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**SCHEDULE HELP  
TOPICS**

**PLANNING, SCHEDULING & RISK**

**INEIGHT** 

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# LESSON 1 – SCHEDULE OVERVIEW

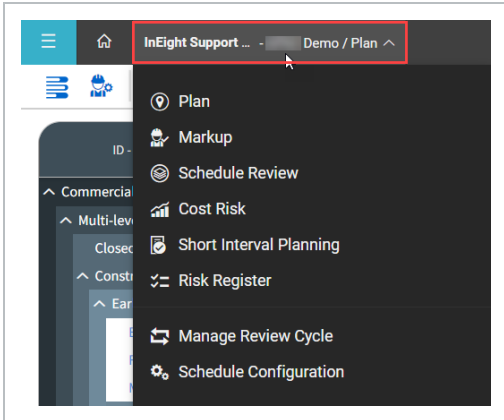
## Overview of the Schedule And Risk Process

InEight Schedule is a (CPM) Critical Path Method planning and risk management tool. It provides multiple tools to support planning and risk management throughout the lifecycle of a project.

Schedule contains six primary schedule views: Plan, Markup, Schedule Review, Cost Risk, Short Interval Planning, and Risk Register. These views correspond to different processes of the Scheduling ecosystem:

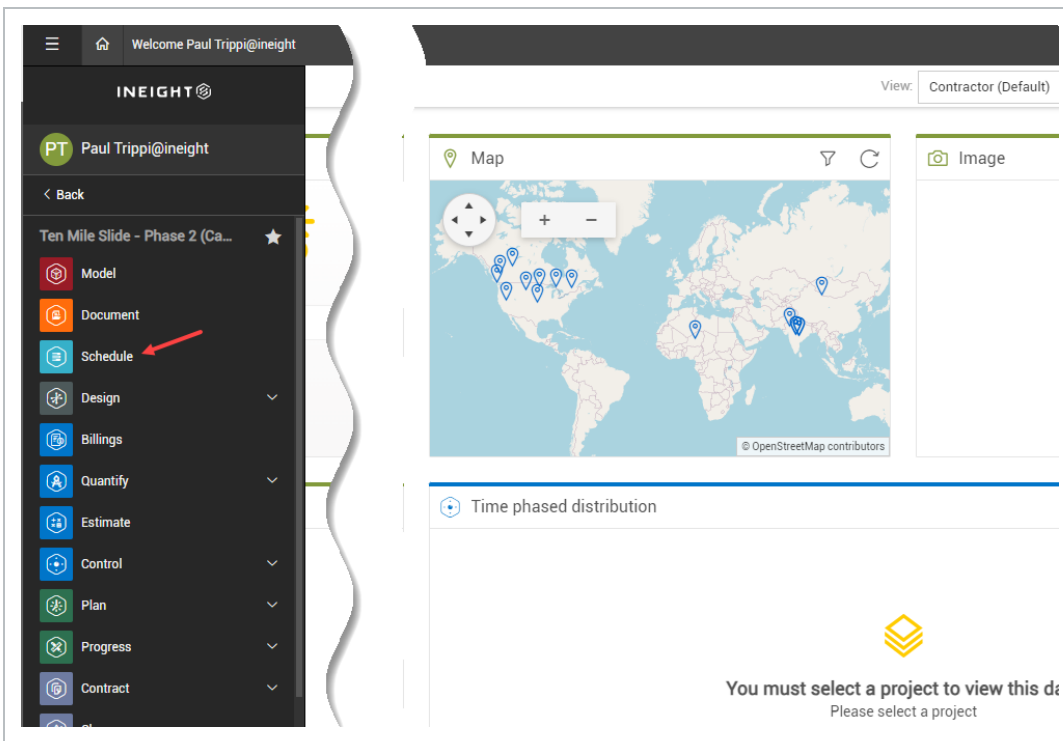
Project View	Description
Plan	Create, detail, and plan out the CPM schedule.
Markup	Assess, critique, and provide feedback on the planned CPM schedule.
Schedule Review	Consolidate markups, conduct risk analysis, and update the CPM Schedule based on review.
Cost Risk	Consolidate markups, conduct risk analysis, and update cost based on review.
Short Interval Planning	Conduct short interval planning, detailing daily work for crews and short term plan to get the CPM Activities done.
Risk Register	Risk Matrix tracking all project events surfaced throughout the planning, markup, review, and execution phases of the Project Schedule.

To access each view, open a schedule and go to the menu bar at the top left of the screen.



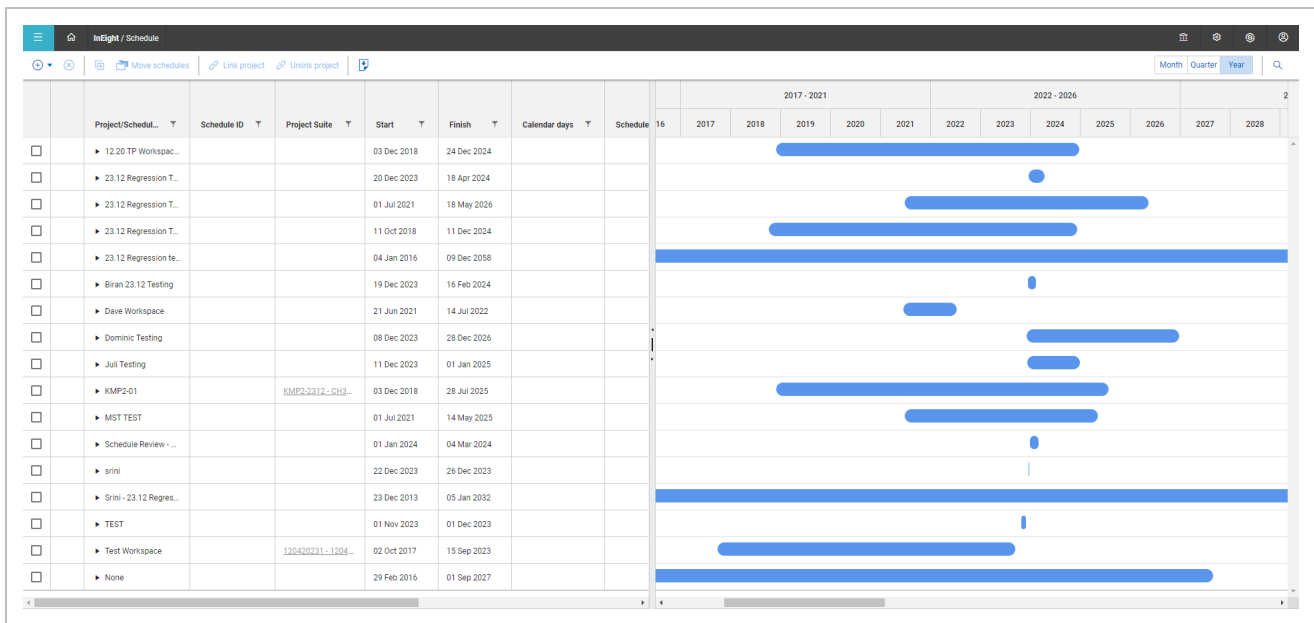
## Schedule Navigation

In Project Suite, select **Schedule** in the left navigation slide-out panel to access the Schedule Project List page.

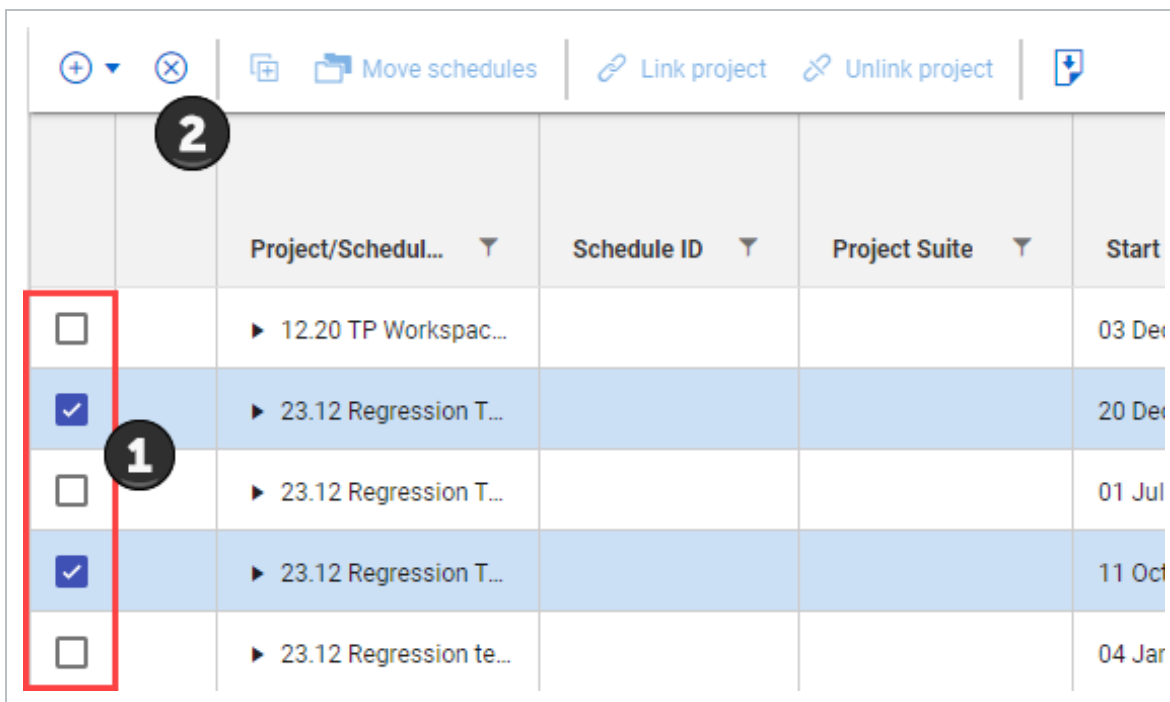


## Project List View

The Schedule home page is where you can see a list of projects and schedules, which includes a Gantt chart that illustrates project work and time periods.



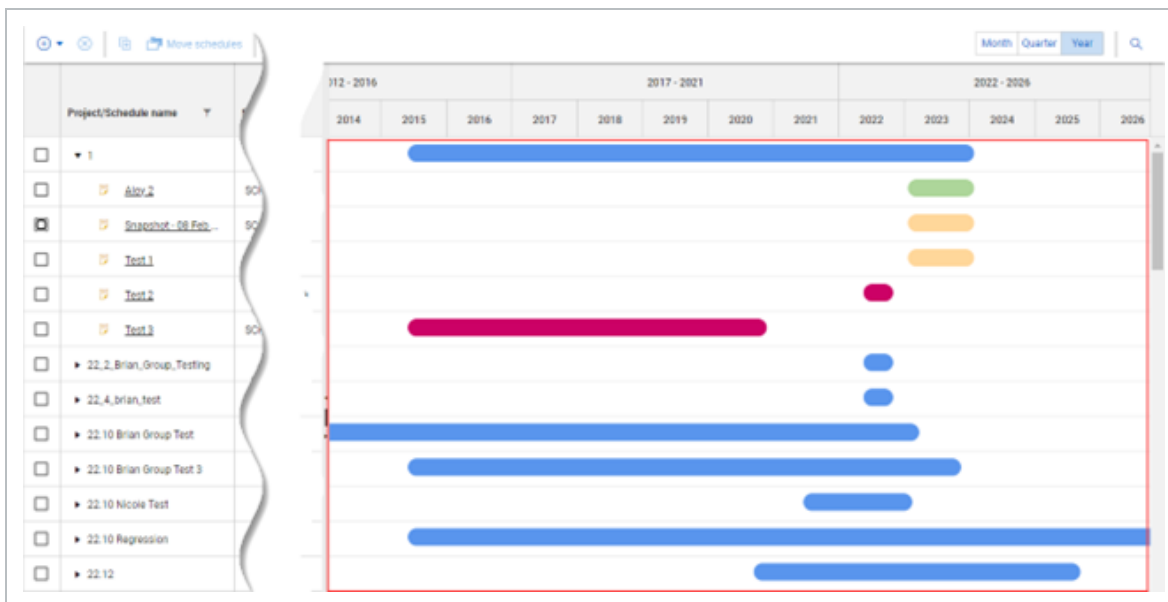
You can select multiple projects and schedules on the Schedule home workspaces page. With this functionality, you can select more than one project or schedule and then select one of the available options on the upper left toolbar, such as delete or move.



You can edit the Project/Schedule name and Schedule ID fields directly and double-click the Project/Schedule name or Schedule ID fields to make direct edits.











	Project/Schedule name	Schedule ID
<input type="checkbox"/>	▶ 1	
<input type="checkbox"/>	▶ 22_2_Brian_Group	
<input type="checkbox"/>	▶ 22_4_brian	
<input type="checkbox"/>	▼ 22.10 Brian Group	
<input type="checkbox"/>	Commercial Construction	SCHED_CC
<input type="checkbox"/>	Commercial Construction	504689-14444444444444
<input type="checkbox"/>	Commercial Construction	SCHED-393
<input type="checkbox"/>	Contract Program - (Status 15th Se	Sept2019-2

A Gantt chart is built in to the Schedule home page. The schedule Gantt chart illustrates horizontal lines representing work over a period in relation to the time planned for the work.



## Schedule type

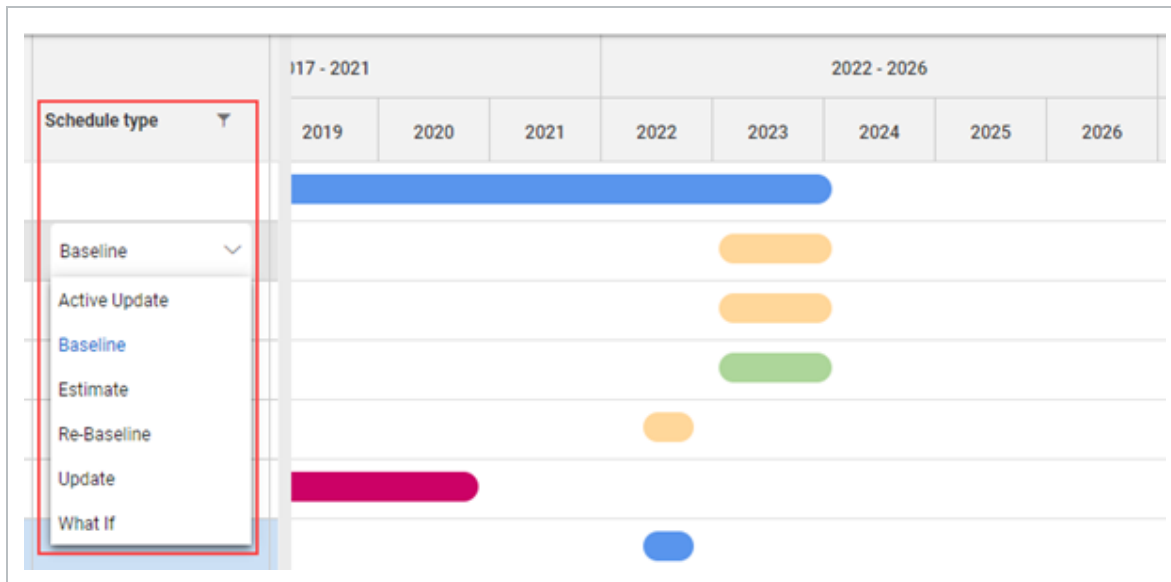
The schedule type shows a corresponding color scheme in the Gantt chart.

Schedule type	
None	
Active Estimate	
Inactive Estimate	
Active Baseline	
Inactive Baseline	
Re-Baseline	
Active Update	
Inactive Update	
Planned	
What If	

Schedule Type	Definition
None	No schedule type selected.
Active Estimate	Represents the latest project agreed schedule based on the construction estimate.
Inactive Estimate	Represents the previous iterations of schedules based on the construction estimate.
Active Baseline	Represents the latest submitted/client approved construction baseline.
Inactive Baseline	Represents previous iterations of submitted/client approved construction baselines

Schedule Type	Definition
Re-Baseline	Represents a copy of a schedule that has been re-baselined prior to submittal/client approval.
Active Update	Represents the current iteration of a schedule that is actively being executed.
Inactive Update	Represents previous iterations of a schedule being executed.
Planned	Represents variations of schedules at conceptual phases of a project.
What If	Represents variations of schedules designed to test how different scenarios impact the overall time line. Used for schedule comparison.

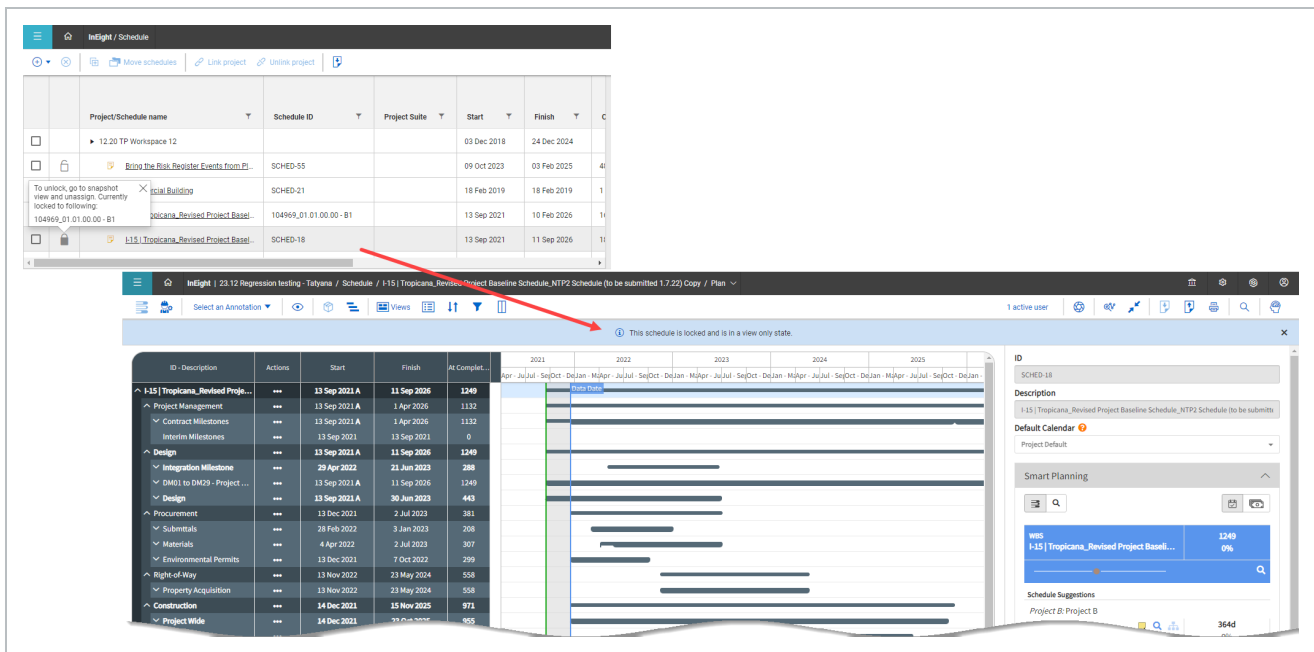
You can change the Schedule type values to change the colors of the horizontal lines in the Gantt chart.



### Locked Columns

The active baseline schedule type now automatically locks the schedule and converts it into a read-only state, which includes the Gantt grid, all Iris fields, and the Import icon. The locked read only state is applied to all views and impacts any functionality that involves the changing of data.





Active baselines are contractual schedule agreements between contractors and owners with infrequent changes. Some scenarios require active baselines to never change, which requires the active baseline to become locked.

The Risk register and Manage Review Cycle views are also in a locked and view only state, but data can still be exported from the Risk register.

Active	Event Id	Title	Type	Description	%	Dur	\$	Score	Risk ...
<input type="checkbox"/>	R4	New Event	Threat						
<input type="checkbox"/>	07	Srini - ProjectOpe	Opportunity	Srini - ProjectIssue des	Low (25%)	Very High (< 180..)	Very High (< \$10..)	10	
<input type="checkbox"/>	629 Oppor	629 Oppor	Opportunity		Low (25%)	Low (< 30d)	Low (< \$10K)	4	
<input type="checkbox"/>	06	Srini Opp	Opportunity	Srini Opp	Low (25%)	Very Low (< 11d)	Low (< \$10K)	4	

The Markup and Schedule Review views are disabled when the project is in a read-only state.

- Plan
- Markup
- Schedule Review
- Cost Risk
- Short Interval Planning
- Risk Register

## Plan View

When you open a schedule, you land on the project's Plan view. In this view, you can see the schedule details (such as activities, work package groupings, dates, duration, and float) where you can create, detail and plan out the CPM schedule.

The screenshot shows the InEight software interface for a project schedule. The top navigation bar includes the project name 'I-15 | Tropicana\_Revised Project Baseline Schedule\_NTP2 Schedule (to be submitted 1.7.22) Copy / Plan'. A notification states 'This schedule is locked and is in a view only state.' The main content area is divided into three sections:

- Section 1 (Left):** A table with columns: ID - Description, Actions, Start, Finish, and AI Complet... The table lists various project activities such as Project Management, Design, Procurement, and Construction, with their respective start and finish dates and AI completion values.
- Section 2 (Center):** A Gantt chart showing a visual layout of scheduled activities, work packages, and milestones over time from 2021 to 2025. The chart uses horizontal bars to represent activity durations.
- Section 3 (Right):** A detailed activity view for 'I-15 | Tropicana\_Revised Project Baseline Schedule\_NTP2 Schedule (to be submitted 1.7.22) Copy'. It shows the activity's description, default calendar, smart planning options, and schedule suggestions with progress bars and completion percentages.

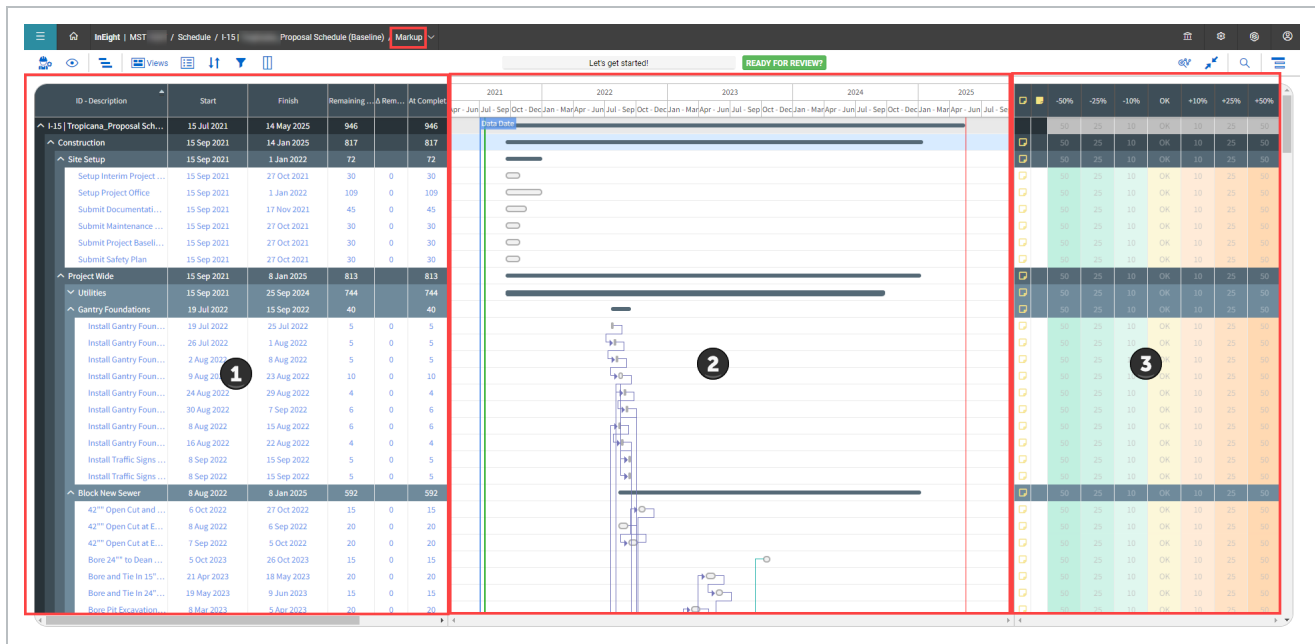
- 1 Contains customizable Gantt chart columns providing a summary view of schedule details including, but not limited to, activity/work package description, dates, durations, float, and cost.
- 2 This Gantt chart provides a visual layout of scheduled activities, work packages, and milestones over time. The Gantt chart also has integrated functionality allowing users to adjust dates, schedule logic, and schedule critiques.
- 3 The Iris contains the fine details of the schedule. Activities, work packages, and milestones that can be detailed out with specific constraints, tags, resources, reviewers, short interval planners, and events. Additionally, the Iris also houses the Smart Planning AI functionality which references and pulls in Knowledge Base information into project work packages and activities.

### NOTE

You can [import](#) or [export](#) a schedule in Plan view.

## Markup View

The Markup view is where project contributors assigned to activities and work packages can provide feedback on the current planned schedule. You can also assess, critique, and provide feedback on the planned CPM schedule.

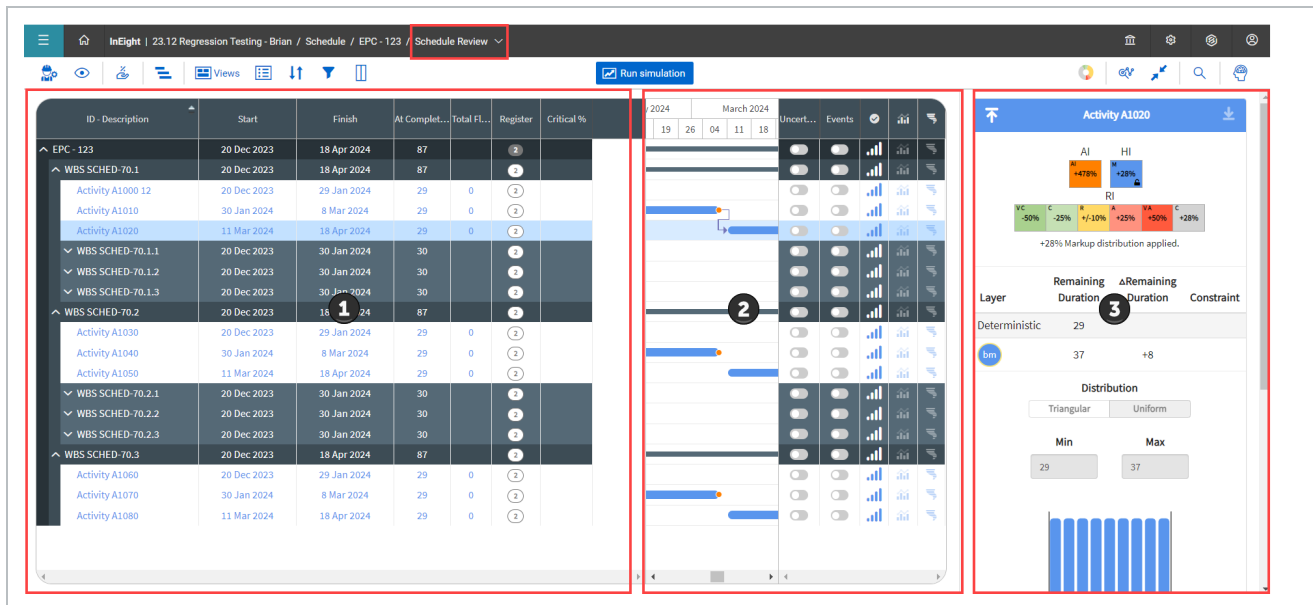


- 1 Gantt chart columns contain activity metadata: ID-description, dates, remaining duration, total duration, delta [change in] remaining duration, delta [change in] end date, and completed [markup status].
- 2 This Gantt chart provides a visual layout of how the schedule would be affected by the markups provided.
- 3 This section contains the markup score card. The score card is a quick way for project contributors to increase, decrease, or confirm the dates and durations for the schedule items assigned. Additionally, project events (such as risks, opportunities, and ideas) can be provided as feedback by contributors.

## Schedule Review View

Project View	Description
Schedule Review	Consolidate markups, conduct risk analysis, and update the CPM Schedule based on review

After the project contributors have finished providing their markups, the Review view is where all the feedback is consolidated. Schedulers can take the information and can begin to conduct risk analysis on the schedule, adjust durations, and associate risk events.



- 1 Gantt chart columns show the original start and finish dates but can have the uncertainty and events from the markups switched on and off to show the changes and impacts to the schedule.
- 2 This Gantt chart provides a visual layout using bars that adjust dependent upon the uncertainty and risk applied. In the right-most columns of the Gantt chart are the icons to access the risk histogram and tornado charts.
- 3 The Iris in this view shows details regarding the markups provided, giving a quick glance at the distribution data from multiple contributor markups. Additionally, the Inference Engine, Human Intelligence, and Risk Intelligence data are housed here to aid in the review process.

With the feedback provided, users can adjust the schedule to reflect the appropriate markups and/or conduct risk analysis with the uncertainty and various events provided.

## Cost Risk View

Project View	Description
Cost Risk	Consolidate markups, conduct risk analysis, and update cost based on review

The Cost Risk view is where all the feedback is gathered and consolidated for cost items. When you bring in your cost structure, you can begin to conduct risk analysis on the budget using uncertainty and risk events.

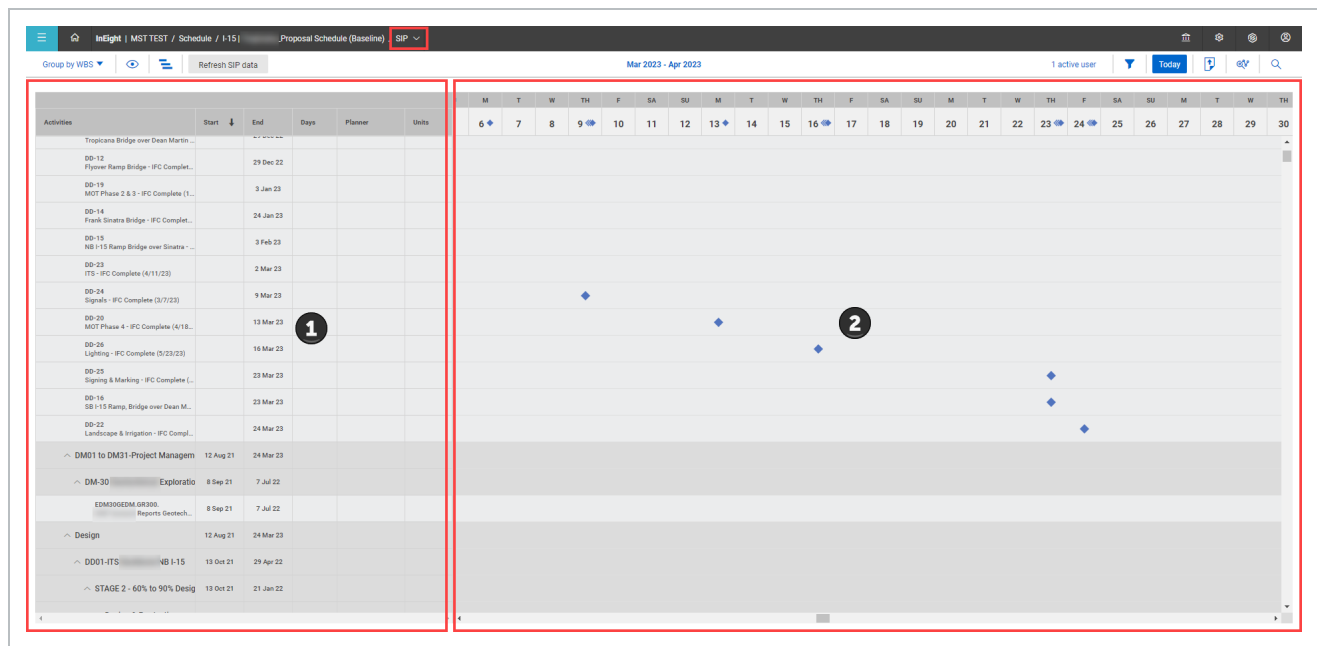
The screenshot shows the InEight software interface in the 'Cost Risk' view. The main table lists cost items with columns for ID, Description, Actions, Exclude, % Cost %, Max Cost, and Max Cost %. To the right of the table are columns for Uncertainty, Events, and Register. A 'WBS Sum Act' panel on the right side shows a distribution chart with a 'Register' button and an 'ADD EVENT' button. Three callouts are present: '1' points to the table columns, '2' points to the Uncertainty and Events toggles, and '3' points to the distribution chart.

- Columns for Cost Item information that shows actual, remaining, and totals of items prior to simulations with the option to display risk adjusted amounts based on user selection.
- Provides toggles to turn on or off uncertainty or events and view events assigned to cost items. Users can also view the risk histogram and tornado chart post simulation runs.
- The details are shown regarding markups provided, giving a quick glance at the distribution data. With the feedback provided, users can conduct risk analysis with the uncertainty and various events provided.

## Short Interval Planning View

Project View	Description
Short Interval Planning	Conduct short interval planning, detailing daily work for crews and short term plan to get the CPM Activities done

In the Short Interval Planning view, schedulers and field execution planners can plan out their day to day work. CPM activities brought in from the Planning view can be broken down into steps and tracked for progress. Crews can be established with specific production rates and goals.

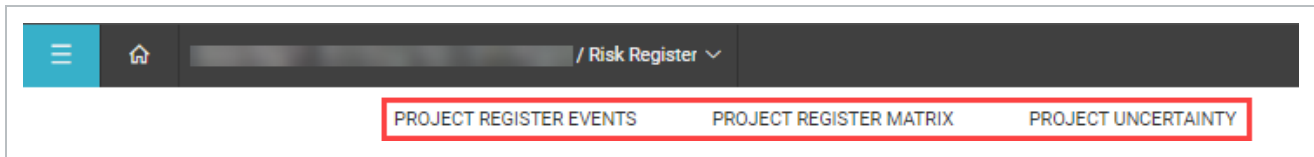


- 1 Contains all work packages, activities, and steps listed with dates and durations.
- 2 This visual represents how steps and crew activity are spread out over the coming weeks. Additionally, the original CPM dates have duration bars shown so users can visually see when steps to complete an activity vary from the baseline CPM schedule dates.

## Risk Register View

Project View	Description
Risk Register	Risk matrix tracking all project events surfaced throughout the planning, markup, review, and execution phases of the project schedule

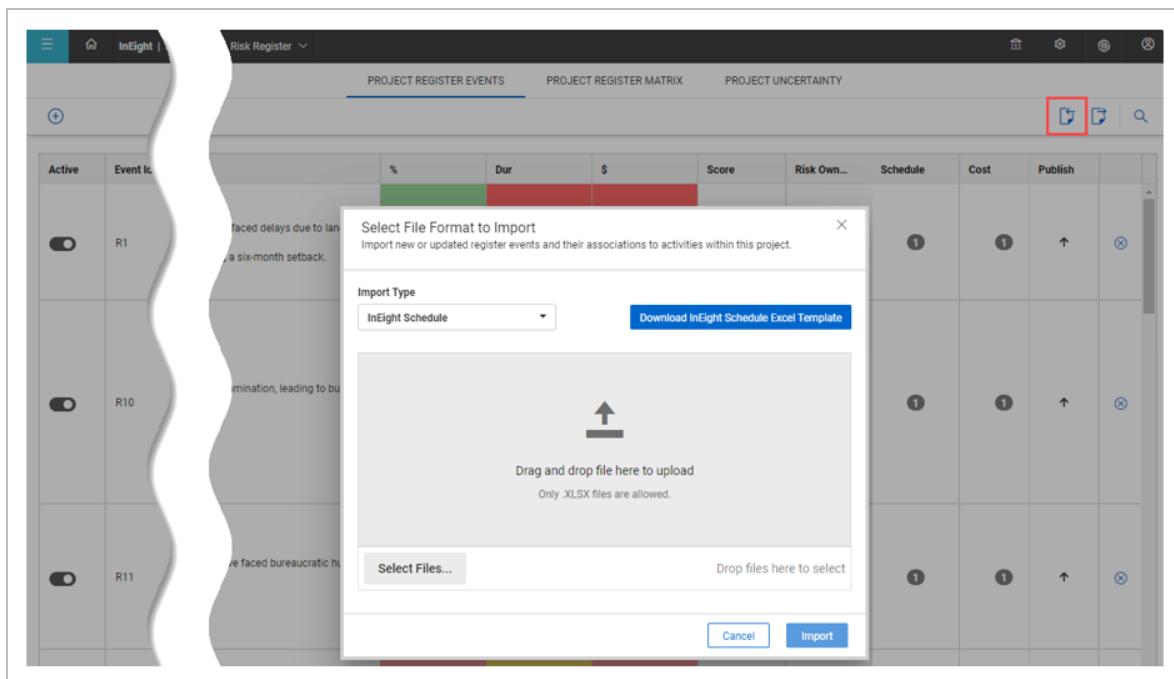
The Risk Register is where the schedule’s risk events, matrix settings, uncertainty values are stored and set.



- The Project Register Events tab summarizes all events on the project. Events can be selected and deselected and edited in this register.

Active	Event Id	Title	Type	Description	%	Dur	\$	Score	Risk Own...	Mitigation	Status	Markup	Schedule	Cost	Publish
<input type="checkbox"/>	R1	Rapid river water	Threat	crane on a barge!	Extremely Low	Very Low (≤ 40d)	Very Low (≤ \$50K)	1	Gar...	Bring the crar	Mitigated		1		↓
<input type="checkbox"/>	O1	Rent equipment for 50% off	Opportunity	overbought!	Ultra Low (5%)	Ultra Low (≤ 7d)	Ultra Low (≤ \$...)	1	Gar...		Unmitigated				↑

The Microsoft Excel import tool lets you import new or updated register events and their activity associations.





- The Project Register Matrix tab shows the attributes available for up to nine events created in the project. These are the default values available when entering data for an event.

There is also an opportunity color column which shows a blue scale to help differentiate various opportunities. The Opportunity Color scheme shows throughout the application where opportunities are presented.

PROJECT REGISTER EVENTS    PROJECT REGISTER MATRIX    PROJECT UNCERTAINTY					
Number of ranges: 9					
Description	Probability	Schedule Impact	Cost Impact	Threat Color	Opportunity Color
Ultra Low	5	7	1000		
Extremely Low	15	20	25000		
Very Low	25	40	50000		
Low	35	50	75000		
Medium	50	60	100000		
High	65	100	1000000		
Very High	75	120	5000000		
Extremely High	85	160	7500000		
Ultra High	95	180	10000000		

For example, in the Project Register Events page, the Opportunity in the second row shows three different color ranges that are associated with the Opportunity Description in the Project Register Matrix.

PROJECT REGISTER EVENTS    PROJECT REGISTER MATRIX    PROJECT UNCERTAINTY									
Active	Event Id	Title	Type	Description	%	Dur	\$	Score	Publish
<input type="checkbox"/>	R1	MST Threat	Threat		Very Low (25%)	Very High (< 1...	Medium (< \$1...	21	<input type="checkbox"/>
<input type="checkbox"/>	O1	MST Opportunity	Opportunity		High (65%)	Very Low (< 4...	Medium (< \$1...	30	<input type="checkbox"/>

The Opportunity ranges one through nine (Ultra High to Ultra Low) and the blue color scale is also visible in the Mitigation page for opportunities.

Description	%	Dur	\$	Score	Risk Own...	Mitigation			
O1 - MST Opportunity									
Probability: High (65%)		Duration Impact: Very Low (<= 40d)		Cost Impact: Medium (<= \$100K)		Unmitigated: 30			
Add new value									
ID	Mitigation	%	Dur	\$	S.	Cost	Owner	Start	End
M1	MST MIT2	High (65%)	Very Low (<= 40d)	Medium (<= \$100K)	30				

- The Project Uncertainty tab shows the attributes which the Markup & Review Cycle Score Card apply. These are the default values the scorecard will use when markups are being conducted.

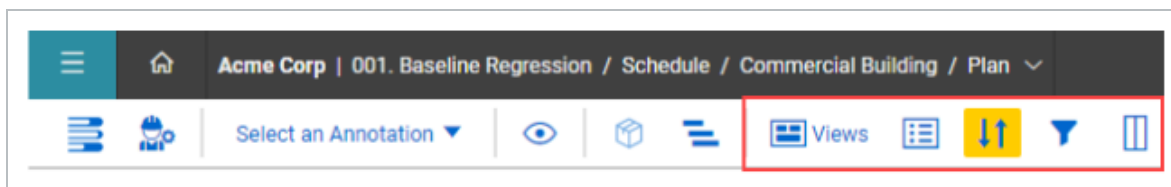
PROJECT REGISTER EVENTS    PROJECT REGISTER MATRIX    **PROJECT UNCERTAINTY**

Description	Min	Most Likely	Max	Color
Very Conservative	50%	100%	100%	Green
Conservative	75%	100%	105%	Light Green
Realistic	90%	100%	110%	Yellow
Aggressive	95%	100%	125%	Red-Orange
Very Aggressive	100%	100%	150%	Red

## Builder Menus

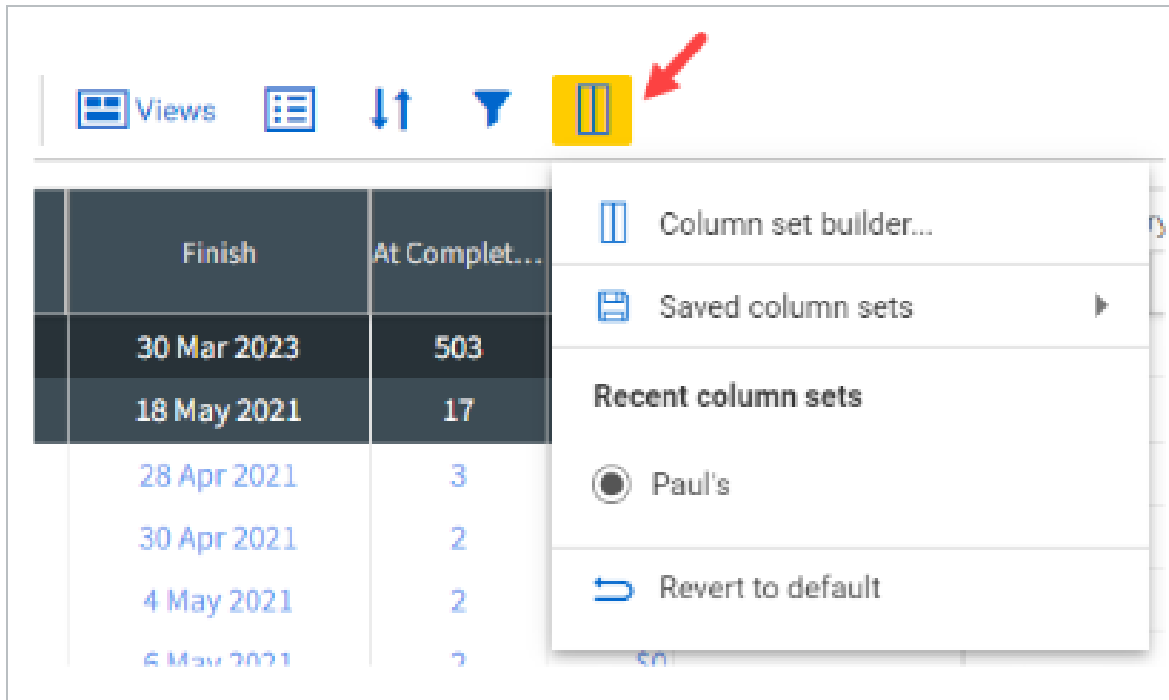
You can run advanced grouping, sorting, and query filters on multiple columns in several Schedule views, save as personal views and reuse in your assigned projects.

All menu builders can be saved and reused and are highlighted when there are existing saved views.

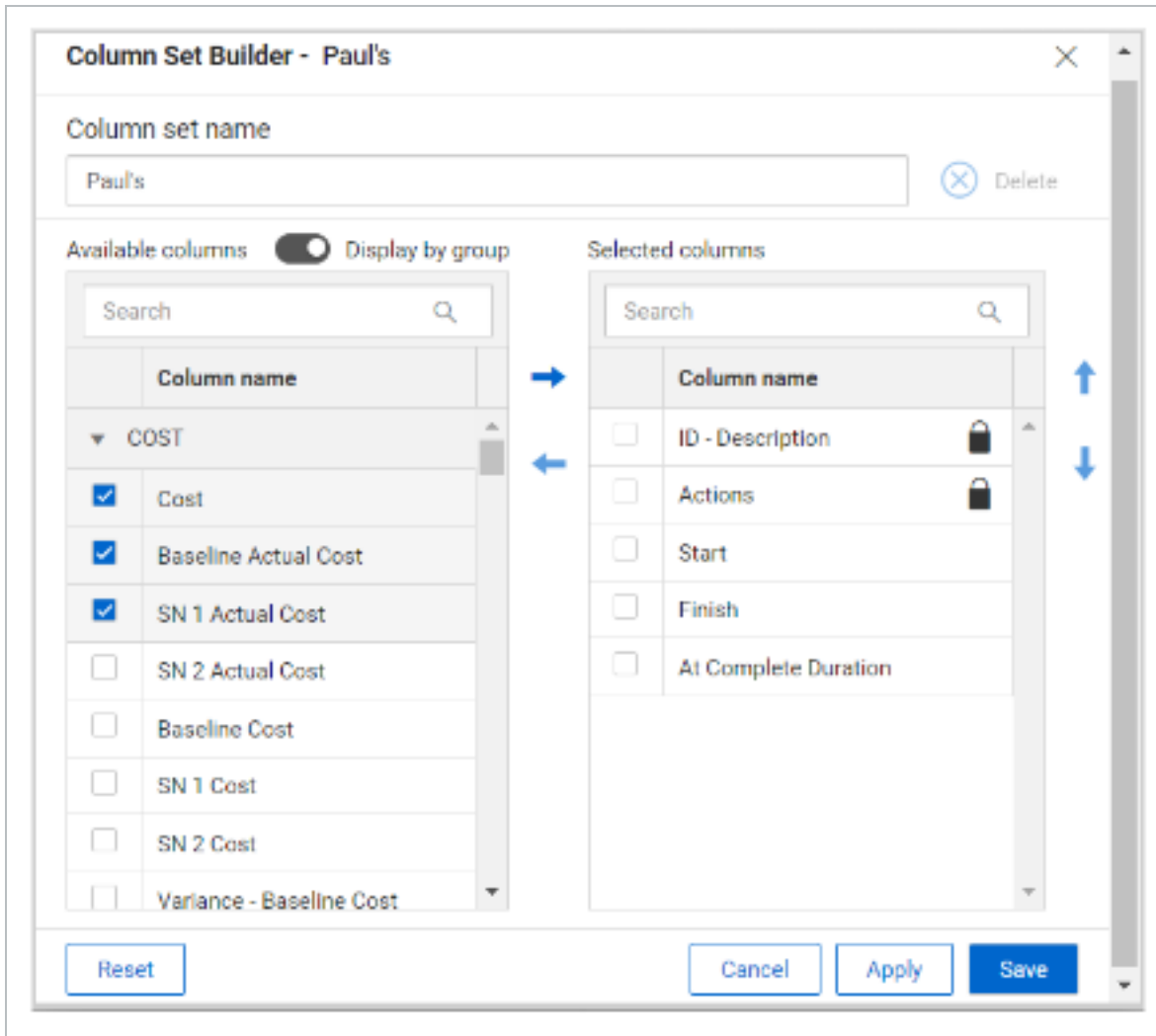


## Column set builder menu

The Column set builder menu lets you add and remove columns in the Plan, Markup, and Schedule Review views.

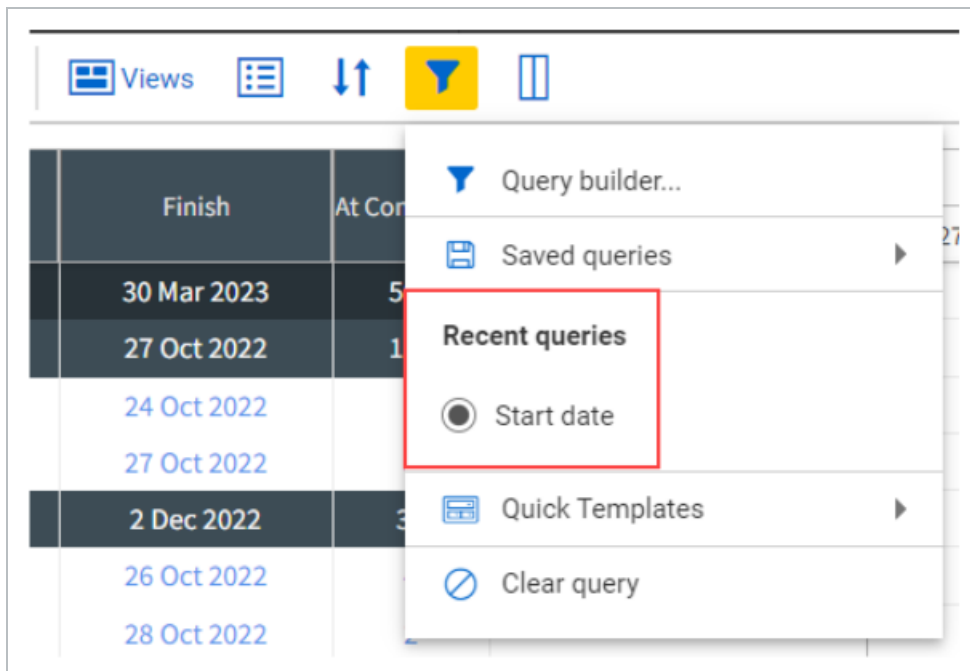


You can choose available columns in the Column set builder to create customized column page layouts.

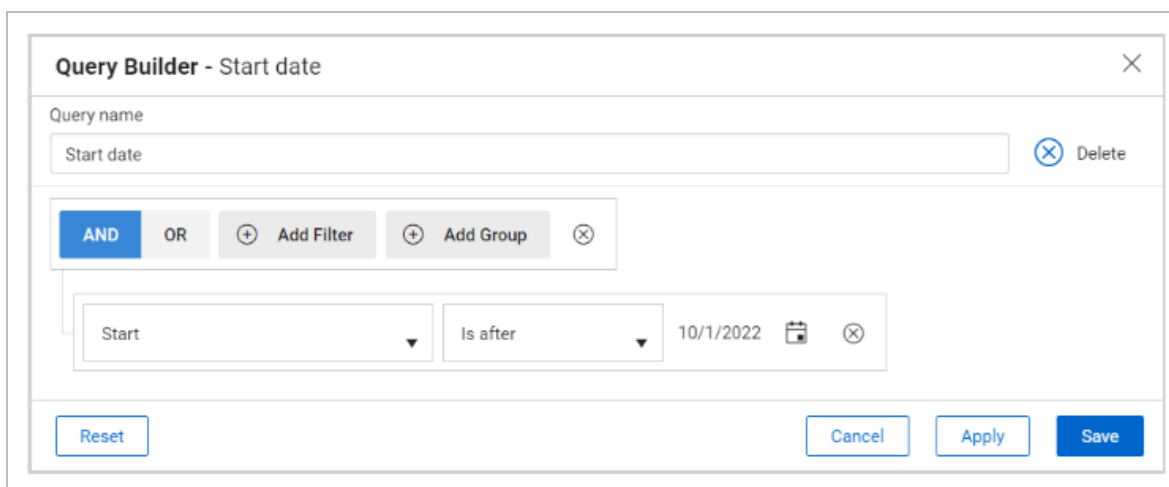


## Query builder menu

The Query builder menu lets you set column filters in the Plan, Markup, Schedule Review, and Cost Risk views.

