summary

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

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

	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	View	Select, save, rename, and delete views.
4	Upper right toolbar icons	<ul> <li>Data conflicts - Show whether conflicts exist.</li> <li>Create Query Filters - Open the query builder.</li> <li>Import and Export - Import and export sets of data.</li> <li>Row density lets you adjust the spacing of grid rows</li> <li>Find lets you search quantity items.</li> </ul>
5	Quantity items	Grid showing quantity items and related information organized by column.
6	Column chooser	Select which columns are shown or hidden.

#### **Overview - Quantity items page**

(	1	2			QUANTITY ITEMS	ROLLUP VIEW	AUDIT L	OG			View: Unsaved	(Default)
Ac	tions 🔻										🗠 🔨 🖸	[7 ‡≣ Q
	*ID 🛒	Description 5	*UoM	Forecast (TO)	*Discipline	*Design element	*Account code	Account code escription	*WBS phase	WBS description	Quantity driver 👘 C	B qty
	8087	Slab on Grade 0-1' Thick - Place / Finish / Cure-02A-CT	CY	177.70	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	Mass Slabs - P/F/C	Component Qty	120.00
	8086	Slab on Grade 0-1' Thick - Place / Finish / Cure-02A-CT	CY	164.50	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	Mass Slabs - P/F/C	Component Qty	294.00
	8085	Slab on Grade 0-1' Thick - Place / Finish / Cure-02A-CT	CY	77.80	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	Mass Slabs - P/F/C	Component Qty	51.00
	8080	Slab on Grade 0-1' Thick - Place / Finish / Cure-02A-CT	CY	433.20	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	Mass Slabs - P/F/C	Component Qty	14.00
	8079	Slab on Grade 0-1' Thick - Place / Finish / Cure-02A-CT	CY	297.30	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	Mass Slabs - P/F/C	Component Qty	344.00
	8078	Slab on Grade 0-1' Thick - Place / Finish / Cure-02A-CT_	CY	55.10	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	Mass Slabs - P/F/C	Component Qty	82.00
	8076	Slab on Grade 0-1' Thick - Place / Finish / Cure-02A-CT	CY	26.50	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	Mass Slabs - P/F/C	Component Qty	14.00
	8071	Slab on Grade 0-1' Thick - Place / Finish / Cure-028-CT	CY	177.70	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	Mass Slabs - P/F/C	Component Qty	93.00
	8070	Slab on Grade 0-1' Thick - Place / Finish / Cure-028-CT	CY	164.50	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	Mass Slabs - P/F/C	Component Qty	294.00
	8069	Slab on Grade 0-1' Thick - Place / Finish / Cure-02B-CT	CY	77.80	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	Mass Slabs - P/F/C	Component Qty	51.00
	8064	Slab on Grade 0-1' Thick - Place / Finish / Cure-02B-CT	CY	433.20	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	Mass Slabs - P/F/C	Component Qty	14.00
)	8063	Slab on Grade 0-1' Thick - Place / Finish / Cure-028-CT	CY	308.10	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	Mass Slabs - P/F/C	Component Qty	359.00
1	8062	Slab on Grade 0-1' Thick - Place / Finish / Cure-02B-CT	CY	55.10	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	Mass Slabs - P/F/C	Component Qty	82.00
	8055	Slab on Grade 0-1' Thick - Place / Finish / Cure-03A-HR	CY	1,264.20	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	Mass Slabs - P/F/C	Component Qty	998.00
	8052	Slab on Grade 0-1' Thick - Place / Finish / Cure-03A-HR	CY	11.10	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	Mass Slabs - P/F/C	Component Qty	13.00
	8049	Slab on Grade 0-1' Thick - Place / Finish / Cure-03B-HR	CY	1,264.20	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	Mass Slabs - P/F/C	Component Qty	998.00
	8047	Slab on Grade 0-1' Thick - Place / Finish / Cure-038-HR.,	CY	273.00	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	Mass Slabs - P/F/C	Component Qty	7.00

### 6.1.2 Considerations

You must have the permission View quantity item and rollup.

# 6.2 ADD A QUANTITY ITEM

### 6.2.1 Summary

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

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

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

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

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

You are not required to set the quantity driver when adding the quantity item, and can change it later. The quantity driver is set to CB qty by default. For more information, see <u>Quantity driver</u>.

#### 6.2.2 Considerations

You must have the permission Add quantity items.