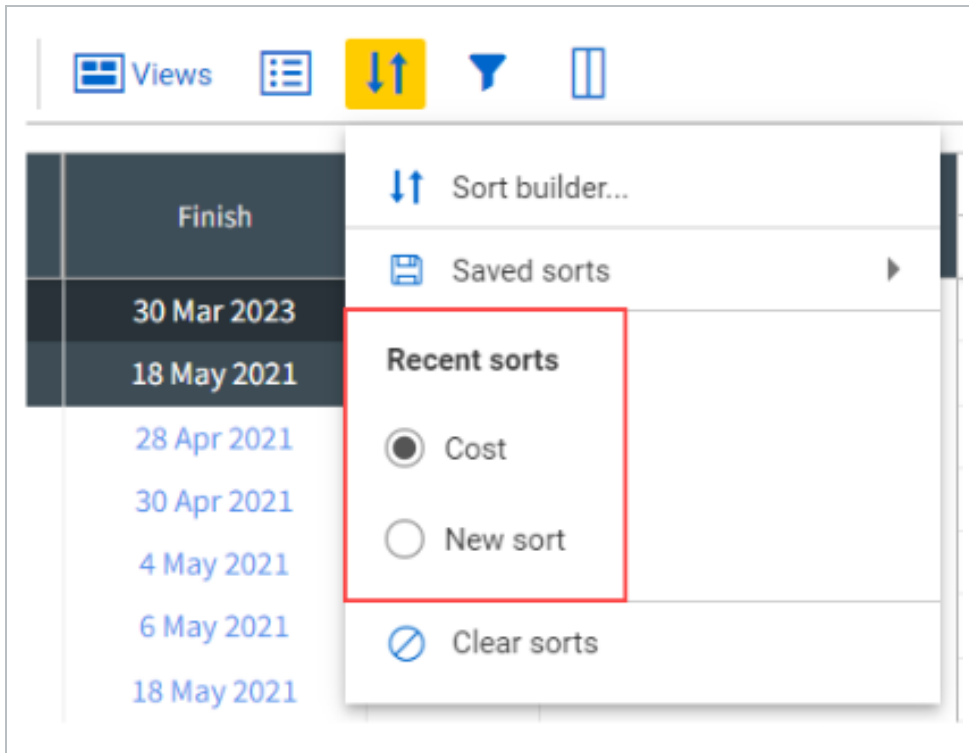


You can choose available columns in the Query builder to create customized page layout query.

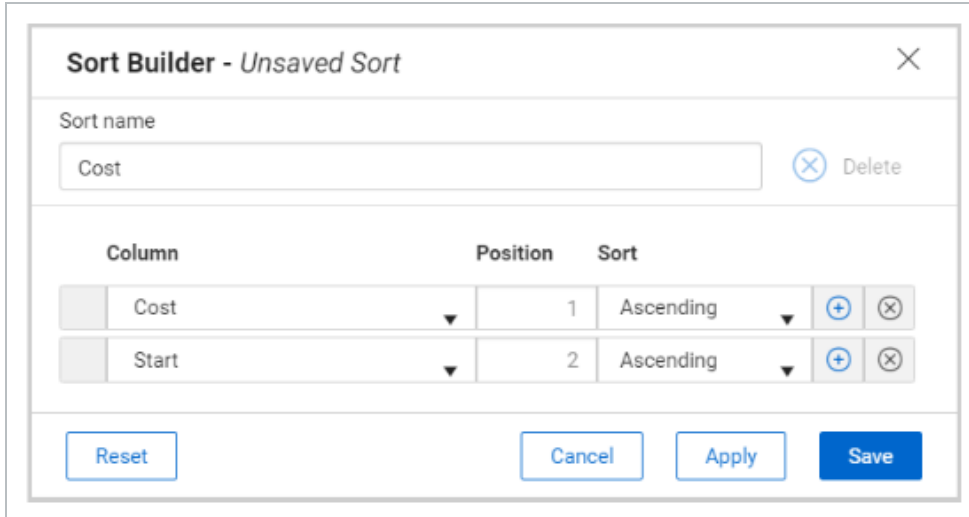


## Sort builder menu

The Sort builder menu lets you sort columns in the Plan, Markup, Schedule Review, and Cost Risk views.

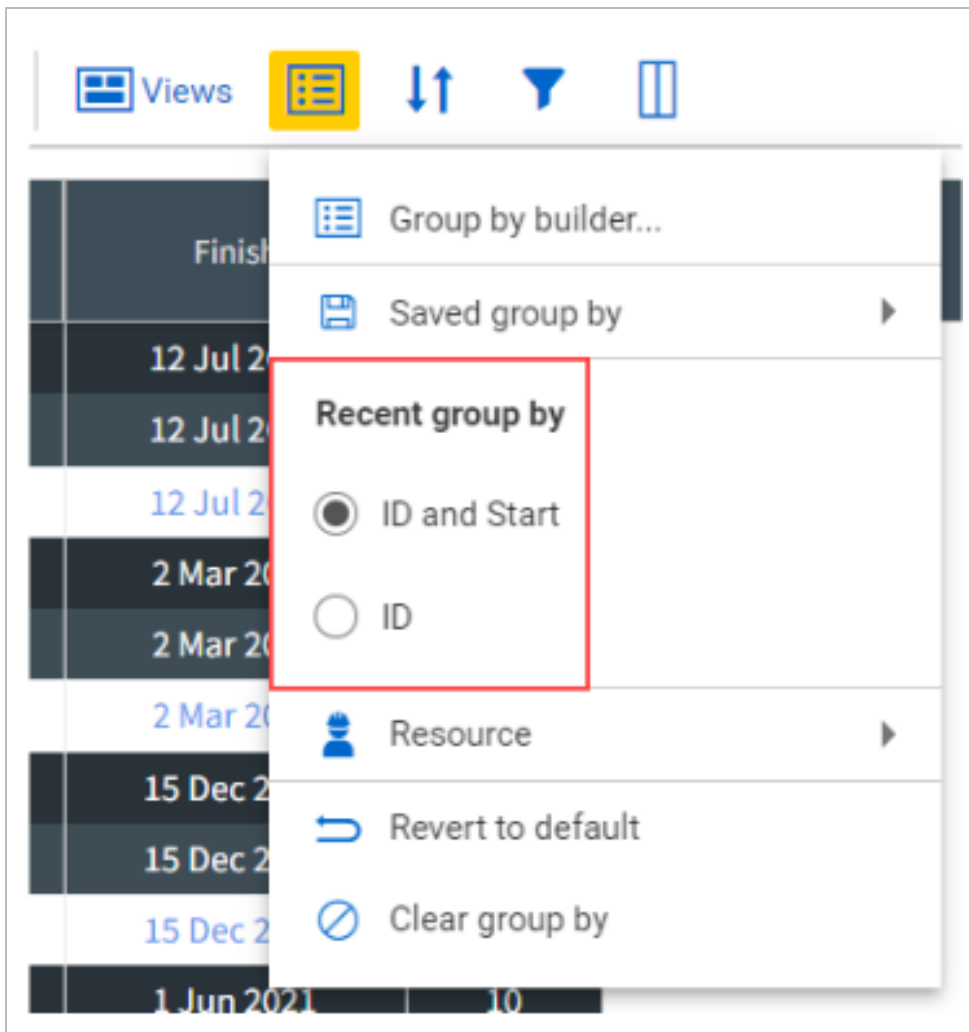


You can choose up to ten columns to sort in ascending and descending order.

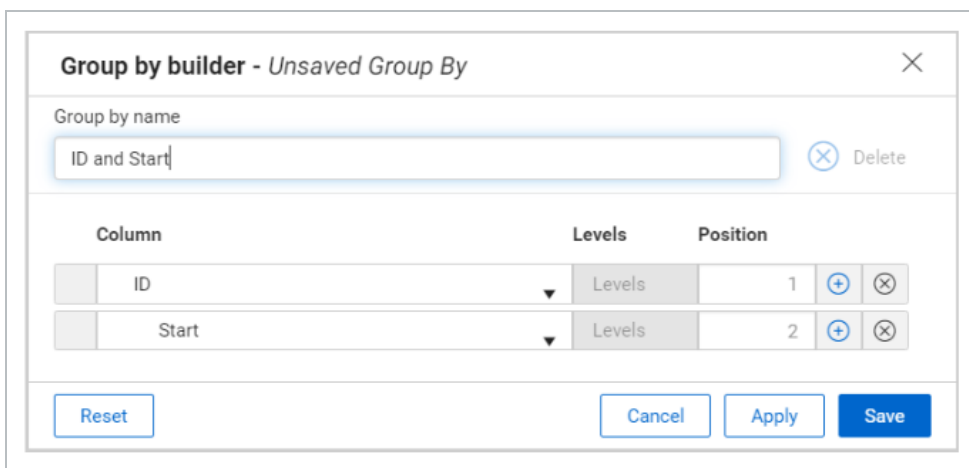


### Group by builder menu

The Group by builder menu lets you group columns in the Plan, Markup, Schedule Review views.

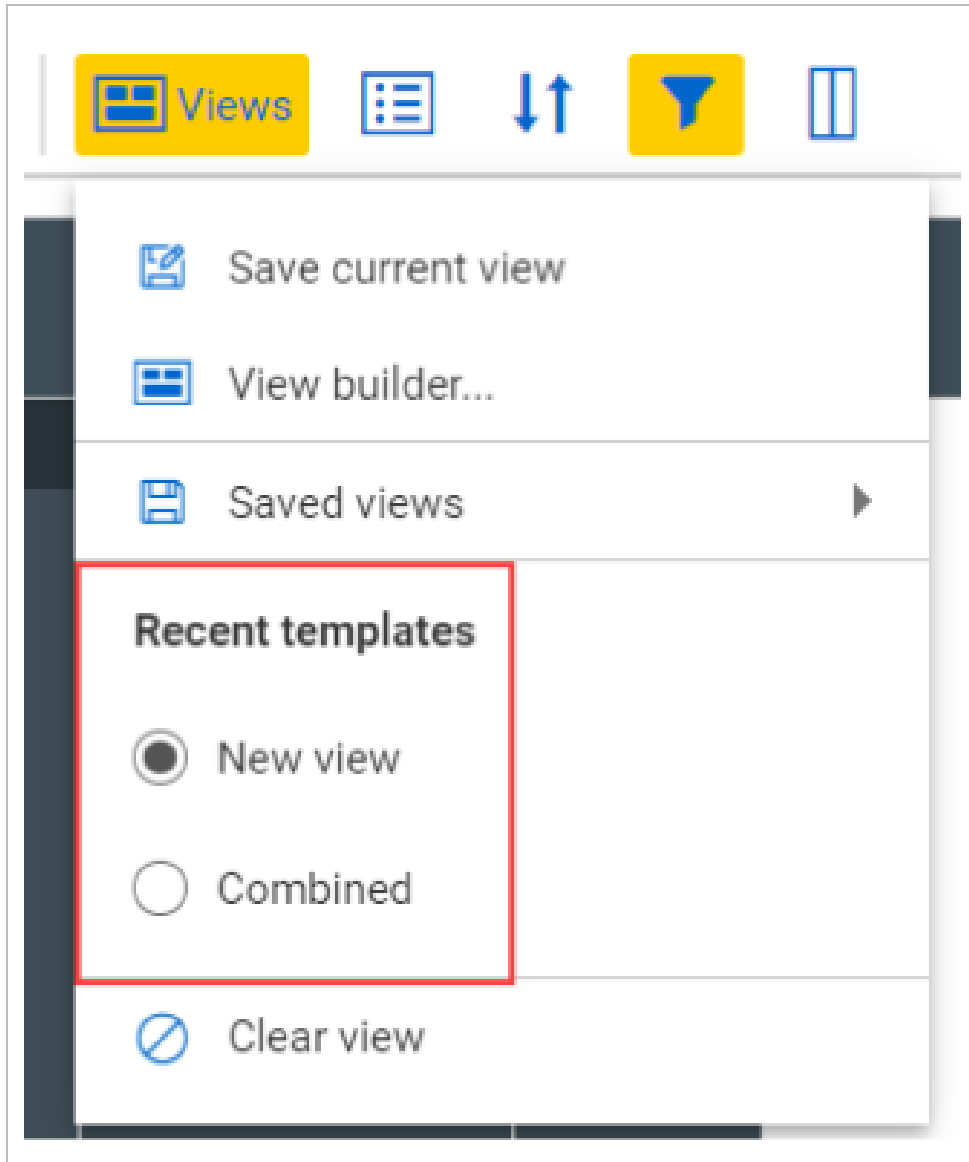


You can choose to group by one column or multiple columns.



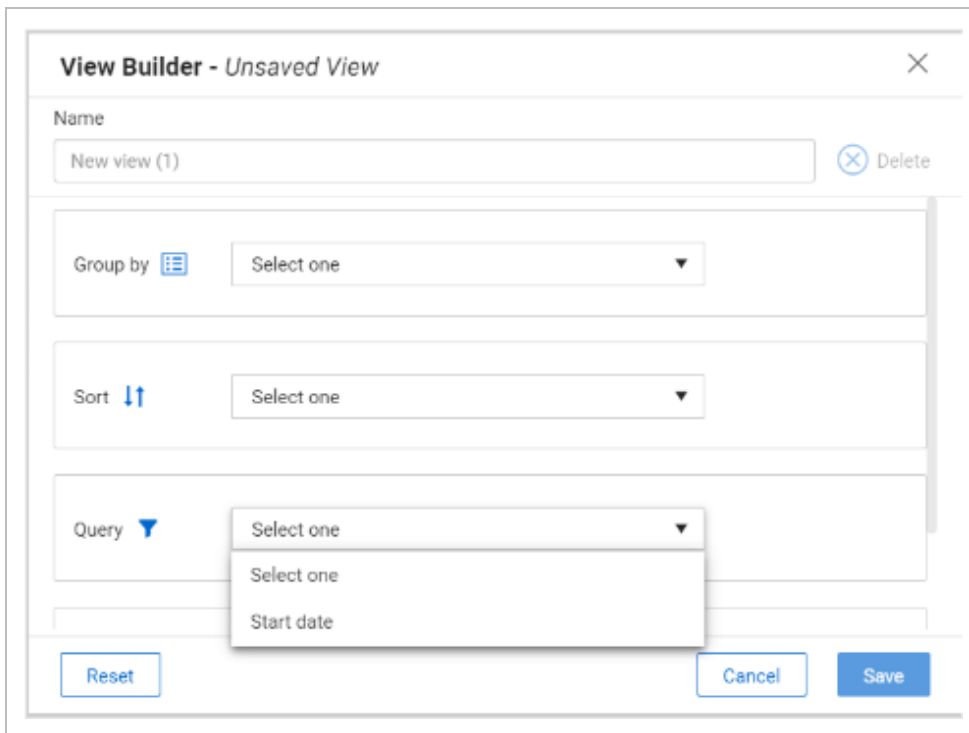
## View builder menu

The View builder menu lets you combine columns from the other builder menus and show in the Plan, Markup, Schedule Review views.



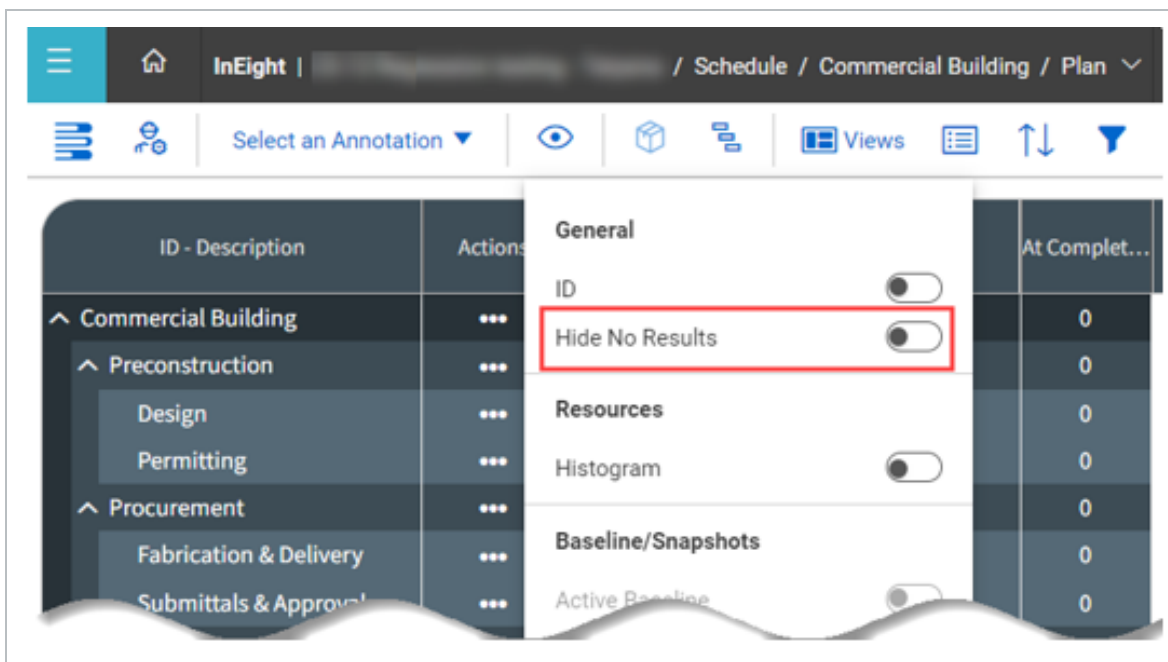
The View Builder lets you choose multiple columns from any of the builder menu columns. The chosen builder menus are highlighted on the toolbar.



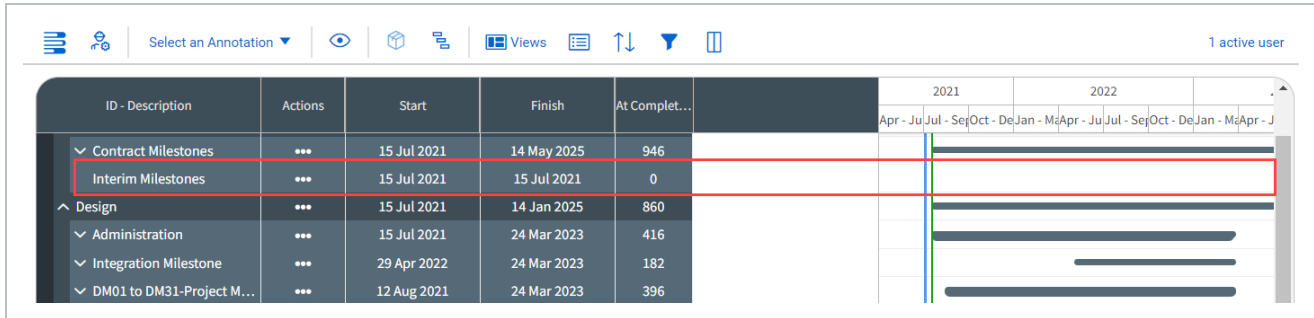


## Hide No Results

In View Options, the Hide No Results toggle has been added that lets you hide WBS items that do not return any results. The new Hide No Results toggle lets you hide any WBS groupings on the Plan page that do not yield any results.



For example, Interim Milestones does not show any scheduled activities, work packages, or milestones, in the Gantt chart.



When the Hide No Results switch is turned *On*, Interim Milestones is removed from the Plan view.

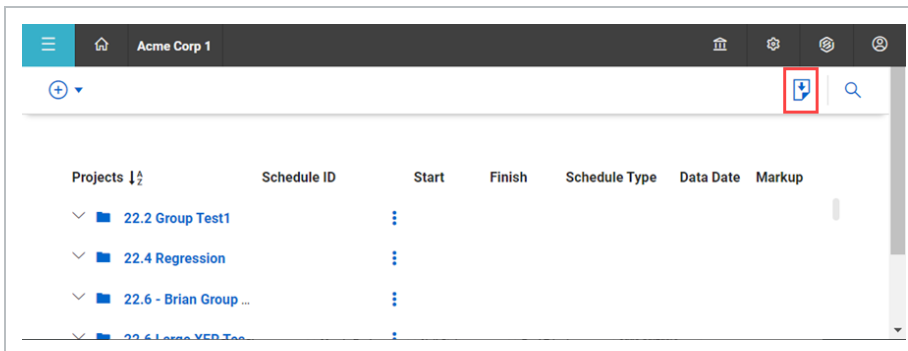


# LESSON 2 – PROJECT CREATION

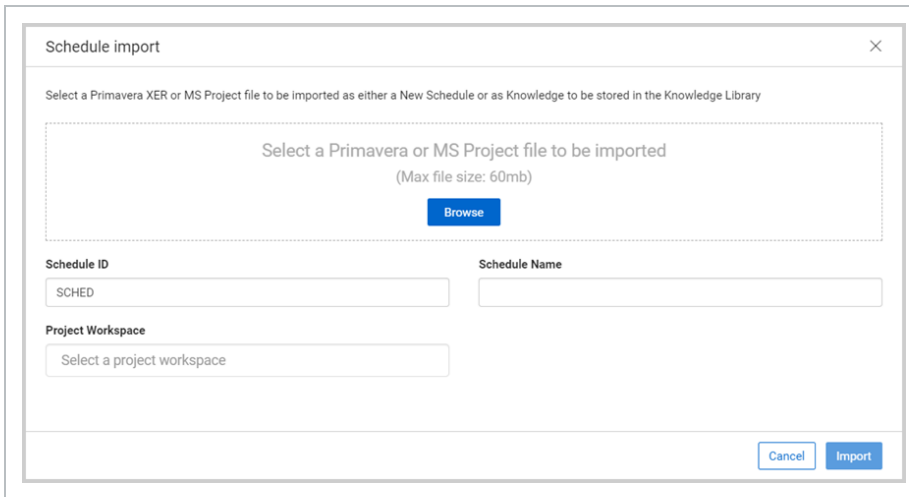
## Import a Schedule

### Importing a schedule

1. From the Schedule home page, click the **Import** icon.



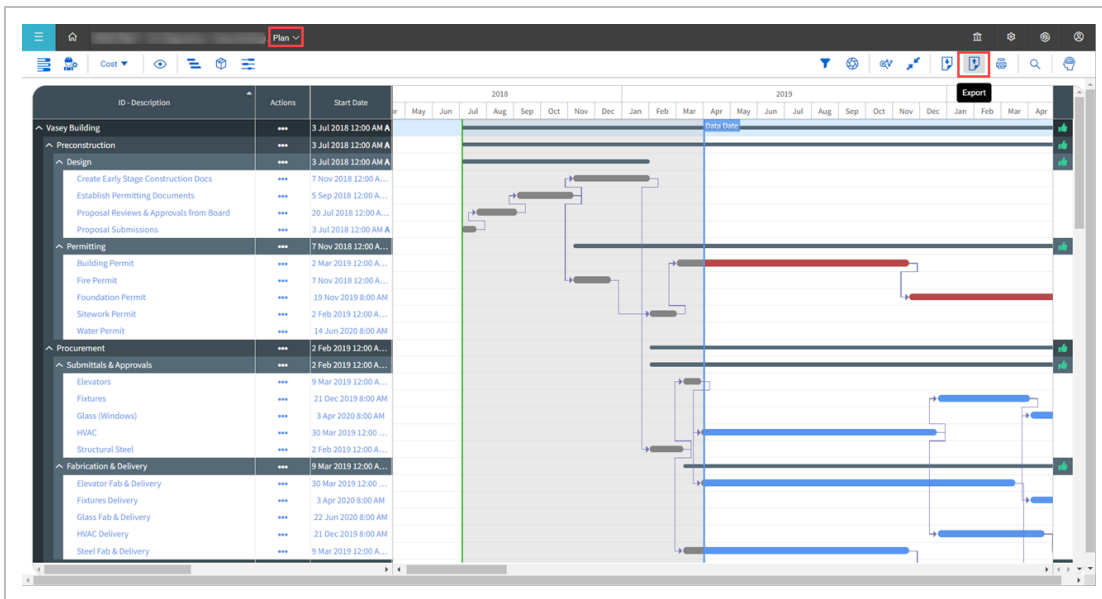
2. Click **Browse** to pick a schedule to upload from your computer or external source.
3. You can enter a Schedule ID, Schedule Name, and select a Project Workspace.
4. Click **Import**.



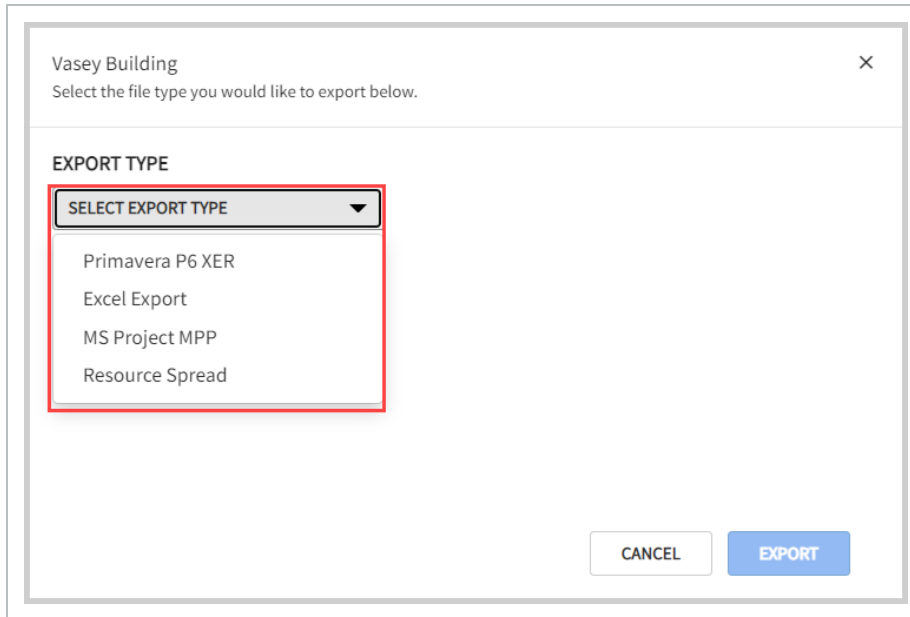
## Export a Schedule

### Exporting a schedule

1. In Plan view, click the **Export** icon at the top right of the page.



2. Select the export type from the Export Type drop-down options. Click **Export**.

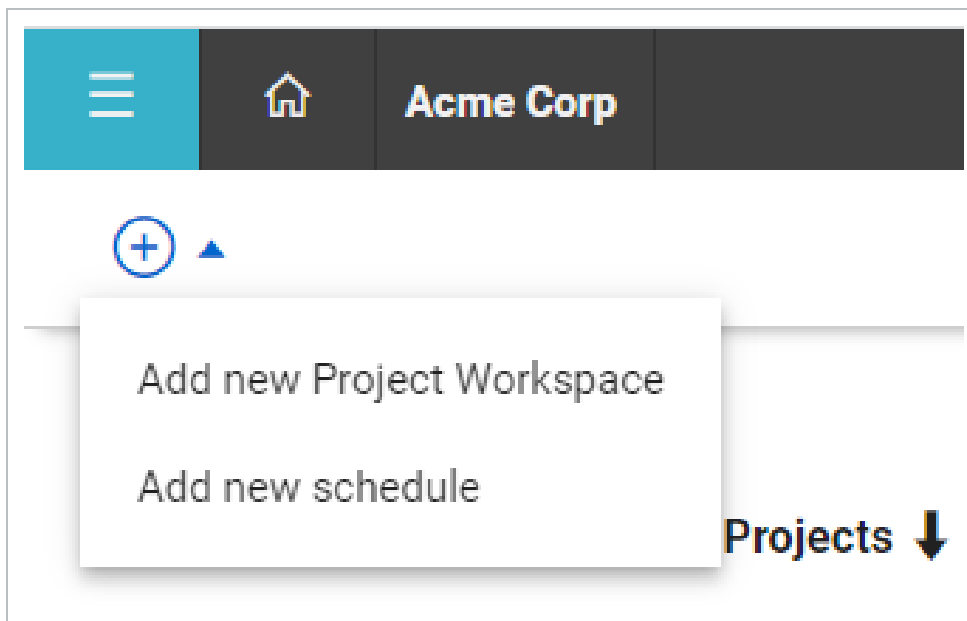


The export file is downloaded to your browser's download folder.

## Create a Schedule from Scratch

When you create a new schedule, there are two key sections to fill out: Details and Outline.

To start, click **Add New Schedule** in the Schedule register. This opens a window so that you can begin to fill out the schedule details.



## Details

The Details section is the first stage for creating a new schedule.

The screenshot shows a dialog box titled "Add a new schedule" with a close button (X) in the top right corner. Below the title bar are three tabs: "Details" (selected), "Context", and "Outline". The "Details" tab contains the following fields:

- Schedule ID:** A text input field containing "SCHED".
- Schedule Name:** A text input field containing "PT1".
- Project Workspace:** A dropdown menu showing "22.10 Brian Group" with a clear button (X) on the right.
- Start Date:** A date input field containing "8 Dec 2022".

A blue "NEXT" button is located at the bottom right of the dialog box.

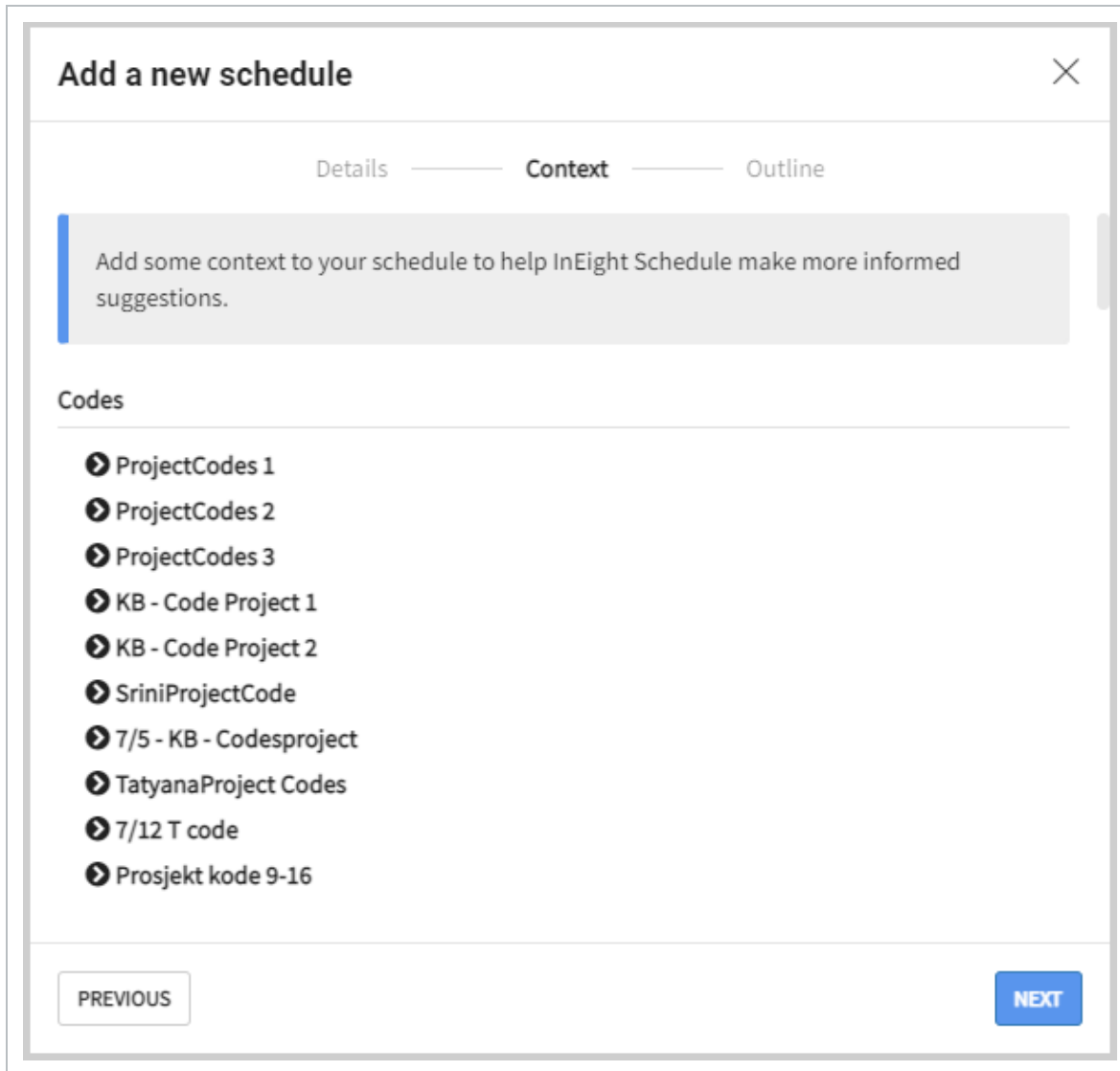
In the details section, complete the following information:

Field	Description
Schedule ID	Unique ID used for schedule identification.
Schedule Name	Official name of the schedule.
Project Workspace	Grouping of multiple schedules.
Start Date	Date the project starts.

Select **Next**.

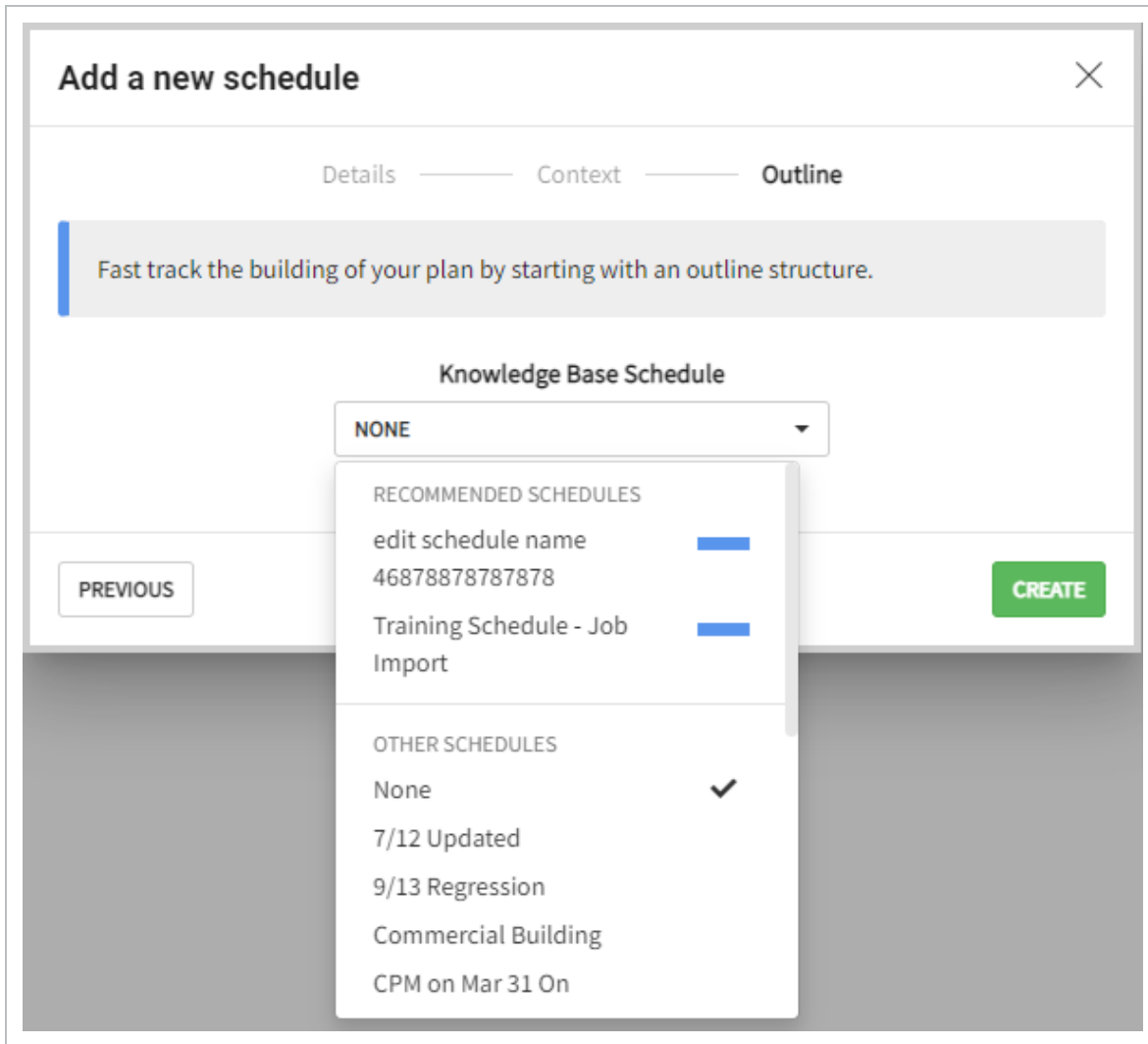
## Context

The second stage in creating a schedule is Context. Context lets you select existing project codes and UDFs to apply on a newly created schedule. These selections help with Knowledge Base suggestions throughout the Schedule application.



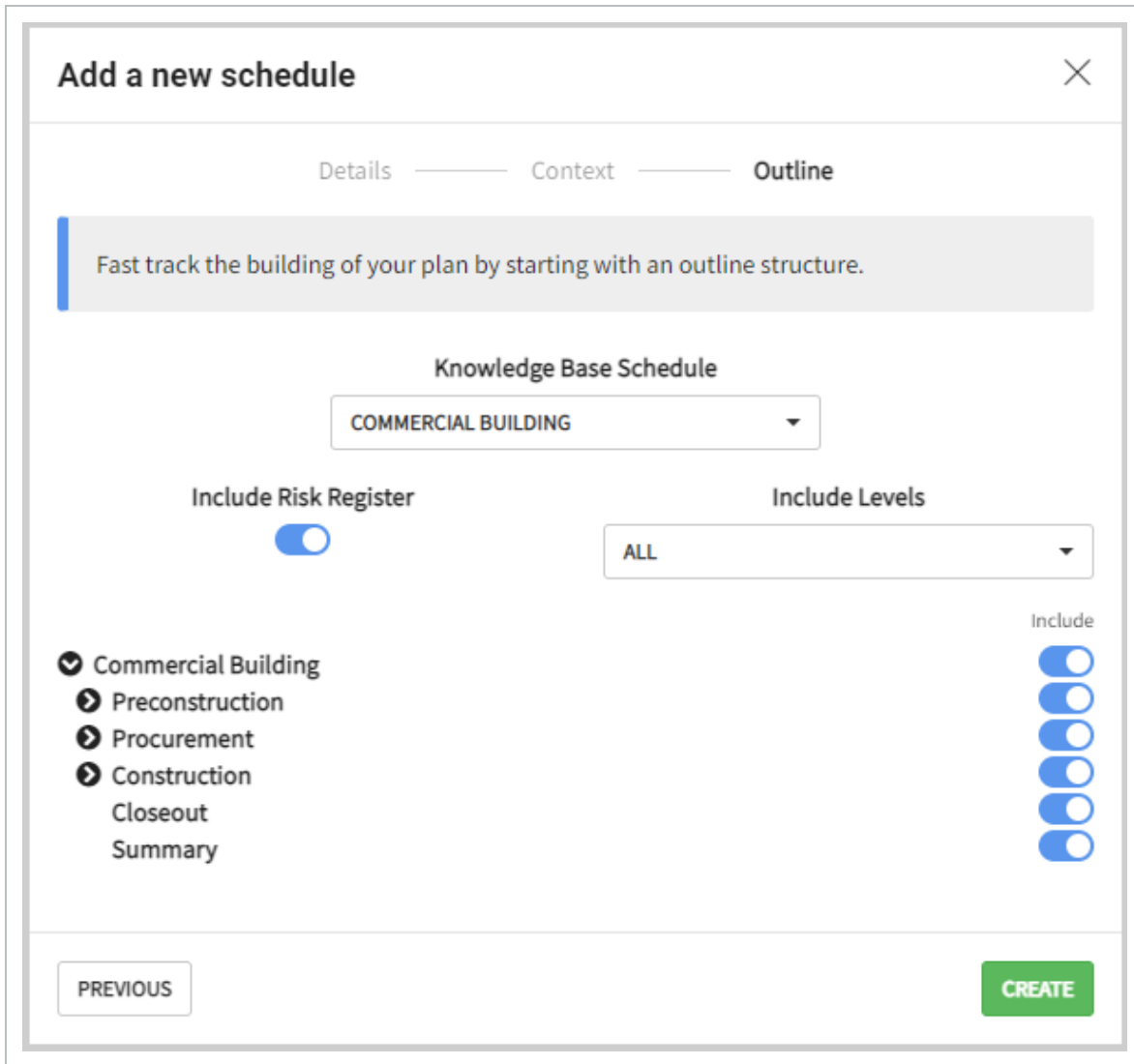
## Outline

The third stage in creating a schedule is Outline. In this section, you select an existing Knowledge Library Schedule as reference for the new schedule being built.



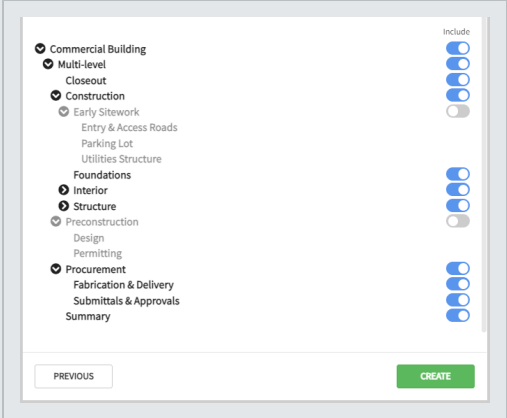
Select a schedule to bring in the work package structure from the Knowledge Base project.



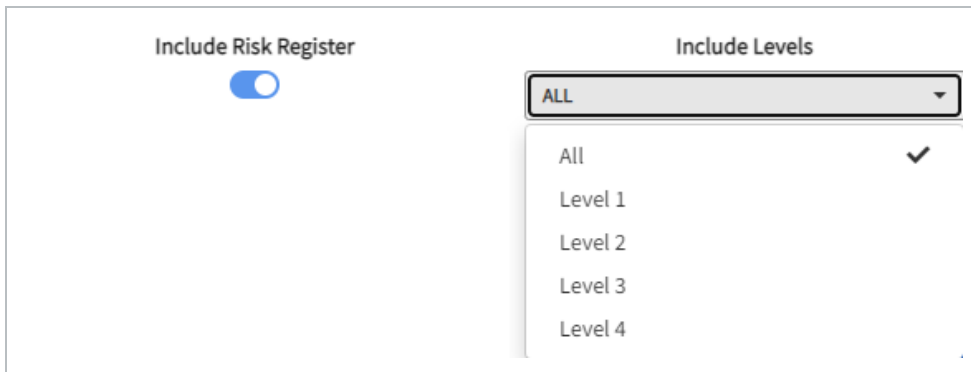


You can select all or parts of the structure levels to use in the schedule being created. This is done by selecting a level from the Include Levels drop-down or by manually toggling work packages in the Include column.

**NOTE** Turning off a Superior work package will turn off its subordinates.



Also, the include Risk Register toggle lets you specify whether to include risks, and if so, the level of risk to include.

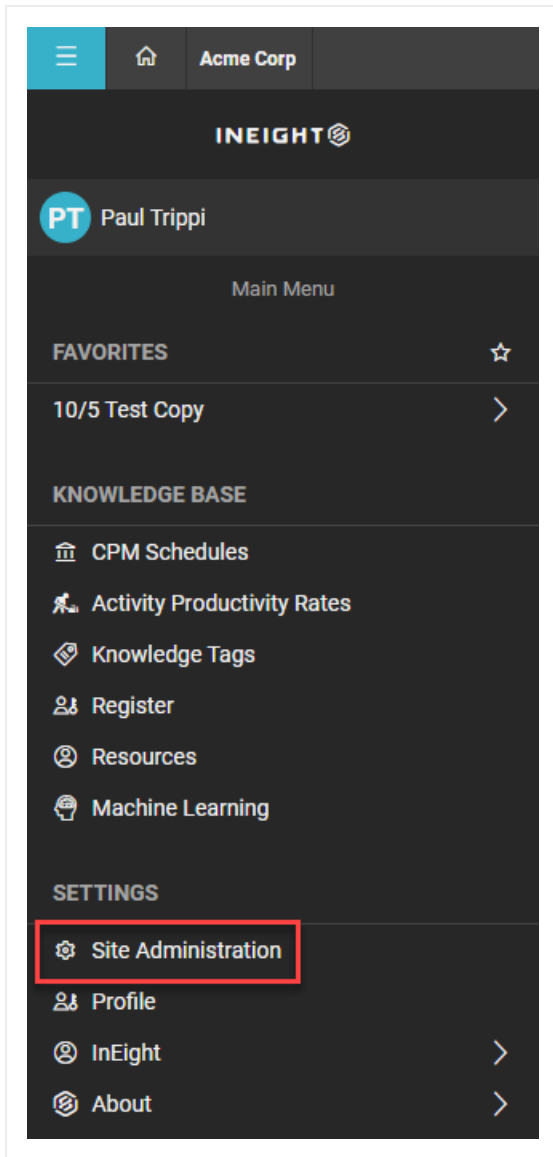


Any risks assigned to the Knowledge Library schedule are brought into the new schedule. Include Risk Register brings in the risk register items from the Knowledge Library Schedule into the new schedule.

**NOTE** The available risk levels are configured at the organization level.

## Application Settings

You can access the Application settings by clicking the **Site Administration** button, and can also be accessed in the upper right corner in a project.



## General Settings

From the General tab, project name, Cost Unit and Allow Project Administrators to invite Non-Schedule Users can be updated.

GENERAL    USERS    SUPPORT    LICENSING

Cancel    Save

**Name**  
  
247 characters remaining



**Cost Unit**











**Allow Project Administrators to Invite Non-Schedule Users**

## Users

You can add both external and internal users to the project. You can also remove users or update their access levels.

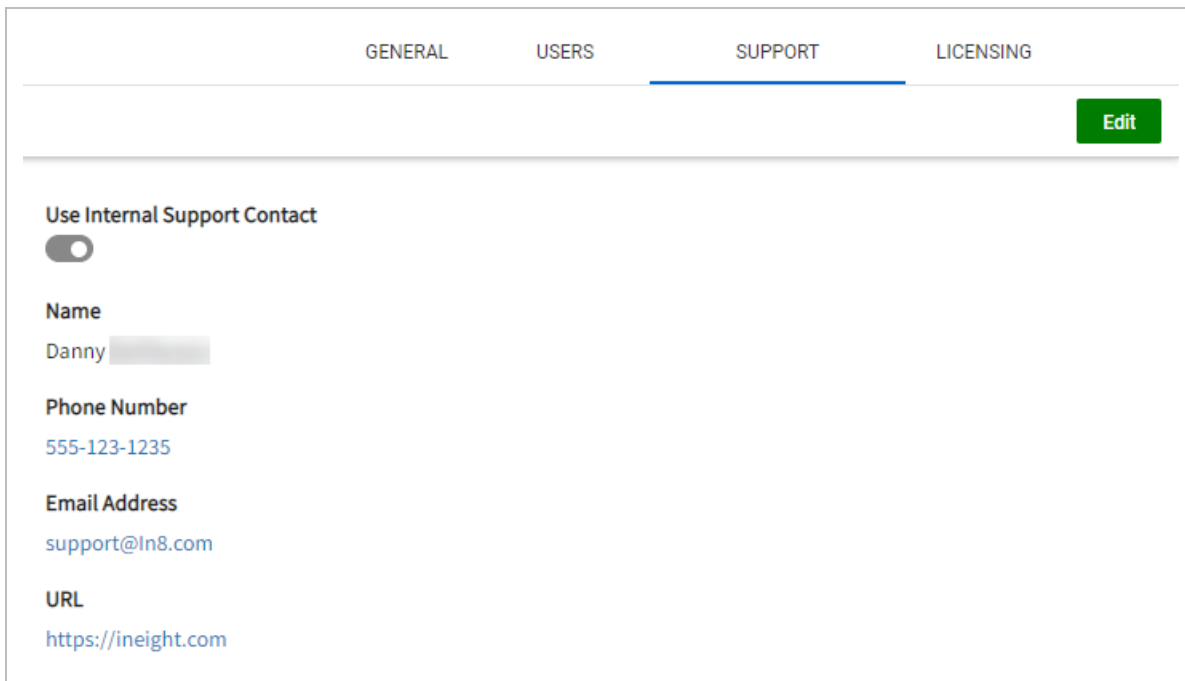
GENERAL    **USERS**    SUPPORT    LICENSING

Status	Email	Name	Permissions	Projects	Action
	abc.tc@gmail.com	abc tc	Project Member	10	 Edit Remove
	adam.althoff@kiewit.com	Adam Althoff	Administrator Knowledge Base Administrator Schedule Creator Project Member	16	
	allen@basispm.com 3 years ago	Allen Paddock	Administrator Knowledge Base Administrator Schedule Creator Project Member	34	
	Anitha.Dooshety@ineight.com	Anitha Dooshety	Administrator Knowledge Base Administrator Schedule Creator Project Member	4	
	austinanthonyriggs@gmail.com 6 months ago	Austin-Test Riggs	Project Member	24	

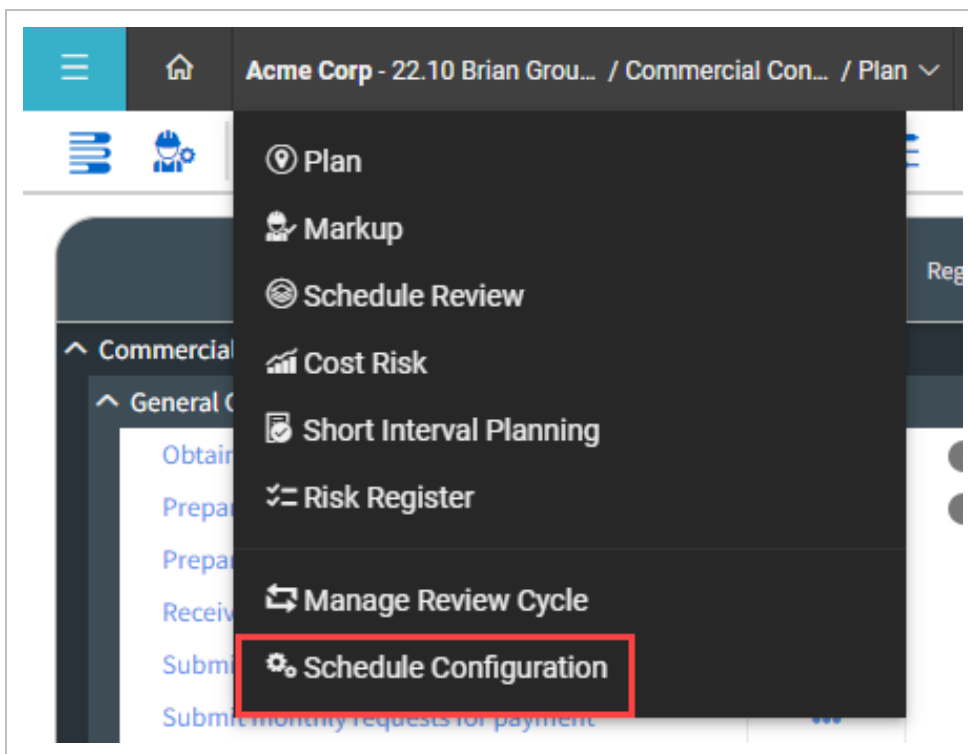
## Support

Use the Support tab to view and edit support details.



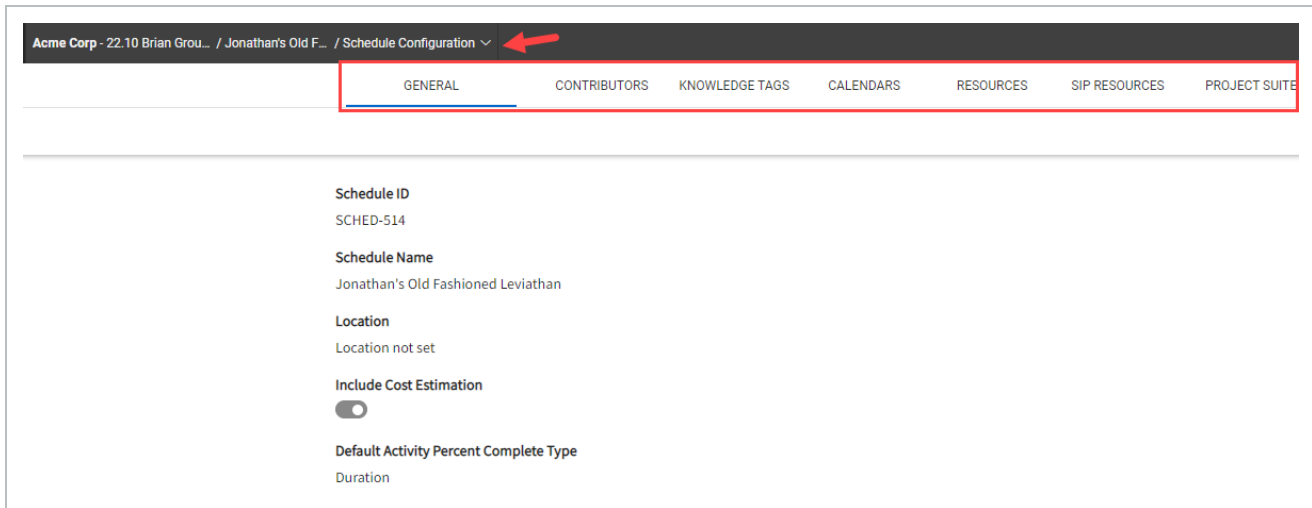
## Schedule Configuration Settings

Schedule settings lets you adjust the data date, switch schedule modes, switch how out of sequence progress is handled. These functions can be accessed via the secondary toolbar at the top of Plan view.



## Schedule Configuration

Schedule Configuration contains the general information and settings for the current project.



Depending on the tab selected, information and settings pertaining to the tab heading are shown.

Tab	Function/Description
General	Schedule details, such as Project Name, Location, Estimate, Benchmark and work hours.
Contributors	Add, remove, and edit project contributors.
Crews	Set up standard crews for the project.
Knowledge Tags	Manage knowledge tags on the project.
Caleendars	Define project calendars and non-workdays.
Resources	Manage project resources.
SIP Resources	Activities from the CPM Schedule show in the Short Interval Planning (SIP) view that are grouped, based on how the Plan view WBS is organized.
Project Suite	Connectivity to other InEight Project Suite Solutions (as needed).

### General

On the General tab, you can configure the project details.

GENERAL CONTRIBUTORS KNOWLEDGE TAGS CALENDARS RESOURCES SIP RESOURCES PROJECT SUITE

---

**Schedule ID**  
SCHED-512

**Schedule Name**  
Test Schedule

**Location**  
Location not set

**Include Cost Estimation**

**Default Activity Percent Complete Type**  
Duration

## Contributors

On the Contributors tab, both external and internal users can be added to the project. Existing contributors can be removed or have their access level updated.

GENERAL CONTRIBUTORS KNOWLEDGE TAGS CALENDARS RESOURCES SIP RESOURCES PROJECT SUITE

+

Email	Name	Permissions	Steps	Actions
ben@basispm.com	Ben Heights	Markup	0	⋮
david@ineight.com 1 day ago	David	Scheduler Short Interval Planner Markup	0	⋮
Paul@ineight.com	Paul	Short Interval Planner	0	⋮

## Knowledge Tags

On the Knowledge Tags tab, organizational defined tags can be reviewed, and excluded from consideration by the Schedule inference engine.

GENERAL	CONTRIBUTORS	KNOWLEDGE TAGS	CALENDARS	RESOURCES	SIP RESOURCES	PROJECT SUITE
Codes / Project						
Codes	Project Codes					
Project	Business Unit / Region					
Activity	Default for Scheduled Svcs					
Register Event	Development					
Resource	Development Manager					
	MAdshead					
	Major Projects					
	Project Lead Planner / Scheduler					

## Calendars

On the Calendars tab, additional calendars can be created, working days can be edited, and a default calendar can be defined. This is also where holidays are defined.

GENERAL	CONTRIBUTORS	KNOWLEDGE TAGS	CALENDARS	RESOURCES	SIP RESOURCES	PROJECT SUITE				
Calendar										
Calendar	Hours/d...	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Exceptions	Actions
724 Su-Sa 12:00A-12:00A No Hol	24	●	●	●	●	●	●	●	0	[edit] [delete]
*508 M-F 8:00A-5:00P US Hol	8	○	●	●	●	●	●	○	1431	[edit] [delete]
0.Standard 5 Day w/ Hol	8	○	●	●	●	●	●	○	1377	[edit] [delete]
24 hours / 7 days	24	●	●	●	●	●	●	●	9	[edit] [delete]
24x7 w/ Turtle Season	24	●	●	●	●	●	●	●	6642	[edit] [delete]
24x7 w/ Turtle Season	24	●	●	●	●	●	●	●	6642	[edit] [delete]
510 M-F No Holidays	10	○	●	●	●	●	●	○	477	[edit] [delete]
510 Su-Th 7:00A-5:00P No Hol	10	●	●	●	●	●	○	○	477	[edit] [delete]
7d-24h (no holidays continuous)	24	●	●	●	●	●	●	●	0	[edit] [delete]
KOS G 5d x 10hr w Holidays	10	○	●	●	●	●	●	○	657	[edit] [delete]

## Resources

On the Resources tab, additional resources can be added and searched. Resource details such as ID, Name, Category, Unit, Default Units, and Costs can be edited in the grid by double-clicking the cell. Use the indent arrows on the right to create a child resource from the selected resource or to move the resource to a different part of the grid.

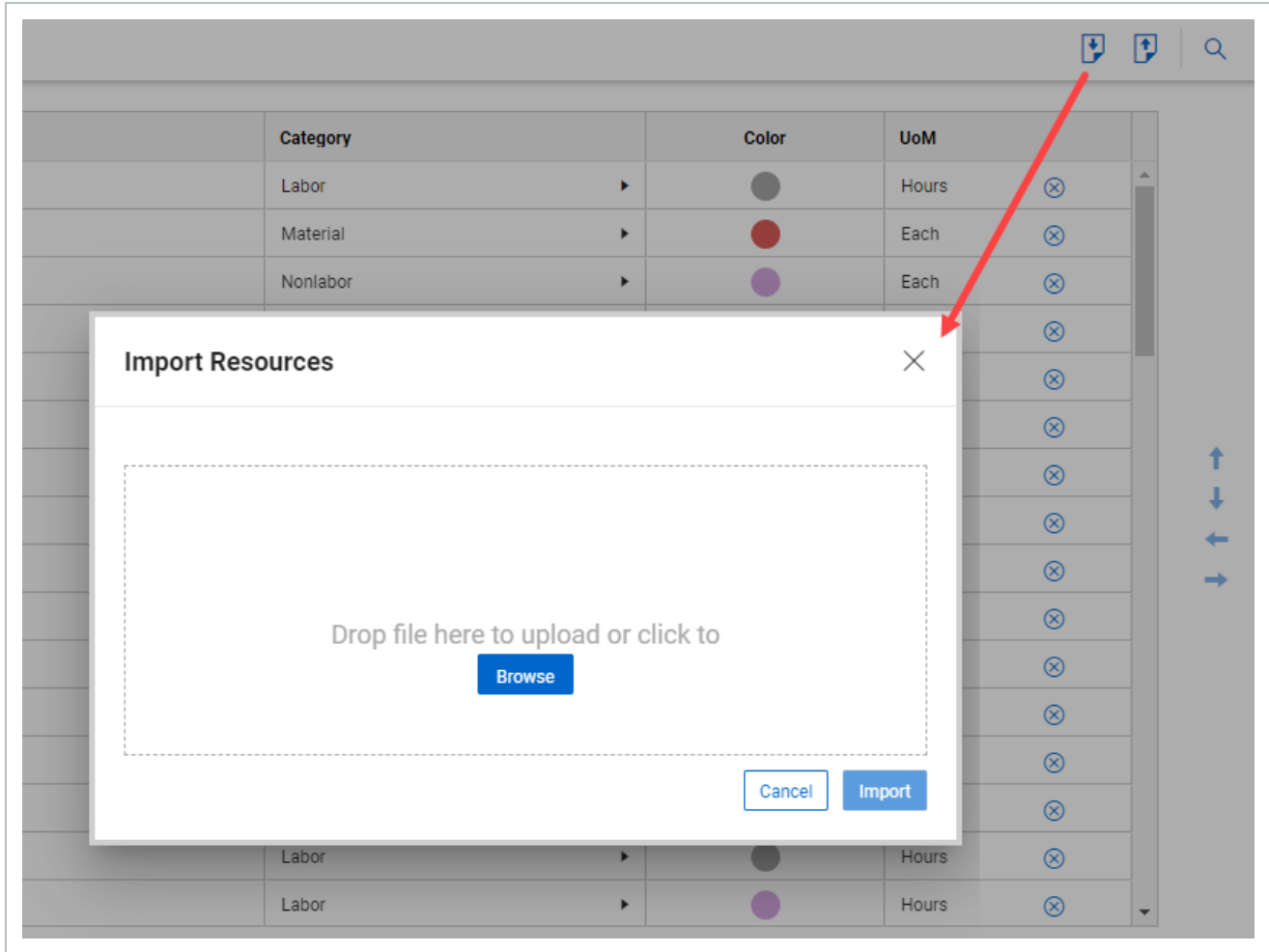


ID	Name	Category	Color	UoM	Default Units/d	Cost/Unit	Assignments	
*EXPT	Export Vessel	Labor	●	Hours	80.00	500000.00	1	⊗
*SURV	Survey Vessel	Labor	●	Hours	80.00	500.00	2	⊗
*FLAY	Flowline Vessel	Labor	●	Hours	80.00	100000.00	1	⊗
SPL-1	Subsea Package Lead - Doiron	Labor	●	Hours	80.00	1.00	47	⊗
SPL-2	Subsea Package Lead - Pyron	Labor	●	Hours	80.00	1.00	167	⊗
SPL-3	Subsea Package Lead - Timte	Labor	●	Hours	80.00	1.00	81	⊗
SPL-4	Subsea Package Lead - Gaston	Labor	●	Hours	80.00	1.00	40	⊗
SPL-5	Subsea Package Lead - Blockhus	Labor	●	Hours	80.00	1.00	36	⊗
SPL-6	Subsea Package Lead - Anderson	Labor	●	Hours	80.00	1.00	17	⊗
SPL-8	Subsea Package Lead - Tavassoli	Labor	●	Hours	80.00	1.00	4	⊗
SPL-9	Subsea Package Lead - Ferguson	Labor	●	Hours	80.00	1.00	10	⊗
Nbl Ops & Eng Serv	Noble Operations and Engineering Services	Labor	●	Hours	8.00	0	0	⊗

Use the indent arrows on the right to create a child resource from the selected resource or to move the resource to a different part of the grid.

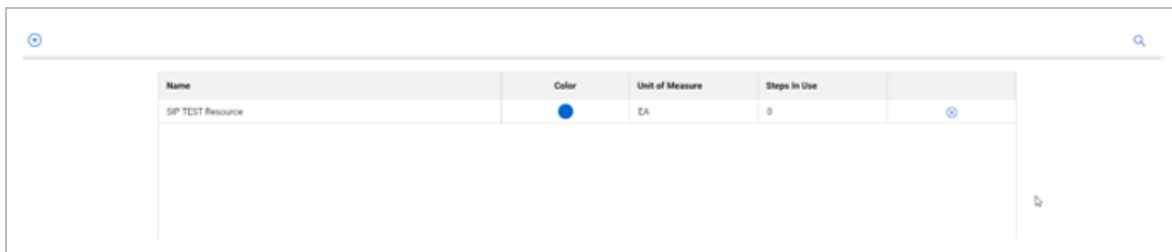
ID	Name	Category	Color	UoM	Default Units/d	Cost/Unit	Assignments	
Kim Test for Keith	Kim Test	Labor	●	Hours	8.00	1.00	⊗	
Robin Tester	Tester	Material	●	Each	1.00	200.00	⊗	
Project resource	project resource	Nonlabor	●	Each	1.00	75.00	⊗	
009	Resource 9	Nonlabor	●	Each	1.00	0	⊗	
Global	Global	New Category	●	Each	1.00	0	⊗	
Srini Import ID	Srini Import Desc	Unique	●	Each	1.00	0	⊗	
Tatyana Reg Test	Ressurs 009	Supply	●	Hver	25.00	5080.00	⊗	
Indent	Indent	Labor	●	Hours	8.00	0	⊗	
SB2		Labor	●	Hours	8.00	0	⊗	
SP	Ski Patroller	Labor	●	Hours	8.00	25.00	⊗	
No UOM	UOM No	Labor	●		1.00	0	⊗	
Jonny B	Bonny J	Labor	●	Hours	8.00	0	⊗	
Baby jon	jonny babe	Labor	●	Hours	2.00	3.00	⊗	
629 Res 1	Res 1	Labor	●	Hours	8.00	0	⊗	
629 Res 2	Res 2	Labor	●	Hours	8.00	0	⊗	
7/12	Resource 3	Labor	●	Hours	8.00	0	⊗	

Resources can be imported using the Excel or Knowledge Library import type. Use the toggles from the Knowledge Library import to select resources to import.

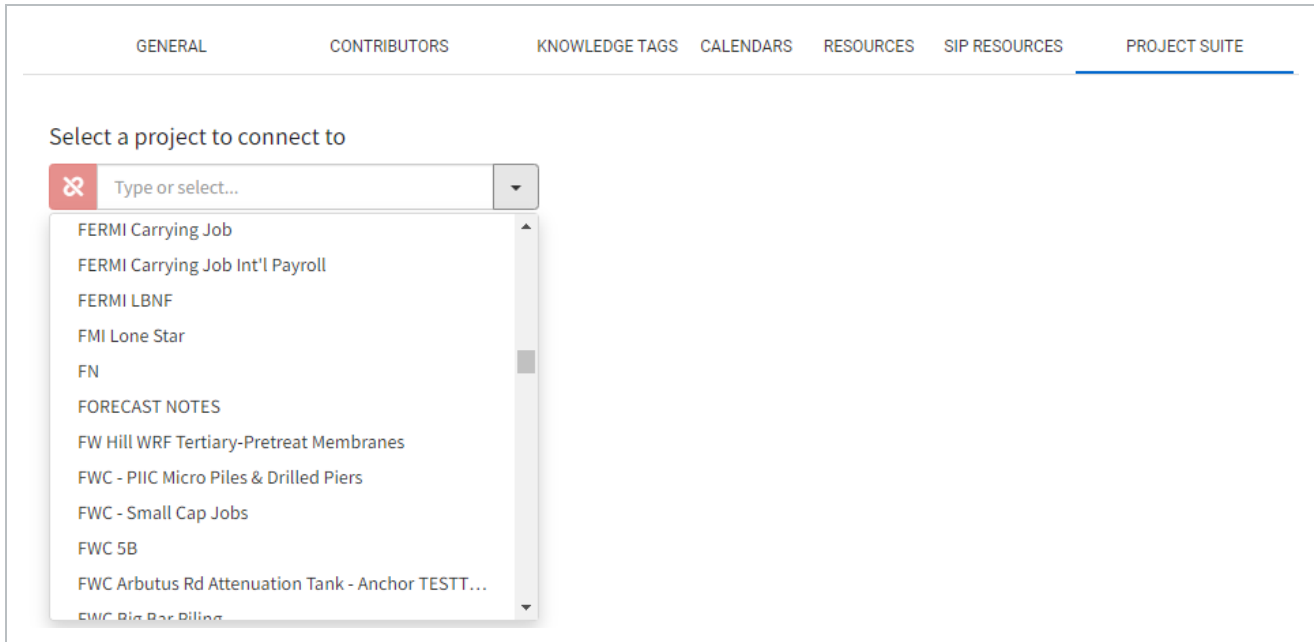


## SIP Resources

On the SIP Resources tab, SIP Resources can be created, edited, deleted, and searched. SIP Resources also shows which step each resource is being used.



## Project Suite



## Print View

The Go To Print View button lets you save a printable version to a PDF file and also customize printable output by modifying the settings in the Page Setup and Gantt Setup tabs.

**1** Save to PDF

**2** Page Setup **3** Gantt Setup

Print settings

Paper Size: Letter (8.5 x 11.0 in)

Orientation: Landscape

Scaling: Default

Header: None

Footer: None

Revert to default

Letter (8.5 x 11.0 in) Landscape - 8 pages

ID - Description	Actions	Start	Finish	At Complet...	September	October 2023
					18 25 02 09 16 23	
EPC - 123	...	20 Dec 2023	18 Apr 2024	87		
WBS SCHED-70.1	...	20 Dec 2023	18 Apr 2024	87		
Activity A1000.12	...	20 Dec 2023	29 Jan 2024	29		
Activity A1010	...	30 Jan 2024	8 Mar 2024	29		
Activity A1020	...	11 Mar 2024	18 Apr 2024	29		
WBS SCHED-70.1.1	...	20 Dec 2023	30 Jan 2024	30		
WBS SCHED-70.1.2	...	20 Dec 2023	30 Jan 2024	30		
WBS SCHED-70.1.3	...	20 Dec 2023	30 Jan 2024	30		
WBS SCHED-70.2	...	20 Dec 2023	18 Apr 2024	87		
Activity A1030	...	20 Dec 2023	29 Jan 2024	29		
Activity A1040	...	30 Jan 2024	8 Mar 2024	29		
Activity A1050	...	11 Mar 2024	18 Apr 2024	29		
WBS SCHED-70.2.1	...	20 Dec 2023	30 Jan 2024	30		
WBS SCHED-70.2.2	...	20 Dec 2023	30 Jan 2024	30		
WBS SCHED-70.2.3	...	20 Dec 2023	30 Jan 2024	30		
WBS SCHED-70.3	...	20 Dec 2023	18 Apr 2024	87		
Activity A1060	...	20 Dec 2023	29 Jan 2024	29		
Activity A1070	...	30 Jan 2024	8 Mar 2024	29		
Activity A1080	...	11 Mar 2024	18 Apr 2024	29		

## Page Setup options

The Paper Size drop-down menu lets you choose several different types of paper sizes.

Print settings

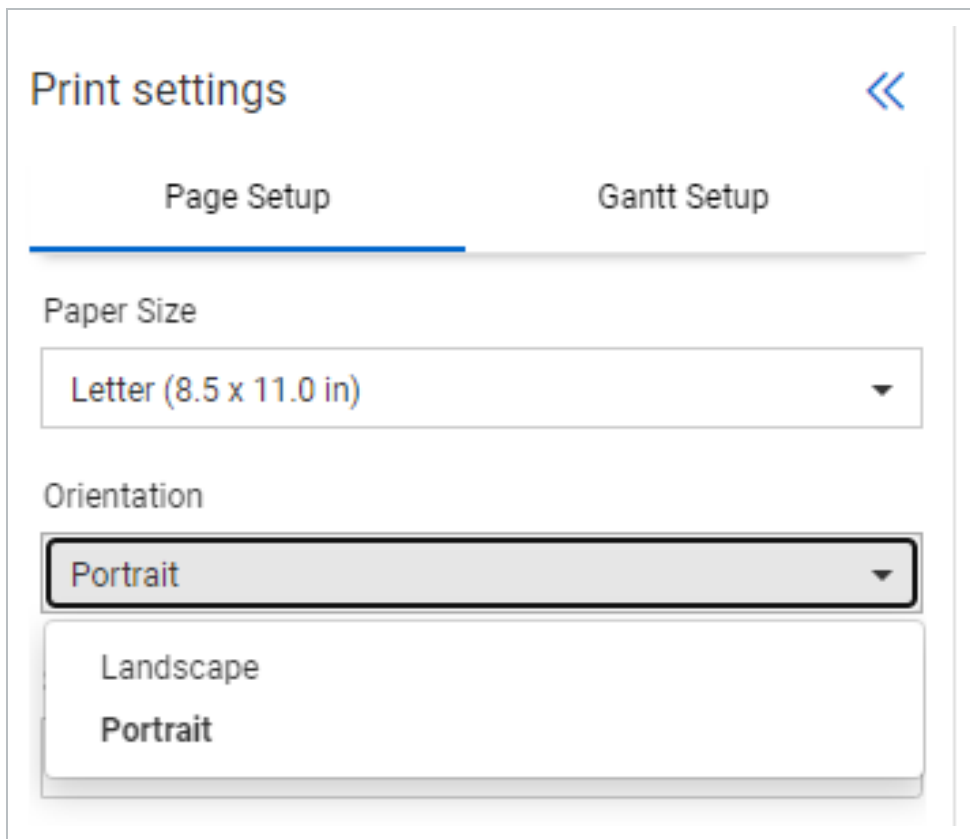
Page Setup Gantt Setup

Paper Size

Letter (8.5 x 11.0 in)

- Letter (8.5 x 11.0 in)
- Legal (8.5 x 14.0 in)
- Tabloid (11.0 x 17.0 in)
- ANSI C (17.0 x 22.0 in)
- ANSI D (22.0 x 34.0 in)
- ANSI E (34.0 x 44.0 in)
- ARCH A (9.0 x 12.0 in)
- ARCH B (12.0 x 18.0 in)
- ARCH C (18.0 x 24.0 in)
- ARCH D (24.0 x 36.0 in)
- ARCH E (36.0 x 48.0 in)
- ARCH E1 (30.0 x 42.0 in)
- ISO A0 (841 x 1189 mm)
- ISO A1 (594 x 841 mm)
- ISO A2 (420 x 594 mm)
- ISO A3 (297 x 420 mm)
- ISO A4 (210 x 297 mm)

The Orientation drop-down menu lets you choose between a landscape or a portrait orientation.



Scaling for the PDF can be set at High, Default, Low or Very low settings.

**Print settings** ⏪

Page Setup      Gantt Setup

---

Paper Size

Letter (8.5 x 11.0 in) ▼

Orientation

Landscape ▼

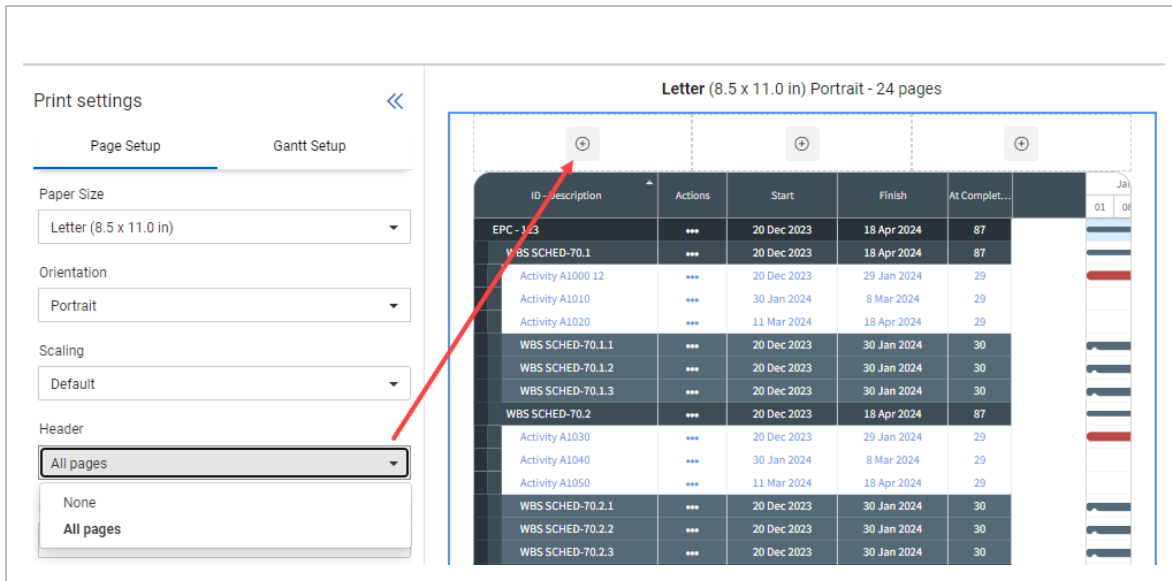
Scaling

Default ▼

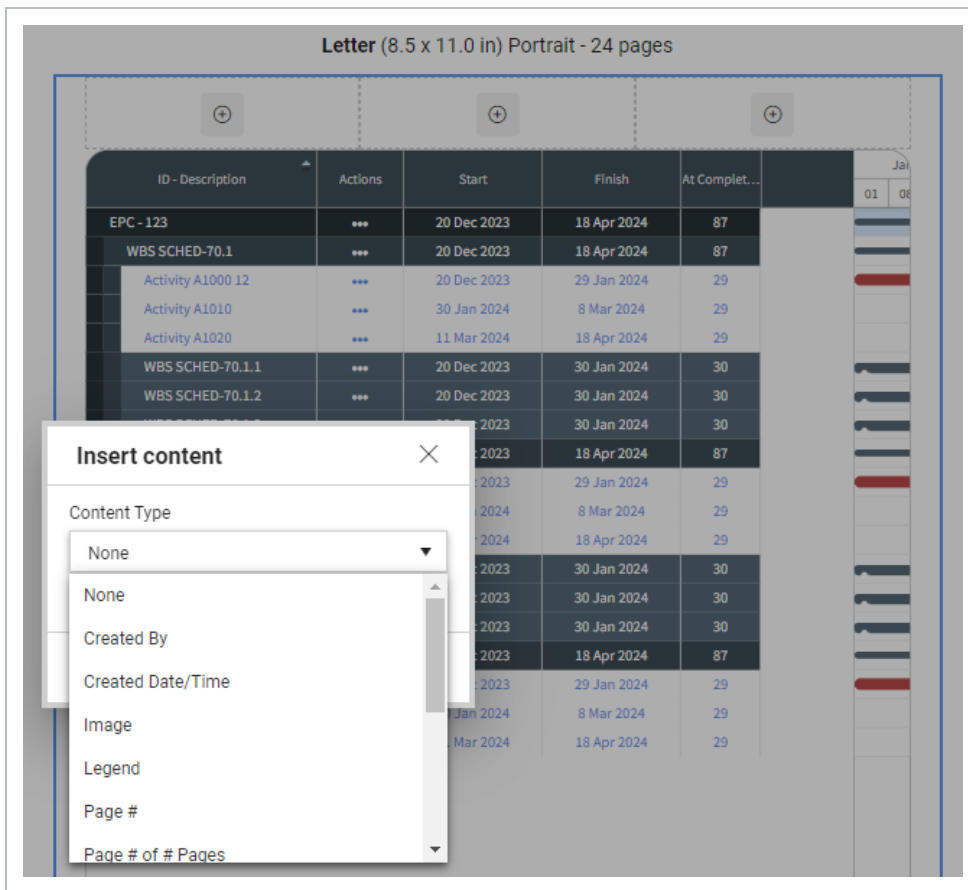
- High
- Default**
- Low
- Very Low

All pages ▼

The header drop-down menu lets you add headers to the PDF.



Select one of the three header add icons to insert one of the header content types from the drop-down menu.



The footer drop-down menu lets you add footers to the PDF.

Print settings <<

Page Setup Gantt Setup

Paper Size  
Letter (8.5 x 11.0 in)

Orientation  
Portrait

Scaling  
Default

Header  
All pages

Footer  
All pages  
None  
All pages

Revert to default

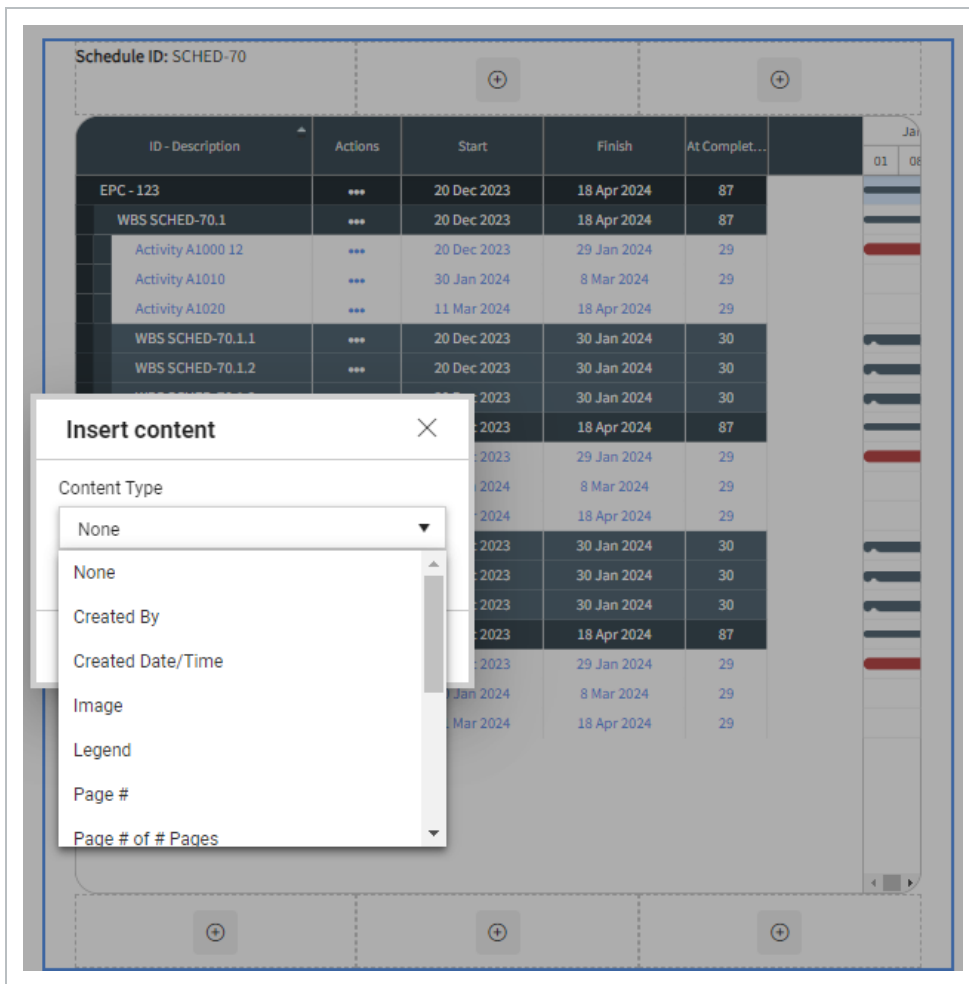
Letter (8.5 x 11.0 in) Portrait - 24 pages

Schedule ID: SCHED-70

ID - Description	Actions	Start	Finish	At Complet...
EPC - 123	...	20 Dec 2023	18 Apr 2024	87
WBS SCHED-70.1	...	20 Dec 2023	18 Apr 2024	87
Activity A1000.12	...	20 Dec 2023	29 Jan 2024	29
Activity A1010	...	30 Jan 2024	8 Mar 2024	29
Activity A1020	...	11 Mar 2024	18 Apr 2024	29
WBS SCHED-70.1.1	...	20 Dec 2023	30 Jan 2024	30
WBS SCHED-70.1.2	...	20 Dec 2023	30 Jan 2024	30
WBS SCHED-70.1.3	...	20 Dec 2023	30 Jan 2024	30
WBS SCHED-70.2	...	20 Dec 2023	18 Apr 2024	87
Activity A1030	...	20 Dec 2023	29 Jan 2024	29
Activity A1040	...	30 Jan 2024	8 Mar 2024	29
Activity A1050	...	11 Mar 2024	18 Apr 2024	29
WBS SCHED-70.2.1	...	20 Dec 2023	30 Jan 2024	30
WBS SCHED-70.2.2	...	20 Dec 2023	30 Jan 2024	30
WBS SCHED-70.2.3	...	20 Dec 2023	30 Jan 2024	30
WBS SCHED-70.3	...	20 Dec 2023	18 Apr 2024	87
Activity A1060	...	20 Dec 2023	29 Jan 2024	29
Activity A1070	...	30 Jan 2024	8 Mar 2024	29
Activity A1080	...	11 Mar 2024	18 Apr 2024	29

Select one of the three footer add icons to insert one of the footer content types from the drop-down menu.





## Gantt Setup options

The Gantt Start Date and Gantt End Dates lets you choose beginning and end dates to show on the Gantt chart.

### Print settings ⏪

Page Setup      Gantt Setup

Gantt Start Date

Gantt End Date

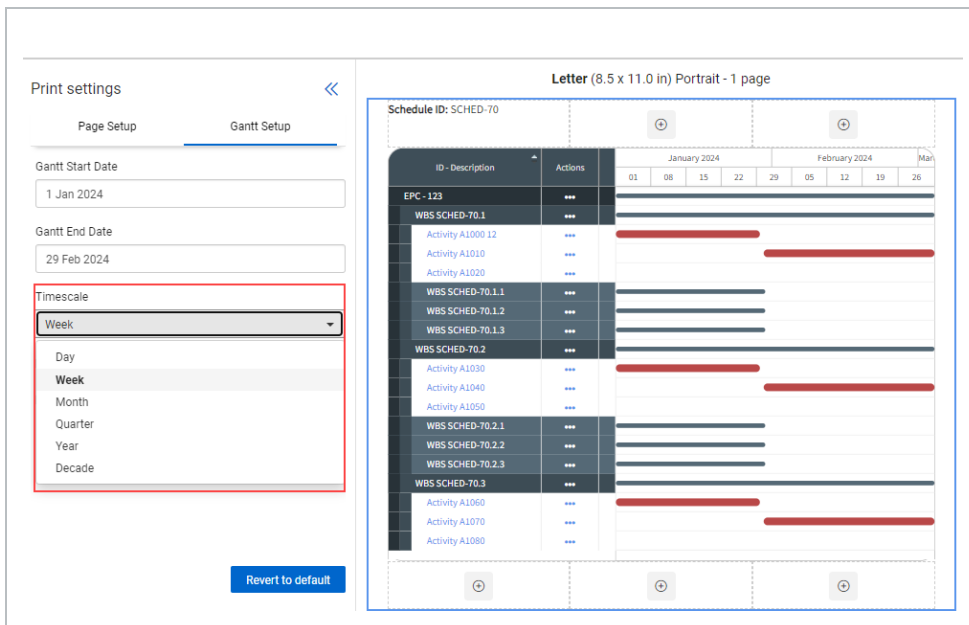
Timescale

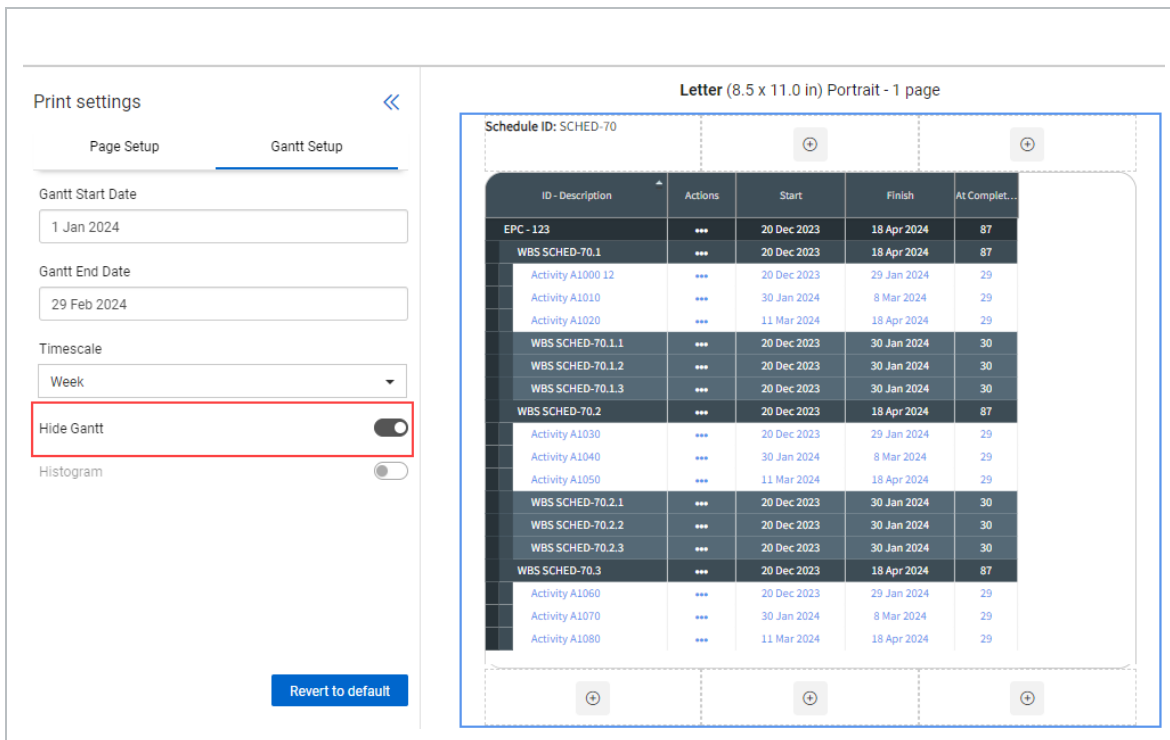
Hide Gantt

Histogram

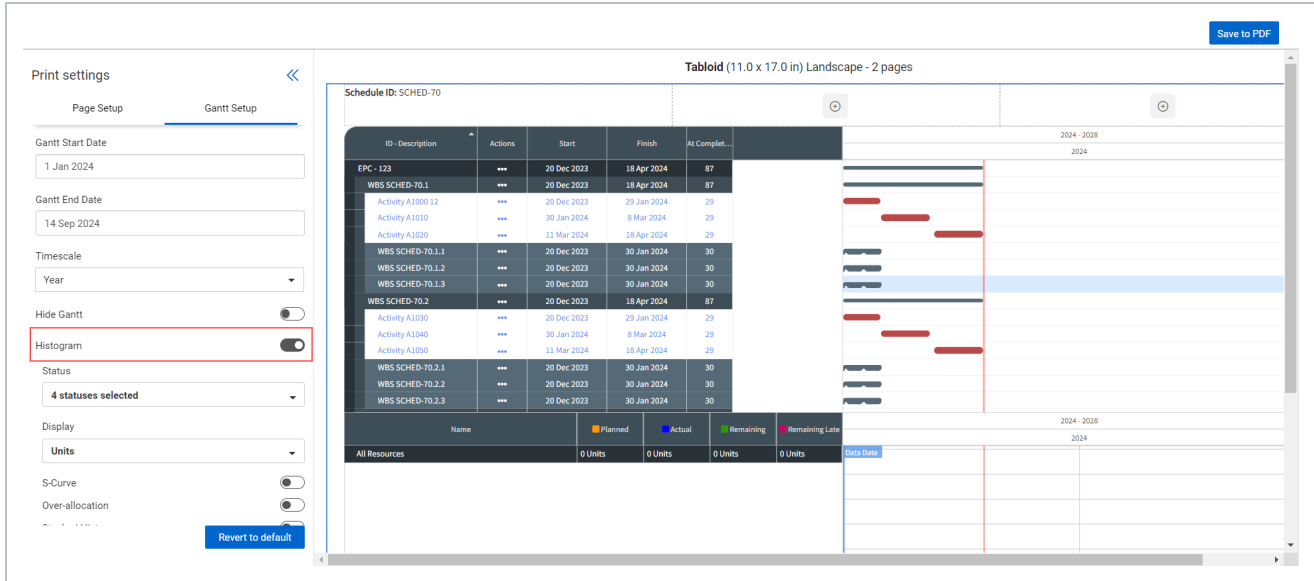
The Timescale drop-down menu lets you select a period of time to show on the Gantt chart.



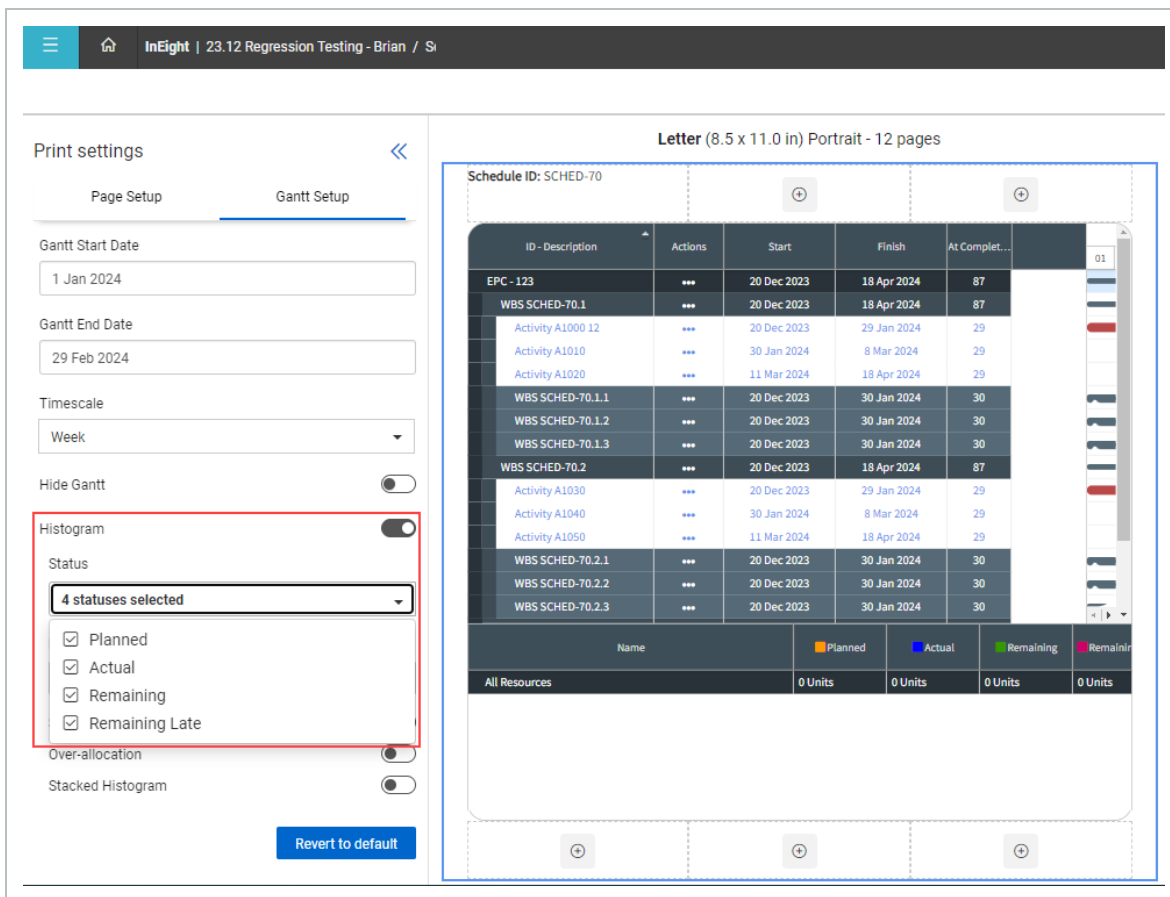
The Hide Gantt toggle lets you hide the Gantt chart from the PDF.



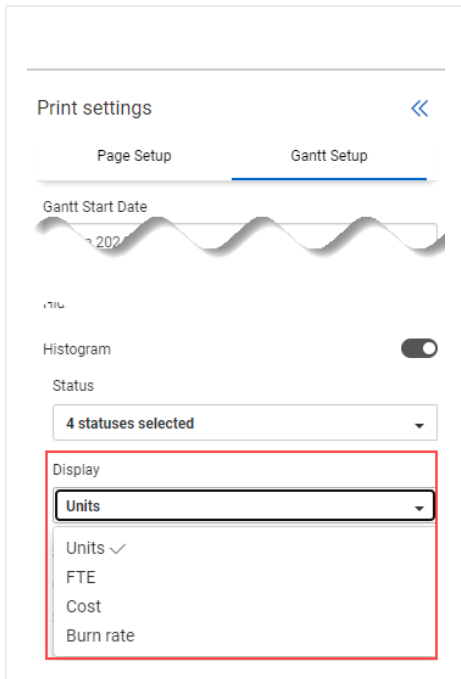
The Histogram toggle controls the display of the histogram in the PDF.



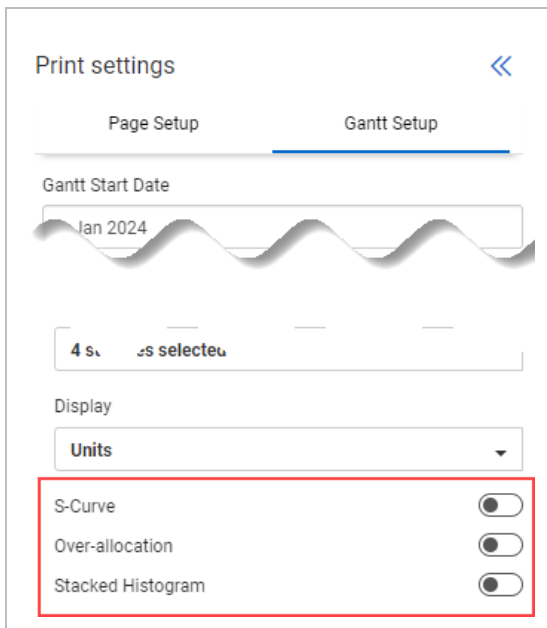
The Status field under Histogram lets you show the Planned, Actual, Remaining and Remaining Late columns in the PDF.



Resources can be displayed as Units, FTE, Cost or Burn Rate in the Display drop-down.

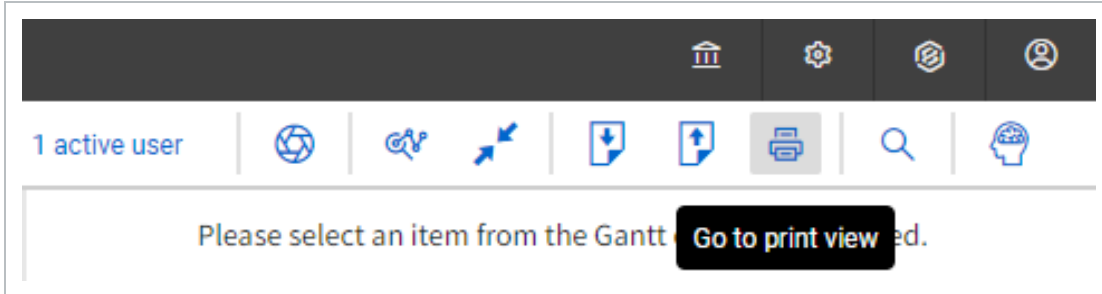


Toggles for S-Curve, Over-allocation and Stacked Histogram can also be turned On or Off.

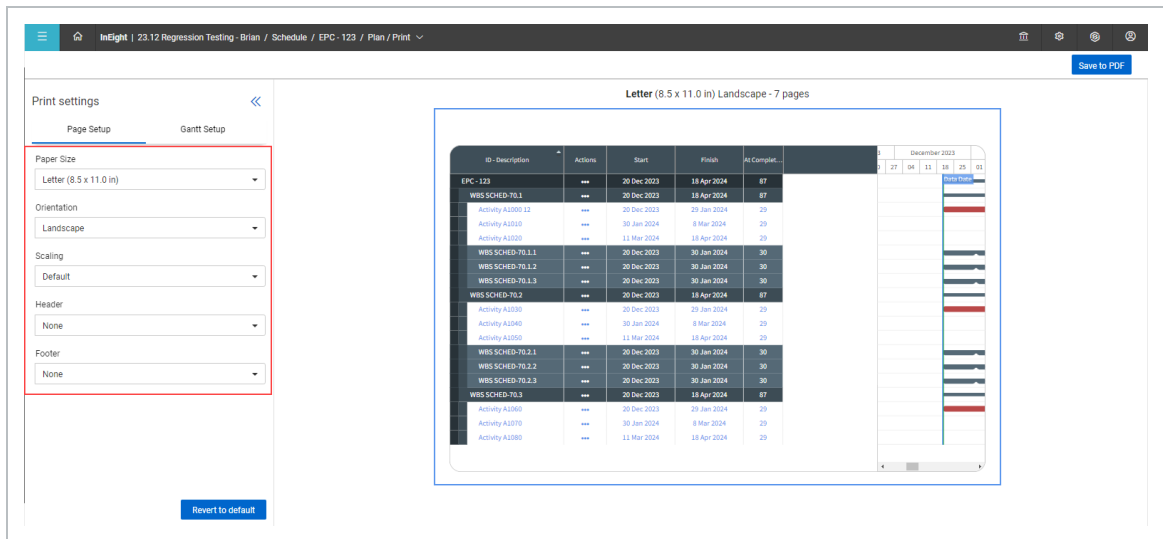


## Save to PDF

1. In Plan view, click the **Go to print view** icon at the top right of the page.

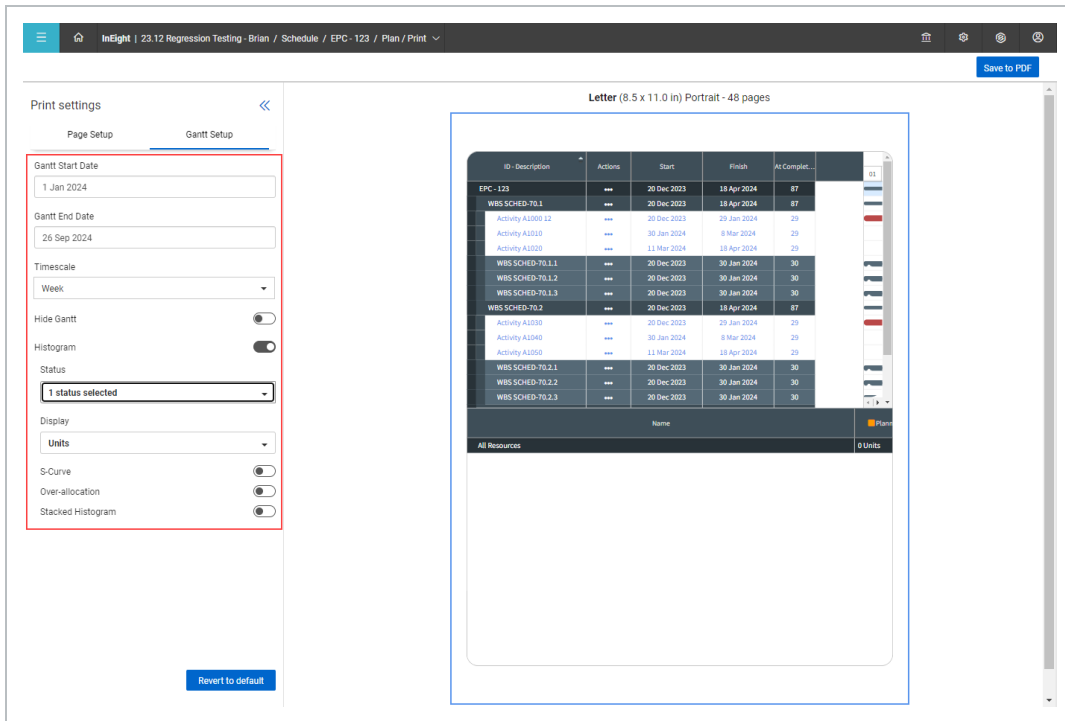


The print view defaults to the Page Setup tab where you can change the page setup paper size, orientation, scaling, header and footer settings.