#### 6.2.3 Steps

To add a quantity item:

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

Ac	tions 👻	<u>o</u> , 🗹 😣										▲• 🔻 🗘 🕻	3 💷	Q
	*ID 👘	Description	'UoM	qty	*Discipline	Tesign element	*Account code	Account code escription	*WBS phase code	Add quantity item				;
5	8087	Slab on Grade 0-1' Thick - Place / Finish / Cure-02A-CT	CY	177.70	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	→	DETAILS	QUANTITIES		
)	8085	Slab on Grade 0-1' Thick - Place / Finish / Cure-02A-CT	CY	164.50	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	ID.		Description		
)	8085	Slab on Grade 0-1' Thick - Place / Finish / Cure-02A-CT	CY	77.80	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077			1		
)	8080	Slab on Grade 0-1' Thick - Place / Finish / Cure-02A-CT	CY	433.20	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	* Account code		* Design element		
)	8079	Slab on Grade 0-1' Thick - Place / Finish / Cure-02A-CT	cr	297.30	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077			Select one	*	
ו	8078	Slab on Grade 0-1' Thick - Place / Finish / Cure-02A-CT	CY	55.10	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	* WBS phase code		* Discipline		
)	8076	Slab on Grade 0-1' Thick - Place / Finish / Cure-02A-CT	CY	26.50	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	Select one	*	Select one	*	
)	8071	Slab on Grade 0-1' Thick - Place / Finish / Cure-028-CT	CY	177.70	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	* UoM		* Ground		
)	8070	Slab on Grade 0-1' Thick - Place / Finish / Cure-028-CT	cr	164.50	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1'T	1077	Select one	-	Select one	*	
)	8069	Slab on Grade 0-1' Thick - Place / Finish / Cure-028-CT	CY	77.80	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	Work type		Cost segment		
	8064	Slab on Grade 0-1' Thick - Place / Finish / Cure-028-CT	CY	433.20	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	Select one	*	Select one	-	
)	8063	Slab on Grade 0-1' Thick - Place / Finish / Cure-028-CT	CY	308.10	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	Quantity source		Construction segment		
)	8062	Slab on Grade 0-1' Thick - Place / Finish / Cure-02B-CT	CY	55.10	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	Select one	*	Select one	*	
)	8055	Slab on Grade 0-1' Thick - Place / Finish / Cure-03A-HR	CY	1,264.20	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	* Area		* System		
)	8052	Slab on Grade 0-1' Thick - Place / Finish / Cure-03A-HR	CY	11.10	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	Select one	*	Select one	*	
)	8049	Slab on Grade 0-1' Thick - Place / Finish / Cure-038-HR	CY	1,264.20	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077	* Subsystem		* Turnover		
	8047	Slab on Grade 0-1' Thick - Place / Finish / Cure-038-HR	CY	273.00	Concrete	Place/Wet Finish/Cu	61.03.06.002.08	Slab on Grade 0-1' T	1077				_	_

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

# **6.3 QUANTITY DRIVER**

#### 6.3.1 Summary

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

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

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

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

	"D 👳	Description 🛒	"UoM 👳	Forecast (TO)	Quantity driver 👘	CB qty 🤤	30% Qty 👘	90% Qty 👘	Design Complete	Componen	t Qty 👘	Installed qty
•	45609		CY	158.00	Component Qty					¥	<u>158.00</u>	0.00
•	45605		Ea	24.00	Component Qty					Ŧ	24.00	0.00
	45604		UF	19.37	Component Qty				8	*	<u>19.37</u>	0.0
	45603		UF	13.73	Component Qty				8	*	<u>13.73</u>	0.0
	45602		Ea	1,905.00	90% Qty	0.00		<b>4</b> 1,905.00			1.905.00	0.0
	45601		SF	20.16	Component Qty					*	20.16	0.0

### 6.3.2 Considerations

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

# 6.4 DATA EXPORT

#### 6.4.1 Summary

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

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

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

### 6.4.2 Considerations

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

#### 6.4.3 Steps

To export all quantity items:

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

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

			QUANT	ITY ITEMS	ROL	LUP VIEW	AUDIT LOG		View: Default	•
A	ctions 🔻 🕒	<b>e</b> 8							Y D D	¢≡ Q
	*ID	Description	*UoM	Forecast (TO) qty		*Discipline 📃	*Design element	*Account code	Template	*WBS phas code
	2282168	1	PLS		1.00	Removals and Demo	Operational Support	50.03	Data export	2587
	2282167	2	PLS		1.00	Removals and Demo	Operational Support	50.03	Civil Demolitions	2587
	2282166	3	PLS		1.00	Removals and Demo	Operational Support	50.03	Civil Demolitions	2587
	2282165	4	PLS		1.00	Removals and Demo	Operational Support	50.03	Civil Demolitions	2587
	2282132	5	PLS		1.00	Removals and Demo	Operational Support	50.03	Civil Demolitions	2587
	2282131	6	PLS		1.00	Removals and Demo	Operational Support	50.03	Civil Demolitions	2587
	2282130	7	PLS		1.00	Removals and Demo	Operational Support	50.03	Civil Demolitions	2587
	2282129	8	PLS		1.00	Removals and Demo	Operational Support	50.03	Civil Demolitions	2587
	2282128	9	PLS		1.00	Removals and Demo	Operational Support	50.03	Civil Demolitions	2587
	2282127	10	PLS		1.00	Removals and Demo	Operational Support	50.03	Civil Demolitions	2587

The Audit log > Export History page opens.

Junitatyltem         A         QuantityltemO1182022073957         Oin progress         0         Julio Salguero         04/18/2023 1239.00 PM           nergyation         A         QuantityltemO4182022073957         Oin progress         0         Julio Salguero         04/18/2023 1239.00 PM           a         QuantityltemO4182023040922         Completed         39,864         Jalob Sjuta1         04/18/2023 01200           Based Hatstory         A         QuantityltemO4182022025822         Completed         1         Jalob Sjuta1         04/18/2023 05:80:0.A           hassigned components         A         QuantityltemO4182022055817         Completed         1         Jalob Sjuta1         04/18/2023 05:60:0.A           d         QuantityltemO41820220525822         Completed         39,864         Jalob Sjuta1         04/18/2023 05:60:0.A			File name	Status	Total record count	Exported by	System time stamp
A         Quantifytem04182023040922         © Completed         99,84         Jalob Sjuts1         04/18/2020 09990 AM           A         Quantifytem04182023040922         © Completed         99,84         Jalob Sjuts1         04/18/2020 09990 AM           Bopt Hatory         A         Quantifytem0418202201201         © Completed         1         Jalob Sjuts1         04/18/2020 08920 AM           A         Quantifytem04182022052824.         © Completed         1         Jalob Sjuts1         04/18/2020 05800 AM           A         Quantifytem04182022052812         © Completed         1         Jalob Sjuts1         04/18/2020 05600 AM           A         Quantifytem04182022052812         © Completed         19,864         Jalob Sjuts1         04/18/2020 075600 AM           A         Quantifytem04182022052612         © Completed         9,864         Jalob Sjuts1         04/18/2020 075600 AM	QuantityItem	4	QuantityItem04182023073957		0		
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Image: Complete State         Occurred State         State         Jakob Sjuta1         OH.18/2022 075600 AM           Image: Complete State         Occurred State         Occurred State         State         Jakob Sjuta1         OH.18/2022 075600 AM           Image: Complete State         Occurred State         Occurred State         State         Jakob Sjuta1         OH.18/2022 075400 AM		*	QuantityItem04182023025824	Completed	1	Jakob Sjuts1	04/18/2023 07:58:00 AM
	Unassigned components	Δ.	QuantityItem04182023025617	Completed	39,864	Jakob Sjuts1	04/18/2023 07:56:00 AM
		Δ.	QuantityItem04182023024543	Completed	39,864	Jakob Sjuts1	04/18/2023 07:45:00 AM
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2. In Export History, click the **Download export file** icon to download the file.

### 6.5 ACTIONS

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

#### **Overview - Actions**

Action	Description
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 " <i>Scope is unlocked</i> ". For more information, see Lock and unlock scope.
Quantity change notes	Create notes to capture quantity change by discipline on a project. You can assign a Discipline, Design Element, Quantity, Cause Code, and Tags to a Quantity Change Note. For more information, see Quantity change notes.

### 6.5.1 Considerations

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

# 6.6 GET CONTROL UNIT RATES

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

					QUANTITY IT	EMS ROLLUP	P VIEW AI	JDIT LOG			View:	Default	
1	Actions 👻 (	⊻ ⊗									Ŧ	19 19 të	
	Get Control unit rates	Get OB MHrs/Unit	$\overline{\mathbf{x}}$	Forecast (TO)	Discipline	Design element	Account code	Account code escription	WBS phase 🔤	WBS description 🔤 OB	qty 👘	Quantity driver	CB
	Run report	Get CB MHrs/Unit		3,557.00								Component Qty	
	Get Plan components Unlock budget	Get CE MHrs/Unit Get FC Remaining MHrs/Unit		5.00								CB qty	#
,	10161	Get PC Remaining Minra/Unit		0.00		Backfill Flatwork						Component Qty	
)	10154	test component		5.00			00	Overhead				CB qty	. #
9	10153	test		5.00								CB qty	

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

### 6.6.1 MHrs Delta columns

The MHrs/Unit delta and MHrs Delta columns let you see any MHrs/Unit or MHrs change before applying the Pending Control Unit Rate. This is a read-only field that shows the difference between the total MHrs of quantity items with like WBS calculated using the current Quantity Forecasting rate and the total MHrs calculated using the Pending Control rate.