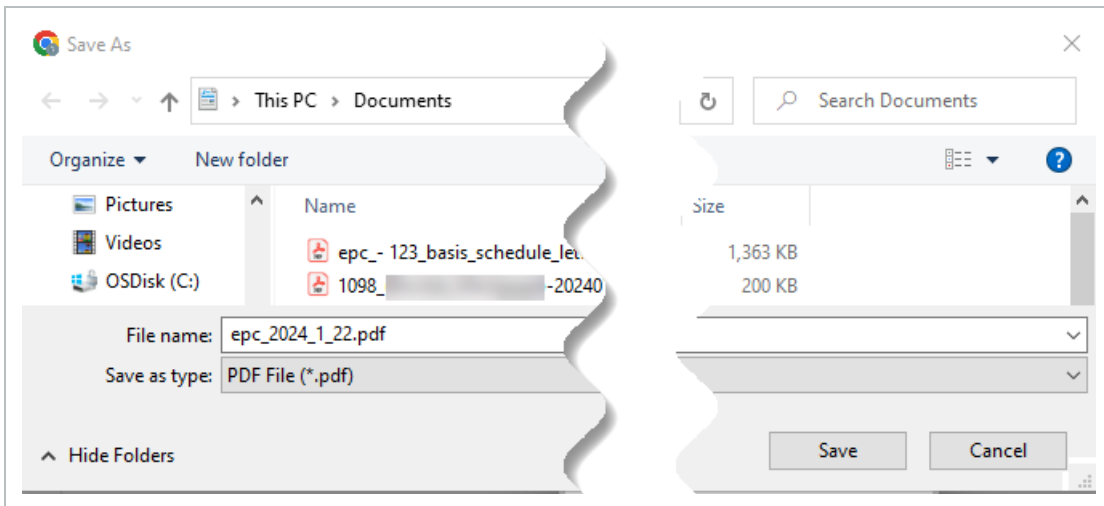


On the Gantt tab, you can select Gantt start and end dates, a timescale time period, an

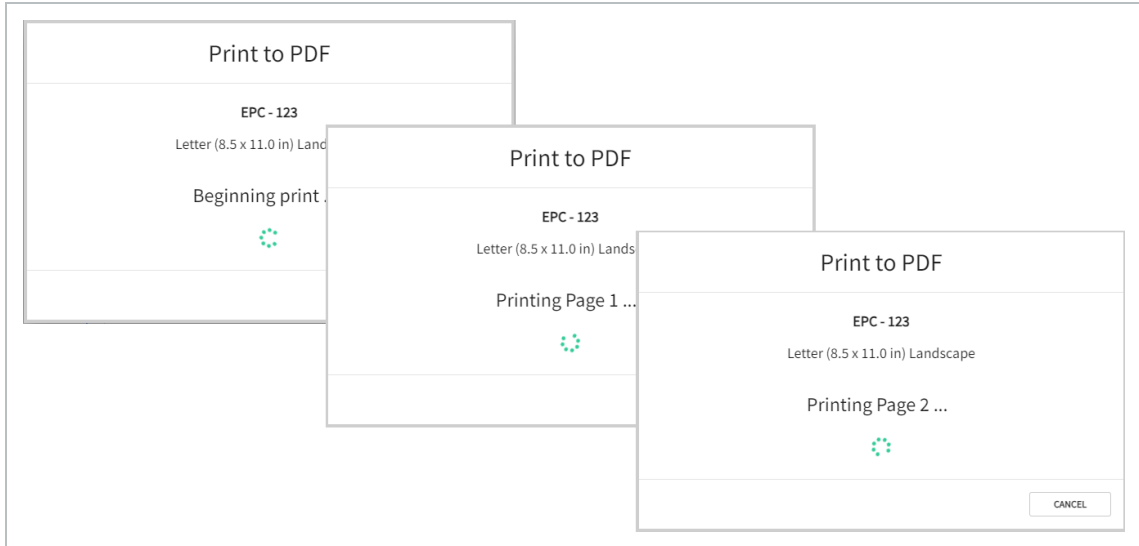
option to show or hide the Gantt chart, and the option to show the histogram.



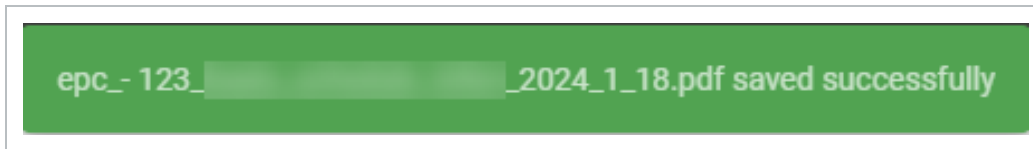
2. Click **Save to PDF**.
3. In the Save As window, select a file name and choose a file location, then select **Save**.



The Print to PDF windows will show printing status.



A success message will show when the PDF printing is complete.





# LESSON 3 – USER ACCESS

## Schedule Navigation

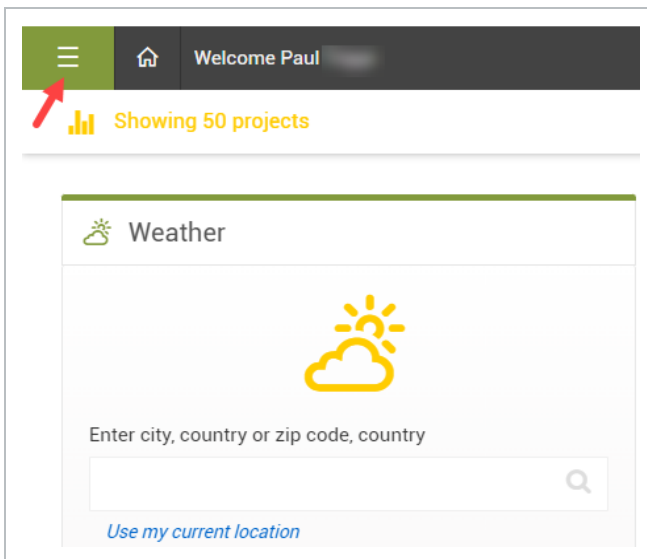
### Main Menu

The Main menu navigation dynamically changes based on the selection of a project or an organization, your level of permissions, and the application you choose. One of the Main menu's functions is to let you connect and share data between all Eight applications involved in managing a project. This lets project management workflows to pass between jobsite, field office, and front office seamlessly in a consistent and standardized user interface. More information on the Main menu can be found [here](#).

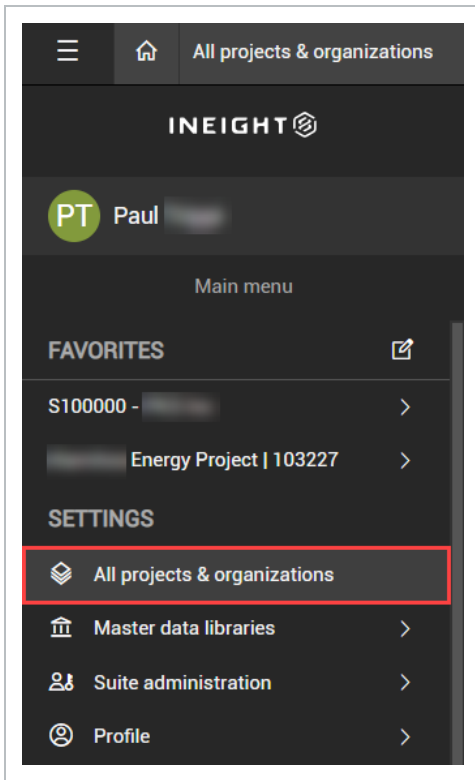
The Schedule module can be accessed at the organization or project levels, as both paths will navigate you to the same Schedule landing page.

### Schedule Access from Main Menu

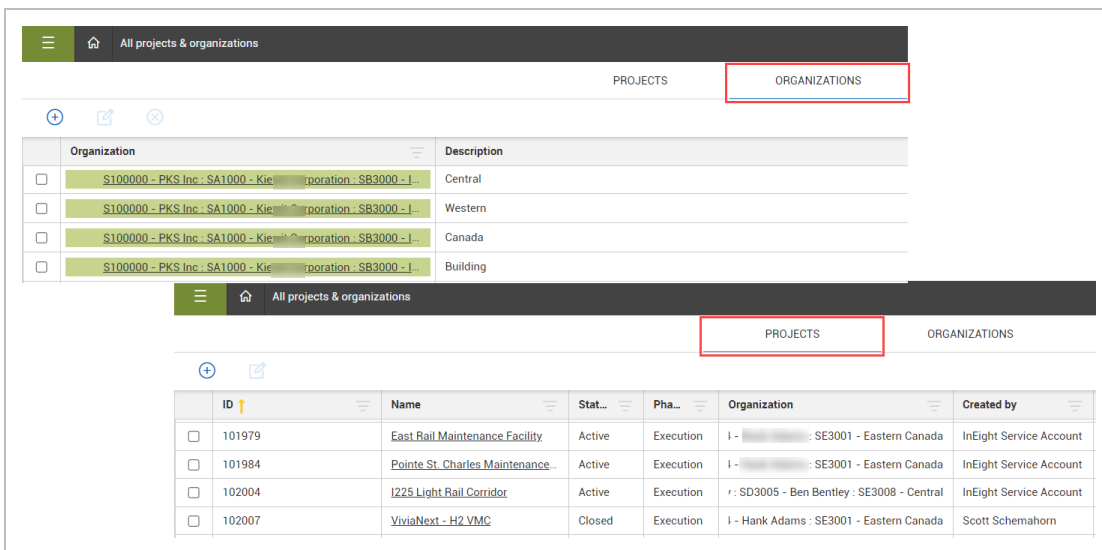
1. Click on the Main menu icon.



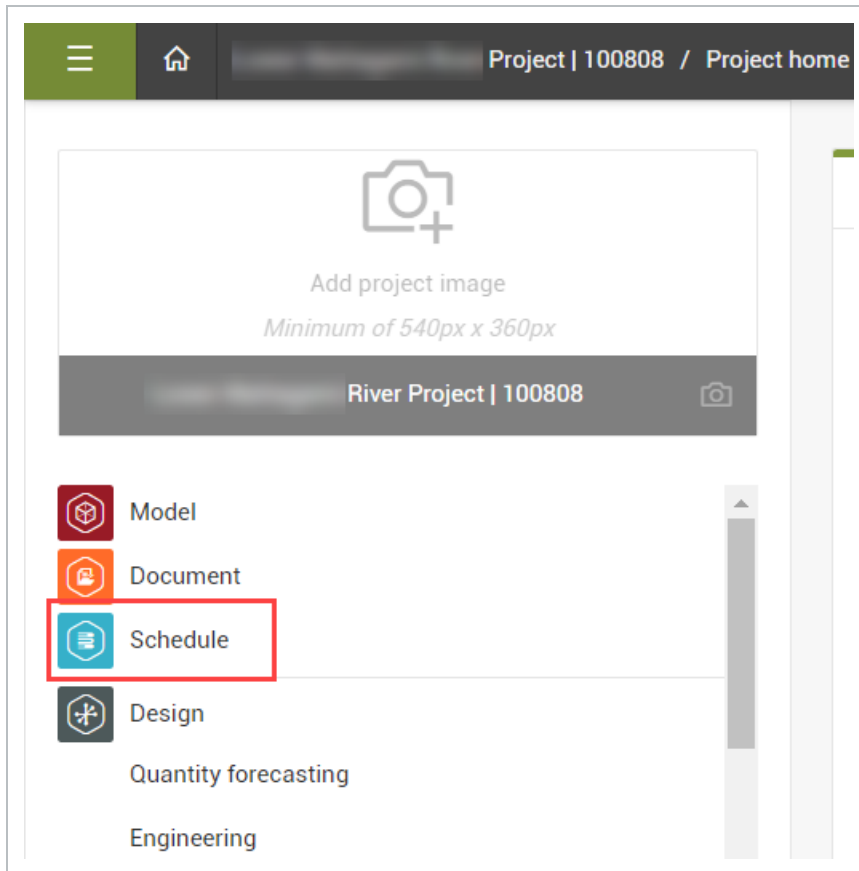
2. Select **All projects & organizations** from the Main menu.



3. Click on either a project or an organization.



## 4. Select Schedule



## User Setup and Roles

### Schedule Roles

#### Schedule Creator

The Schedule Creator role is typically a planner or scheduler at an organization. The user can create schedules and has full rights to those schedules.

Schedule creators can:

- Create / delete their own schedules
- Use Knowledge Library and Smart Planning to inherit schedules and subnets
- Use Productivity Rates
- Assign contributors to schedules for markup

- Manage markup process
- Manage Review and consolidation process
- Contribute to other schedules when assigned as a schedule contributor

## Project Member

The Project Member role can be wide range of organizational roles. The organization roles can be Supervisors, Foremen, SME's, External Subs, Customers, anyone that a project would like to contribute to the project. The Project Member role serves as a contributor to projects assigned to them by the administrator or project creator.

## Administrator

The Administrator role in Schedule can also be considered the Super User. This role has full rights to everything in the customer instance of Schedule. The typical person in a company that would have these permissions is a senior planner who is a super user or a Planning/Scheduling leadership role.

In addition to the permissions described for the Schedule Creator and Contributor Role the Administrator can do the following:

- Manage the Knowledge Library (Schedules, Productivity Rates, Knowledge Tags, Risks)
- Create, delete, and modify any schedule
- Access to the system settings to add users to the instance

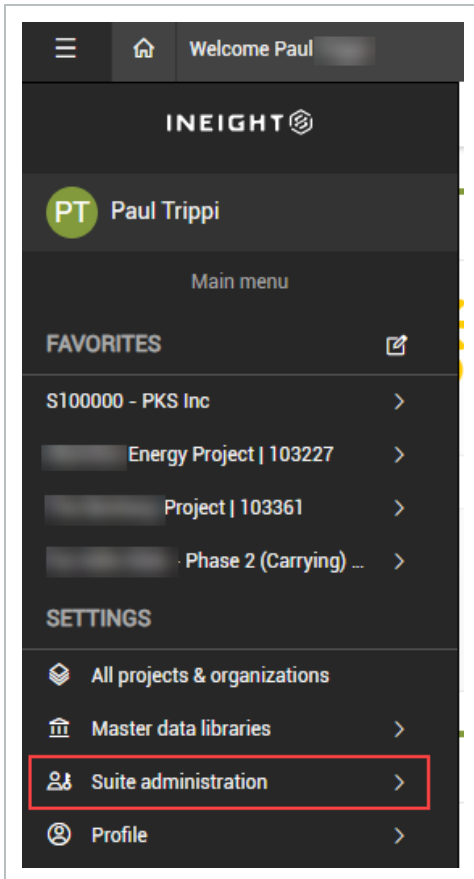
## Knowledge Library Administrator

The Knowledge Library Administrator role is primarily responsible for creating and updating Knowledge Library tags, schedules, deliverable rates, and Register Items.

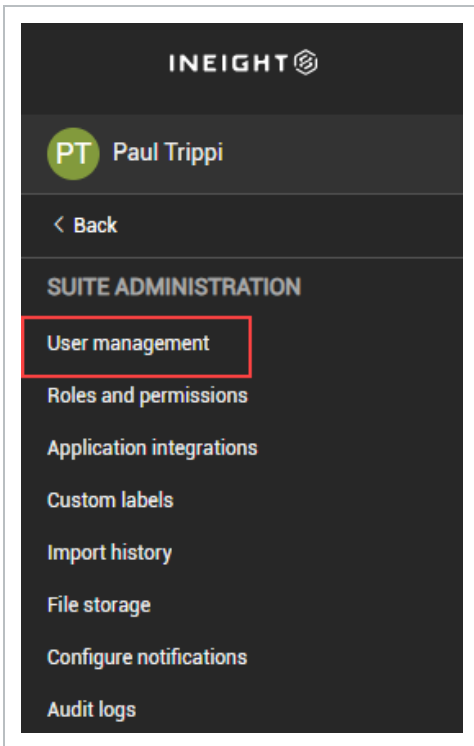
## User Creation

### Create a New User

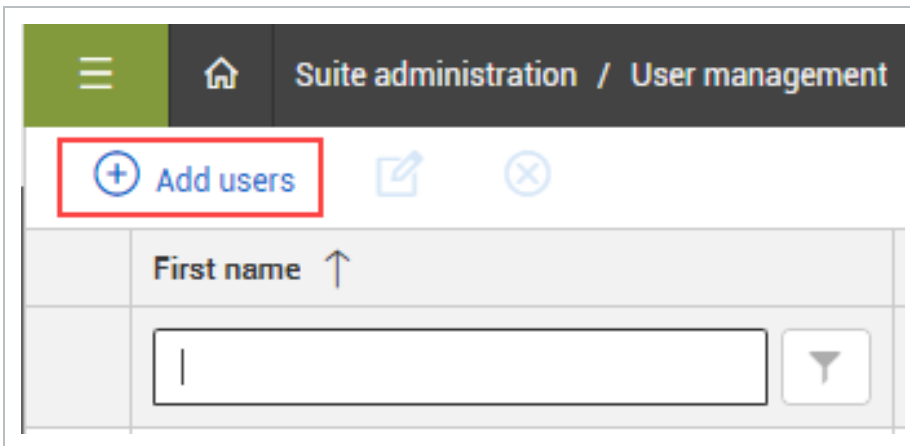
1. Click **Suite Administration**.



2. Select **User Management**.



3. Click the **Add Users**.



4. In the Details tab, enter the user contact information.

### Add users

×

**1** DETAILS **2** ROLES

\* First name  \* Last name

\* Email address  \* Start date

\* End date  Vendor

*Hint: type vendor name or ID*

---

#### Contact

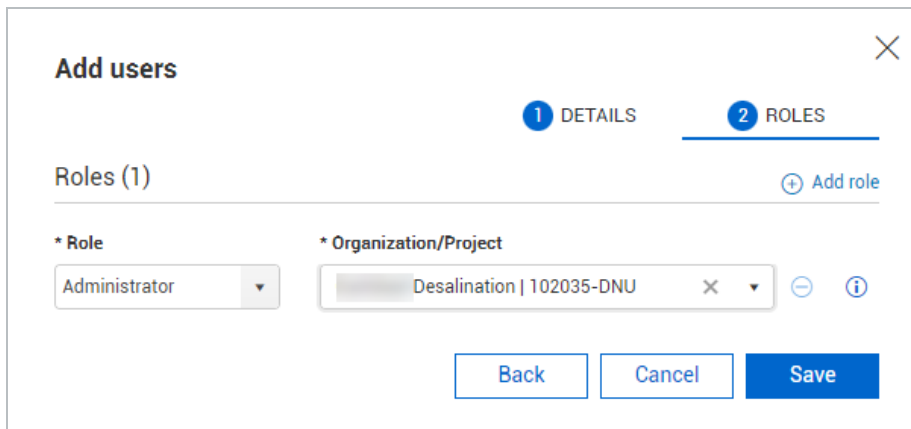
Office number  Mobile number

Country / Region  Address 1

Address 2  City

State  Postal / Zip code

5. In the Roles tab, select the **Role** and **Organization**.



**Add users** ✕

1 DETAILS **2 ROLES**

Roles (1) ➕ Add role

\* Role: Administrator

\* Organization/Project: Desalination | 102035-DNU ✕ ⊖ ℹ

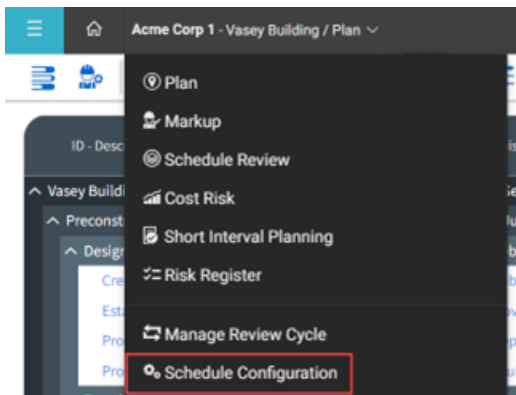
Back Cancel Save

6. Select **Save**.

## Schedule Contributor Setup

### Schedule Contributors

Schedule Contributors are users assigned to the schedule. The contributors and their roles on a schedule are managed from the Schedule Configuration register.



### Contributor Role Types

Project Contributor role types pertain to the user and are specific to each project. Users can be assigned different contributor roles for each project.



## Markup

The Markup role grants access to markup and review cycles on a schedule. Selecting this on will allow this user to be assigned to activities for markup.

## Short Interval Planner

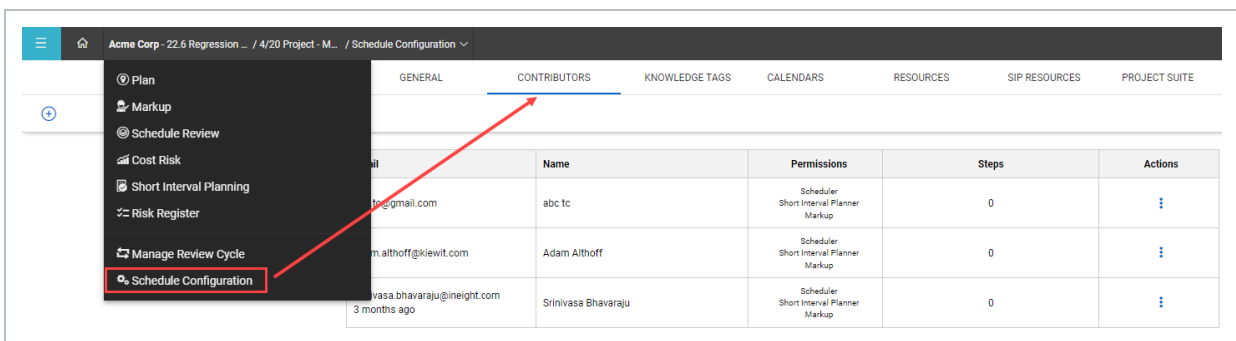
This role grants access to the Short Interval Planning (SIP) section of InEight Schedule. Users in this role can be assigned to activities for field execution planning. For details on how to use the SIP Functionality, see chapter 6.

## Scheduler

The Scheduler role has all access and privileges of the Markup and Field Execution Planner roles. Additionally, schedulers can adjust items in the Planning view, such as details in the Iris, logic in the Gantt chart, and resources.

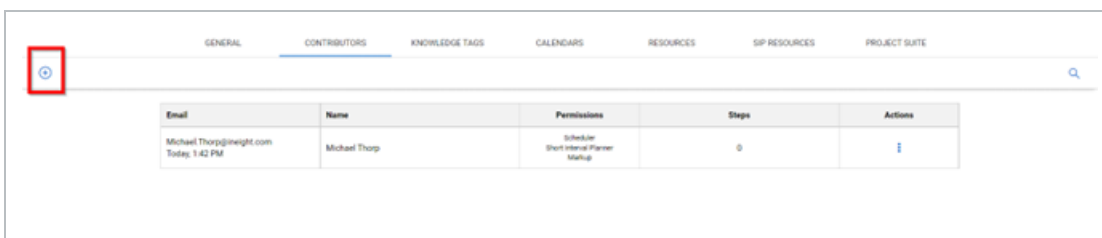
## Selecting Project Contributors

1. In Schedule Configuration, go to the **Contributors** tab.



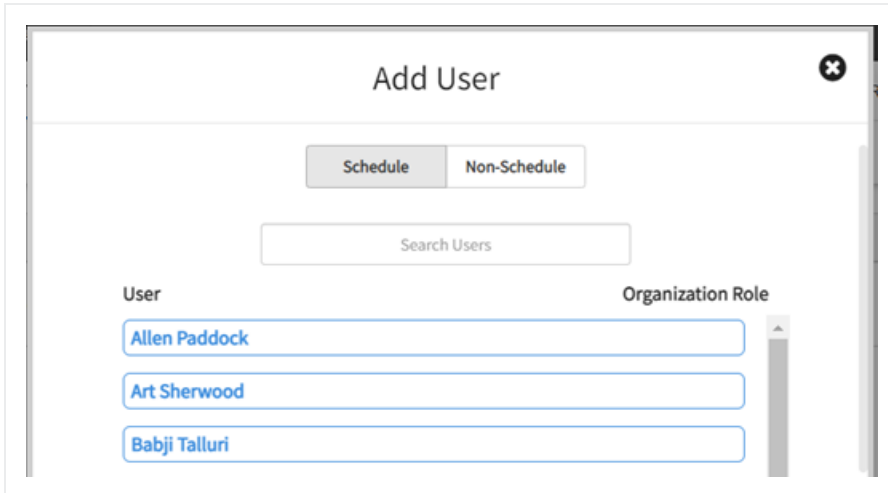
- All Project Contributors are listed in the register

2. To add a new user, click **Add User**.



- The Add User Window opens

- Schedule and Non-Schedule options are at the top of the window. Select **Schedule** to list all users currently registered in Schedule.
- Click on the user(s) to be added as project contributors.

**NOTE**

Switching to Non-Schedule changes the window to a registration form which lets guest user to be added to the project. White toggle means it's turned *Off* and when it's dark, it's turned *On*.

- Once selected, select **On** each role the new user should have.
- Click **Add**.

# LESSON 4 – PACKAGES AND ACTIVITIES

## Activity Productivity Rates

Productivity rates allow schedulers to establish a productivity factors for activities and thus scale durations accordingly.

**NOTE** These rates also aid in generating a bottom-up cost for the project.

To set the productivity factor, use the built-in application in the Iris' Smart Planning Section.

### Set the productivity factor

1. Select an **activity**.

Construction	05 Jul 21 12 Apr 23	463	...					
Early Sitework	05 Jul 21 29 Apr 22	215	...					
Foundations	16 Mar 22 09 Aug 22	105	...				1	
Grade & Support Be...	16 Mar 22 12 Apr 22	20	...					24
Stub-in Utilities	13 Apr 22 03 May 22	15	...					24
Drainage	04 May 22 24 May 22	15	...					24
Pour & Cure	25 May 22 26 Jul 22	45	...					24
Enclosures	27 Jul 22 09 Aug 22	10	...					24


2. In Iris > **Smart Planning** section, select the **set productivity rate** option for the activity duration field.

**ID**  
A1000

**Description**  
Activity A1000

**Calendar**  
Project Default

**Smart Planning** ^

<b>Planned (d)</b> 0	<b>Cost (\$)</b> 0 
<b>Remaining (d)</b> 0 <b>R</b>	<b>Start</b> <input type="checkbox"/> 0
<b>Actual (d)</b> 0	<b>Finish</b> <input type="checkbox"/> 0
<b>At Complete (d)</b> 0	<b>Percent Complete</b> Dur ▾ 0

---

<b>Early Start</b> 6 Oct 2022	<b>Early Finish</b> 6 Oct 2022
<b>Late Start</b> 31 Dec 1969	<b>Late Finish</b> 31 Dec 1969
<b>Planned Start</b> 6 Oct 2022	<b>Planned Finish</b> 6 Oct 2022
<b>Total Float</b>	<b>Free Float</b>

- A new window opens with the Productivity Rate Calculator and Knowledge Library Suggestions

R

Estimate the duration and cost of this activity using a Productivity Rate.

Unit Rate

Manhour Rate

**Rate**

**Description**

Output <span style="color: #ff9800;">?</span> *	UOM <span style="color: #ff9800;">?</span>	Hours/unit *	\$/unit
<input style="width: 100%;" type="text" value="1"/>	<input style="width: 100%;" type="text"/>	<input style="width: 50%; border: 1px solid #ccc;" type="text" value="Hours"/> <input style="width: 50%; border: 1px solid #ccc;" type="text" value="328"/>	<input style="width: 100%;" type="text" value="0"/>

**Work**

**How many units?\***

**Crew/Equip Count \***

Remaining duration is currently **41 days**  
**1 unit of Engineering** with **1 crew** will take **41 days**

**Productivity Rate Suggestions**

**Act 1**  
 days @ \$5MM per 1,250.00 Sec  
 1 Sec will take **0 days** and cost **\$4K**

**Srin new act**  
 555.0000 hours @ \$2 per Sec  
 1 Sec will take **555 days** (555 hours ) and cost **\$2**

CANCEL

APPLY RATE

## Using the Productivity Rate Calculator

In the top section, schedulers establish the package of work to be conducted. Here, you enter the values for the calculator to use to determine the base productivity rate:

When you select the Unit Rate method, the following fields are shown.

R

Estimate the duration and cost of this activity using a Productivity Rate.

Unit Rate
Manhour Rate

**Rate**

**Description**

**Output** ?\*

**UOM** ?

**Hours/unit** \*

Hours ▾

**\$/unit**

**Work**

**How many units?\***

**Crew/Equip Count \***

Remaining duration is currently **41 days**  
**1 unit of Engineering** with **1 crew** will take **41 days**

**Productivity Rate Suggestions**

**Act 1**  
 days @ \$5MM per 1,250.00 Sec  
 1 Sec will take **0 days** and cost **\$4K**

**Srin new act**  
 555.0000 hours @ \$2 per Sec  
 1 Sec will take **555 days** (555 hours ) and cost **\$2**

Q

ADOPT ▲

ADOPT ▼

CANCEL

APPLY RATE

Field	Description
Activity Description	Activity this Productivity Rate is for
Output	Output quantity for a single package (in the respective Unit of

Field	Description
	Measure)
UOM	Unit of Measure description
Time/ "Output & UoM"	Time (Hours/Days/Weeks) to complete the output established
\$/"Output & UoM"	Cost to complete the output established

When you select the Manhour Rate method, the following fields are shown.

R

Estimate the duration and cost of this activity using a Productivity Rate.

Unit Rate
Manhour Rate

---

**Rate**

**Description**

WBS SCHED-99.2

Output ?*	UOM ?	Manhours	\$/unit
1		2920	0

---

**Work**

<b>How many manhours?*</b>	<b>Crew/Equip Count *</b>
2920	1

Remaining duration is currently **365 days**

**1 unit** of **WBS SCHED-99.2** with **1 crew** will take **365 days**

**Productivity Rate Suggestions** 🔍

No suggestions found. ⬆️

CANCEL
APPLY RATE

All of the Manhour Rate fields are the same as the Unit Rate Fields, with the exception that the Manhour Rate uses Manhours and the work calculates with manhours instead of units.

Output <sup>?</sup> *	UOM <sup>?</sup>	<b>Manhours</b>	\$/unit
<input type="text" value="1"/>	<input type="text"/>	<input type="text" value="2920"/>	<input type="text" value="0"/>
<b>Work</b>			
<b>How many manhours?*</b>		<b>Crew/Equip Count *</b>	
<input type="text" value="2920"/>		<input type="text" value="1"/>	

Under the Work subheader, schedulers can define the variables on the current project that the productivity rate will be factored against:

Field	Description
How many “manhours”?	Total quantity of manhours of effort to be expended
Crew/Equipment Count	Total Crews or Equipment assigned to complete the work

After all the variables have been entered, Schedule provides a summary of the calculation.

### Using the Knowledge Base Suggested Rates

The Knowledge Base pulls in suggested productivity rates based on past packages that are similar in their descriptions, associated knowledge tags , and benchmark selection.



R

Estimate the duration and cost of this activity using a Productivity Rate.

Unit Rate

Manhour Rate

---

**Rate**

**Description**

Engineering

Output ?*	UOM ?	Hours/unit *	\$/unit
1		Hours ▾ 328	0

---

**Work**

**How many units?\***

1

**Crew/Equip Count \***

1

Remaining duration is currently **41 days**  
**1 unit of Engineering** with **1 crew** will take **41 days**

**Productivity Rate Suggestions**

**Act 1** ADOPT ▲

days @ \$5MM per 1,250.00 Sec

1 Sec will take **0 days** and cost **\$4K**

**Srin new act** ADOPT ▼

555.0000 hours @ \$2 per Sec

1 Sec will take **555 days** (555 hours ) and cost **\$2**

CANCEL

APPLY RATE

To select a suggestion, click **Adopt**. This will automatically fill in the Productivity Rate Calculator with the values from the Knowledge Library.

**NOTE** You can still make adjustments to the rate for the current project after adopting the suggestion.

## Calculate Productivity Rates

1. Go to the Knowledge Base productivity rate suggestions and **Adopt** a productivity rate.
2. Set or change the amount of work and crew size.

**R**

Estimate the duration and cost of this activity using a Productivity Rate.

**Unit Rate** | **Manhour Rate**

**Rate**

**Description**

Engineering

Output ?*	UOM ?	Hours/unit *	\$/unit
1		Hours ▾ 328	0

**Work**

<b>How many units?*</b>	<b>Crew/Equip Count *</b>
1	1

Remaining duration is currently **41 days**  
**1 unit of Engineering** with **1 crew** will take **41 days**

**Productivity Rate Suggestions**

**Act 1**  
days @ \$5MM per 1,250.00 Sec  
1 Sec will take **0 days** and cost **\$4K**

**Srin new act**  
555.0000 hours @ \$2 per Sec  
1 Sec will take **555 days** (555 hours ) and cost **\$2**

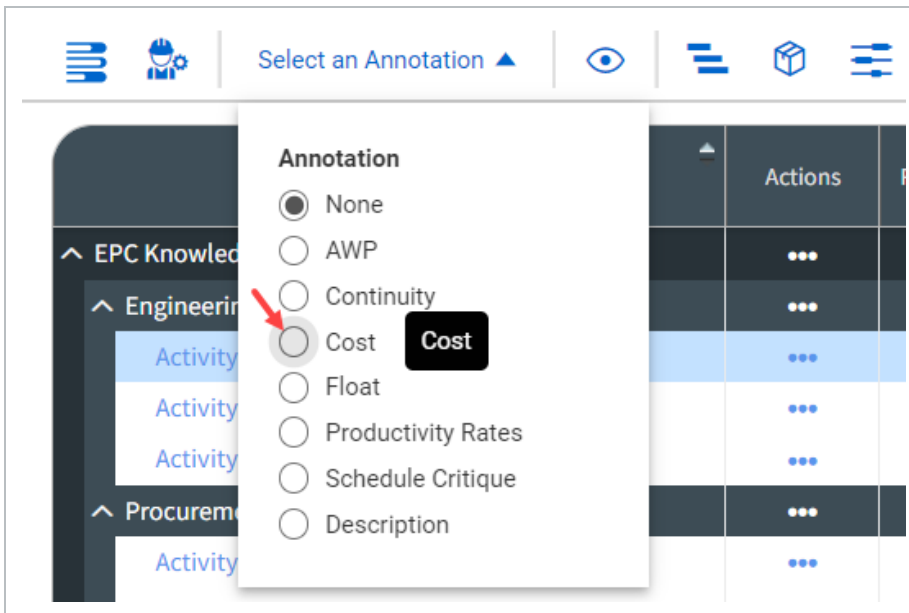
**ADOPT** **ADOPT**

**CANCEL** **APPLY RATE**

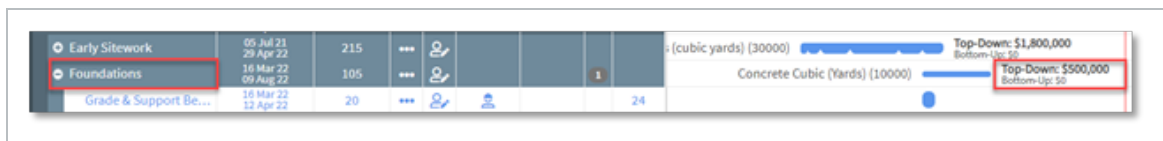
**NOTE**

Pay attention to how this impacts the activity duration and cost

3. Click **Apply Rate** when complete.
4. Open the Annotation drop-down menu and select **Cost**.



- Now, you can view your project's bottom-up and top-down costs



## Create Activities

There are two ways to conceptualize activity creation within InEight Schedule and depending on your intended outcome, there are benefits to each process:

- Knowledge subnet
- Create form scratch

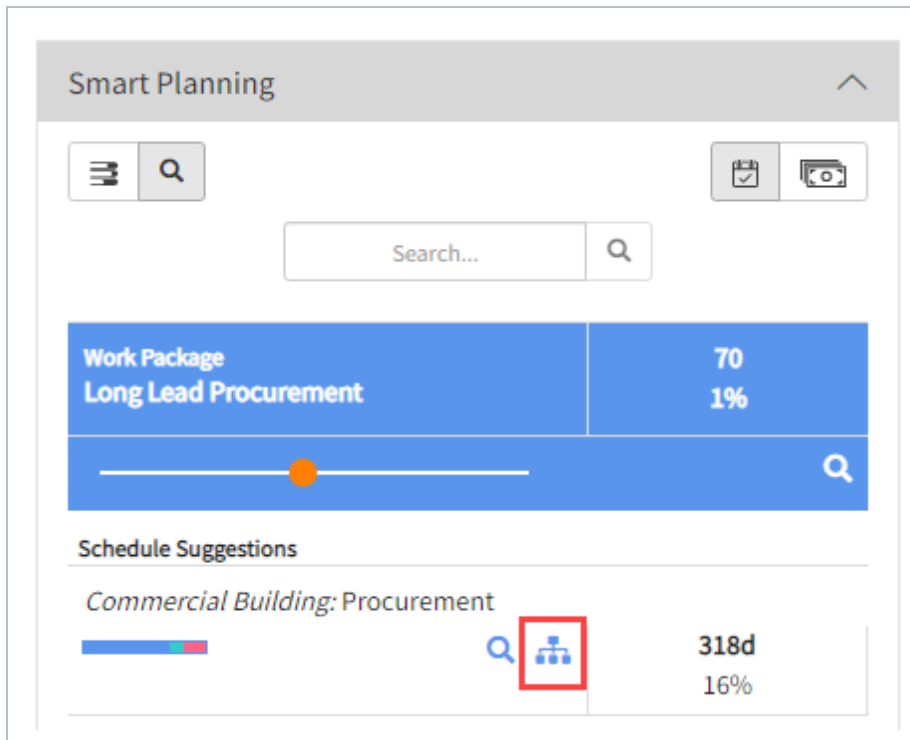
### Knowledge subnets

Schedule leverages the Knowledge Base to rapidly build a schedule based on historical projects or existing templates. This feature enables you to pull in similar activities from Knowledge Base projects

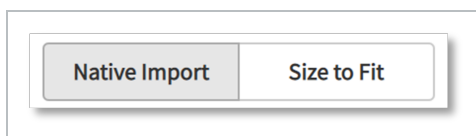
and adjust them based on the parameters of the project being created.

## Building a schedule

1. Select a planning package.
2. From the Iris > **Smart Planning**, under the first Schedule Suggestion, click **Import Knowledge Subnet**.



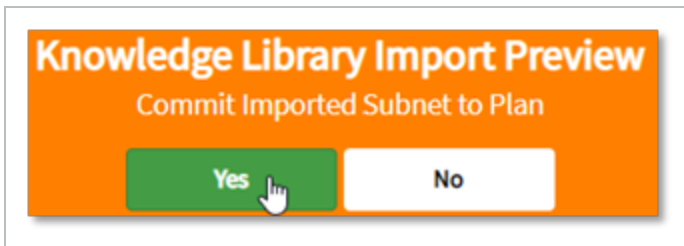
- The merge window opens, letting you customize your selection of planning packages and activities. For this example include all packages and activities in the subnet switched on
3. After the subnet selection is made, the option to bring in Knowledge Base subnet as *Native Import* or *Size to Fit* is available.



- **Native Import:** it will bring in the selected subnet with the original durations from the Knowledge Base

- Size to Fit: it will proportionally adjust the subnet to fit within the duration of the Superior planning package in the current schedule
4. Select either **Native Import** or **Size to Fit**.
  5. When complete, click **Preview**.

- Schedule merges in the Knowledge Subnet into the project and presents it as a preview.
6. If the preview looks good for merge, select **Yes** to commit the import in Schedule.

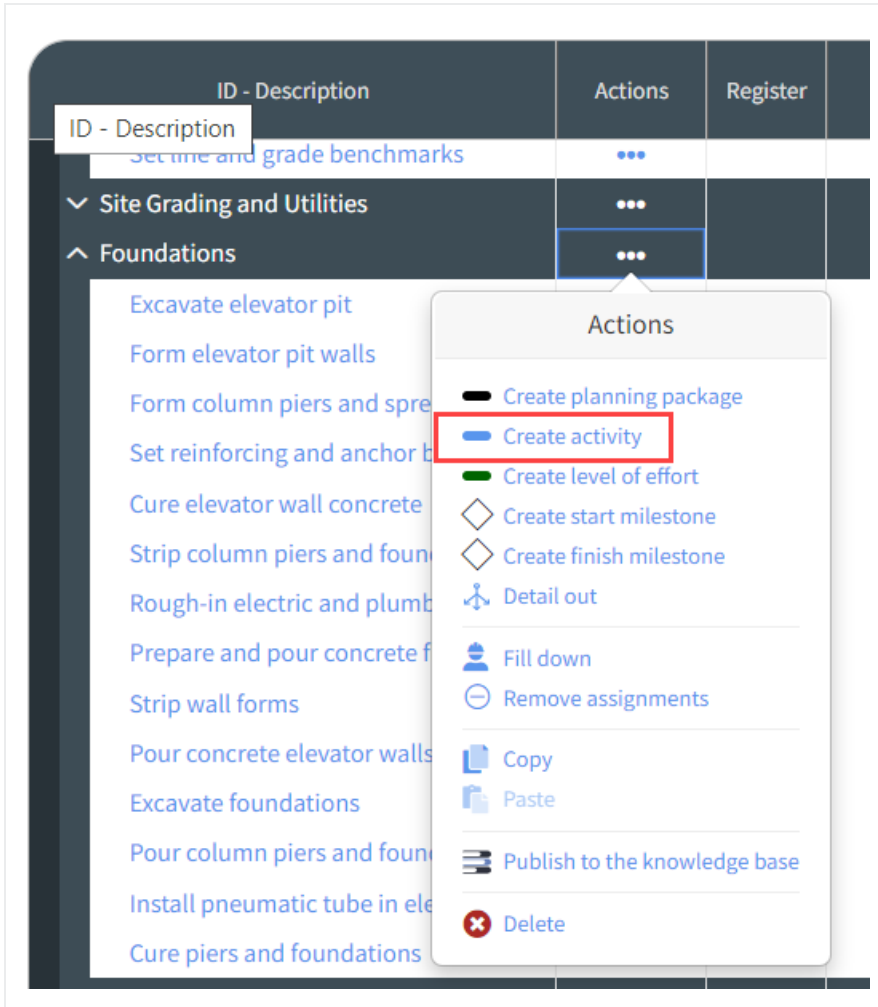


## Activities from Scratch

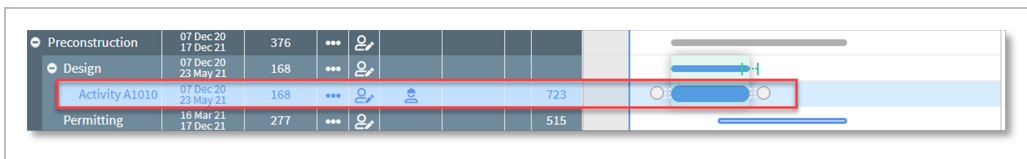
The second way to create activities is from scratch. This allows activities not yet in the Knowledge Library to be created on the project. Additionally, it provides schedulers total manual control when creating an activity.

## Build Activities from Scratch

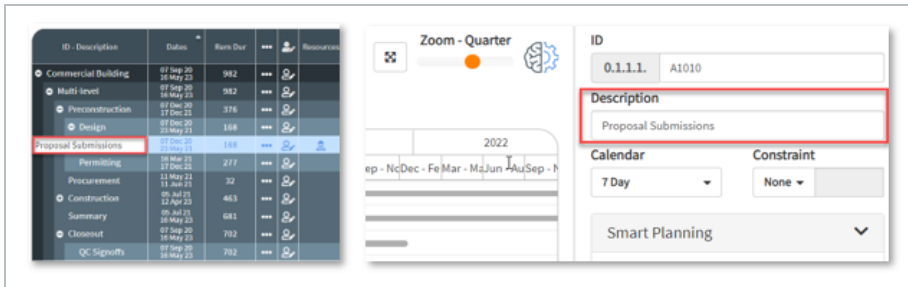
1. Click the **Actions** icon for the planning package which the subordinate activity falls under.



2. Select **Create Activity**.
  - A new activity will appear as a subordinate

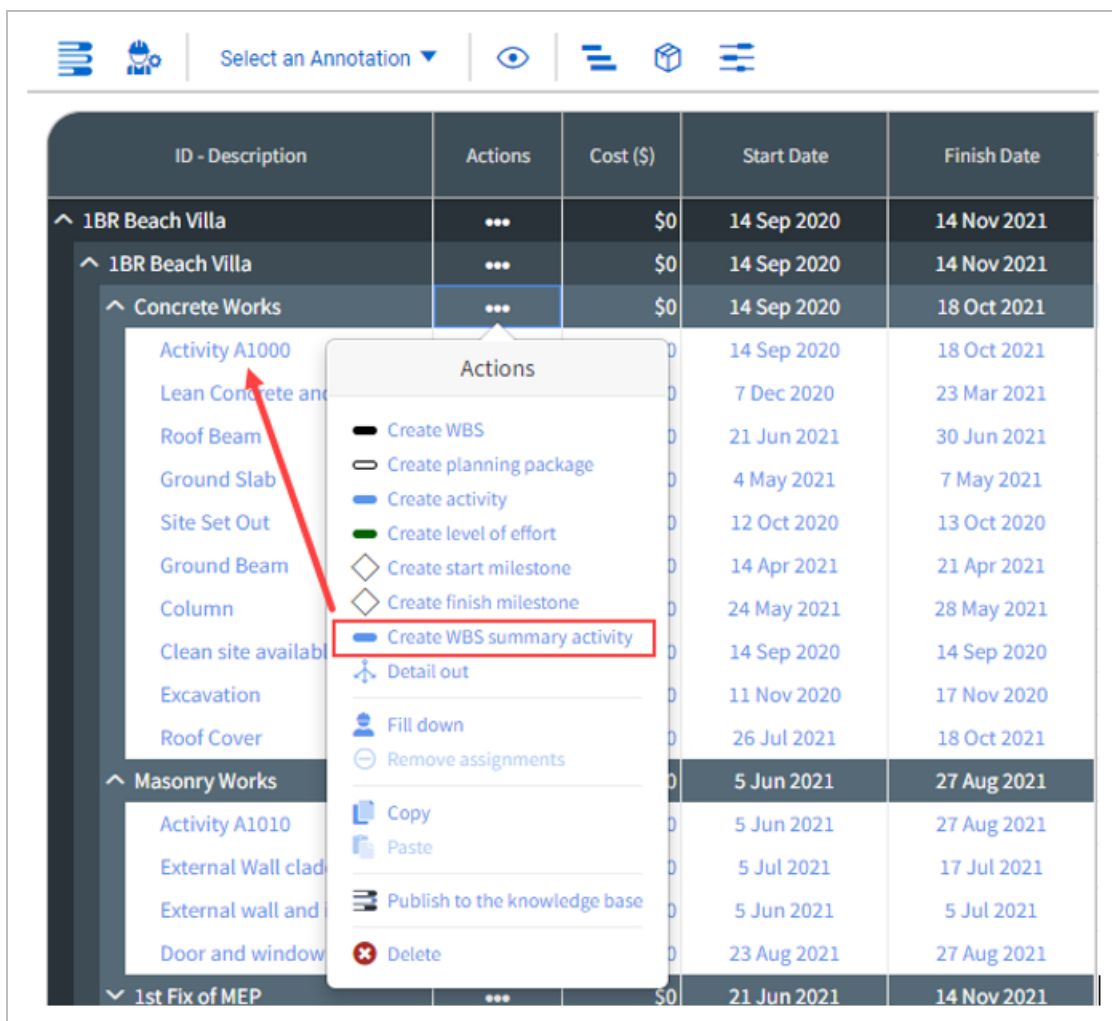


3. Rename your activity by either selecting the description field in the Gantt View or by going to the Iris and adjusting the description there.

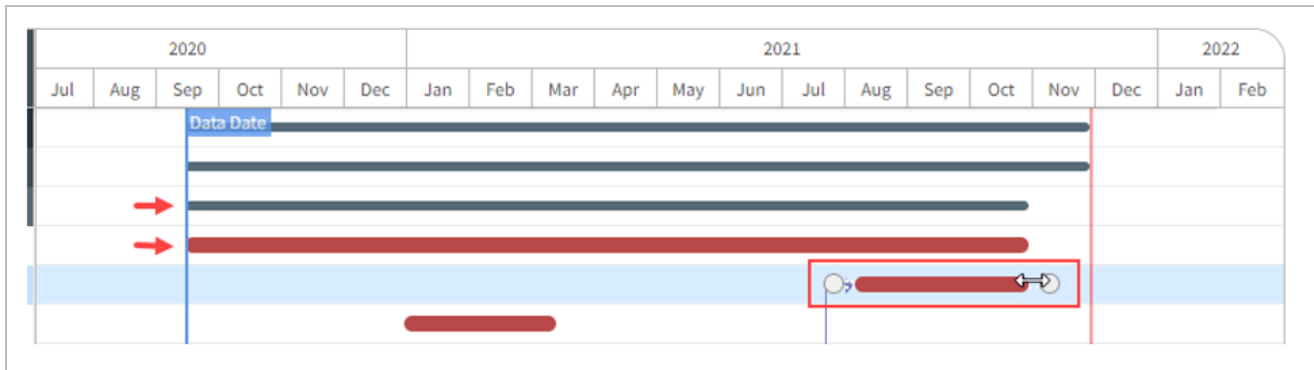


## WBS summary activity type

In Schedule > **Plan**, you can create a WBS summary activity. Primavera XER imports support the WBS summary activity type and does not convert these summaries to Planning packages.



When you increase or decrease the duration of a portion of your WBS in your schedule, the WBS summary activity dynamically reacts to the modified duration changes.



You can load resources into WBS summary activities to help linearly spread units over a specific time frame. Different calendars can be assigned to the WBS summary activity for tracking.

## Change Activity Type

You can select an Activity Type in the plan schedule and change it from one type to another via a drop-down menu, which lets change an activity type without having to leave the page.

### Change Activity Type

1. From the Schedule Plan view select an (terminal level) **Activity**.
2. Click on **Show/Hide Iris**.



The screenshot displays the InEight software interface. On the left, a table lists activities under the heading 'WBS SCHED.3'. The table has columns for ID-Description, Actions, Start Date, and Finish Date. The activity 'Activity A1010' is highlighted in blue. On the right, a configuration panel for 'Activity A1010' is shown, with a red arrow pointing to a brain icon in the top toolbar. The configuration panel includes fields for ID, Description, Activity Type (set to 'Task dependent'), Calendar (set to 'Project Default'), Constraint (set to 'None'), Smart Planning, and Logic.

ID - Description	Actions	Start Date	Finish Date
WBS SCHED.3	...	4 Sep 2023	2 May 2024
Activity A1000	...	4 Sep 2023	22 Nov 2023
Activity A1010	...	23 Nov 2023	12 Feb 2024
Activity A1020	...	13 Feb 2024	2 May 2024

**Activity Configuration Panel:**

- ID: A1010
- Description: Activity A1010
- Activity Type: Task dependent
- Calendar: Project Default
- Constraint: None
- Smart Planning: [Dropdown]
- Logic: [Dropdown]

3. Click on **Activity type drop-down**, and select an activity type.

The screenshot shows a web interface for creating an activity. At the top, there is a toolbar with icons for user selection, filters, search, and other actions. Below the toolbar, the form contains several fields: 'ID' with the value 'A1010', 'Description' with the value 'Activity A1010', and 'Activity Type' which is a dropdown menu. The dropdown menu is currently open, showing a list of options: 'Select one...', 'Start milestone', 'Finish milestone', 'Task dependent', 'Level of effort', and 'WBS summary'. The 'Task dependent' option is selected. Below the dropdown menu, there are several other sections, each with a downward arrow: 'Logic', 'Knowledge Tags', 'Project Register', 'Delegation', and 'Resource Assignments'.

## Bulk Activities from Scratch

If multiple activities are to be created from scratch, the detail out function can be used as well.

## Create Activities in Bulk

1. Click the **Actions** icon for the planning package that the subordinate activities fall under.
2. From the Actions menu, click **Detail Out**.
3. Create your activities as needed.
4. Set the Work or Scope option to **Activity**.
5. Set the Sequence option to **In Succession**.
6. Set the Duration to **Automatic**.
7. Set your **Quantity**.
8. Click **Build**.

Quickly build more detailed schedules by creating multiple activities or planning packages. Establish as a logical sequence or in parallel (concurrent).

Work or Scope  
 Activity  Planning Package

Sequence  
 In Succession  Parallel

Duration  
 Automatic  Manual

Quantity

Lag Duration

Schedule will create **4 Activities In Succession** each with a duration of **31 days** under **WBS SCHED-379.2**.

9. Change the activity names and their respective duration.

ID - Description	Actions	Register	Start Date	Finish Date	Remaining Dura...	Resources	Resource A...	2022			2023			2024		
								Apr - Jun	Jul - Sep	Oct - Dec	Jan - Mar	Apr - Jun	Jul - Sep	Oct - Dec	Jan - Mar	Apr - Jun
SCHED-379000	...		11 Jul 2022	15 May 2024	675											
Cost Risk WBS Import	...															
SCHED-37900.1	...		11 Jul 2022	15 May 2024	675											
WBS SCHED-379.1	...	2														
A1000	...	2	27 Apr 2023	15 May 2024	385											
Activity A1020	...	2	11 Jul 2022	29 Nov 2022	142											
Activity A1000	...	2	30 Nov 2022	26 Apr 2023	148											
Activity A1010	...	2														
SCHED-37900.2	...		10 Nov 2022	13 Mar 2023	124											
WBS SCHED-379.2	...															
A1110	...		10 Nov 2022	10 Dec 2022	31											
Activity A1110	...		11 Dec 2022	10 Jan 2023	31											
A1120	...															
Activity A1120	...		11 Jan 2023	10 Feb 2023	31											
A1130	...															
Activity A1130	...															

## Assign Knowledge Tags

Knowledge Tags connect the data between the Knowledge Base, schedules, and activities. Assigning Knowledge Tags to planning packages and activities aid in associating schedules of similar scope, cost, duration, location, discipline etc. for InEight Schedule to generate suggestions and benchmarks.

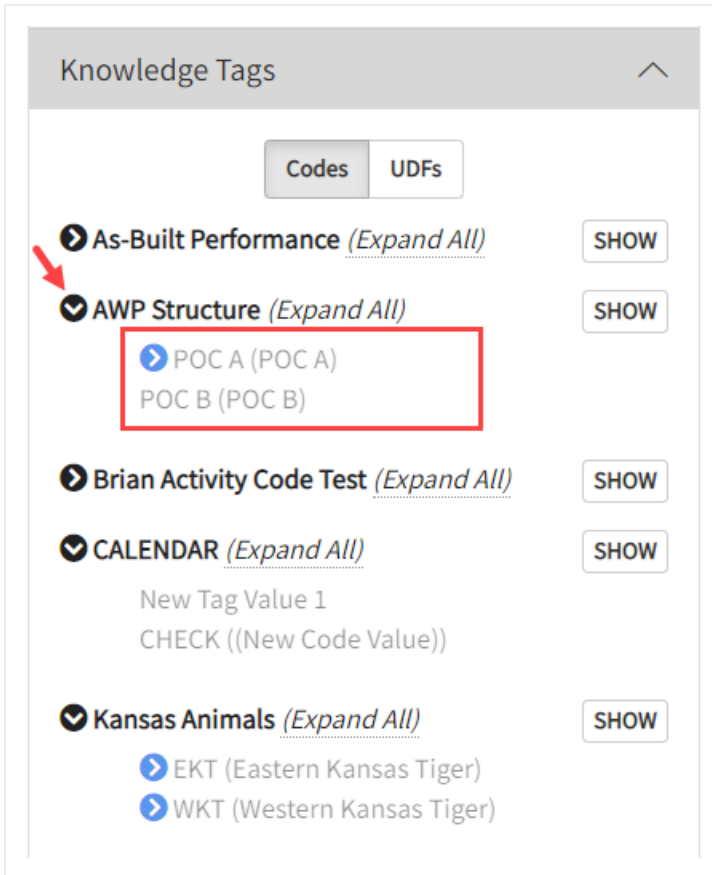
**NOTE** The process of associating Knowledge Tags to activities is fundamentally the same for planning packages.

### Assigning Knowledge Tags in the Iris

1. Select an activity. Open the Iris and go to the Knowledge Tags Section.
  - Knowledge Tags will appear in the Iris based on what is set up in the Knowledge Base & the Configuration Knowledge Tags Register.

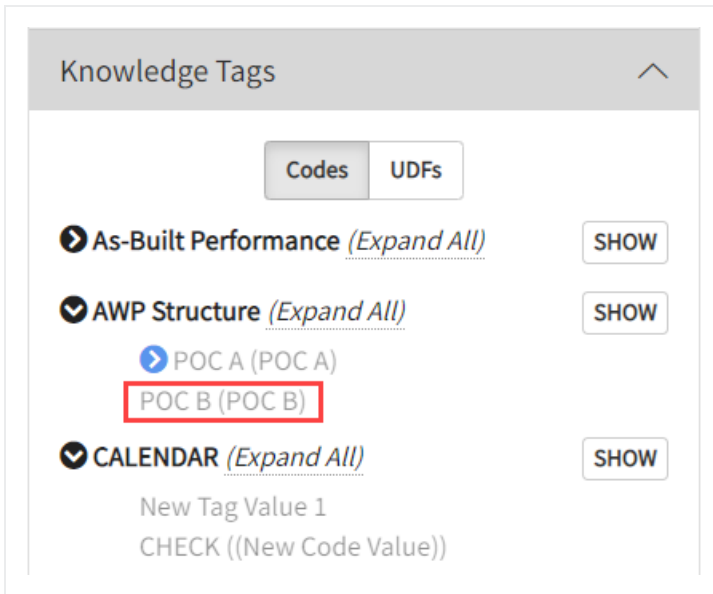


2. Click on the **arrow** to expand the Knowledge Tags available within each group.

**NOTE**

Some tags have “Inherited” values. These are rolled down from a superior level (i.e. assigned at the project level, assigned at the planning package level)

3. Select a tag from the drop-down menu to assign it to the activity.



## Assigning Logic

Logic is what links planning packages, activities, and milestones together throughout the schedule, for example when:

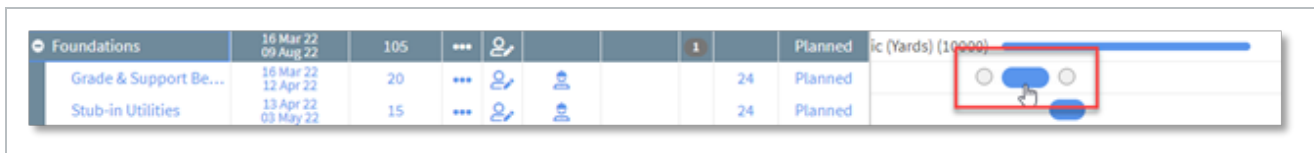
- an activity finishes, another starts
- two activities kick off at the same time
- multiple activities must be completed before another begins

Within Schedule, there are two ways to setup schedule logic: via the Gantt Chart or the Iris.

## Using the Gantt Chart to Assign Logic

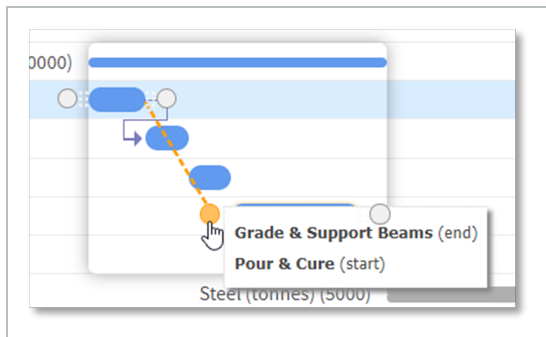
The Gantt Chart has built-in functionality allowing activity logic to be tied together directly in the visual. This is great for quickly adding or adjusting logic in the schedule.

When hovering over any activity bar in the Gantt chart, two dots will appear at the beginning and end of the activity:



Clicking and dragging either dot from what activity to another will create a logic tie.

- Dot at the beginning of an activity: the start logic of the activity
- Dot at the end of an activity: the end logic of the activity



Connecting dots between activities, define the type of logic being applied.

Function (Connect the Dots)	Logic (How to Connect)	
	Start-to-Start (SS)	Connect the start of one activity to the start of another activity
	Finish-to-Start (FS)	Connect the end of one activity to the start of another activity
	Finish-to-Finish (FF)	Connect the end of one activity to the end of another activity
	Start-to-Finish (SF)	Connect the start of one activity to the end of another activity

**NOTE**

The first activity dot selected is treated as the predecessor to the second activity dot. Thus, the second activity will be a successor to the first activity.

## Planning Mode

At the start of the project or phase, non-schedulers identify the key items to be planned for and create a rough timeline of the plan. InEight Schedule gives you the ability to do this in a way that easily carries forward into a full schedule.

**TIP**

Planning mode lets users freely move around planning items. In this mode, planning packages and milestones can be added, but not activities.

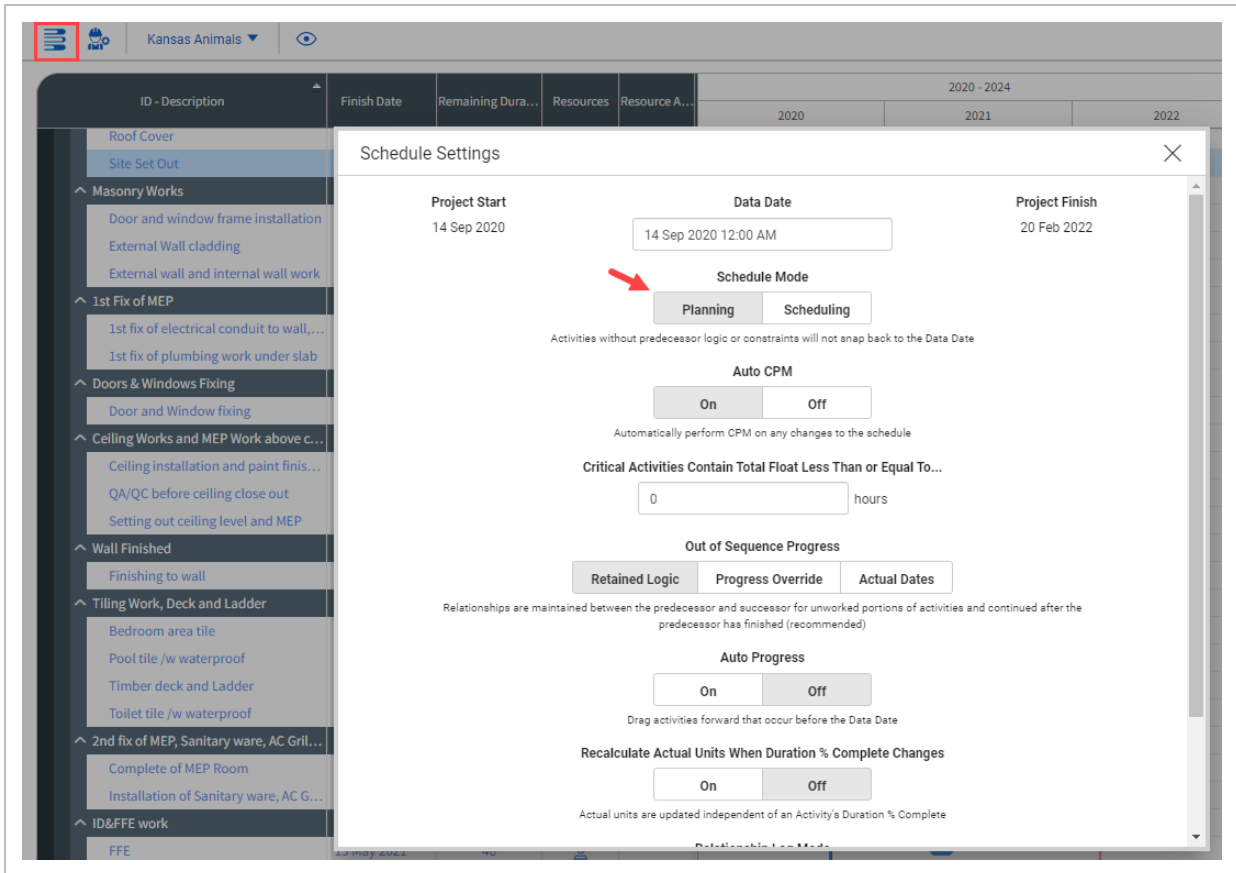
### Create a new planning package

**NOTE**

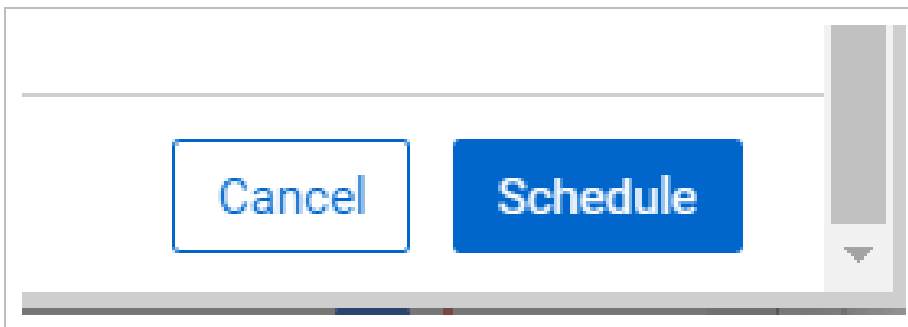
Planning packages brought in from the outline during project creation are automatically populated.

1. To create a new planning package from scratch, click the **Schedule** icon in the far left corner and select **Planning** Schedule mode.





2. Scroll down to select **Schedule** at the bottom far right on the Schedule Settings window.



**NOTE** New planning packages are created as subordinates under the open or selected parent package.

ID - Description	Dates	Rem Dur	...	👤	Resources	Resource As	🟡	Float
Commercial Building	07 Sep 20 16 May 23	982	...	👤				
Multi-level	07 Sep 20 16 May 23	982	...	👤				
Preconstruction	07 Sep 20 25 Jul 21	322	...	👤				660
Procurement	22 Feb 21 14 Sep 21	205	...	👤		1		609
Construction	05 Jul 21 12 Apr 23	647	...	👤				34
Summary	05 Jul 21 16 May 23	681	...	👤				0
Closeout	08 Mar 23 16 May 23	70	...	👤				0
WBS 0.1.6	07 Sep 20 16 May 23	702	...	👤				0

**TIP** If the Actions icon is not available, you can bring it into view using the **Customize Gantt View** icon at top.

1. Click in the **Description** column to rename your new planning package.
2. Organize planning packages by clicking and dragging the rows.

Commercial Building	07 Sep 20 16 May 23	982	...	👤				
Multi-level	07 Sep 20 16 May 23	982	...	👤				
Preconstruction	07 Sep 20 25 Jul 21	322	...	👤				660
Procurement	22 Feb 21 14 Sep 21	205	...	👤		1		609
Construction	05 Jul 21 12 Apr 23	647	...	👤				34
Summary	05 Jul 21 16 May 23	681	...	👤				0
Closeout	07 Sep 20 16 May 23	702	...	👤				0
QC Signoffs	07 Sep 20 16 May 23	702	...	👤				0
QC Signoffs	07 Sep 20 16 May 23	702	...	👤				0

**NOTE** When dragging rows in the Gantt chart, either a white dot or a blue line shows where in the hierarchy the row is being moved. Or, a row is boxed in blue, signifying the planning package being dragged will become a subordinate to the boxed work package.

3. You can continue adjusting planning packages using the bars in the Gantt chart.

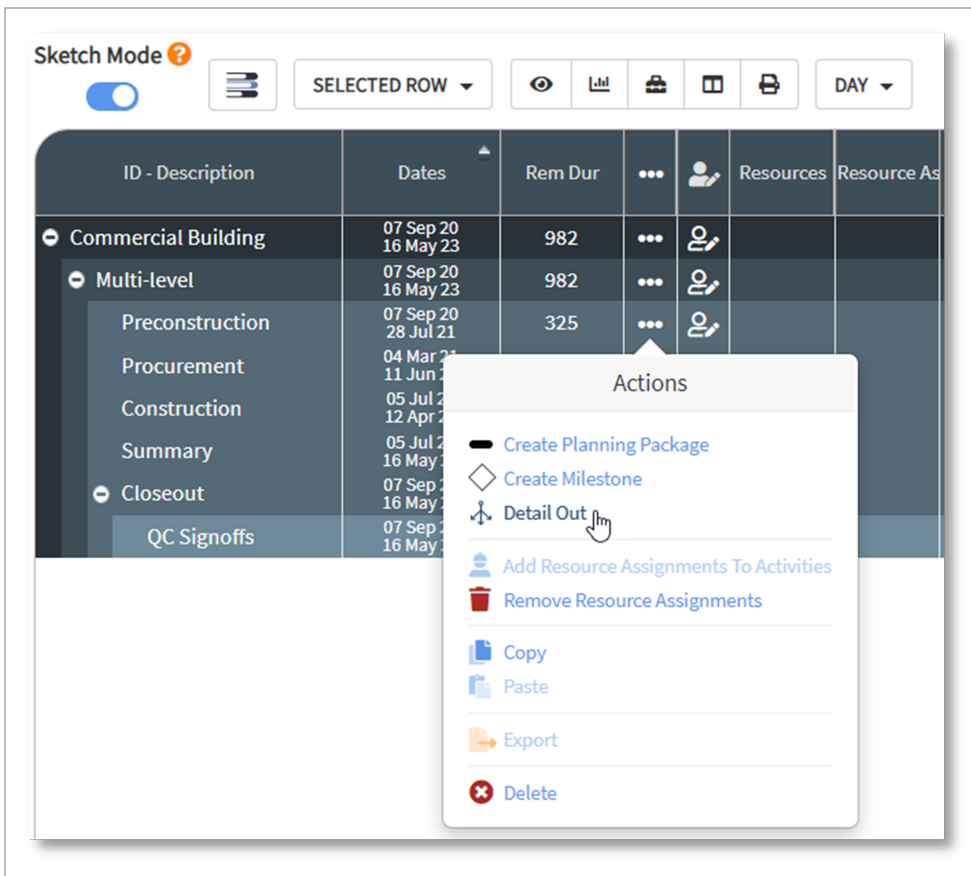
**NOTE** You can adjust a planning package’s duration in the Rem Dur column. This will adjust its duration while holding the current start date.



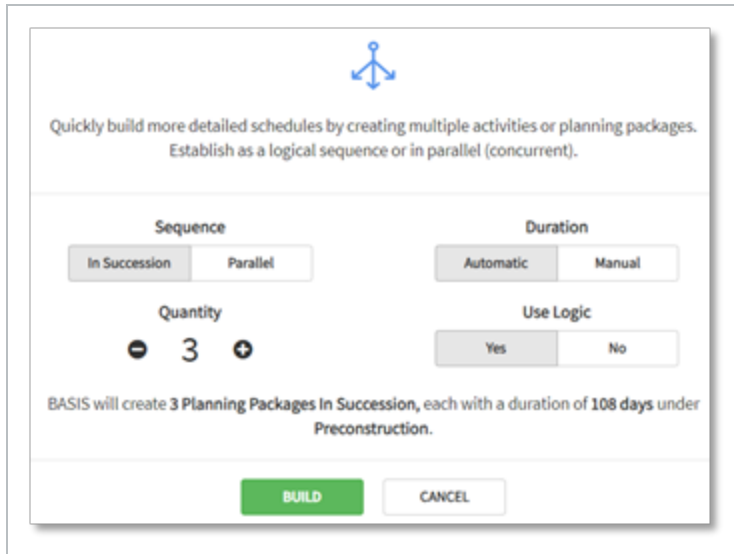
## Bulk creation of planning packages

Add planning packages individually or in bulk with the Detail Out function.

1. Select the **Actions** icon on an existing planning package.
2. From the drop-down menu, select **Detail Out**.



- From here you can select how you want to add your new planning packages



Field	Description
Sequence	Sets the new planning packages to occur in succession or parallel.
Duration (Automatic)	Schedule will distribute the superior duration evenly across the subordinate planning packages.
Duration (Manual)	Manually set a custom base duration.
Quantity	Number of subordinate planning packages are being created.
Use Logic (On)	Logic is tied from one package to the next.
Use Logic (Off)	Logic is not assigned. Additionally, the option to set a scope gap is provided.

**NOTE** The values set here are for the default/initial creation of packages and can be changed as needed later .

3. Set the **quantity**.
4. Click **Build**.

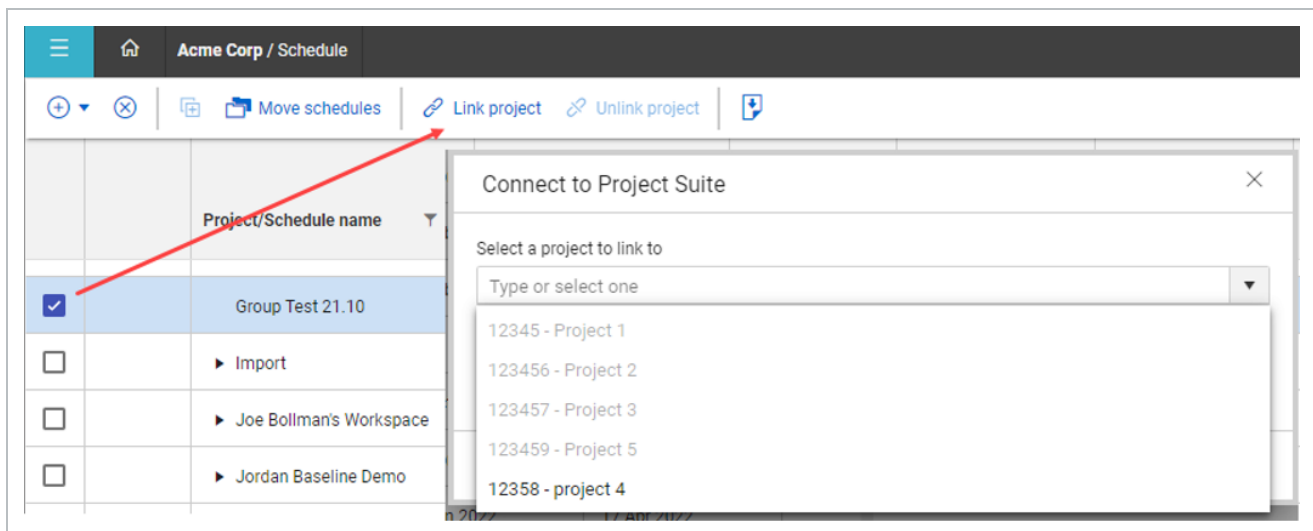
**NOTE**

At the bottom of the Detail Out window is a summary of what will be added to the schedule.

5. Your new WBS planning package is created, and you can rename your planning packages accordingly.

## Advanced Work Packaging

The integration with Project Suite is built primarily for the Project Suite migration. For new users or non-connected workspaces, you can navigate to the Project List page, select a workspace and link a project. You can then select a project in Project Suite to connect and link a project schedule in Schedule.



When linked, the Project Suite field becomes populated with a selected project.

	Project/Schedule name	Schedule ID	Project Suite	Start	Finish	C
<input type="checkbox"/>	▶ 23.4 Group Test - Regression		123459 - Project 5	01 Jun 2015	21 Nov 2020	
<input type="checkbox"/>	▶ 00001 BUG TEST			24 Apr 2023	24 Apr 2024	
<input type="checkbox"/>	▶ 001. Baseline Regression		123456 - Project 2	23 Dec 2013	07 Dec 2034	
<input type="checkbox"/>	▶ 1			30 Mar 2021	06 Oct 2028	
<input type="checkbox"/>	▶ 22_2_Brian_Group_Testing			20 May 2022	23 Nov 2023	

When you go to AWP, you see Plan and Progress data in that schedule.

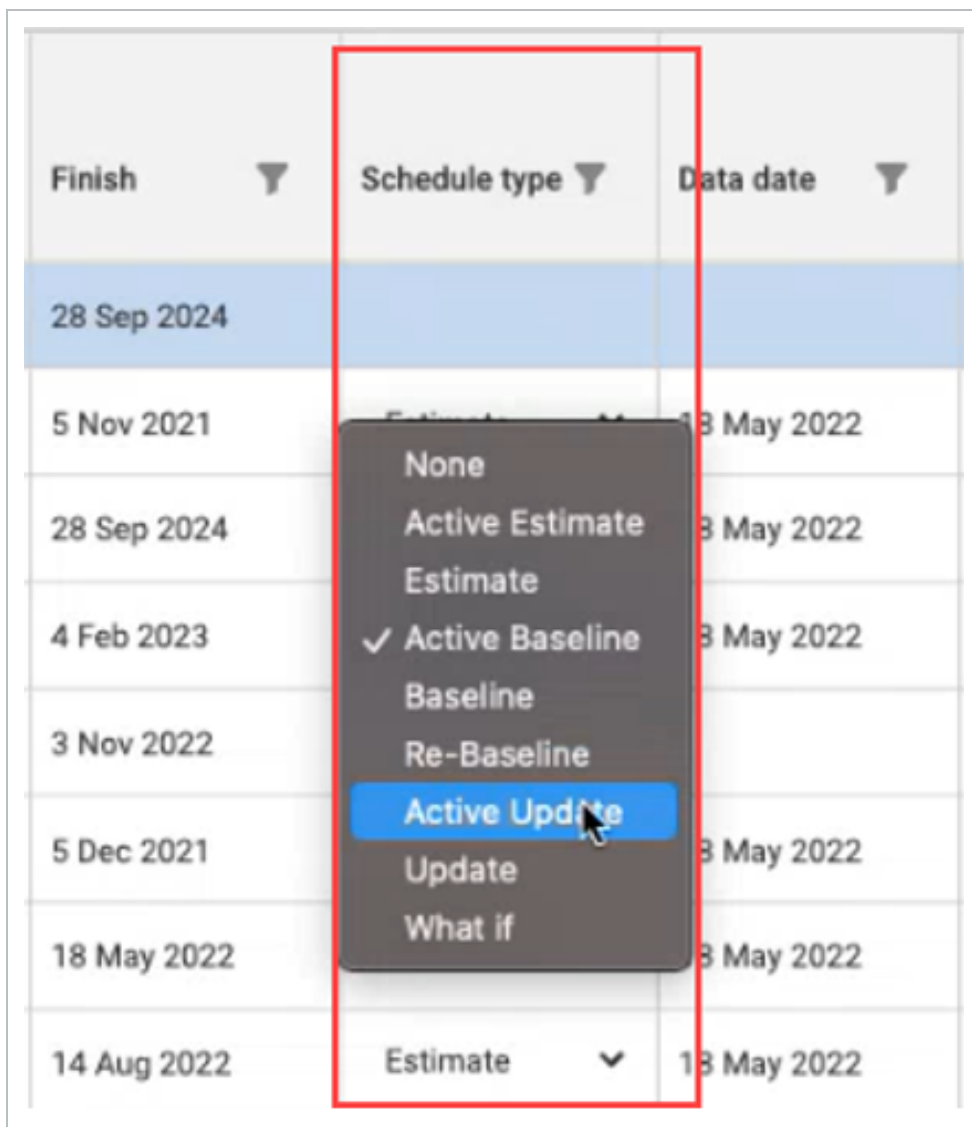
Advanced Work Packaging  
Associate your schedule structure with AWP elements

Name	ID	Duration	Start Date	Finish Date
...	NEL-001	775	16 Jan 2023 A	2 Jan 2026
...	NEL-001.1	278	16 Jan 2023 A	7 Feb 2024

Name	Description	Type	Task	Start	End
▼ S100.01	Zone S100 Bulleen R...	CWA			
▼ CWP-Bulleen Roa...	Bulleen Road Temp...	CWP			
IWP-Concrete - F...	Concrete for Bulleen ...	IWP			
IWP-Temporary D...	Temporary Diversion ...	IWP			
▼ S100.02	Zone S100 Bulleen R...	CWA			
CWP-BR101 - Bulleen...	BR101 - Bulleen Rd O...	CWP			
S100.03	Zone S100 Bulleen R...	CWA			
S100.10	Zone S100 EF IB Entr...	CWA			

When a project schedule is identified as an Active Update Schedule Type, it becomes the Project Suite connected schedule.

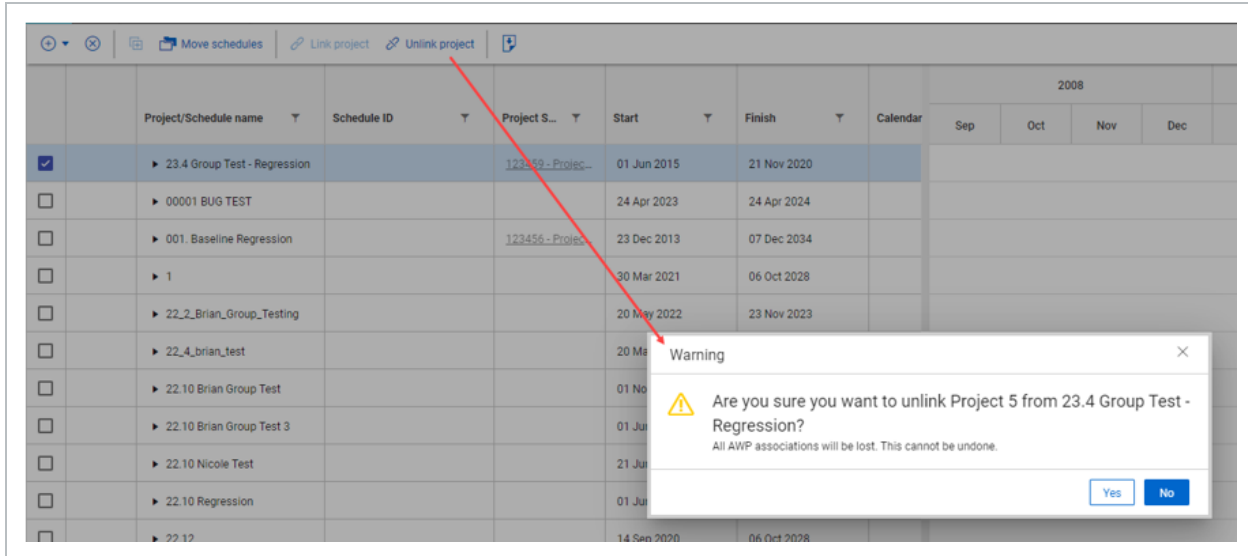


An InEight icon shows next to the project schedule name to signify that the schedule is now linked with a project in Project Suite.

<input type="checkbox"/>		Melbourne Airport...	SCHED-45	06 Dec 2021
<input type="checkbox"/>		Metropolitan ring r...	NEL-002	06 Dec 2021
<input type="checkbox"/>		Ring Road intercha... Linked to Ridgeway Campus	NEL-001	16 Jan 2023
<input type="checkbox"/>		Ring Road intercha...	NEL-005	16 Jan 2023

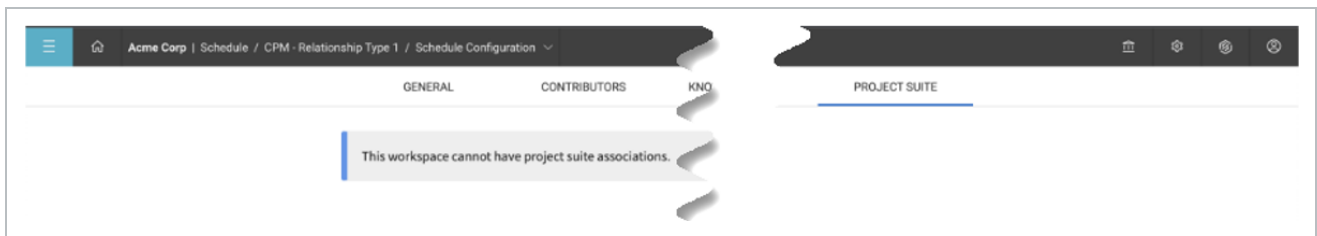
## Unlink a Project Suite project

You can select **Unlink project** to disconnect a Project suite project from Schedule. All the AWP associations will be deleted, and any changes cannot be undone.



## Schedule Configuration

Schedules that are housed under the *None* project workspace do not support a Project Suite project connection via the Project Suite tab in Schedule Configuration.



If a connection is required, you can move the schedule file to a new or existing workspace to enable this feature.

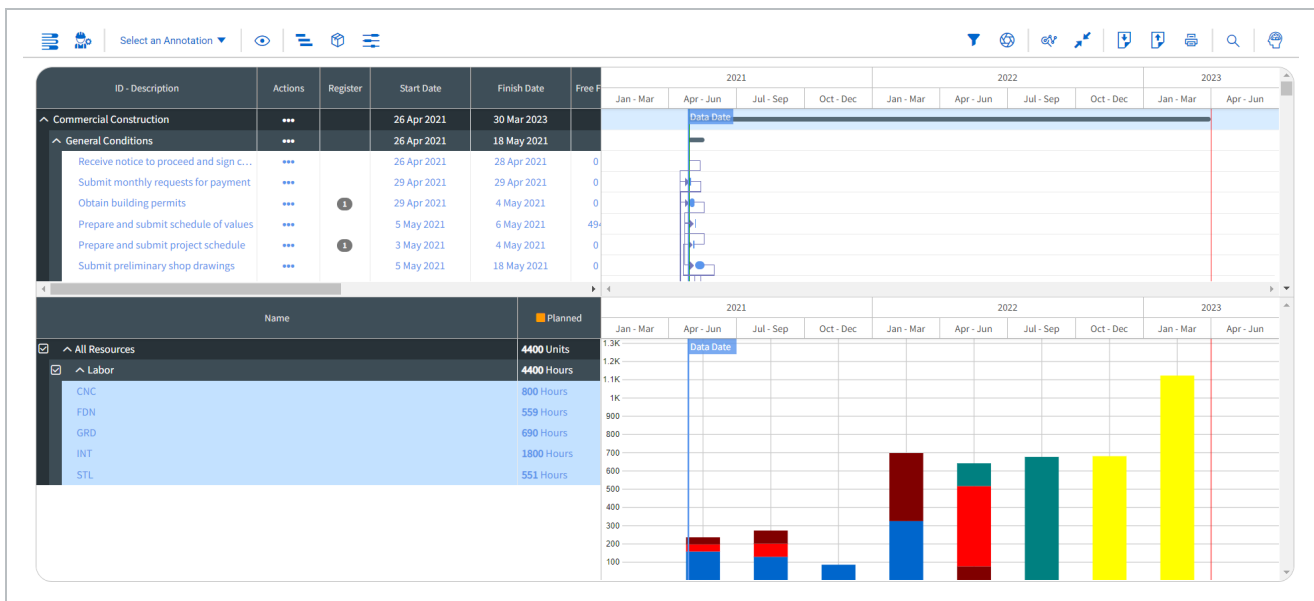




# LESSON 5 – RESOURCE MANAGEMENT

## Project Resources

The Resource Management function provides schedulers with the ability to account for and report on the project resources (for example, labor, materials, or equipment) that are needed to plan the scheduled work.



From a shared organization resource pool, schedulers can assign the required resources to activities. With the resource utilization data, InEight Schedule can assess cost and time impacts in a time-phased manner.

ID	Name	Category	Color	UoM	Default Units/d	Cost/Unit	
Kim	Kim Test	Labor	Grey	Hours	8.00	1.00	⊗
Robin	Tester	Material	Red	Each	1.00	200.00	⊗
Project resource	project resource	Nonlabor	Purple	Each	1.00	75.00	⊗
009	Resource 9	Nonlabor	Green	Each	1.00	0	⊗
Global	Global	New Category	Blue	Each	1.00	0	⊗
Import ID	Srini Import Desc	Unique	Cyan	Each	1.00	0	⊗
Tatyana	Ressurs 009	Supply	Red	Hver	25.00	5080.00	⊗
Indent	Indent	Labor	Magenta	Hours	8.00	0	⊗
SB2		Labor	Green	Hours	8.00	0	⊗
SP	Ski Patroller	Labor	Dark Green	Hours	8.00	25.00	⊗
No UOM	UOM No	Labor	Light Green		1.00	0	⊗
Jonny B	Bonny J	Labor	Teal	Hours	8.00	0	⊗

## Resource Assignments

Resources are assigned to activities (activity level) but can also be set via work packages (summary level) in the schedule.

### Assign Resources at the Activity Level

From the plan view, access the resource assignments of the assigned by using the options below:

- You can open an Activity's details in the Iris, expanding the Resource Assignments section, and selecting **Modify**.

Project Register ▼

Delegation ▼

Resource Assignments ▲

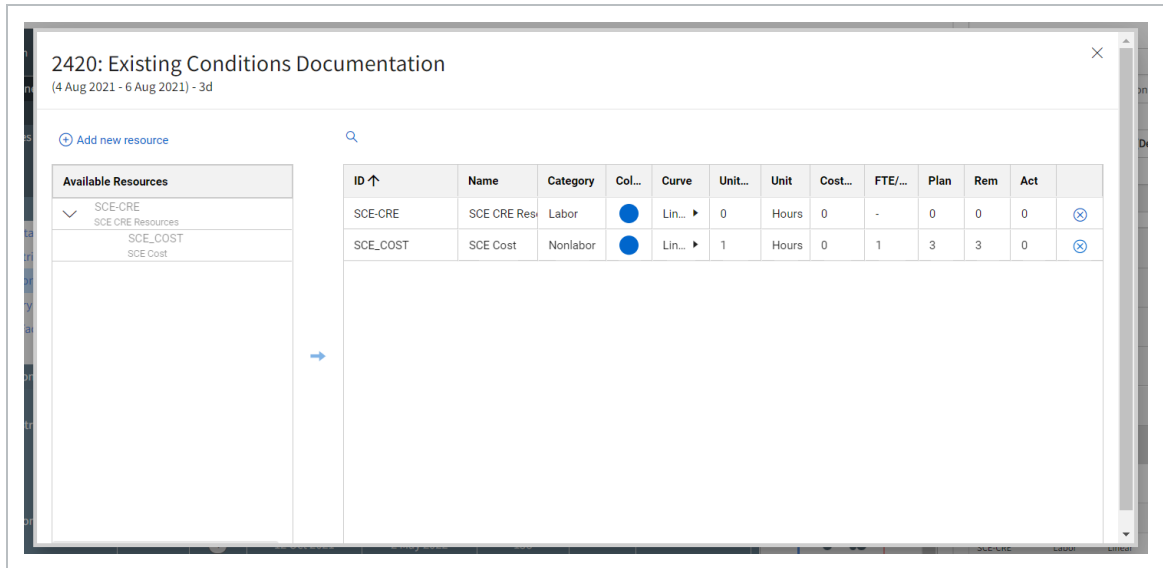
ID	Category	Curve	Plan	Remaining	Actual
SCE_COST	Nonlabor	Linear	1	1	0
SCE-CRE	Labor	Linear	0	0	0

Modify

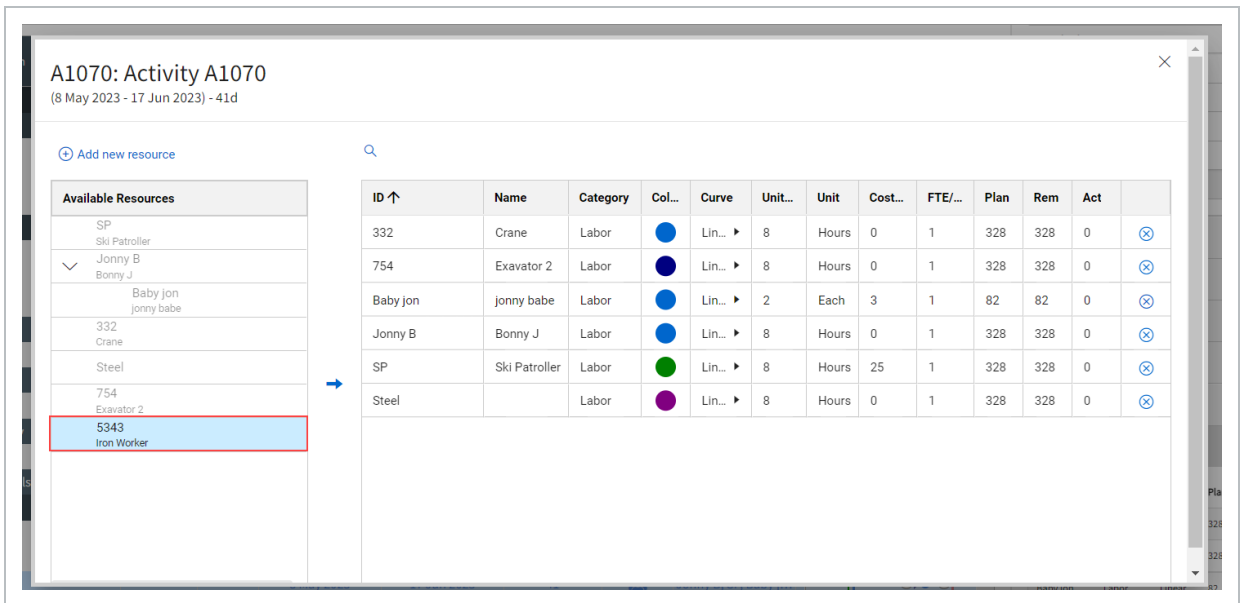
- You can customize the Gantt Chart view to include the Resources Column and selecting the **Resources** icon directly in the Gantt Chart.

ID - Description	Actions	Register	Start Date	Finish Date	Remaining Dura...	Resources	Resource Assignments
^ ABC Building Project Baseline	...	4	21 Jun 2021	14 Jul 2022	268		
^ ABC Building	...	4	21 Jun 2021	14 Jul 2022	268		
v Summary & Milestones	...	4	21 Jun 2021	14 Jul 2022	268		
v Pre-Construction	...	4	21 Jun 2021	24 Nov 2021	110		
^ Construction	...	4	4 Aug 2021	11 Jul 2022	234		
^ Mobilization	...	1 4	4 Aug 2021	16 Aug 2021	9		
Temp Trailer Install	...	5	11 Aug 2021	11 Aug 2021	1		SCE_COST, SCE-CRE
Temporary Electric Install	...	5	5 Aug 2021	11 Aug 2021	5		SCE_COST, SCE-CRE
Existing Conditions Document...	...	5	4 Aug 2021	6 Aug 2021	3		SCE_COST, SCE-CRE
Install Temporary Barracades	...	5	9 Aug 2021	10 Aug 2021	2		SCE_COST, SCE-CRE
Temp Sanitary Facilities Install	...	5	11 Aug 2021	11 Aug 2021	1		SCE_COST, SCE-CRE
Dig Alert	...	5	4 Aug 2021	6 Aug 2021	3		SCE_COST, SCE-CRE

- When either of these options have been selected, the resource assignment window appears:

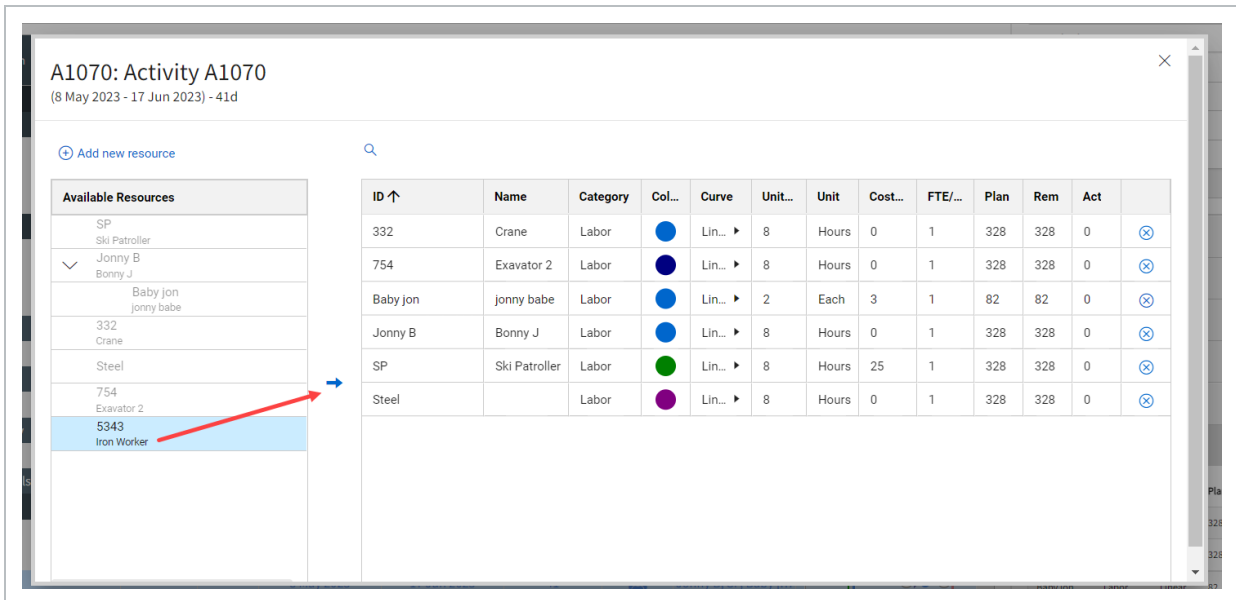


2. In the resource window, under Available Resources, select the resource.



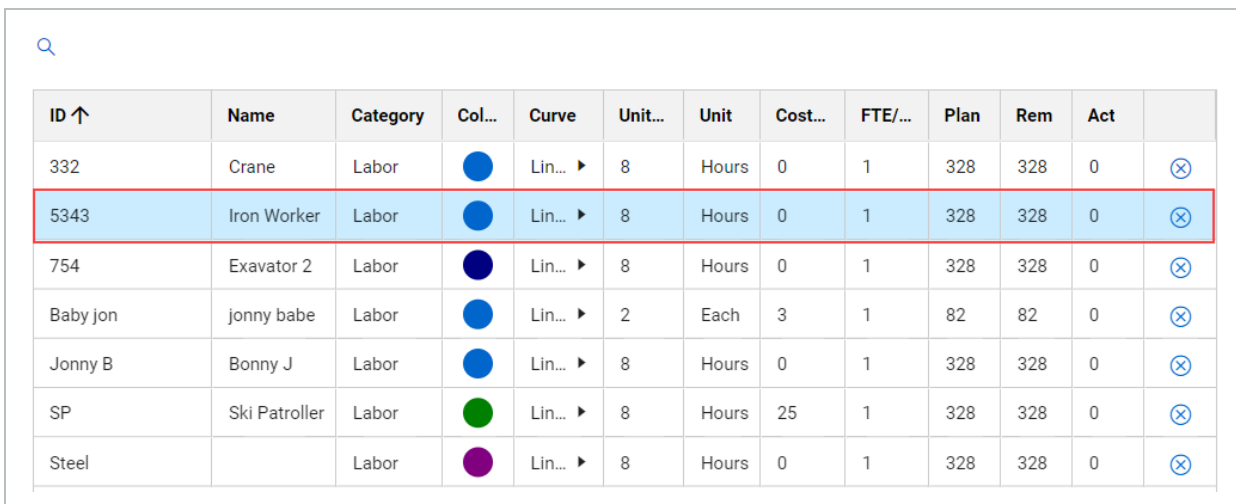
**NOTE** All available resources can be quickly found using the search function in the resource assignment window. If a resource cannot be found or a project-specific resource is to be made, see “Creating Project Resources via Resource Assignment” on for more information.

- Once selected, click the **right arrow** to add the resource to the activity's Resource register.



**TIP** Double clicking a resource will also add it to the activity's Resource register.

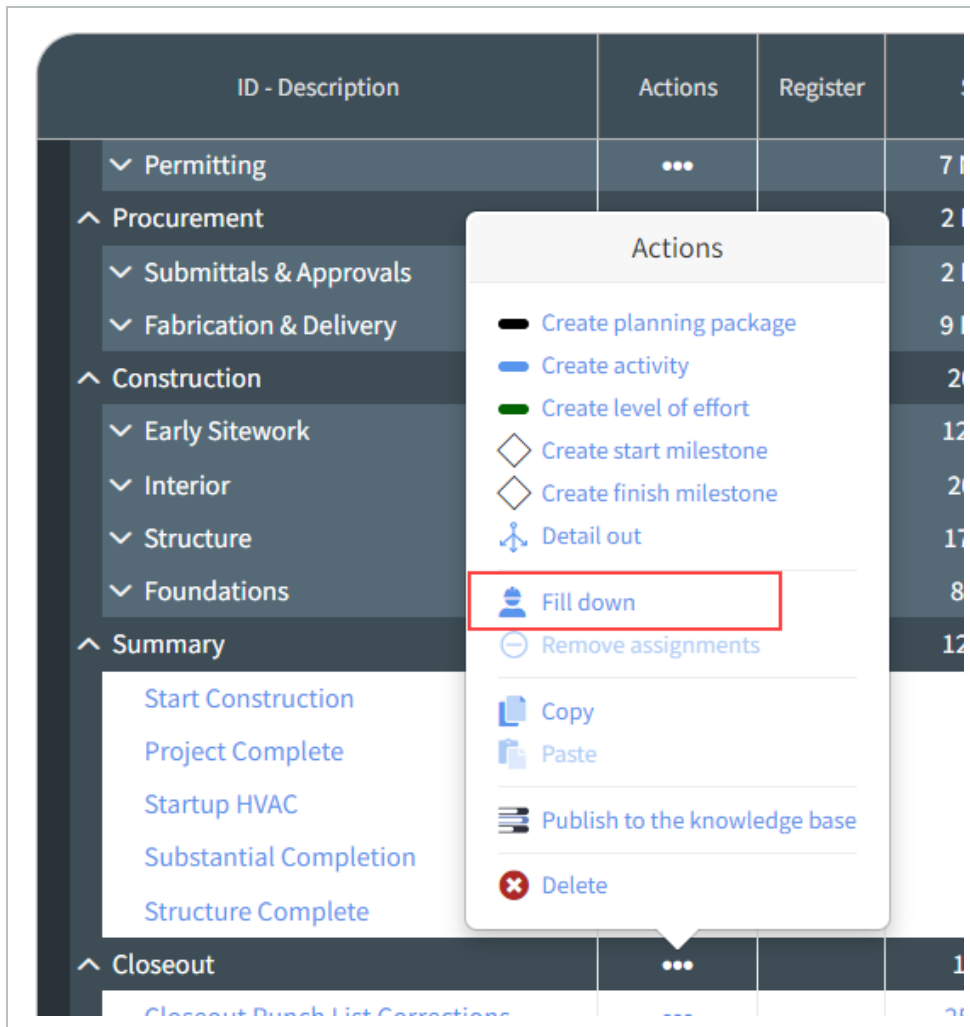
- Once added, details for each resource can be modified for the activity. Fields that can be adjusted at this level include Curve, Units/d, Cost/Unit, FTE/Qty, and Plan.



**NOTE** If a resource is not available in the Project's resource register, a new resource can be created directly from the Resource Assignment window. See "Creating Project Resources via Resource Assignment" topic.

## Fill Down

The Fill Down function lets you fill down a calendar, code or resource from the summary level. You select the items to fill down, the system fills down the selections and processes the items to all child level elements.