(1)	2							
elect Cost Items	Get Unit Rat	95						
					MHrs/Unit		1	
WBS phase code	Description	Current Rate	Pending control rate	Manual Rate	MHrs/Unit Delta	MHrs Delta	Last update	Updated by
1007	KIE-Design	39.34769230	39.34769230769		0.00000000	0.00000000	03/22/2024	Mamatha R
1013	KIE-Project	38.12413793	38.12413793103		0.0000000	0.00000000	02/09/2024	Jakob Sjuts1
1014	KIE-Enginee	37.66146993	37.66146993318		0.0000000	0.00000000	02/09/2024	Jakob Sjuts1
1016	QTO-Manag	0.00000000000	0.0000000000		0.0000000		02/09/2024	Jakob Sjuts1
1017	QTO-Demo/	0.0000000000	0.0000000000		0.00000000	0.0000000	02/09/2024	Jakob Sjuts1

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.

(1)	2							
Select Cost Items	Get Unit Rate	es						
								C
WBS phase code	Description	Current Rate	Pending control rate	Manual Rate	MHrs/Unit Delta	MHrs Delta	Last update	Updated by
1007	KIE-Design	39.34769230	39.34769230769	45	5.65230769	0.00000000	02/09/2024	Jakob Sjuts1
1013	KIE-Project	38.12413793	38.12413793103		0.00000000	0.00000000	02/09/2024	Jakob Sjuts1
1014	KIE-Enginee	37.66146993	37.66146993318		0.00000000	0.00000000	02/09/2024	Jakob Sjuts1
1016	QTO-Manag	0.00000000	0.0000000000		0.00000000		02/09/2024	Jakob Sjuts1
1017	QTO-Demo/	0.00000000	0.0000000000		0.00000000		02/09/2024	Jakob Sjuts1

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

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

elect Cost Items	Get Unit Rat	es						
								C
WBS phase code	Description	Current Rate	Pending control rate	Manual Rate 📍	MHrs/Unit Delta	MHrs Delta	Last update	Updated by
1006	Mech/Elec	0.08493639466	0.0000000000	1	-0.0849363	0.0000000	05/04/2022	Mason Green

### 6.6.3 Considerations

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

# 6.7 GET PLAN COMPONENTS

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

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

Actions - (+)				
( Get Control unit rates Run report	)escription	*UoM	Forecast (TO)	*D
Get Plan components	, 	LF	526.74	S
Unlock scope		Ea	6.00	E
Quantity change notes		LF	280.00	Е
2200245		LF	320.00	E
2030534		LF	80.00	Е
2030533		Ea	2.00	Е
0020522		Fa	4.00	F

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

	<u>ه</u>	tion / Design / C	luantity forecasting			Component sync in pro	gress.				æ	8 (	)
				QU	IANTITY ITEMS	ROLLUP VIEW	AUDIT LOG		View: D	efault			*
Ac	ctions 🔻 (	r 8								C7	D	\$≣	Q
	*ID 👳	Description	"UoM		Forecast (T0)	*Discipline	*Design element	*Account code	Account code description		VBS phar de	ie	
	3422429	NNN	Wk		600.00	Operational Support	Dust Control	30.06.32.004	Support Services - D	2	930		

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.