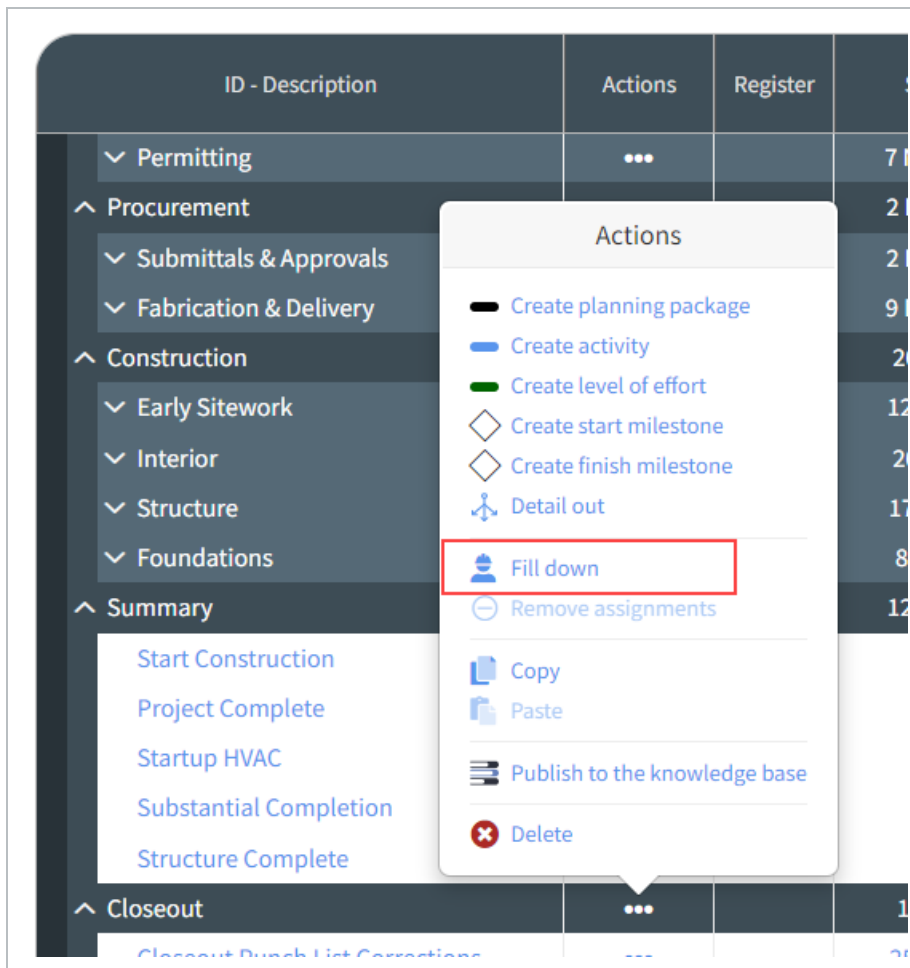


### Fill Down from the summary level

1. Identify the summary level planning package to assign resources to, and select the **Actions** icon.

Construction		11 Nov 19 30 Dec 21	557	...	
Early Sitework		11 Nov 19 09 Nov 20	259	...	
Entry & Access Roads		11 Nov 19 22 Jan 20	53	...	

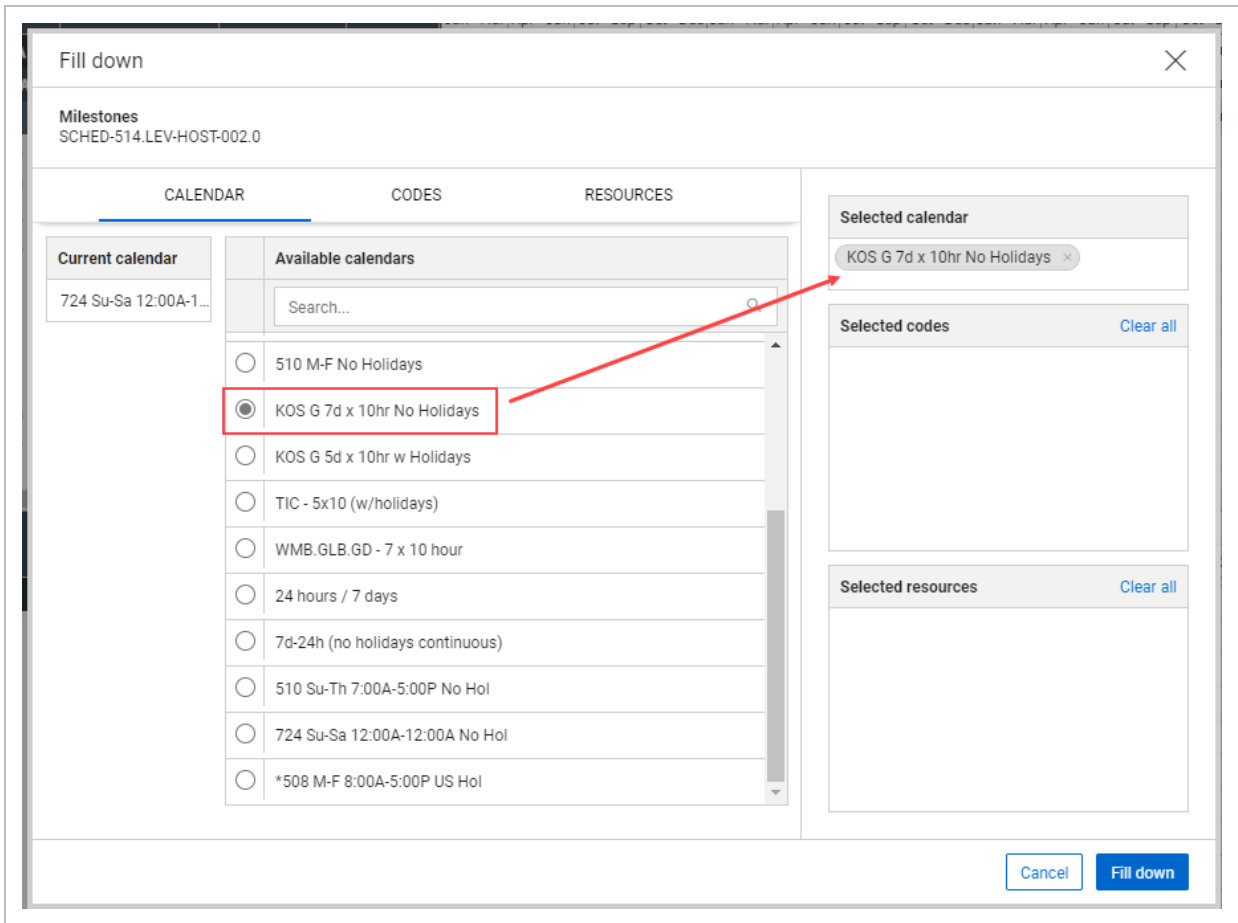
2. In the Actions menu, select **Fill Down**.



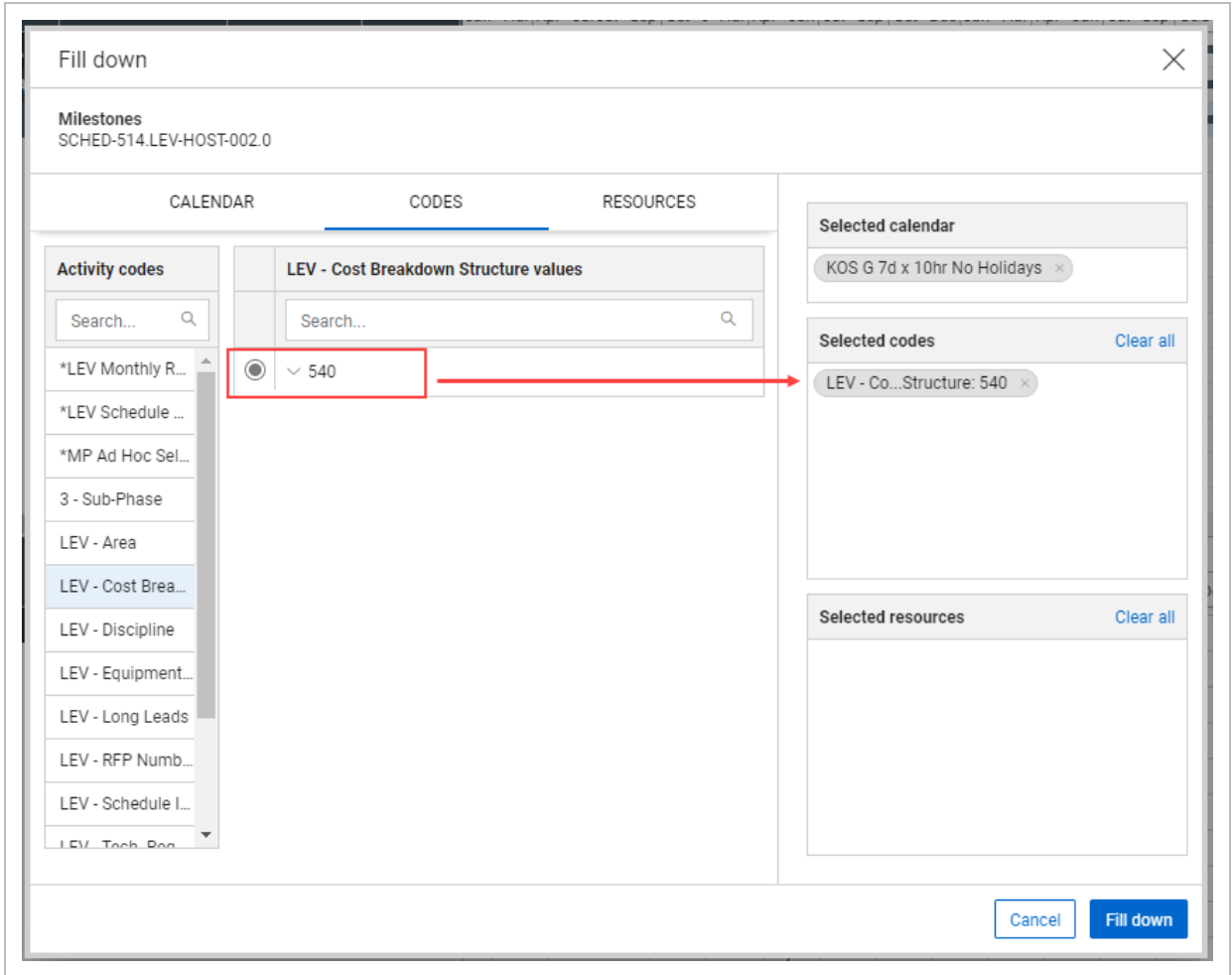
- The Fill down window appears

3. Under Calendar, choose a calendar from available calendars





4. Click on the Codes and select any Activity Code.



5. Click on Resources and select any Resource value.

- All assignments made from this window flow down to all subordinate activities.

**NOTE**

All available resources can be quickly found using the search function in the resource assignment window. If a resource cannot be found or a project specific resource is to be made, see the “Creating Project Resources via Resource Assignment” section for more information.

**NOTE**

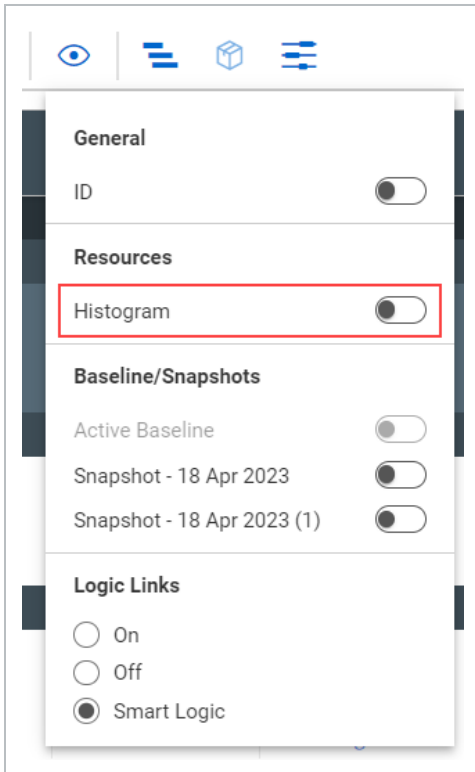
Resources can still be further edited at the activity level even when set up from the summary level. Plan values are not editable when applying a resource at the summary level but can be adjusted at the activity level.

## Resource Histogram

After a schedule has been loaded with resources, Schedule can generate a resource histogram.

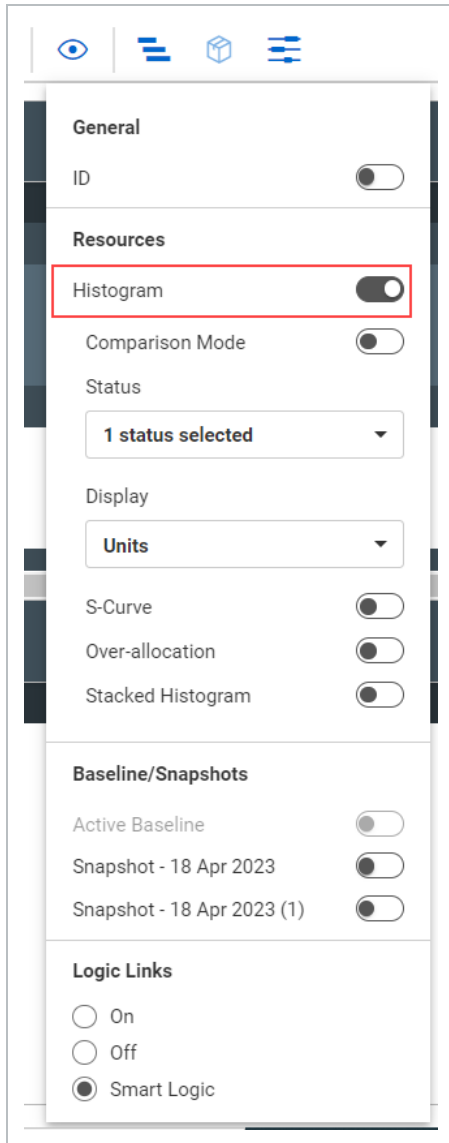
## Generate a Resource Histogram

1. In the Schedule's Planning View, select **View Options**.
  - A drop-down menu appears where you can switch the Resource Histogram on or off.
2. Switch the histogram from off to *ON*.



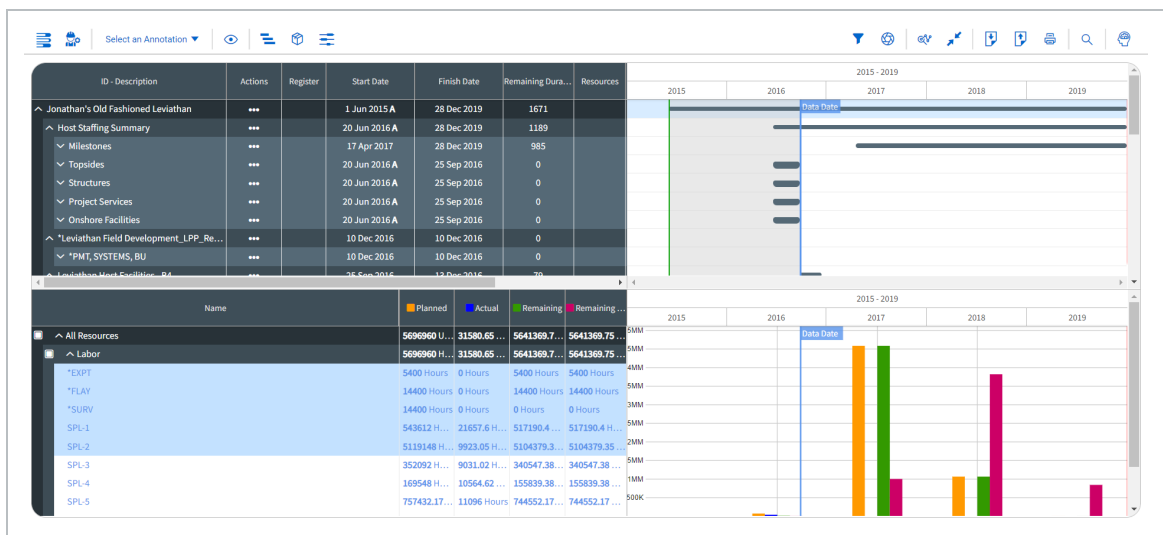
A histogram shows below the Gantt Chart. The resource histogram plots resource utilization over time depending on the following:

- **Resource Settings Configuration Options:** When the resource histogram is switched on, more settings become available for configuration.

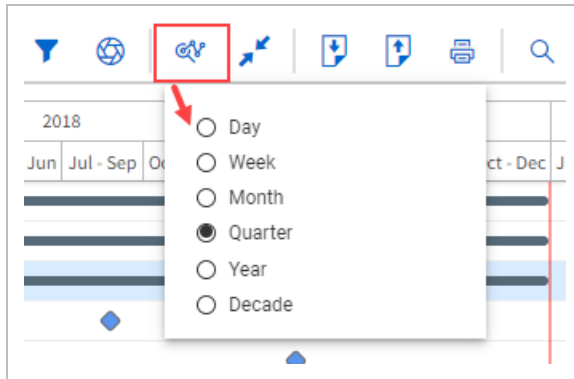


Setting	Function
Resource Histogram	You can switch the Resource Histogram view on or off.
Comparison Mode	Compares Current, Active Baseline, and Snapshots in the Resource Histogram.
Status	Filters histogram to show Planned, Actual resource quantities, Remaining or Remaining

Setting	Function
Display	Late. Adjusts the Y-axis of the histogram to show Units, FTE, or Cost.
Unit	The resource's unit of measure.
S-Curve	Switches on or off the S-Curve on the resource histogram.



- **The activity or summary level selected in the Gantt Chart:** The resource histogram plots out data based on the activity or planning package selected in the schedule
  - *The zoom level selection:* The zoom level for the Gantt chart controls both the schedule and resource histogram X-axis units of time that is days, weeks, months, quarters, years or decades.



3. Set the Resource Setting Configuration Status to **Planned & Remaining**.

This populates the Resource Histogram with all planned and remaining resources for the activity or planning package selected.

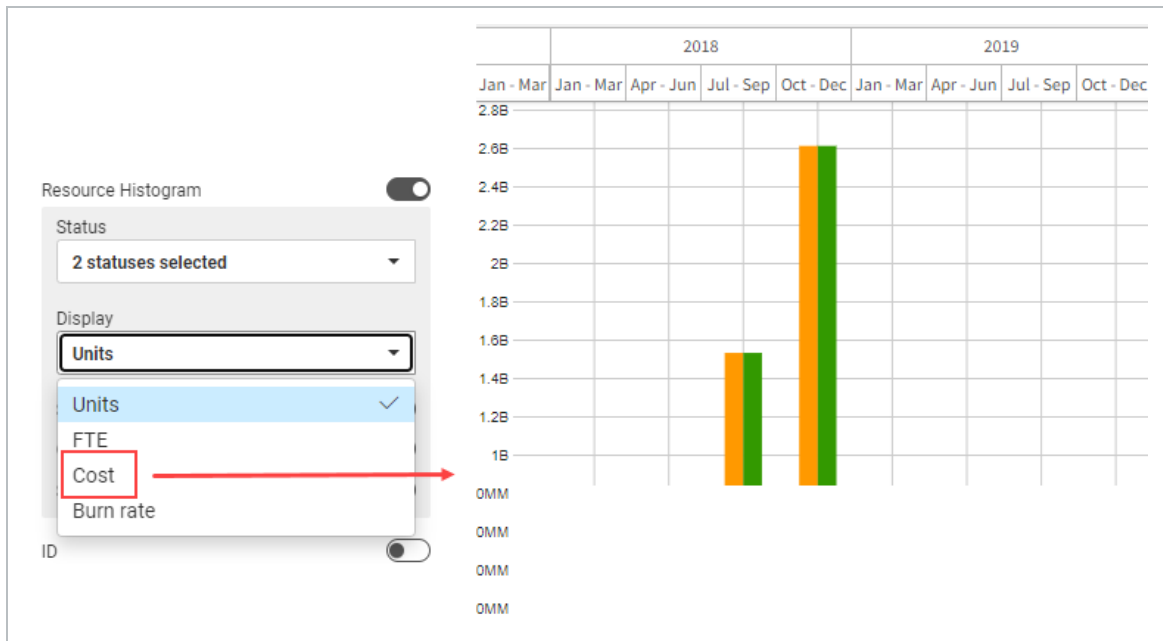
The screenshot shows the 'Resource Histogram' configuration panel on the left and a data table on the right. The configuration panel has a 'Status' dropdown set to '2 statuses selected', with 'Planned' and 'Remaining' checked. The data table shows resource usage for 'All Resources' and 'Labor'.

Name	Planned	Remaining
^ All Resources	5696960 Units	5641369.75 U...
^ Labor	5696960 Hours	5641369.75 H...
*EXPT	5400 Hours	5400 Hours
*FLAY	14400 Hours	14400 Hours
*SURV	14400 Hours	0 Hours
SPL-1	543612 Hours	517190.4 Hours
SPL-2	5119148 Hours	5104379.35 H...
SPL-3	352092 Hours	340547.38 H...
SPL-4	169548 Hours	155839.38 H...

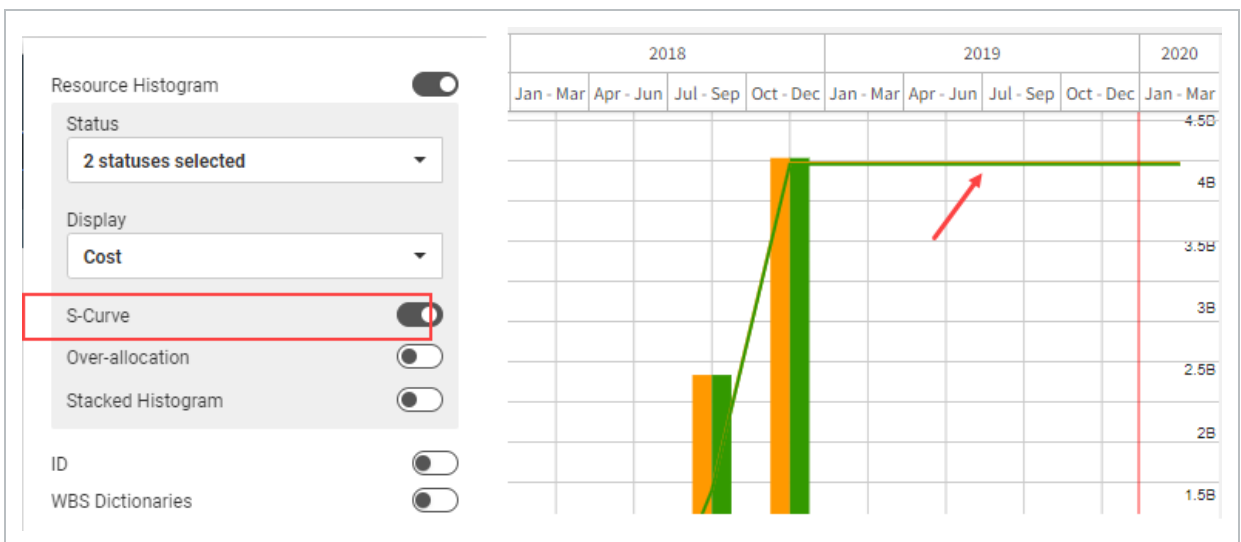
4. Change the Resource Setting Configuration Display from Units to **Cost**.

- FTE stands for Full Time Equivalent, and is the count of people per time period.
- Burn rate is the percent planned per period of time.

- This adjusts the Y-axis values from resource quantities to dollars



5. Switch on the **S-Curve**. This overlays the S-Curve on the Resource Histogram.



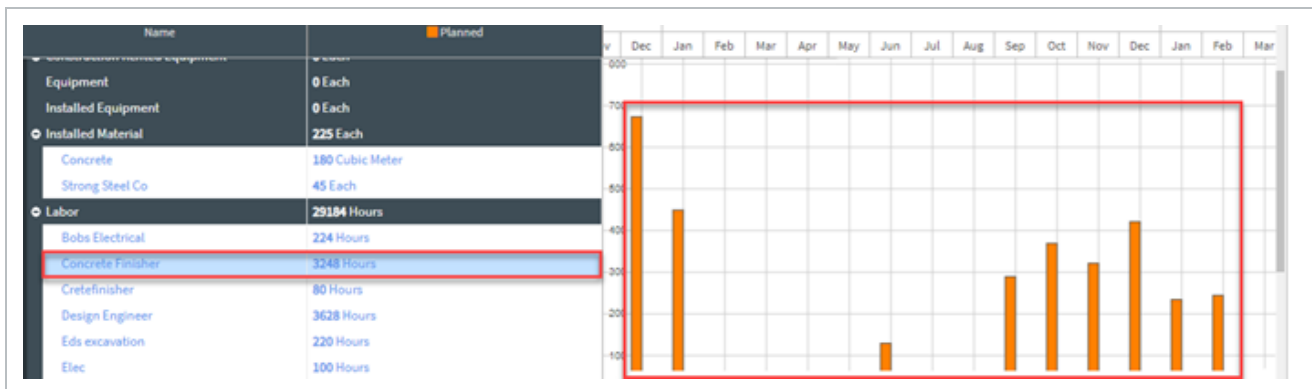
**NOTE** S-Curves reflect cumulative data. As the values increase over time, this reflects the accumulation of resource units/FTE/cost, depending on settings, over time.



## Filtering by Resource

Filtering by resource only applies if the stacked resource histogram is turned to *On*. In the filter functionality, the Gantt chart & resource histogram can be filtered to see planning packages and activities assigned specific resources. When the resource histogram is switched on, it can be used as an interactive filter as well. Selecting a Resource Name listed in the histogram or any of the resource bars will filter down the Gantt Chart and Resource Histogram to show only data pertaining to the information selected.

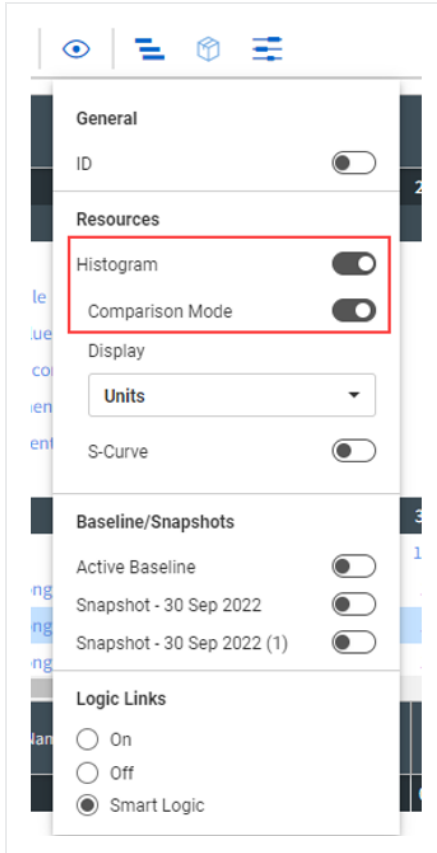
In the image below, the Resource Histogram is filtering based on the selected resource: *Concrete Finisher*.



Additionally, to modify or disable the resource filtering, users may click the filter icon to make adjustments to the filter parameters.

## Histogram Comparison Mode

In View Options, you can view the histogram in comparison mode, when enabled.



When the Comparison mode toggle is set to On, the baselines and snapshots that exist in the Baseline/Snapshot Management show as a graph with the current baseline. The histogram compares resources rolled up to the category type and shows you resources as they trend.

Each line in the graph represents a baseline, snapshot, and the current estimate.

The screenshot displays the 'Baseline/Snapshot Management' interface. On the left, a table compares 'Current Schedule', 'Active Baseline', 'Snapshot 1', and 'Snapshot 2' across various metrics. A red arrow points from the 'Resources' section of the settings menu to the histogram graph. The histogram shows resource usage over time, with bars representing different resource types.

	Current Schedule	Active Baseline	Snapshot 1	Snapshot 2
Data Date	21 Jun 2021	21 Jun 2021	21 Jun 2021	21 Jun 2021
Number of Activities	521	521	521	521
Start Date	21 Jun 2021	21 Jun 2021	21 Jun 2021	21 Jun 2021
Finish Date	27 Sep 2022	27 Sep 2022	27 Sep 2022	26 Jul 2022
Remaining Duration	464 days	464 days		
Average Float	111 days	111 days		
Labor Resource Units	4,264	4,264		
Total Cost	\$120,110	\$120,110		
Critical Activities	50	50		
Activities Completed	0	0		
Activities in progress	0	0		
Activities not started	521	521		
Constraints	2	2		

**Resources**

- Histogram
- Comparison Mode
- Display
- Units
- S-Curve

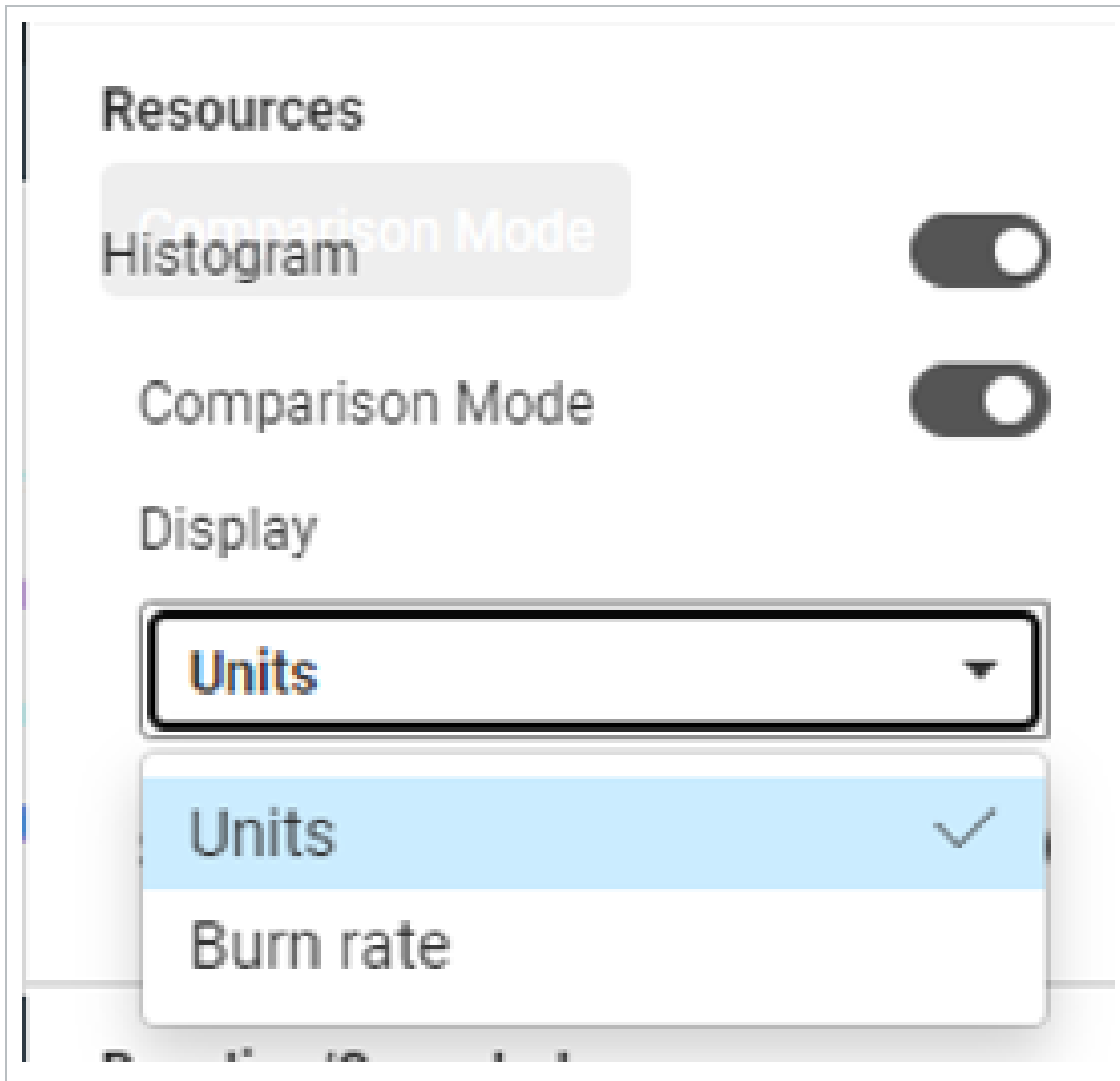
**Baseline/Snapshots**

- Active Baseline
- Snapshot - 30 Sep 2022
- Snapshot - 30 Sep 2022 (1)

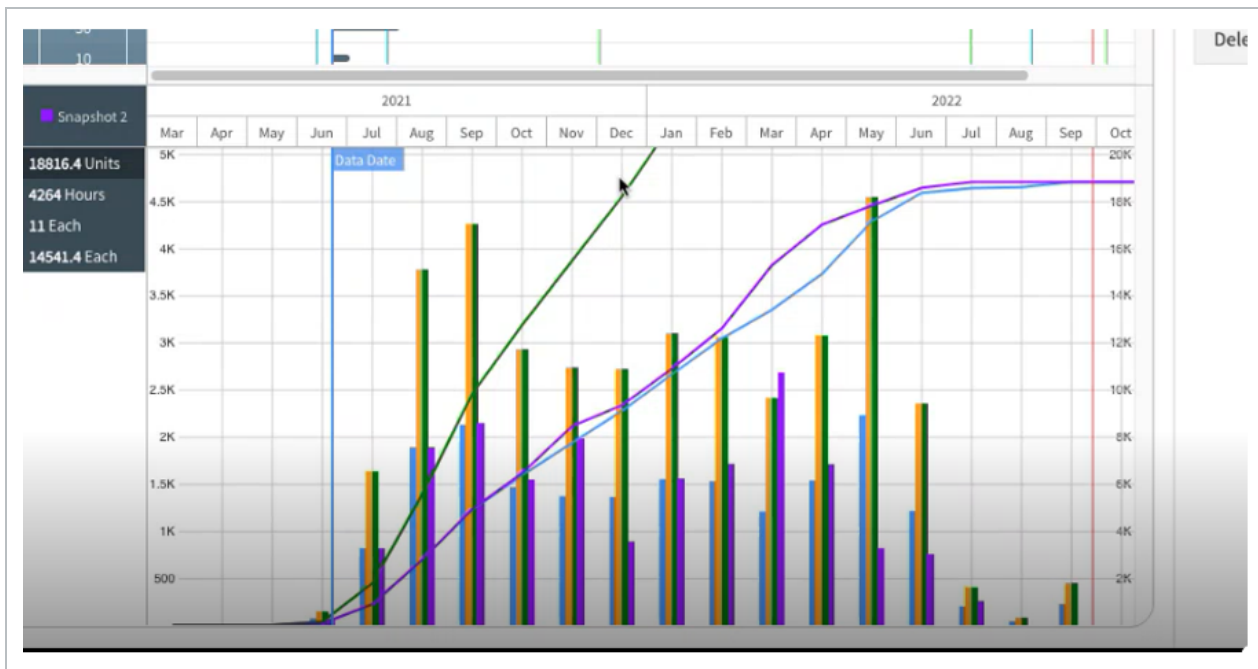
**Logic Links**

- On
- Off
- Smart Logic

The histogram graph can now also be shown in units and burn rate.

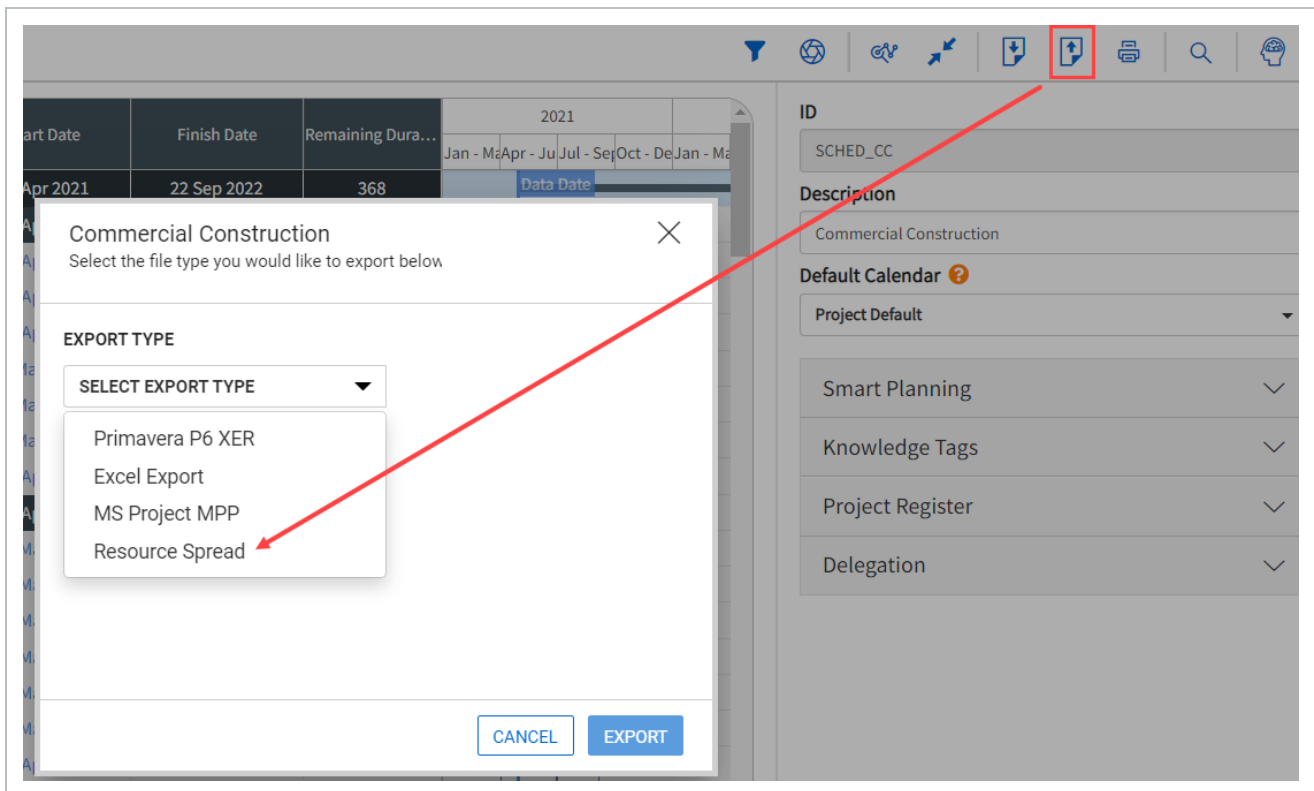


You can also view the histogram with an S-Curve that shows you a cumulative trend line for each baseline, snapshot and current.



## Export Assignments

Schedule export functionality includes the ability to export resource assignments. Select the **Export** icon, then select the **Resource Spread** export type from the drop-down menu.



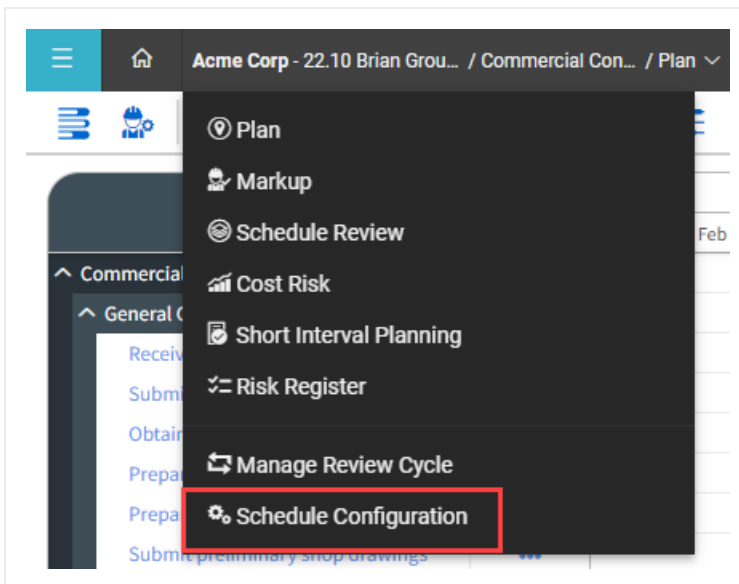
## Project Specific Resources: Project Configuration Setup

Resources in a Project are either global resources or project specific resources. Global resources automatically populate a project's resource register from the Knowledge Base. If a resource is not available from the established global resources, project specific resources can be set up.

Project specific resources are useful when the resource utilized is unique to that project and not applicable across the organization.

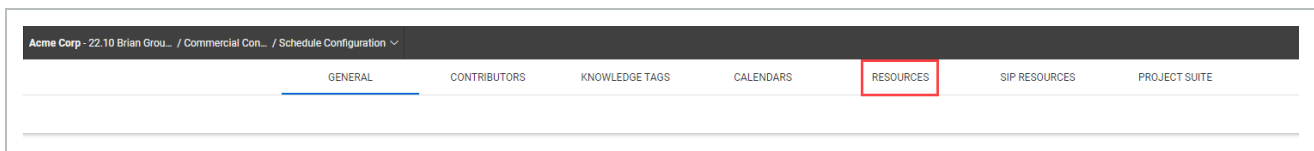
To establish project specific resources:

1. Select Schedule Configuration from the project drop-down menu.

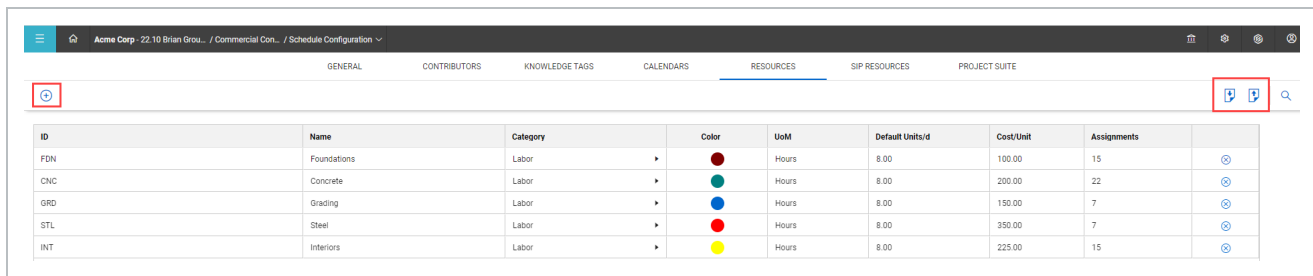


2. Select the **Resources** tab in the Knowledge Base.

This brings you to the project-level resource register



The Project level resource register functions the same as the Knowledge Base. See [Setting up Resources](#) for information about how to add resources and use the Import/Export functionality in the Resources register



ID	Name	Category	Color	UoM	Default Units/d	Cost/Unit	Assignments
FDN	Foundations	Labor	●	Hours	8.00	100.00	15
CNC	Concrete	Labor	●	Hours	8.00	200.00	22
GRD	Grading	Labor	●	Hours	8.00	150.00	7
STL	Steel	Labor	●	Hours	8.00	350.00	7
INT	Interiors	Labor	●	Hours	8.00	225.00	15

Schedule possesses the concept of global and project specific resources. When you create a schedule, it does not populate the resources in the Schedule Configuration window, but you can import resources from the Knowledge Base to use in your schedule.

**TIP**

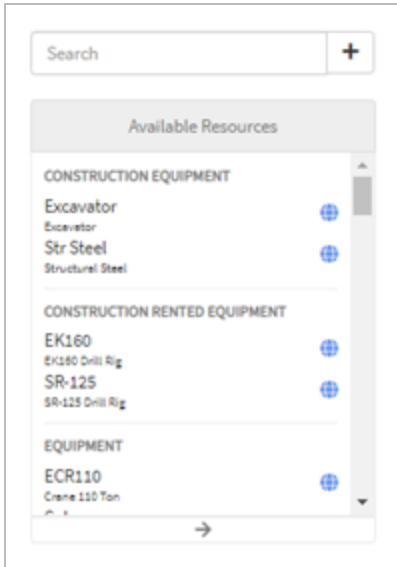
Project specific resources can also be added from the resource assignment window in the planning view. See the Resource Assignment for more information.

## Create a project-specific resource via the Resource Assignment window

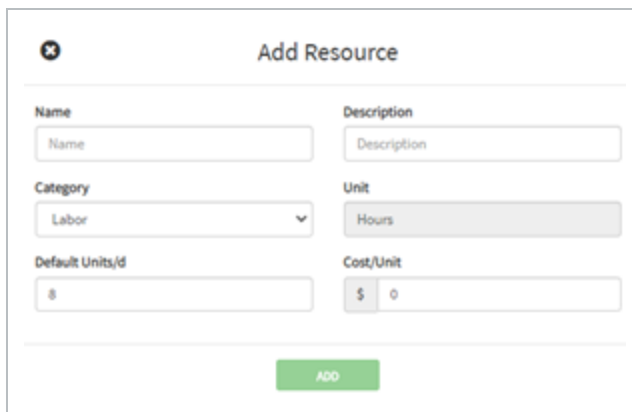
Project Specific Resources can also be created from the Resource Assignment window in the Planning view.

## Create a Project Specific Resource via the Resource Assignment Window

1. Without having any resources selected, click the plus **+** icon.



- The Add Resource opens to add a project specific resource

A screenshot of the 'Add Resource' form. The form has a title bar with a close icon and the text 'Add Resource'. It contains several input fields: 'Name' (text), 'Description' (text), 'Category' (dropdown menu with 'Labor' selected), 'Unit' (dropdown menu with 'Hours' selected), 'Default Units/d' (text), and 'Cost/Unit' (text with a dollar sign prefix). A green 'ADD' button is at the bottom center.

2. Fill out the project resource information and then click **Add**.

## Knowledge Base Resources

### Resources in the Knowledge Base

To access the Knowledge Base, click the **Knowledge Base** icon.



In the Knowledge Base, you can establish the base pool of resources for the organization. Schedule is built on top of augmented intelligence, or machine based learning. The Knowledge Base is used to enhance machine based learning and load with past schedule-related data that an organization would want to include in future schedules. Hence, this data that gets loaded should be as accurate as possible. After set up, schedulers can pull these into projects for use with the resource management functionality and analytics.

CPM SCHEDULES	ACTIVITY PRODUCTIVITY RATES	KNOWLEDGE TAGS	CALENDARS	REGISTER	RESOURCES	MACHINE LEARNING
<div style="display: flex; justify-content: space-between; align-items: center;"> <span>+</span> <span>📄 🔍</span> </div>						
Schedules ↓	Schedule ID		Start	Finish	Data Date	Verified
📄 MPP Project	SCHED-17	⋮	2 Jul 2018	18 Jun 2023	2 Jul 2018	●
📄 ms proj	SCHED-18	⋮	1 Jul 2019	26 Feb 2023	1 Jul 2019	●
📄 MS project	SCHED-1	⋮	3 Jul 2018	13 Sep 2020	3 Jul 2018	●
📄 New CPM Schedule	SCHED-19	⋮	9 Jun 2021	9 Jun 2022	19 Aug 2021	●
📄 new kb	SCHED-70	⋮	12 Apr 2022	12 Apr 2023	12 Apr 2022	●
📄 New Sch on 6.27	SCHED-83	⋮	27 Jun 2022	27 Jun 2023	27 Jun 2022	●
📄 New schedule from Scratch	SCHED-54	⋮	14 Feb 2022	14 Feb 2022	14 Feb 2022	●
📄 no ID	NO ID	⋮	3 Jul 2018	13 Sep 2020	3 Jul 2018	●
📄 not	SCHED-37	⋮	27 Sep 2021	27 Sep 2021	1 Apr 2019	●
📄 Offshore Platform	SCHED-20	⋮	8 May 2019	8 May 2020	8 May 2019	●
📄 Offshore Platform [OUTLINED @ 7/15/20...	SCHED-21	⋮	8 May 2019	8 May 2019	8 May 2019	●
📄 Paradise	SCHED-22	⋮	29 Oct 2020	29 Oct 2020	26 Mar 2017	●
📄 Preconstruction	SCHED-23	⋮	2 Jul 2018	16 May 2024	27 Oct 2020	●
📄 Procurement	SCHED-24	⋮	1 Oct 2017	1 Oct 2018	1 Oct 2017	●
📄 ProjectCode Match	SCHED-80	⋮	16 Jun 2022	16 Jun 2023	16 Jun 2022	●
📄 PT	SCHED-112	⋮	26 Oct 2022	26 Oct 2023	26 Oct 2022	●
📄 Publish to KB	SCHED-49	⋮	21 Feb 2022	20 Feb 2023	19 Feb 2022	●

## CPM Schedule




CPM schedules in the Knowledge Base contain the same information as project schedules. CPM schedules are past or current schedules where relevant schedule data can be used in future schedules. For example: if you are working on a new schedule for bridgework, you can store past bridgework schedules in the knowledge library to use later for machine learning for new projects.

The Verified column on the far right is controlled by an administrator, and represents schedules that have been certified as schedules that contain accurate data. Schedules that show a green dot are verified, and red dots are unverified schedules.

CPM SCHEDULES	ACTIVITY PRODUCTIVITY RATES	KNOWLEDGE TAGS	CALENDARS	REGISTER	RESOURCES	MACHINE LEARNING
<div style="display: flex; justify-content: space-between;"><span>+</span><span>📄 🔍</span></div>						
<b>Schedules ↓</b>	<b>Schedule ID</b>		<b>Start</b>	<b>Finish</b>	<b>Data Date</b>	<b>Verified</b>
📄 MPP Project	SCHED-17	⋮	2 Jul 2018	18 Jun 2023	2 Jul 2018	●
📄 ms proj	SCHED-18	⋮	1 Jul 2019	26 Feb 2023	1 Jul 2019	●
📄 MS project	SCHED-1	⋮	3 Jul 2018	13 Sep 2020	3 Jul 2018	●
📄 New CPM Schedule	SCHED-19	⋮	9 Jun 2021	9 Jun 2022	19 Aug 2021	●
📄 new kb	SCHED-70	⋮	12 Apr 2022	12 Apr 2023	12 Apr 2022	●
📄 New Sch on 6.27	SCHED-83	⋮	27 Jun 2022	27 Jun 2023	27 Jun 2022	●
📄 New schedule from Scratch	SCHED-54	⋮	14 Feb 2022	14 Feb 2022	14 Feb 2022	●
📄 no ID	NO ID	⋮	3 Jul 2018	13 Sep 2020	3 Jul 2018	●
📄 not	SCHED-37	⋮	27 Sep 2021	27 Sep 2021	1 Apr 2019	●
📄 Offshore Platform	SCHED-20	⋮	8 May 2019	8 May 2020	8 May 2019	●
📄 Offshore Platform [OUTLINED @ 7/15/20...	SCHED-21	⋮	8 May 2019	8 May 2019	8 May 2019	●
📄 Paradise	SCHED-22	⋮	29 Oct 2020	29 Oct 2020	26 Mar 2017	●
📄 Preconstruction	SCHED-23	⋮	2 Jul 2018	16 May 2024	27 Oct 2020	●
📄 Procurement	SCHED-24	⋮	1 Oct 2017	1 Oct 2018	1 Oct 2017	●
📄 ProjectCode Match	SCHED-80	⋮	16 Jun 2022	16 Jun 2023	16 Jun 2022	●
📄 PT	SCHED-112	⋮	26 Oct 2022	26 Oct 2023	26 Oct 2022	●
📄 Publish to KB	SCHED-49	⋮	21 Feb 2022	20 Feb 2023	19 Feb 2022	●

## Activity Productivity Rates

Organizations can use Activity Productivity Rates deemed as being the most productive, which can be used to give you durations.

CPM SCHEDULES		ACTIVITY PRODUCTIVITY RATES		KNOWLEDGE TAGS		CALENDARS		REGISTER		RESOURCES		MACHINE LEARNING	
<div style="display: flex; justify-content: space-between; align-items: center;"> <span>+</span> <span>    </span> </div>													
Description	Output	UOM	Duration/Output	Duration Unit	\$/Output								
Act 1	1250	Sec		Days	\$5,000,500.00								
Act1	8500	Hours	150	Days	\$787,878,778.00								
APR 1	2	10	200	Hours	\$6,000,000.00								
Brian Test Rate	1	23	23	Days	\$230.00								
Concrete	80	Cubic Yards	144	Days	\$40,000.00								
Concrete Pour (generic)	400	Sq Feet	1	Days	\$36,000.00								
Concrete Pour (generic)	8	Cubic Yards	1	Days	\$0.00								
Concrete Pour (refinery)	6	Cubic Yards	1	Days	\$0.00								
Concrete Pour (refinery)	60	Cubic Yards	1	Days	\$52,000.00								
Controls	1	Unit	4	Days	\$20,000.00								
Controls	1	Unit	4	Days	\$0.00								
Drywall	1	1	5	Days	\$0.00								
Early Works	1	Acre	1	Days	\$0.00								
Early Works	1	Acre	1	Days	\$2,000.00								
Early Works	1	Acre	1	Days	\$2,000.00								
EIA	1	Unit	24	Days	\$30,000.00								
EIA	1	Unit	24	Days	\$0.00								
Excavation	200	Linear Feet	1	Days	\$0.00								
Excavation	0.25	Cubic Yards	0.5	Hours	\$0.00								

## Knowledge Tags

On the Knowledge Tags tab, you can review tags defined at the organization level and exclude them as necessary from consideration by the Schedule inference engine. When a new project is created, you have the option to import these knowledge tags into the new project.

CPM SCHEDULES    ACTIVITY PRODUCTIVITY RATES    **KNOWLEDGE TAGS**    CALENDARS    REGISTER    RESOURCES    MACHINE LEARNING

Codes / Project

Project Codes			
10/7 Project Code			
7/12 T code			
7/5 - KB - Codesproject			
Business Groups			
Code 25 25-3			
CodesProject 1			
CodesProject 2			
CodesProject 3			
KB - Code Project 1			
KB - Code Project 2			
Locations			
Project Code 10/6			
ProjectCodes 1			
ProjectCodes 2			
ProjectCodes 3			
Prosjekt kode 9-16			
Regression Code			
Srini 5 C/H tag			
SriniProjectCode			

## Calendars

On the Calendars tab, additional calendars can be created, working days can be edited, and a default calendar can be defined. This is also where holidays are defined.

Calendar	Hours/d...	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Exceptions	Actions
2 Days	10	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	4	
22 Day	10	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	0	
3 Day	8	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	0	
4 Day	8	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	0	
5 Day	8	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	0	
6 Day	8	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	0	
7 Day	8	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	0	
Brian Default Work Schedule	1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	0	
Global Calendar	8	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	0	
My calendar	5	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	2	
Tatyana's calendar	6	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	2	

## Register

### Events register

The Events register is where you store persistent risks that occur on projects. The Events register is useful for pulling stored risks into new schedules and use them for risk workshops. The following fields can be quickly edited from the register.

Tab	Function/Description
Title	Title of the event.
Type	This describes the type of register item, for example, Risk, Opportunity, or Action Item.
Description	Items descriptions can be edited at any time.
%	The Probability an event will occur in a risk simulation.
Dur	Impact range event would have on a simulation when it occurs.
\$	Impact range event would have on a simulation when it occurs



CPM SCHEDULES   ACTIVITY PRODUCTIVITY RATES   KNOWLEDGE TAGS   CALENDARS   REGISTER   RESOURCES   MACHINE LEARNING

Events Register   Register Types   Matrix Definition

Name	Prefix	Probability	Schedule Impact	Cost Impact	Positive Impact	Edit
Opportunity	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Idea	I	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Srini Test	SR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Tatyana Test	TP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Schedule Change Request	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Test 9-16	TP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Type 1	TP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
General	GEN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Threat	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Issue	U	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

### Matrix Definition

The tenant level definition of the likelihood and range of impact for both duration and cost a register event has in the cost risk, and schedule review views on risk simulations. These can be adjusted to be project or schedule specific

CPM SCHEDULES   ACTIVITY PRODUCTIVITY RATES   KNOWLEDGE TAGS   CALENDARS   REGISTER   RESOURCES   MACHINE LEARNING

Events Register   Register Types   Matrix Definition

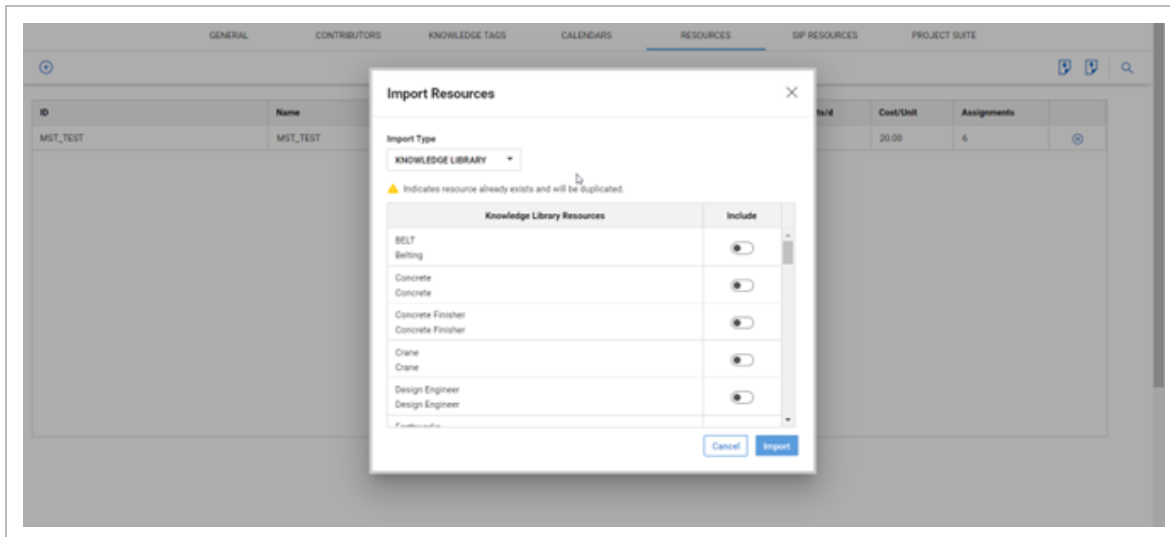
Description	Probability	Schedule Impact	Cost Impact	Color
Very Low	10%	≤ 11 days	≤ \$13	
Low	25%	≤ 30 days	≤ \$10,000	
Medium	50%	≤ 60 days	≤ \$100,000	
High	75%	≤ 90 days	≤ \$1,000,000	
Very High	95%	≤ 180 days	≤ \$10,000,000	

### Resources

Resource details such as ID, Name, Category, Default Units, and Costs can be edited in the register. The indent arrows located on the far right of the screen are used to create child resources or to move the resource to a different part of the grid.

ID	Name	Category	Color	UoM	Default Units/d	Cost/Unit	
Kim Test for Keith	Kim Test	Labor	Grey	Hours	8.00	1.00	
Robin Tester	Tester	Material	Red	Each	1.00	200.00	
Project resource	project resource	Nonlabor	Purple	Each	1.00	75.00	
009	Resource 9	Nonlabor	Green	Each	1.00	0	
Global	Global	New Category	Blue	Each	1.00	0	
Srini Import ID	Srini Import Desc	Unique	Cyan	Each	1.00	0	
Indent	Indent	Labor	Magenta	Hours	8.00	0	
Tatyana Reg Test	Resurs 009	Supply	Red	Hiver	25.00	5080.00	
SB2		Labor	Green	Hours	8.00	0	
SP	Ski Patrolter	Labor	Dark Green	Hours	8.00	25.00	
No UOM	UOM No	Labor	Light Green	Hours	1.00	0	
✓ Jomny B	Bonny J	Labor	Teal	Hours	8.00	0	
Baby Jon	Jonny babe	Labor	Yellow	Hours	2.00	3.00	
629 Res 1	Res 1	Labor	Pink	Hours	8.00	0	
629 Res 2	Res 2	Labor	Grey	Hours	8.00	0	
7/12	Resource 3	Labor	Purple	Hours	8.00	0	

Resources can be imported from a Microsoft Excel file and also exported, which can then be edited and imported back into the Resources tab.

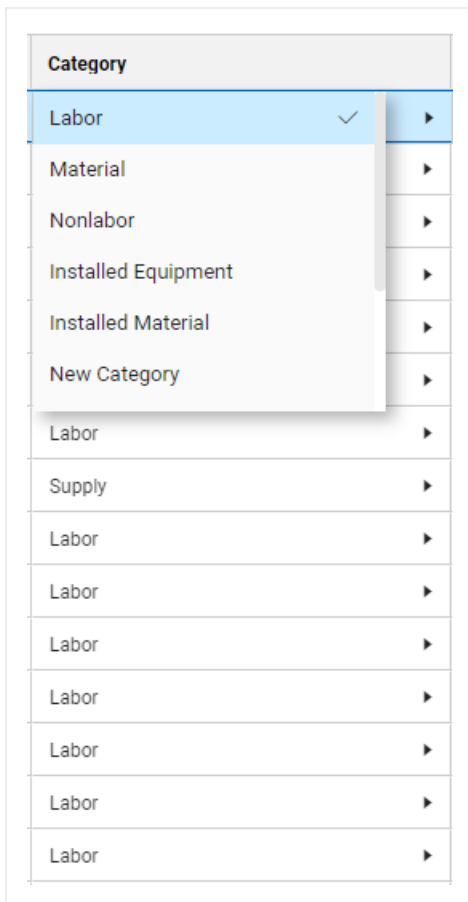


## Categories

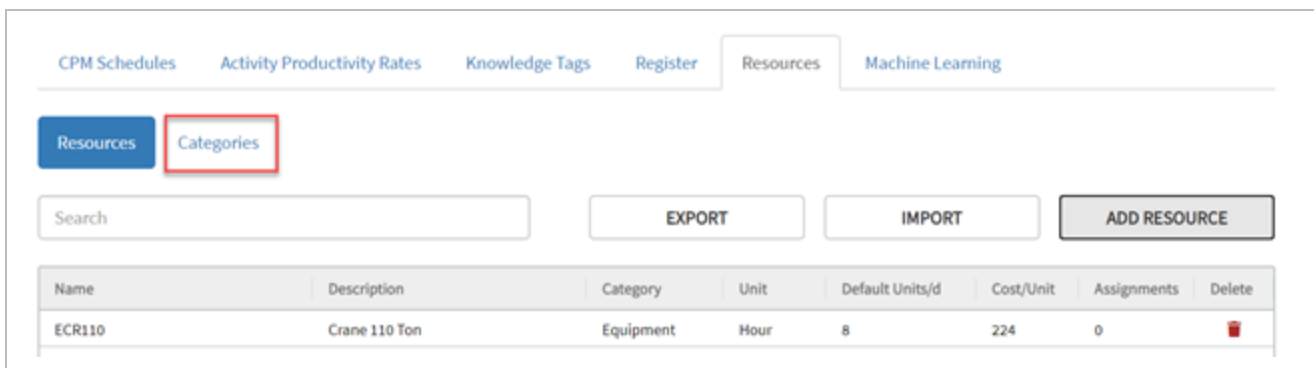
Schedule validates the Categories column in the Resources register after it is updated.

**NOTE** Only System Administrators can add, edit, or delete Category types.





To modify the categories available, click on the Categories section of the Knowledge Library Resource register.



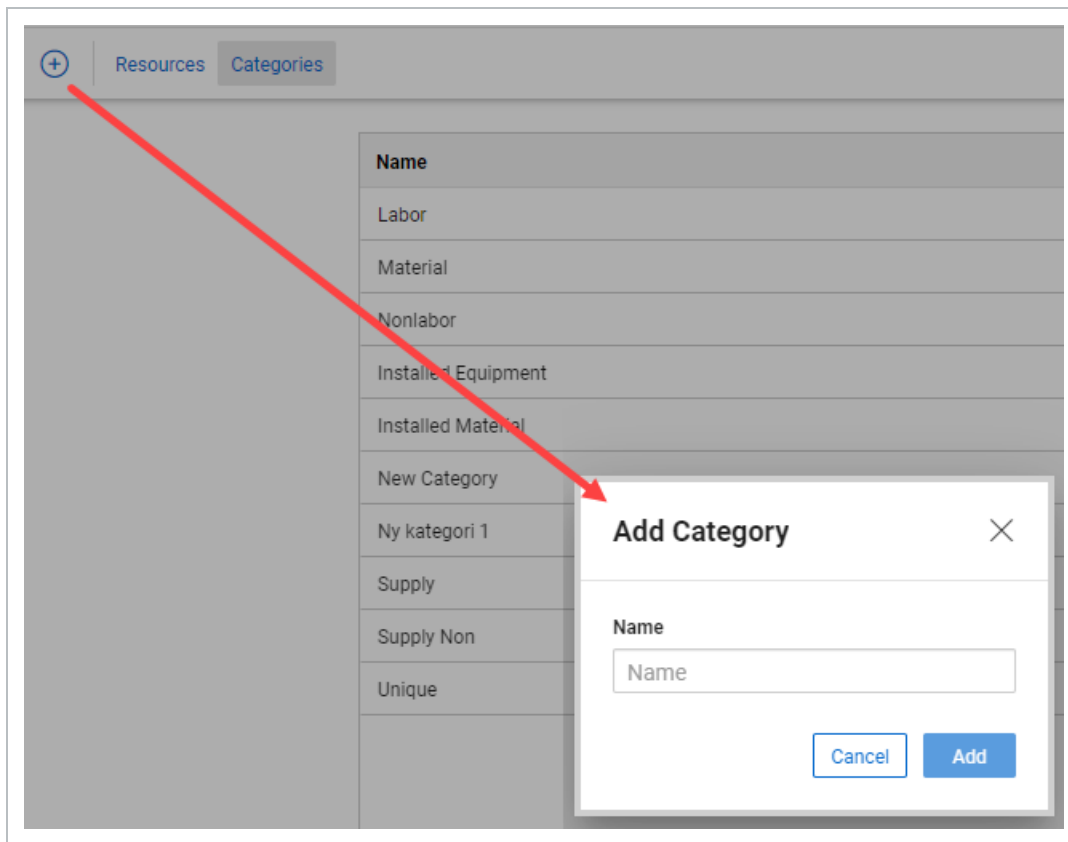
CPM SCHEDULES      RESOURCES      MACHINE LEARNING

Resources    **Categories**

Name	
Labor	
Material	
Nonlabor	
Installed Equipment	⊗
Installed Material	⊗
New Category	⊗
Ny kategori 1	⊗
Supply	⊗
Supply Non	⊗
Unique	⊗

To add a category, click the **Add Category** button.

Type in a new category name. Click **Add** to complete the action.



To edit a category name, click directly into the name field of the category to be modified.

If a category needs to be deleted, select the icon in the delete column.

**NOTE** If you are using Estimate or Control, these categories also match the default categories.

## Machine learning

Machine learning lets inference engine suggestions be automatically tuned and calibrated by the chosen selection.

CPM SCHEDULES   ACTIVITY PRODUCTIVITY RATES   KNOWLEDGE TAGS   CALENDARS   REGISTER   RESOURCES   MACHINE LEARNING

Enable Machine Learning

Schedule Machine Learning allows Inference Engine suggestions to be automatically tuned and calibrated by the selections you choose. The relative influence of each part that makes up a suggestion is detailed below.

Parameter	Influence
Description	+12%
Duration	+3%
Parent Description	0%
Phase	+9%
Project Codes	-1%
Project Code Values	0%

## Set Up Resources

1. Open the **Knowledge Base** and then go to the **Resources** tab.

Acme Corp

CPM SCHEDULES   ACTIVITY PRODUCTIVITY RATES   KNOWLEDGE TAGS   CALENDARS   REGISTER   RESOURCES   MACHINE LEARNING

Resources Categories

ID	Name	Category	Color	UoM	Default Units/d	Cost/Unit	
Kim Test for Keith	Kim Test	Labor	Grey	Hours	8.00	1.00	⊗
Robin Tester	Tester	Material	Red	Each	1.00	200.00	⊗
Project resource	project resource	Nonlabor	Purple	Each	1.00	75.00	⊗
009	Resource 9	Nonlabor	Green	Each	1.00	0	⊗
Global	Global	New Category	Blue	Each	1.00	0	⊗

2. In the Resources Register, select the **Add Resource** button to establish a new resource.

ID	Name	Category	Color	UoM	Default Units/d
Kim Test for Keith	Kim Test	Labor	Grey	Hours	8.00
Robin Tester	Tester	Material	Red	Each	1.00
Project resource	project resource	Nonlabor	Purple	Each	1.00
009	Resource 9	Nonlabor	Green	Each	1.00

- A dialog box opens.

Field	Definition
Name	Recognizable resource name or abbreviation schedulers reference when selecting resources from the register
Description	Extended description or full title of the resource
Category	Resource type classification such as Labor, equipment, and material.

Field	Definition
Unit	The resource's unit of measure
Default Units/d	Daily unit production/completion rate
Cost/Unit	Cost per unit

3. Enter in the resource details and then click **Add** when complete.

### Add Resource ✕

**ID**

**Name**

**Category**

**Unit**

**Default Units/d**

**Cost/Unit**

**Color assignment**

●
●
●
●
●
●
●

[view more colors](#)

- The new resource is added to the Resource register

ID	Name	Category	Color	UoM	Default Units/d	Cost/Unit	
754	Electric	Material	●	Each	1.00	0	⊙
L61	Concrete (Labor)	Labor	●	Hours	8.00	100.00	⊙
120838	Ubct Partnership	Labor	●	Hours	8.00	100.00	⊙
NL-07-B Earthworks	NL-07-B (Mat) Constr ~ Earthworks	Installed Material	●	Square Meter	22.00	100.00	⊙

**NOTE** To edit a resource, click directly into the specific field of that resource in the register.  
 To delete a resource, click the icon in the Delete column.

4. Click the header of the column to sort by to sort resources by field.

- Clicking the header initially sorts ascending/A-Z
- Clicking the header a second time sorts descending/Z-A
- Clicking the header a third time clears the sort function

## Import/Export

In addition to using the Resources register to set up individual resources, you can also import and export resources in bulk.

1. In the Knowledge Library Resource register, click the **Export** button.

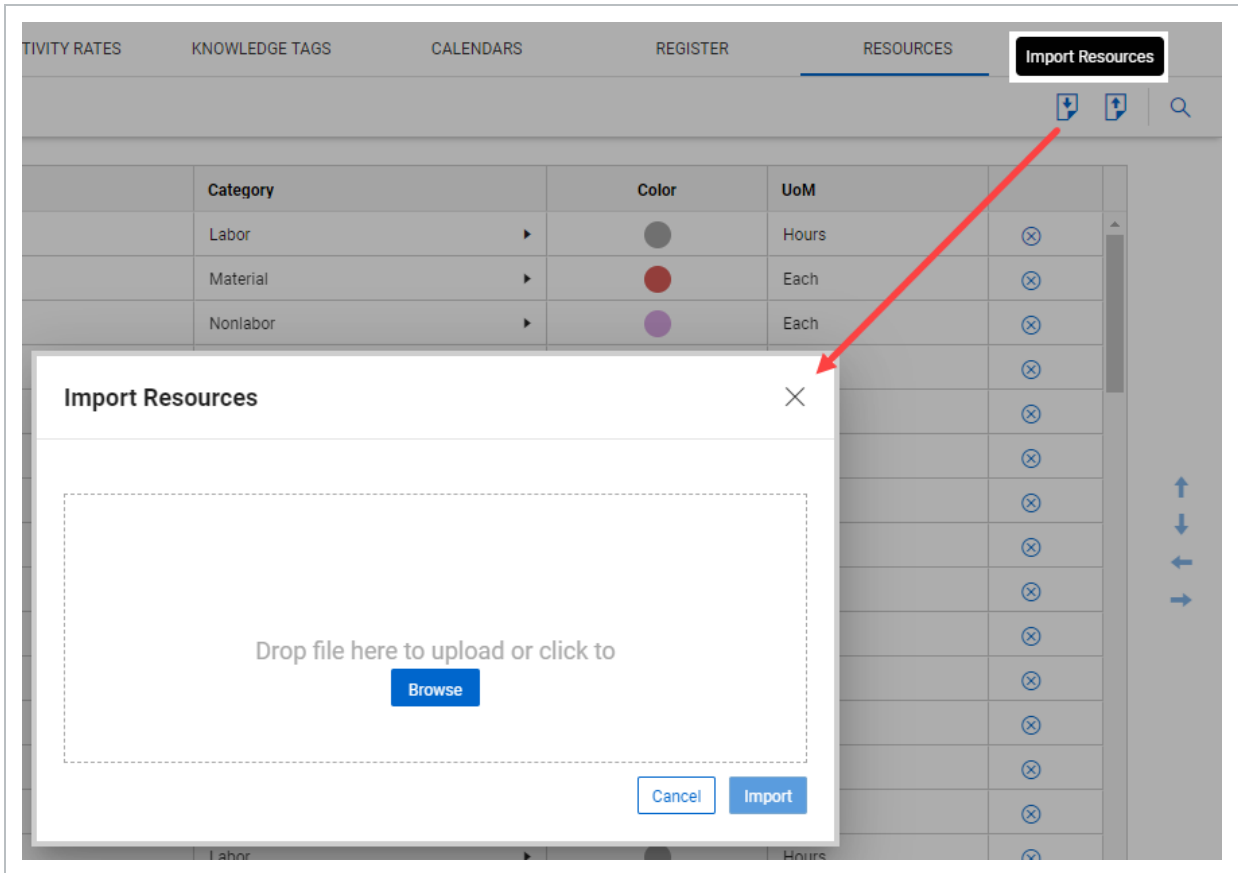
- Once selected, an Excel file downloads to your local drive. The file contains the list of resources currently in the organization’s Resource register.

	A	B	C	D	E	F	G
1	REQUIRED	Field is required for import					
2	OPTIONAL	Field is optional for import					
3	VALIDATED	Field must match master data available in application					
4	IGNORED	Field not to be populated					
Notes:							
1. Create New Resources - To create a new Resource enter valid input for the required fields. Rows that are left blank with required fields will not be entered into Schedule as a new Resource.							
2. The default Category is <b>Labor</b>							
3. Colors are defined using predefined set of hexadecimal characters, the default <b>Color</b> is 0066CC.							
6	ID	Name	Category	Color	Unit	Default Units Per Day	Cost Per Unit
7	Text	Text	Text: "Labor", "Construction Equ	Text: "0066CC", "800000"	Text	Numeric: > 0	Numeric: > 0
8	256	256		7			
9	Kim Test for Keith	Kim Test	Labor	a5a5a5	Hours	8	1
10	Robin Tester	Tester	Material	D85C57	Each	1	200
11	Project resource	project resource	Nonlabor	D8A6E2	Each	1	75

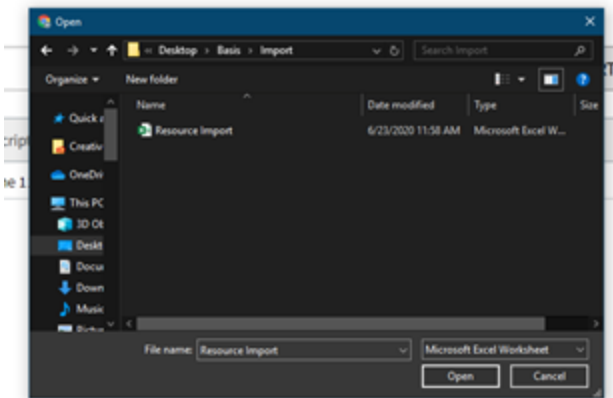
2. In Excel, populate the columns with additional resources and details.

- Once complete, save the .xlsx file

3. In the Knowledge Library Resource Register, click the **import** icon.



4. A dialog box opens where you select the updated .xlsx file. Select the file, and, click **Open**.





- Schedule processes the data and updates the register with new items and changes.

ID	Name	Category	Color	UoM	Default Units/d	Cost/Unit	
Kim Test for Keith	Kim Test	Labor ▶	Grey	Hours	8.00	1.00	⊞
Robin Tester	Tester	Material ▶	Red	Each	1.00	200.00	⊞
Project resource	project resource	Nonlabor ▶	Purple	Each	1.00	75.00	⊞
009	Resource 9	Nonlabor ▶	Green	Each	1.00	0	⊞
Global	Global	New Category ▶	Blue	Each	1.00	0	⊞
Smsi Import ID	Smsi Import Desc	Unique ▶	Cyan	Each	1.00	0	⊞

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# LESSON 6 – RESOURCE HISTOGRAM

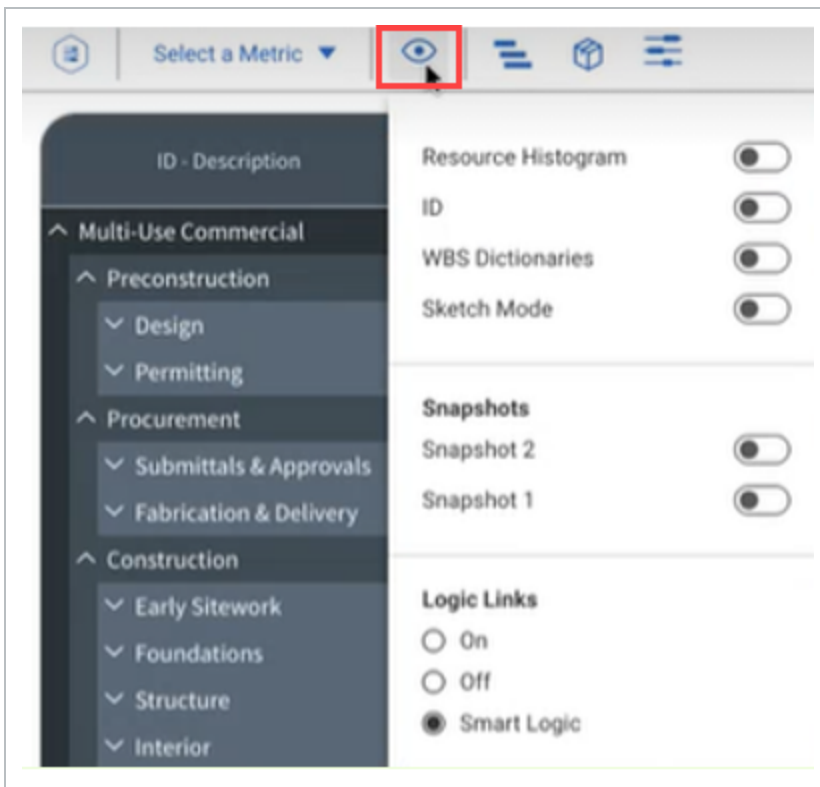
## Resource histogram view

The Resource histogram shows the assigned resources for the project in the histogram window. Assigned resources can be viewed based on Planned, Remaining, Actual, and Remaining Late statuses.

Use the following step-by-step to enable the Resource histogram view.

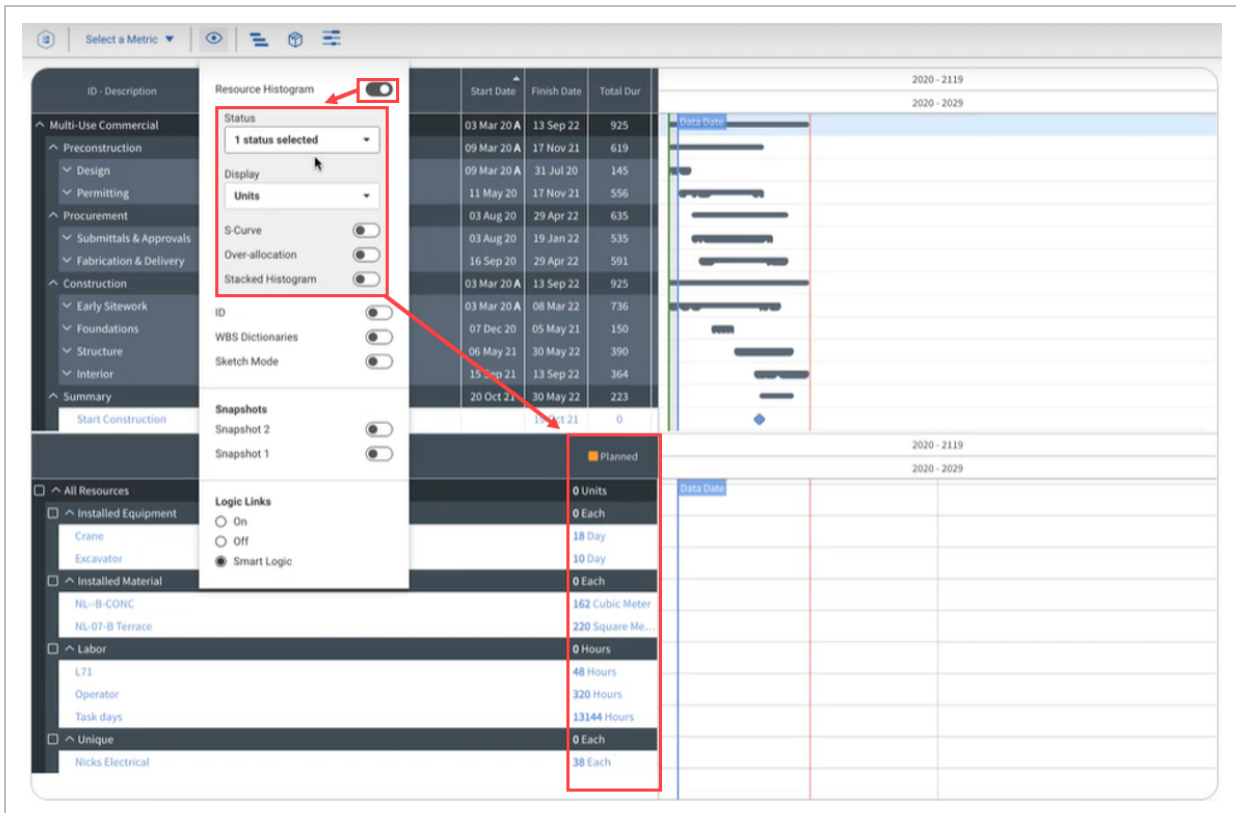
### Enable the Resource Histogram View

1. In the toolbar, click the **View options** icon.

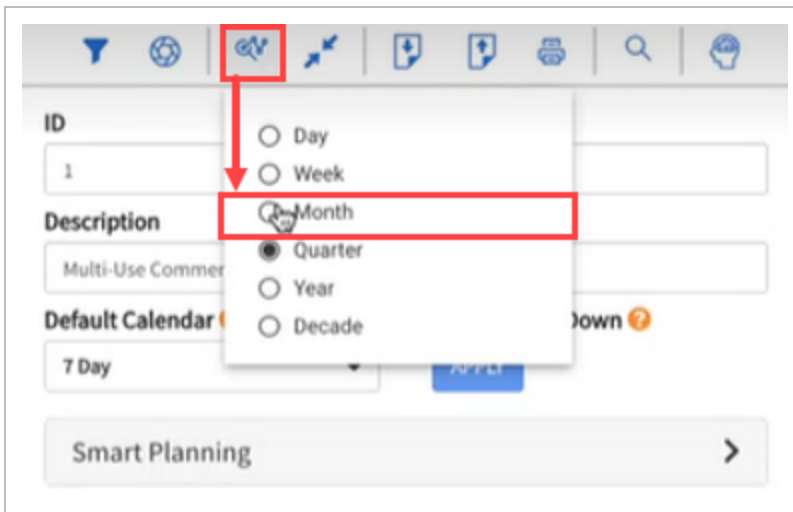


2. Switch the Resource Histogram toggle to enable the Resource histogram.

The view options menu now shows more features in the gray box area. Resources show in the bottom left of the screen. To the right, the histogram window shows.

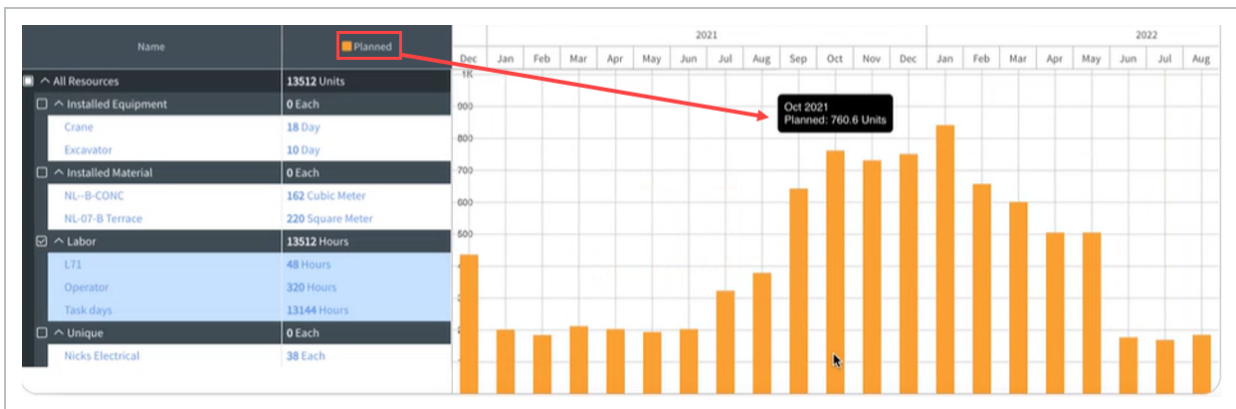


- To view a specific date range for resources, on the right side of the screen, select the **Zoom level** icon.



In the following images for the next steps, the Zoom level is set to Month.

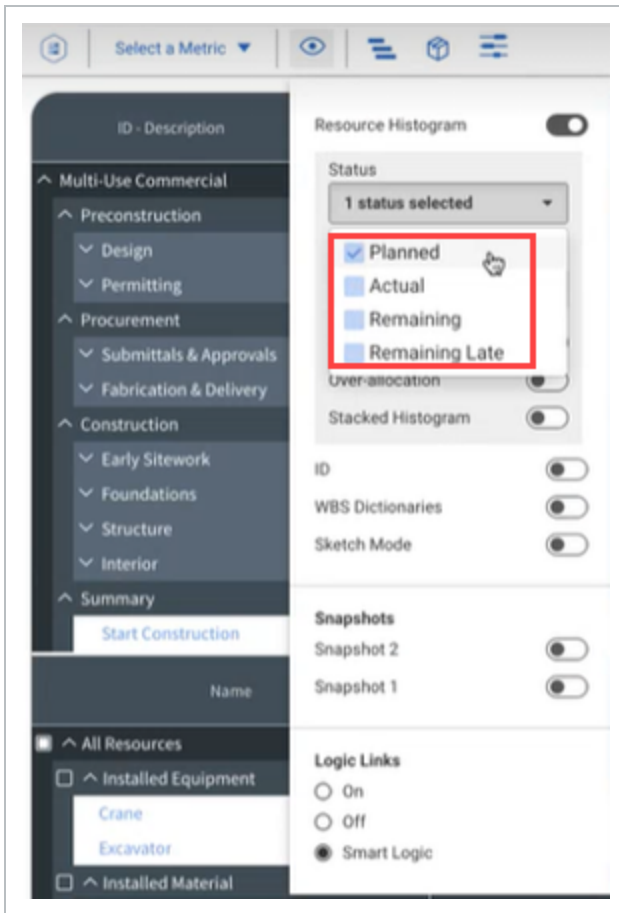
The histogram now shows resources allocated based on the month. By default, only the Planned status is selected.



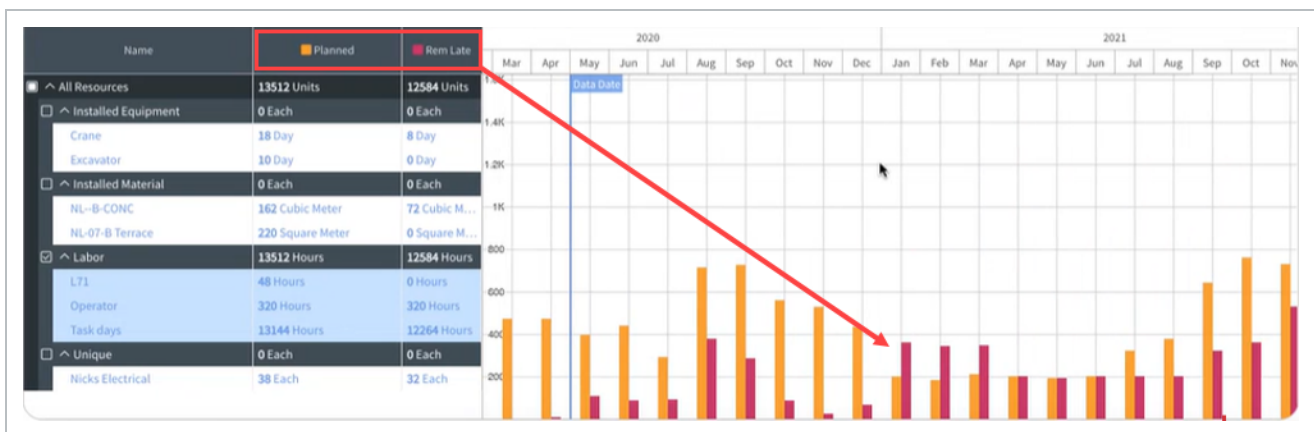
Use the following step-by-step to add statuses to the histogram.

## Add statuses to the Resource histogram

1. Select the **View options** icon, and then select the **Status** drop-down menu.  
The Planned status is selected by default.
2. Select another status to show on the histogram that has not been selected previously.



The additional statuses show the resource bar in different colors. You can hover over the bar to view the data or you can review the resource data in the left column. The image below shows that the Planned and Remaining Late statuses currently occupy the histogram.



In the columns on the left of the screen, the status selected brings in the units associated to it. In this case, the remaining late units are brought in because the Remaining late status is selected. You can see those units spread incrementally across the project.

**NOTE**

The data date is also shown on the histogram. You can add the data date and the finish date of the project for reference so that you know the boundaries of your project.

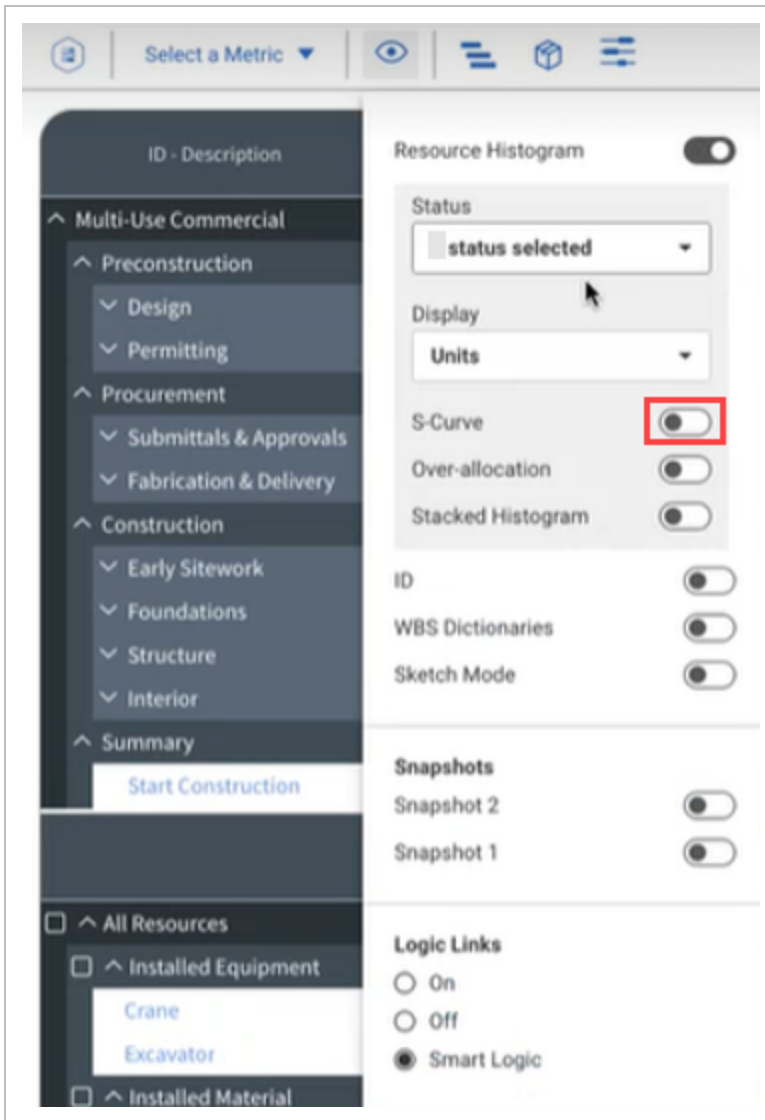
## S-curve

In addition to the incremental curve, you also have a cumulative curve. This is also known as the S-curve. If you toggle the S-curve *On*, you can see two S-curves are planned on the histogram.

Use the following step by step to enable the S-curve in the Resource histogram.

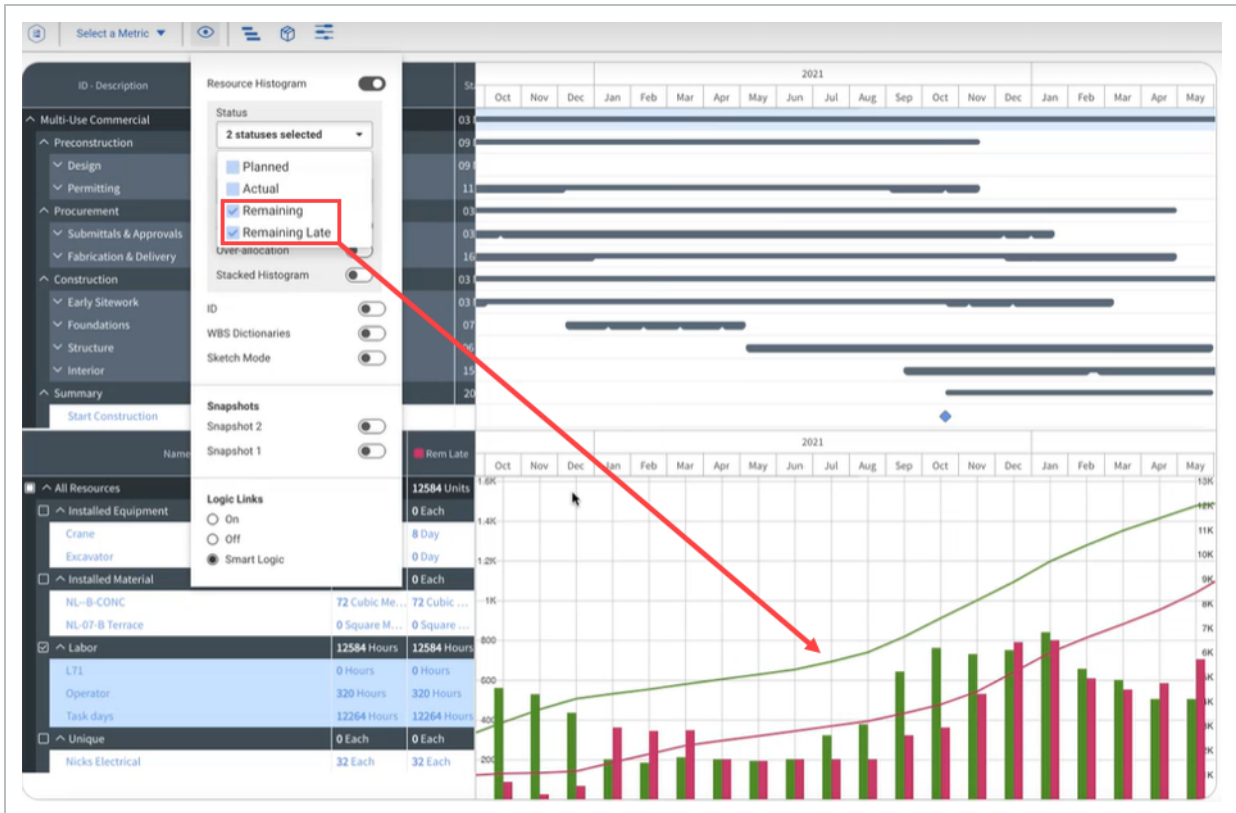
### Enable the S-curve

1. In the toolbar, click the **View options** icon.
2. Select the **Status** drop-down menu, and then select **Remaining** and **Remaining Late**.
3. Switch the S-curve toggle to enable the S-curve.



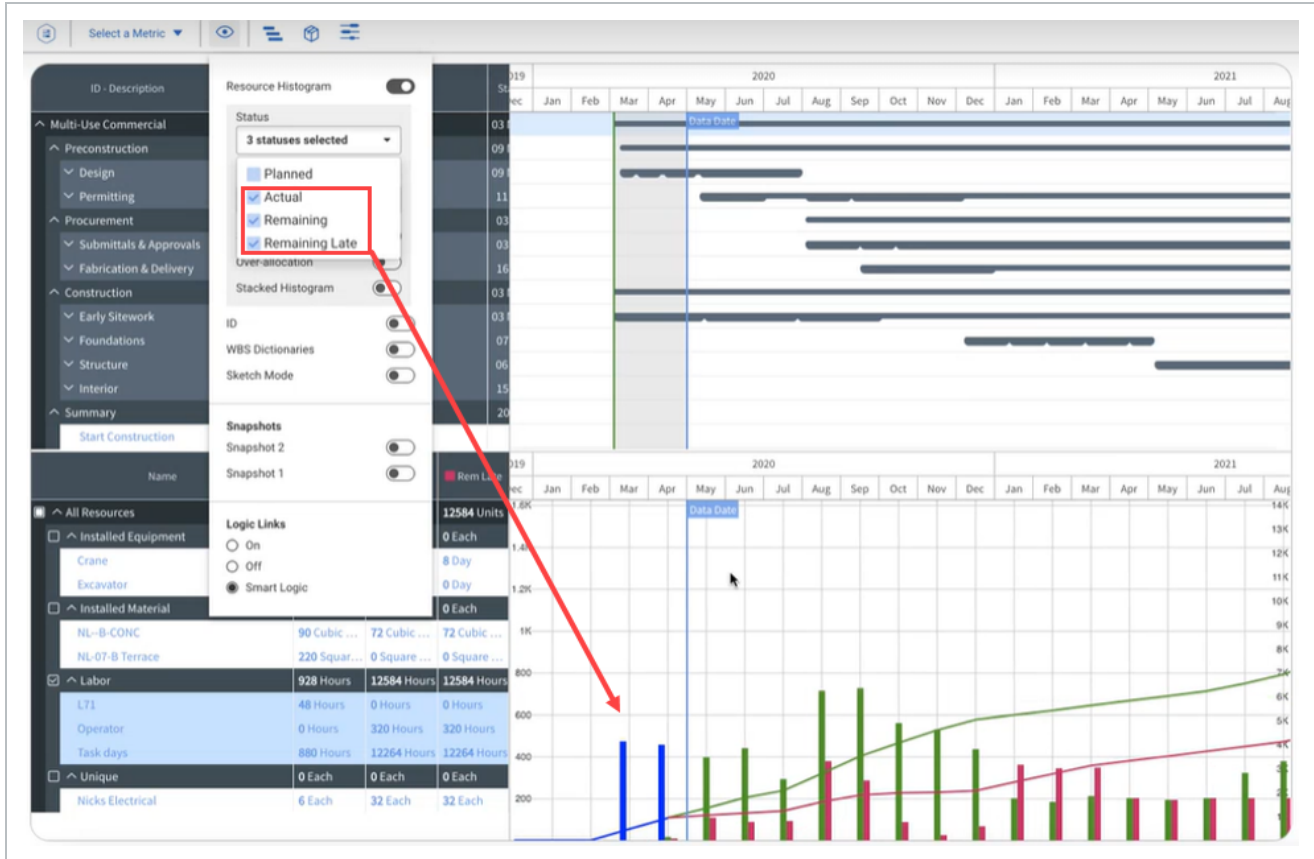
Two S-curves show on the histogram. At the conceptual phase of a project, you are shown these early and late dates. The space between those curves is the float on the project.





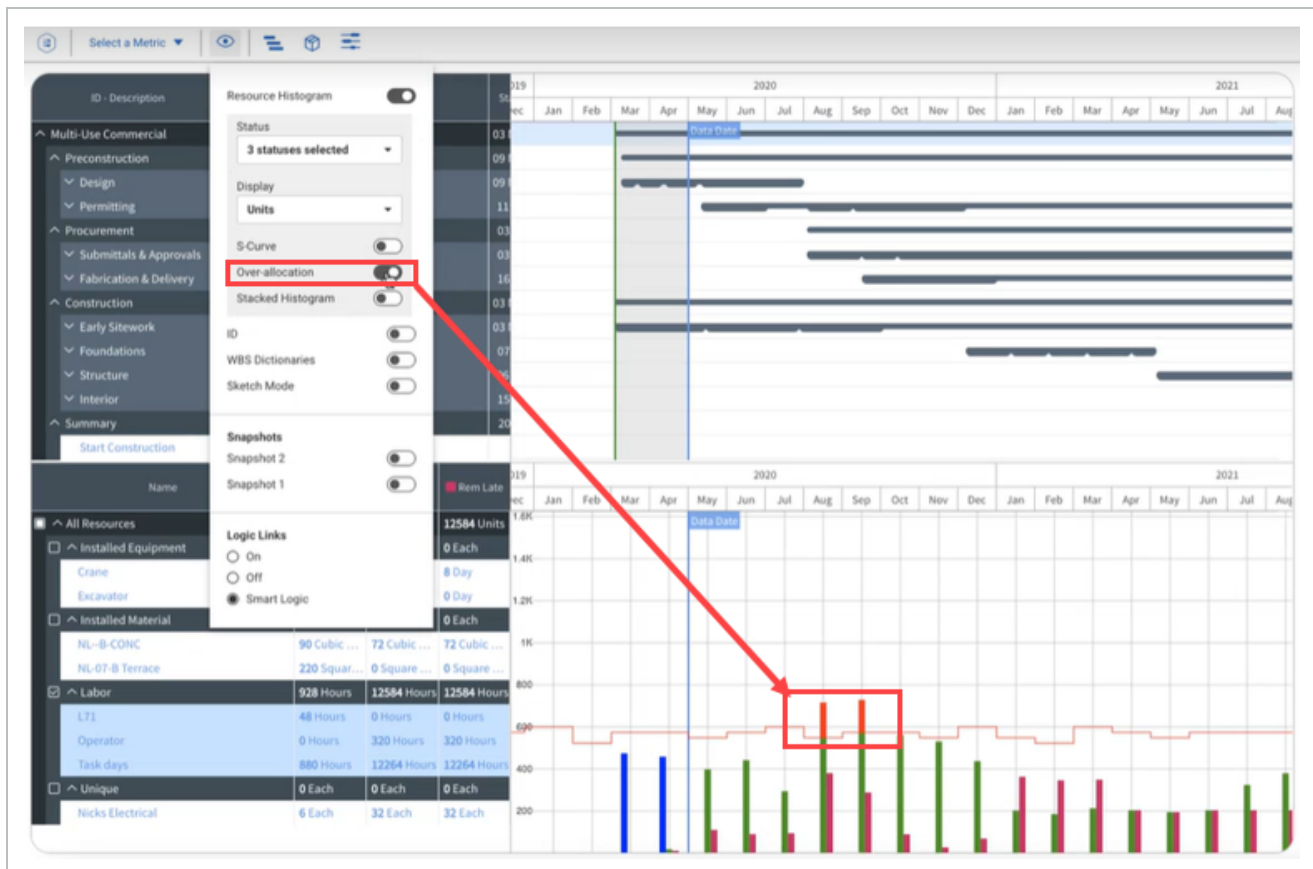
## Actual status enabled with S-curve

With the Actual status enabled with the S-curve lines, you can see that the Actual line ends where the Remaining Late and Remaining lines start. This is your job to date running total for the project. For example, you had certain man-hours earned to date and the remaining hours to earn start from what you have earned to date. You started from the Actuals line in blue and then you go forward from there. The Actual line end where remaining units begin. The Remaining and Remaining late lines starts where actuals for the project end.