					QUANTI	TY ITEMS	ROLLUP VIEW	AUDIT LO	G				View: Default		
Ac	tions 👻 🕒	⊠ ⊗											<b>T</b> 🕑	.∎ t≡	(
1	*ID	Description 👻	*UoM	Forecast (TO) 🔤 0 qty	% Qty 👘	90% Qty	- Design Complete	Compon	ent Qty 👘 🛒	Installed qty 👘 👻	Edit quantity item				
•	45609			158.00			2	Ŧ	<u>158.00</u>	0.00	DETAILS	QUANTITIES	COMPONENTS	NOTES	
	45605		Ea	24.00			×	Ŧ	24.00	0.00					
	45604		LF	19.37				×	<u>19.37</u>	0.00	Component ID Embed Concrete	Component qty	Installed qty	Modified Date	
	45603		LF	13.73				*	13.73	0.00	Heating/Hoardin EC-300 (01G-U	4.00000	0.00000	11/21/2019 12:33:19 PM	
	45602		Ea	1,905.00		<b>I</b> ,905.0			1.905.00	0.00	Embed Concrete Heating/Hoardin EC-300 (01G-U	11.00000	0.00000	11/21/2019 12:33:19 PM	
0	45601		SF	20.16			2	¥	20.16	0.00	Embed Concrete Heating/Hoardin EC-301 (01G-U	23.00000	0.00000	11/21/2019 12:33:19 PM	
0	45600		SF	10.50			×.	¥	10.50	0.00	Embed Concrete Heating/Hoardin EC-301 (01G-U	19.00000	0.00000	11/21/2019 12:33:19 PM	
0	45599		SF	10.50			2	*	10.50	0.00	Embed Concrete Subtotals	158.00			
9	45598		SF	56.50			×.	x	56.50	0.00					

#### 6.7.1 Considerations

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

# 6.8 LOCK AND UNLOCK SCOPE

On the Quantity Items page, you can lock and unlock the scope of a project. When you lock the scope, the OB Qty and OB Man Hour fields are disabled, and the design stages are enabled to allow stage

quantities to be maintained and updated. Locking scope maintains a snapshot of your initial estimate quantity to help in benchmarking post-project completion.

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

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

A	ctions 👻 🕒 [	₫ ⊗					▲• ▼	<b>[</b> ]	C
	Get Control unit rates	escription $=$	*UoM 👳	Forecast (TO) qty	OB qty	OB MHrs	CB MHrs	CE MHrs	Fo
	Get Plan components	NNN	Wk	600.00				156.08	
l	Unlock scope	Test Bug 23619871	SY	0.00				0.00	
(	Quantit Action will enable OB	Qty and OB MHrs/Unit fie	lds and disable Design stage	fields 80.00				20.81	
)	2200248		LF	526.74				559.00	
)	2200247		Ea	6.00				2.16	
)	2200246		LF	280.00				8.40	
כ	2200245		LF	320.00				9.60	
)	2030533		Ea	2.00				4.75	
כ	2030532		Ea	4.00				9.50	
)	2030531		Ea	2.00				4.75	
)	2030530		Ea	2.00				4.75	

### 6.8.1 Considerations

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

# **6.9 QUANTITY CHANGE NOTES**

In Quantity change notes, you can create notes to capture quantity change by discipline on a project. This lets you document changes throughout the life of the project to understand what changed, why it changed, and when it changed. When an account code set is assigned to a project, the system only shows the design elements that are associated to the selected discipline in the account code set in the Quantity change notes dialog box drop-down fields.

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

		QUANTITY I	TEMS ROLLU	IP VIEW A	UDIT LOG	View	C Unsaved (Default)	
Actions 👻 (+)	₫ ⊗						. ( <b>)</b> () ()	(
Get Control unit rates Run report	<ul> <li>Description</li> </ul>	*UoM	Forecast (TO)	*Discipline	*Design element	*Account code	Account code	*WBS code
Get Plan components	NNN	Wk	600.00	Operational Support	Dust Control	30.06.32.004	Support Services - D	293
Unlock scope	Test Bug 23619871	SY	0.00	Operational Support	Temporary Roads, P	30.06.04.002	Temporary Roads, P	342
Quantity change notes	Test Bug 2361987	LF	80.00	Electrical	Heat Trace - Cable	81.39.02	Heat Trace self-regu	2930
Quantity change	e notes	LF	526.74	Subcontracts	Piping Subcontracts	95.70	Piping Subcontracts	265

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

*Discipline		*Design element		*Qty —	*UoM			Tags	Modified by	Modified date -
Select discipline	•	Select design element	Ŧ	Enter qty	Select uom 👻	Select cause code 🛛 🔻	Enter note	Select tags 👻		
Civil Utilities		Precast Cable Trench		100	LF	Design Change	test2		Jakob	6/23/2020 2:28:43 PM
Building		Joint Sealants		10	LF	Design Change	test		Jakob	6/22/2020 2:59:43 PM
Notes: 2										

All additions, edits, and deletions are automatically saved.

### 6.9.1 Considerations

You must have applicable permissions in Quantity forecasting.