## Over-allocation

Over-allocation shows you where you are over allocated based on your resource limits. For example, where you planned for more resources needed to complete the work than you currently plan to have on site. This means in the month of August and September, the bars above the line represent a need for more resources. To fix this over-allocation, you can move activities around to flatten that peak, add more resources, or extend the duration of your activities.



The line across the histogram represents the activity calendars on which these resources are assigned. Weekends, holidays, and exceptions make the line drop because you are working fewer days in that given period. During those periods, you have fewer days to complete the work.

Use the following step by step to enable Over-allocation in the Resource Histogram.

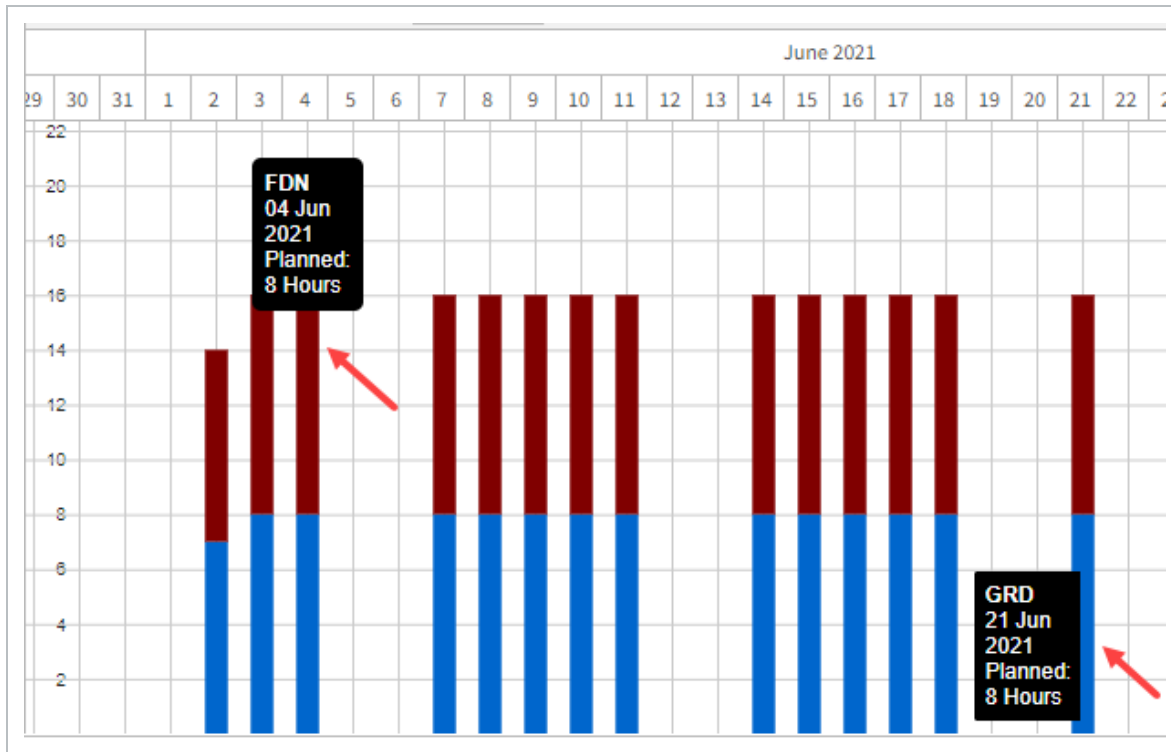
## Enable the Over-allocation

1. In the toolbar, click the **View options** icon.
2. With Resource Histogram enabled, switch the Over-allocation toggle to enable Over-allocation.

## Stacked histogram

The Stacked Histogram shows the different resources in the histogram using different colors. Hover over the different colored tool tips to show which resource that color represents. The tool tip also gives you data for the specific resource and period.

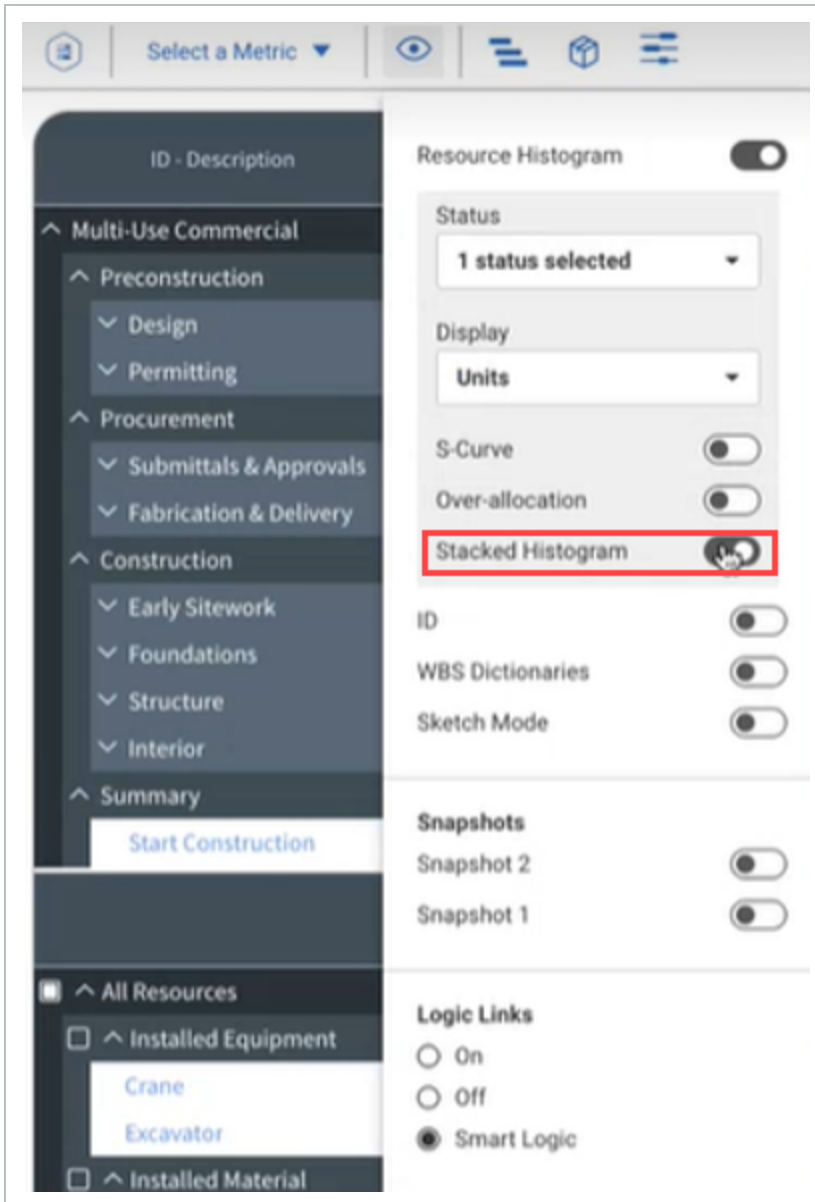
The Stacked Histogram contains advanced filtering capabilities, letting you click on a specific colored bars in a specific time period. Schedule then builds a filter to show that resource for that time period in the Gantt chart.



Use the following step by step to enable the Stacked Histogram.

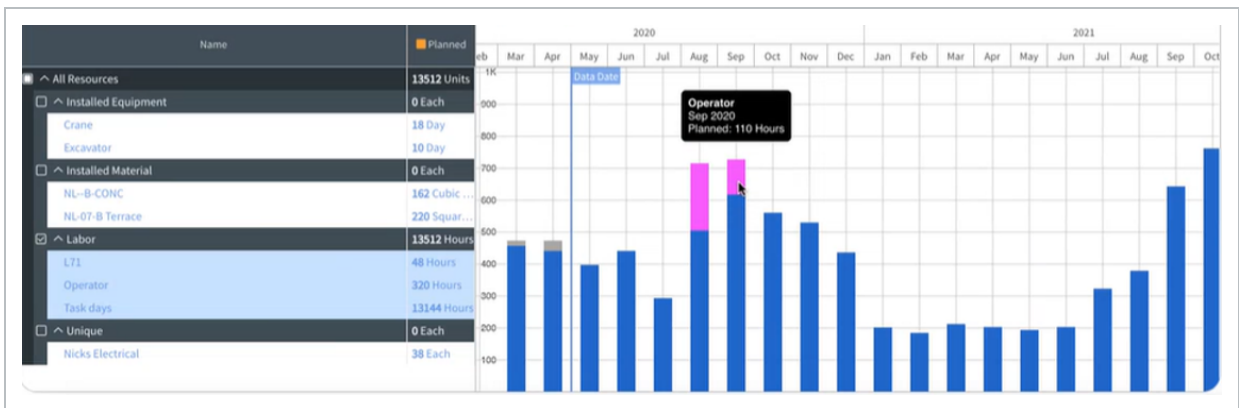
## Enable the Stacked Histogram

1. In the toolbar, click the **View options** icon.
2. With Resource Histogram enabled, switch the **Stacked Histogram** toggle on.



Stacked Histograms are shown on the histogram.

3. Hover over the different colored bars to show the tool tip information.



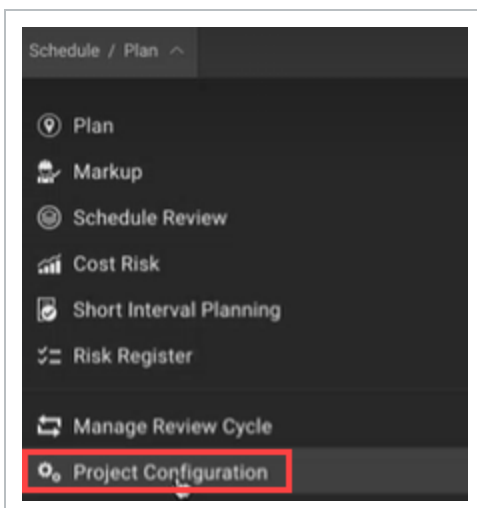
## Changing the stacked histogram colors

Similar to the color column in the SIP resources, the Stacked Histogram colors are controlled at a project level in the Project Configuration.

Use the following step by step to edit the column colors for the stacked histogram.

### Edit Stacked Histogram Colors

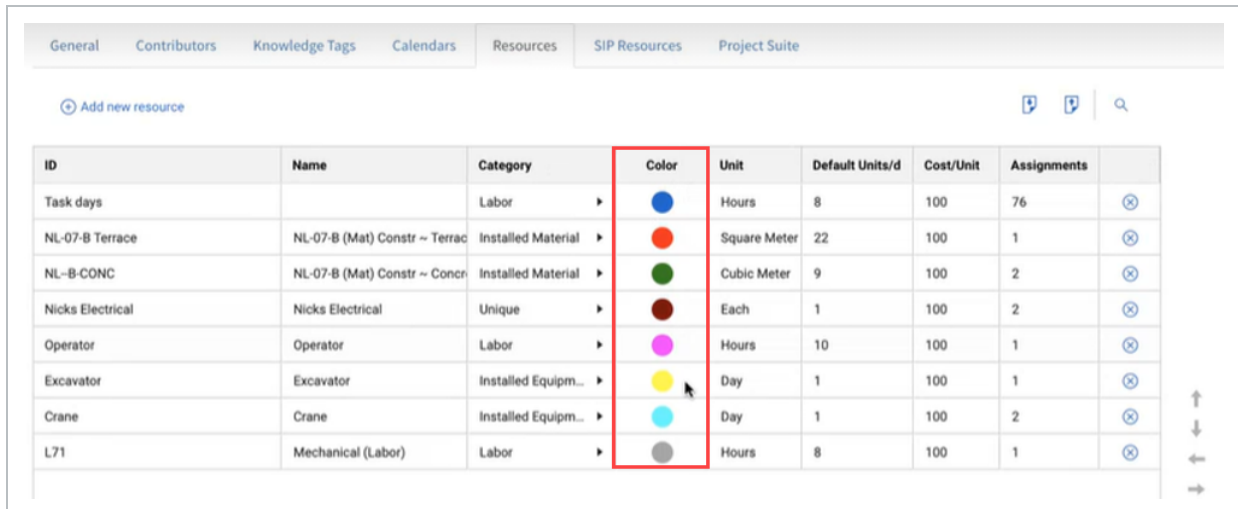
1. Select the navigation drop-down menu.
2. Select **Schedule Configuration**.



3. Select the **Resources** tab.

Resources that have been added to the Resources tab have a column labeled Color.

4. Select the color cell in the row of the resource you want to edit. Then choose a different color for that resource.



ID	Name	Category	Color	Unit	Default Units/d	Cost/Unit	Assignments
Task days		Labor	Blue	Hours	8	100	76
NL-07-B Terrace	NL-07-B (Mat) Constr ~ Terrac	Installed Material	Red	Square Meter	22	100	1
NL-B-CONC	NL-07-B (Mat) Constr ~ Concr	Installed Material	Green	Cubic Meter	9	100	2
Nicks Electrical	Nicks Electrical	Unique	Brown	Each	1	100	2
Operator	Operator	Labor	Pink	Hours	10	100	1
Excavator	Excavator	Installed Equipm...	Yellow	Day	1	100	1
Crane	Crane	Installed Equipm...	Cyan	Day	1	100	2
L71	Mechanical (Labor)	Labor	Grey	Hours	8	100	1

## Burn Rate

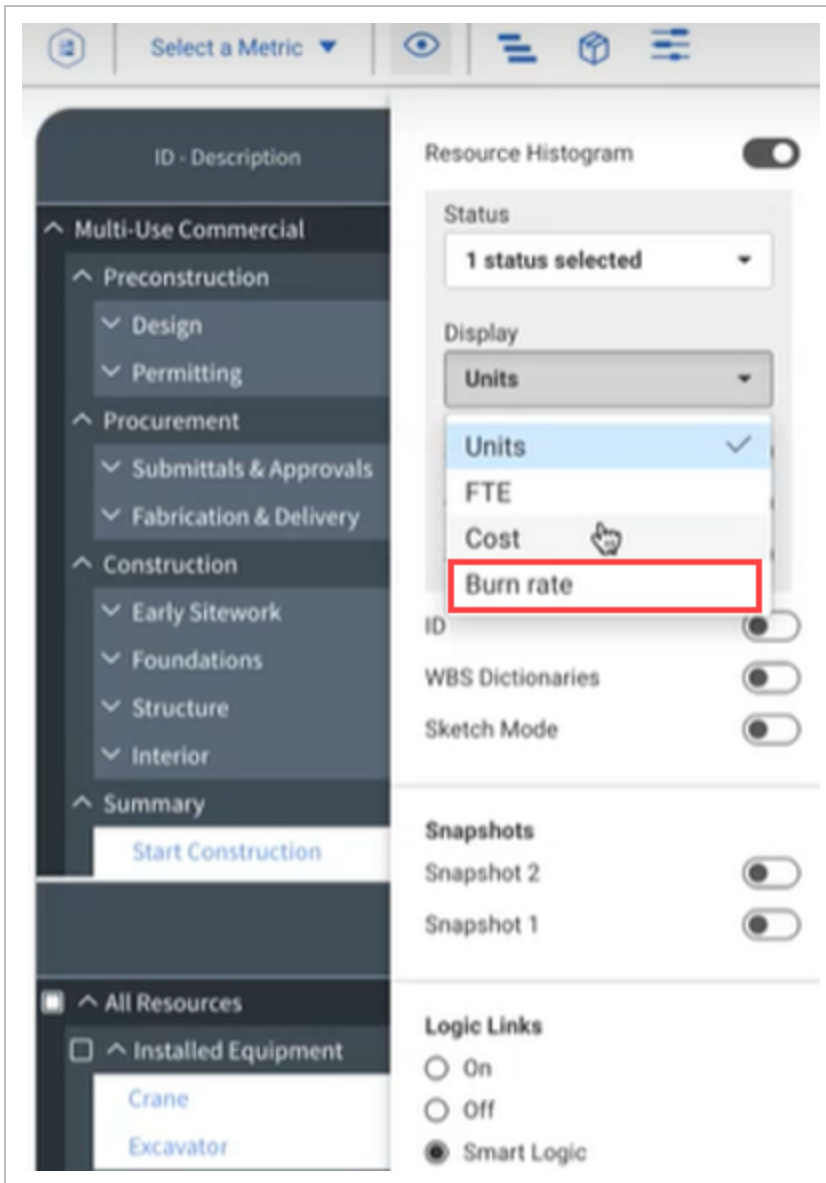
When Burn Rate is enabled, it shows as a percentage on the x-axis. The Burn rate is the percent of total man-hours in a period. The equation is the following:

Month total for a resource ÷ project total for resource(s) = Burn rate percentage

Use the following step by step to enable the Burn rate on the Resource Histogram.

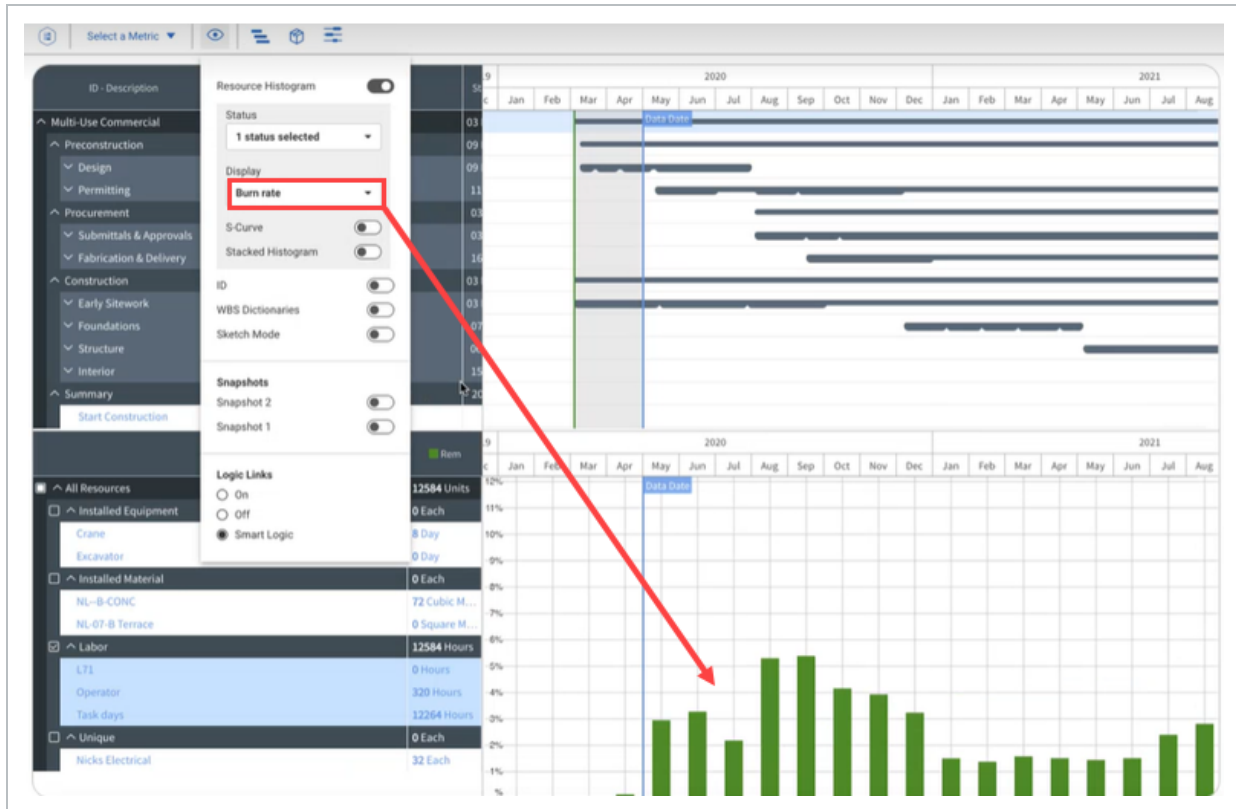
### Enable the Burn rate

1. In the toolbar, click the **View options** icon.
2. Select the **Display** drop-down menu.
3. Select **Burn rate**.



The histogram shows Burn rate data.





## Excel Export

The Excel export feature lets you use the exported project file for reporting since it is a flat data source.

When you export from Schedule, the data from the entire project is exported including the following tabs:

- WBS
- Activity
- Logic
- Codes
- Udfs
- Resource Assignments

Each tab provides information that can be built upon each other. This lets you pivot on different data to create slicers for your reports. The Excel export also lets you make bulk edits to a schedule. You can build an entire schedule in Excel and then import it back into Schedule. This includes logic, resource assignments, and the WBS. Each tab contains the following fields:

- Required
- Optional
- Validated
- Ignored

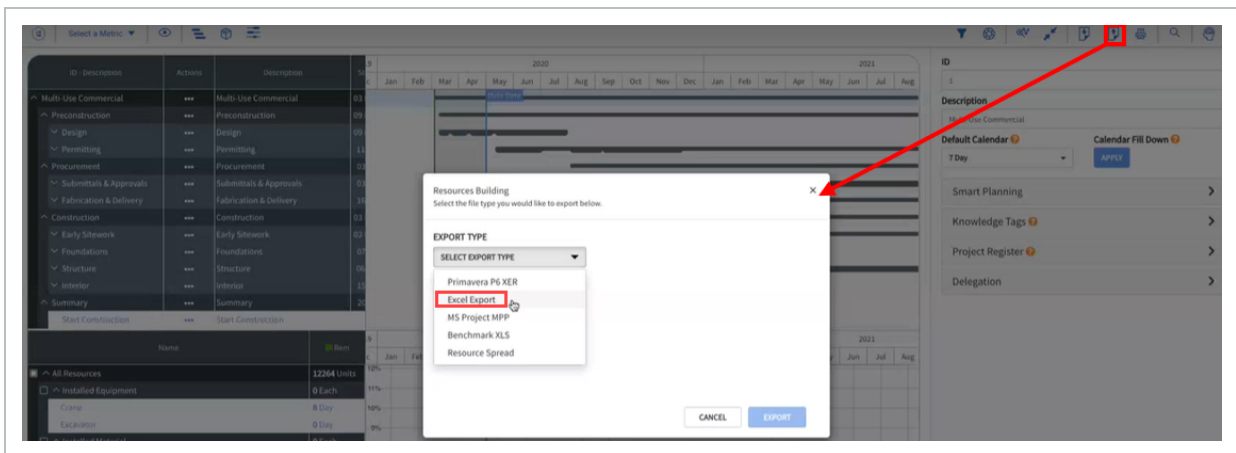
When considering what to import back into a Schedule project, you have the option to delete some tabs and import in only the specific tabs that were changed.

**NOTE** If there are no changes to the file imported back into a Schedule project, the import shows no changes have been made.

Use the following step by step to export a Schedule project.

## Export from Histogram

1. Select the **Export** button on the right of the screen.
  - The Resources Building dialog box is shown



2. Select the **Export Type** drop-down menu.
3. Select **Excel Export**, and then select **Export**
  - An Excel project file opens

WBS ID	WBS Description	Cost	Deliverable	Deliverable Quantity	Delete Record
1	REQUIRED	Field is required for import			
2	OPTIONAL	Field is optional for import			
3	VALIDATED	Field must match master data available in application			
4	IGNORED	Field not to be populated			
Notes:					
1. WBS ID must be unique					
2. When a WBS is deleted, all child WBS's will be deleted and activities will be placed in the root of the project					
7	Text	Numeric	Text	Numeric > 0	Text: "Yes"
8	256	256	128		
9	1	Use Commercial			
10	1.1	Construction			
11	1.1.1	Design			
12	1.1.2	Permitting			
13	1.2	Procurement			
14	1.2.1	Submittals & Approvals			
15	1.2.3	Fabrication & Delivery			
16	1.3	Construction			
17	1.3.1	Early Sitework			
18	1.3.1.1	Parking Structure			
19	1.3.1.2	Utilities Structure			
20	1.3.1.3	Entry & Access Roads			
21	1.3.2	Foundations			
22	1.3.3	Structure			
23	1.3.3.1	Floor 1			
24	1.3.3.2	Floor 2			
25	1.3.3.3	Floor 3			
26	1.3.5	Interior			
27	1.3.5.2	Floor 2			
28	1.3.5.1	Floor 1			
29	1.3.9	Floor 3			
30	1.9	Summary			
31	1.4	Closeout			

Use the following step by step to import an Excel file into a Schedule project.

### Import into the Schedule

1. From Schedule, select the **Import** button on the right of the screen.
2. Browse to the file you want to import back into Schedule.
3. Select **Import**.

**NOTE** An error message can be shown during the Import process. This error message can show where an error occurred in the Excel template and where the fix needs to be made. The import still brings in the data that is correct, but it skips over the data that generated the error. The error is then logged in Schedule.

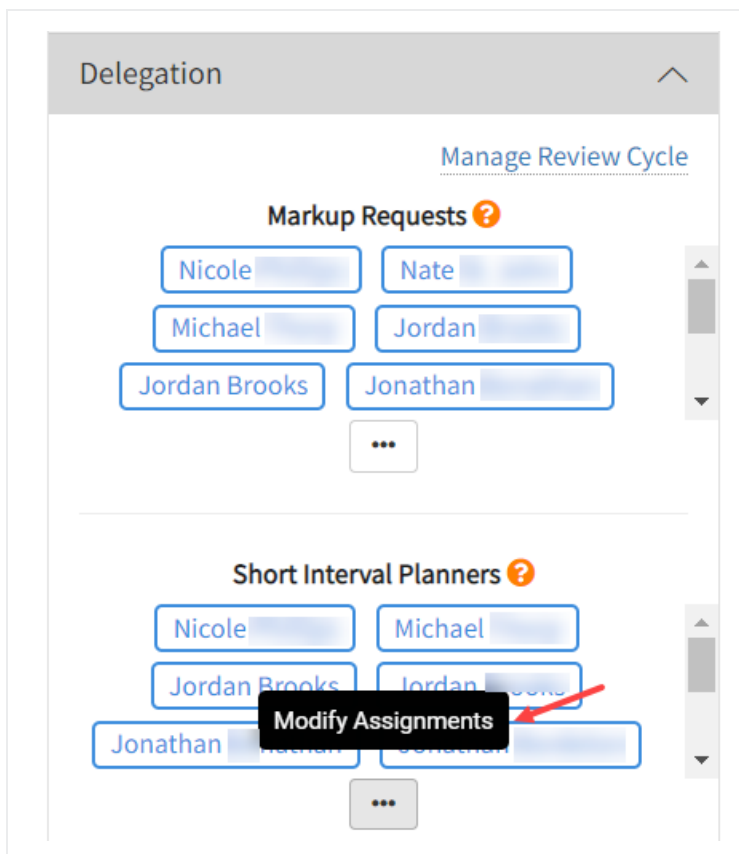
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# LESSON 7 – MARKUP PROCESS

## Markup Process Overview

### Assigning Markup

Markup is assigned in the plan project view from the first level drop-down menu in a project. Select a project WBS summary level, then expand the delegation panel and click the **Modify Assignments** icon, where users can be assigned at various levels within the schedule to provide markup.

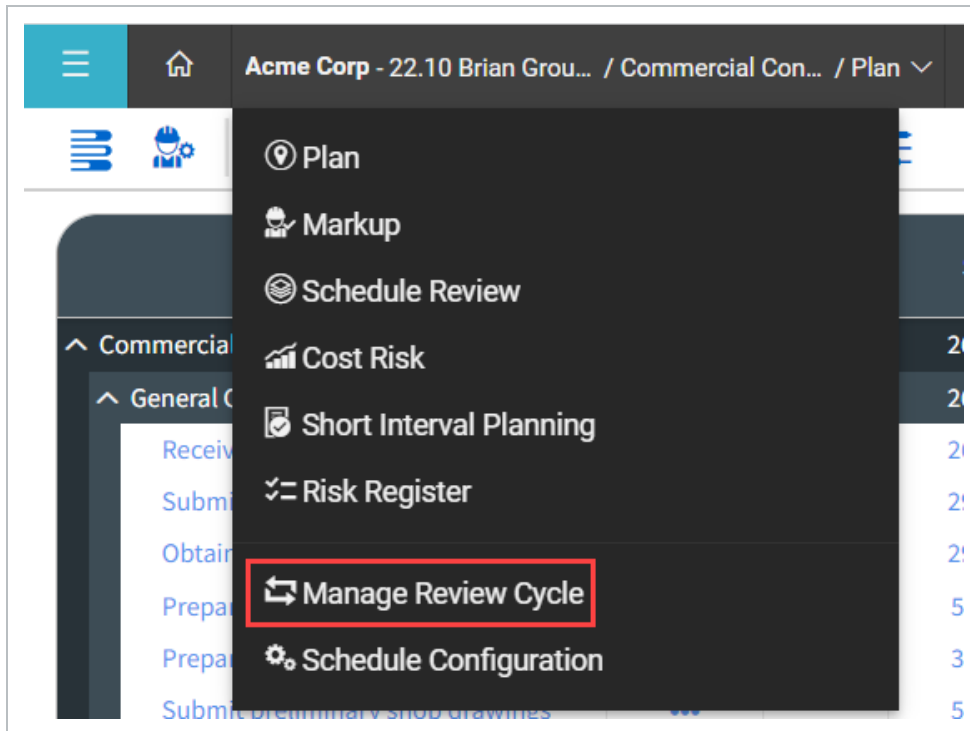


Click the **blue ellipse** icon and select users to assign to WBS elements.

### Initiating the Review Cycle

Once contributors are assigned, the review cycle can be initiated by clicking on the Manage Review Cycle link in the top right of the delegation panel or go to the project settings view from the 1st level

drop-down menu within a project and select Manage Review Cycle.



Assigned contributors and a review message can be validated here. After the Start Review Cycle button is clicked, an invitation email is sent to contributors.

**Start Review Cycle**

Start Review Cycle to solicit expert feedback from project team members

START REVIEW CYCLE

**Message**

Explain to your team members the purpose of the review cycle as well as what to focus on. This message will appear in popup at the start of Markup

Please review before end of week

**Register Threshold**

Difference in BASIS Duration and Team Member Markup that requires a Register entry

+/- 50% ▾

**Team Member Markup**

Assignee	Team Contribution	Last Accessed	Ready For Review?	Show Whole Project	Show Cost	Clear Markup
Ben Heights	<div style="display: flex; width: 100%;"><div style="width: 38%; background-color: #4CAF50;"></div><div style="width: 13%; background-color: #FFC107;"></div><div style="width: 49%; background-color: #FF5722;"></div></div> 38% (3) 50% (4) 13%	4 months ago	✔	<input type="checkbox"/>	<input type="checkbox"/>	
Allen Paddock	<div style="display: flex; width: 100%;"><div style="width: 38%; background-color: #4CAF50;"></div><div style="width: 13%; background-color: #FFC107;"></div><div style="width: 49%; background-color: #FF5722;"></div></div> 38% (3) 13% 50% (4)	1 week ago	✔	<input type="checkbox"/>	<input type="checkbox"/>	
Paul Self	<div style="display: flex; width: 100%;"><div style="width: 13%; background-color: #4CAF50;"></div><div style="width: 50%; background-color: #FFC107;"></div><div style="width: 37%; background-color: #FF5722;"></div></div> 13% 50% (4) 38% (3)	4 months ago		<input type="checkbox"/>	<input type="checkbox"/>	
Christy Tuppence	<div style="width: 100%; background-color: #FFC107;"></div> 100% (6)	4 months ago	✔	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Overall</b>	<div style="display: flex; width: 100%;"><div style="width: 22%; background-color: #4CAF50;"></div><div style="width: 53%; background-color: #FFC107;"></div><div style="width: 25%; background-color: #FF5722;"></div></div> 22% (7) 53% (17) 25% (8)					<div style="background-color: #F44336; color: white; padding: 2px 5px; border-radius: 3px;">REMOVE ALL</div>

EXPORT USER MARKUP

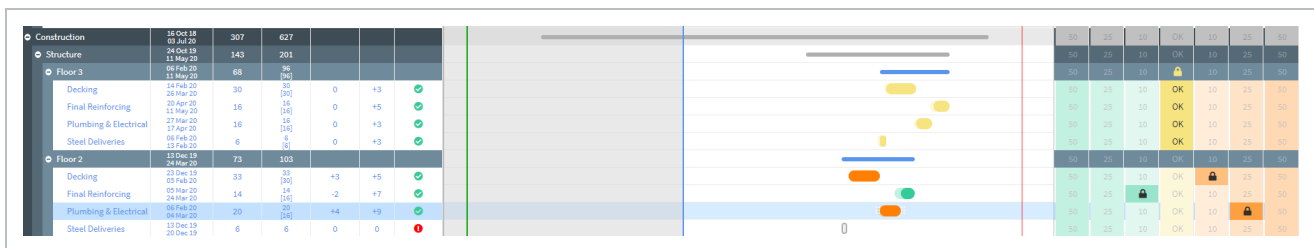
**Uncertainty**

Export project uncertainty ranges generated from team member markup to a risk analysis tools - Oracle PRA (Pertmaster) or Deltek Acumen Risk

EXPORT FORMAT ▾

## Marking up the Schedule

After the review cycle is in process, assigned contributors should log into the project, confirm they are in the Markup project view from the first level drop-down menu in a project, and provide feedback to sections of the schedule assigned to them.



## Reviewing Markup

After Markup is complete, group consensus and individual responses can be assessed from the Review project view from the first level drop-down menu in a project. Consensus is indicated by the signal bars in the tabular WBS view, and individual responses can be viewed by selecting a WBS element and looking in the Duration Uncertainty slide-out panel to the left.

The screenshot displays a project management software interface. At the top, there's a navigation bar with 'Vasey Building (Exp. Confidence Scenario)' and a 'Review' dropdown menu. Below this is a 'Detail - Project' section with a search bar and a 'Zoom - Quarter' view selector. The main area is a Gantt chart showing task durations from 2019 to 2020. A red box highlights the 'Review' dropdown and a vertical toolbar on the right side of the Gantt chart. On the far right, a 'Duration Uncertainty' configuration panel is open, showing 'Uncertainty Type' (Markup/Manual), 'Layer' (Deterministic, AP, BH, CT), 'Distribution' (Triangular/Uniform), and 'Rem Dur (exp)' (14). A 'COMMIT' button is visible at the bottom of the panel.

After a review is complete, the cycle can be ended by returning to the Manage Review Cycle page, and clicking **End Review Cycle**.

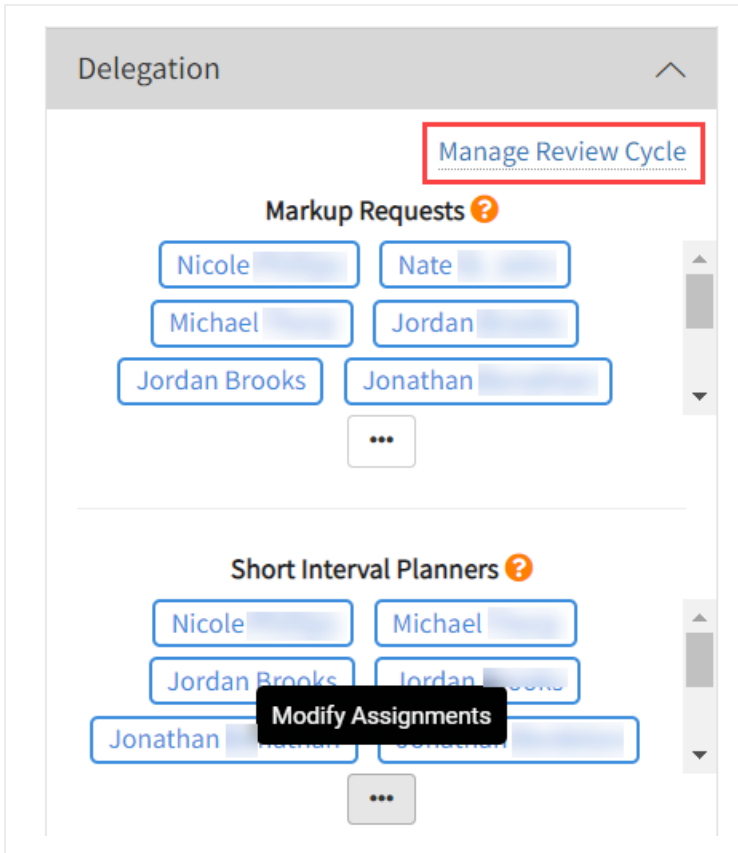
## Initiating the Review Cycle

Now that users have been assigned to various sections of the schedule, you can initiate a review cycle. This will send a notice (email) to contributors assigned to provide markup, notifying them that they may start their review.

## Opening the View Cycle

1. To access the Review Cycle settings, open the **Delegation** tab from Iris and select **Manage Review Cycle**.





**TIP** In the Manage Review Cycle screen, settings can be adjusted prior to initiating the cycle.

The Manage Review Cycle window opens.

**Start Review Cycle**  
Start Review Cycle to solicit expert feedback from project team members

**Message**  
Explain to your team members the purpose of the review cycle as well as what to focus on. This message will appear in popup at the start of Markup

22.10 Markup Group Testing! Let's Markup!

**Register Threshold**  
Difference in Schedule Duration and Team Member Markup that requires a Register entry

**Team Member Markup**

Assignee	Team Contribution	Last Accessed	Ready For Rev...	Show Whole P...	Show Cost	Clear Markup
Brian Mikinski	66% (85) 17% (22) 12%	9/30/22		<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="Clear"/>
Nicole Phillips	51% (66) 16% (21) 27% (35)	10/12/22		<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="Clear"/>
Jonathan Bordelon	29% (38) 50% (64) 16% (20)	10/12/22		<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="Clear"/>
Brian Basis Planning Mikinski	36% (47) 11% 39% (50)	10/27/22	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="Clear"/>
Nate St. John	15% (19)	10/19/22	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="Clear"/>
Jonathan Bonathan	Not started			<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="Clear"/>
Jonathan Bordelon	Not started			<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="Clear"/>
Jordan Brooks	Not started	11/9/22		<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="Clear"/>

## Register Threshold

If a markup is provided with a schedule duration adjustment more higher than the value defined, a Project Register Event is required with the markup.

**Start Review Cycle**  
Start Review Cycle to solicit expert feedback from project team members

**Message**  
Explain to your team members the purpose of the review cycle as well as what to focus on. This message will appear in popup at the start of Markup

22.10 Markup Group Testing! Let's Markup!

**Register Threshold**  
Difference in Schedule Duration and Team Member Markup that requires a Register entry

**Team Member Markup**

Assignee	Team Contribution	Last Accessed	Ready For Rev...	Show Whole P...	Show Cost	Clear
Brian	66% (85) 17% (22) 12%	9/30/22		<input type="checkbox"/>	<input type="checkbox"/>	

None ▲  
None  
+/- 10%  
+/- 25%  
+/- 50%

## Team Member Markup

The Team Member Markup, shows a list of users who have permissions to provide feedback.

### NOTE

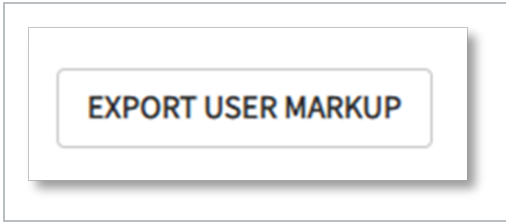
To remove reviewers, go back to the plan view and use the Iris to unassign them as Markup Contributors.

Assignee	Team Contribution	Last Accessed	Ready For Rev...	Show Whole P...	Show Cost	Clear Markup
Brian	66% (85) 17% (22) 12%	9/30/22	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nicole	51% (66) 16% (21) 27% (35)	10/12/22	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jonathan	29% (38) 50% (64) 16% (20)	10/12/22	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brian	36% (47) 11% 39% (50)	10/27/22	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Column	Description
Assignee	First and Last name of contributor.
Team Contribution	Visual percent complete of items reviewed vs assigned.
Last Accessed	Last instance the contributor was in the Schedule system.
Ready for Review?	Confirmation the contributor has finished their markups.
Show Whole Project	Toggle if contributors see the whole project or only items they are assigned to.
Show Cost	Toggles if cost is shown when providing markups.
Clear Markup	Clear/delete markups made.

## Export Options

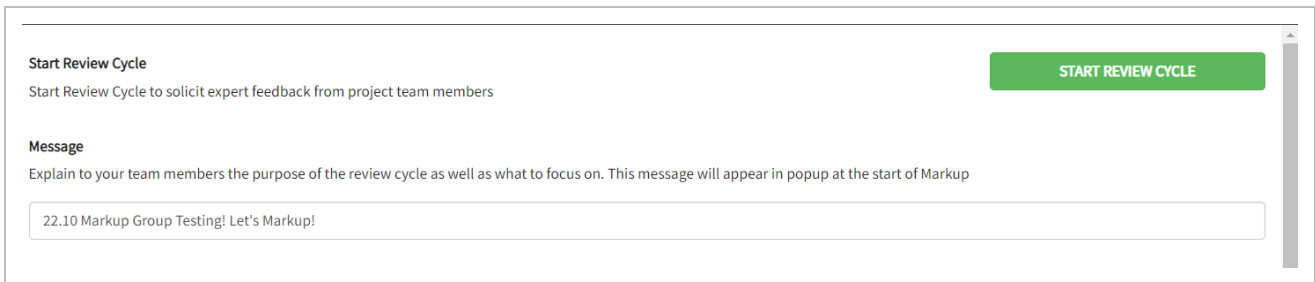
The Export User Markup function lets you export the markup data to excel after the review has been completed. This creates an archive of the data for reference.



**NOTE** Markups can only be exported per cycle. Once a new cycle is initiated, the previous cycle is over written. Exporting after a cycle saves the data before it is overwritten.

### Start/Stop a Review Cycle

Once all the Review Cycle settings have been set, select the Start Review Cycle button at the top of the page in . This will begin the review cycle for Project Contributors to provide feedback and markup the schedule.



### Generate a Review Cycle

1. Select **Manage Review Cycle**. The team members that you added are listed but they have not taken any action yet

Team Member Markup								
Assignee	Team Contribution			Last Accessed	Ready For Rev...	Show Whole P...	Show Cost	Clear Markup
Brian Mikinski	66% (85)	17% (22)	12%	9/30/22		<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="Clear"/>
Nicole Phillips	51% (66)	16% (21)	27% (35)	10/12/22		<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="Clear"/>
Jonathan Bordelon	29% (38)	50% (64)	16% (20)	10/12/22		<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="Clear"/>
Brian Basis Planning Mikinski	36% (47)	11%	39% (50)	10/27/22	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="Clear"/>

- Switch the Show Whole Project to **ON** for the persons you want to be able to view the entire project schedule. By default the markup users only see the section of the project that you have assigned them to

Team Member Markup								
Assignee	Team Contribution			Last Accessed	Ready For Rev...	Show Whole P...	Show Cost	Clear Markup
Brian Mikinski	66% (85)	17% (22)	12%	9/30/22		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="Clear"/>
Nicole Phillips	51% (66)	16% (21)	27% (35)	10/12/22		<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="Clear"/>
Jonathan Bordelon	29% (38)	50% (64)	16% (20)	10/12/22		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="Clear"/>
Brian Basis Planning Mikinski	35% (47)	11%	39% (50)	10/27/22	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="button" value="Clear"/>

- Enter your message to provide guidance to the team members.

**Message**

Explain to your team members the purpose of the review cycle as well as what to focus on. This message will appear in popup at the start of Markup









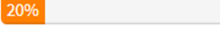



Please review.

- Click **Start Review Cycle**.
- Click **Yes** to updating the project baseline.

**Do you want to update the Project Baseline before beginning this Review Cycle?**

Project Baselines allow you to visualize the impact of the Markup Review process.

As markups are being made, you can refresh the Manage Review Cycle page to see what percent complete contributors are with their markups

Assignee	Team Contribution	Last Accessed	Ready For Review?	Show Whole Project	Show Cost	Clear Markup
Allen Paddock		2 years ago	<input type="checkbox"/>	<input type="checkbox"/>		
Ben Heights		2 years ago	<input type="checkbox"/>	<input type="checkbox"/>		
Christy Tuppance		2 years ago	<input type="checkbox"/>	<input type="checkbox"/>		
Bridgette Quintero		5 months ago	<input type="checkbox"/>	<input type="checkbox"/>		
Susan Cappelloni		2 years ago	<input type="checkbox"/>	<input type="checkbox"/>		
Overall						

[EXPORT USER MARKUP](#)

**NOTE** The color coding of the Team Contribution visualizes the summaries:

- Green:** Percent of items marked up reducing duration
- Orange:** Percent of items marked up increasing duration
- Yellow:** Percent of items marked as planned duration is OK
- White:** Percent of items pending review

6. Click **End Review Cycle** after markups have been submitted.

End Review Cycle

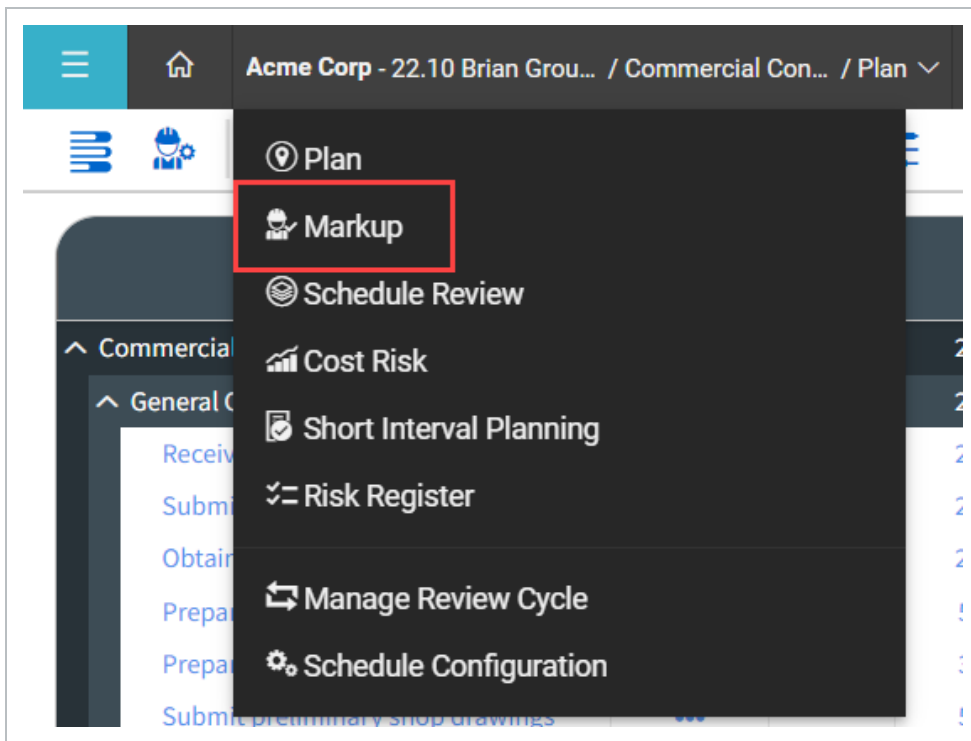
End Review Cycle to review Markup from team members

END REVIEW CYCLE

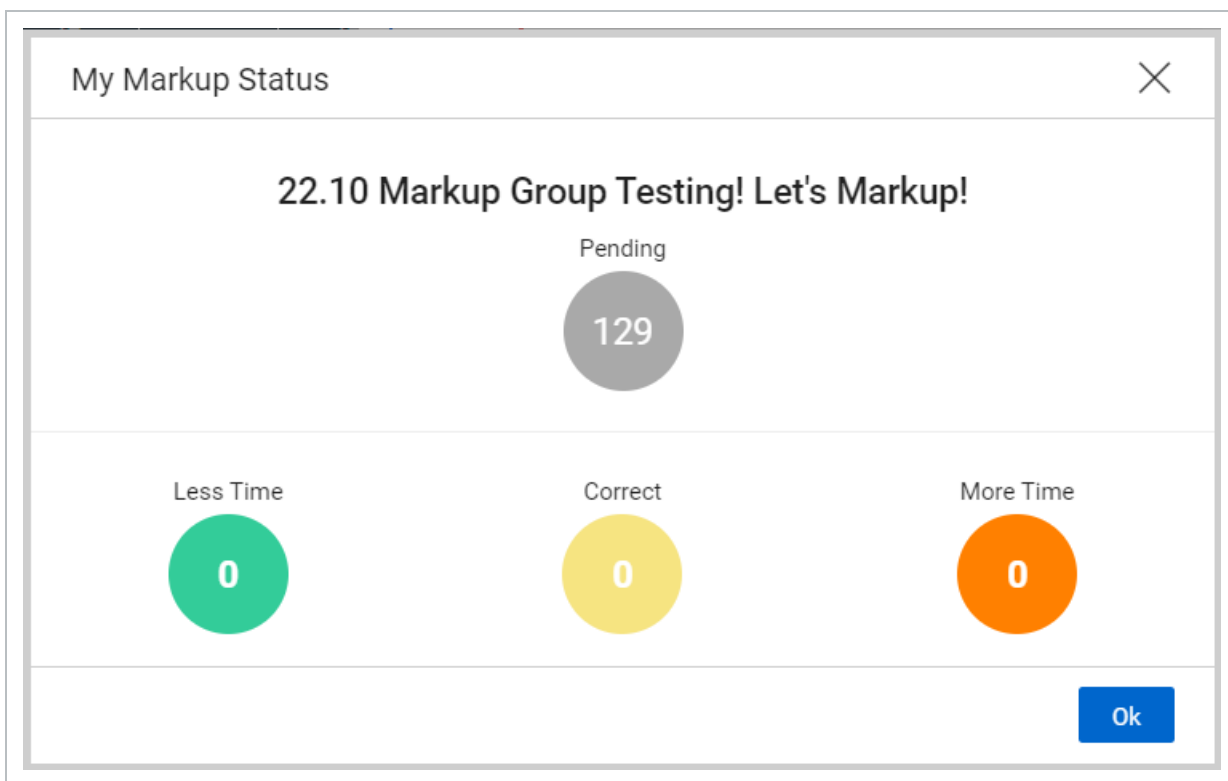
## Marking Up the Schedule

### Uncertainty

User assigned sections for markup and review can begin to provide feedback in the Markup view.

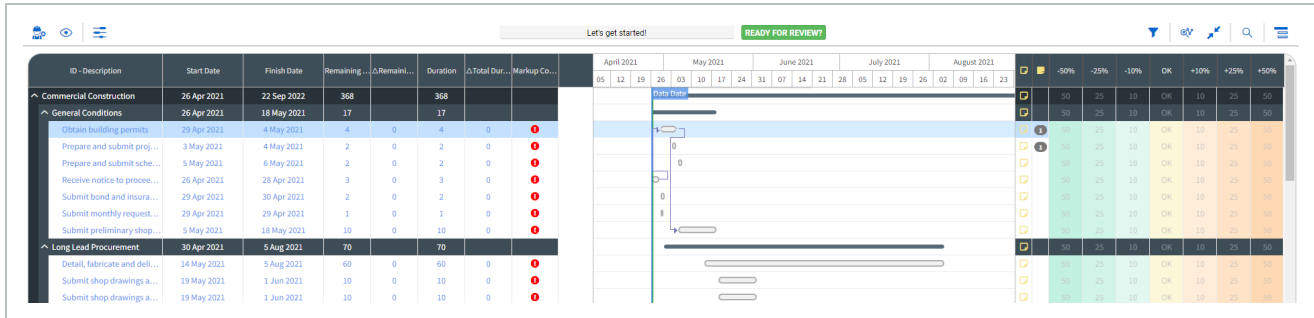


The My Markup Status confirmation box opens to show markup status information.



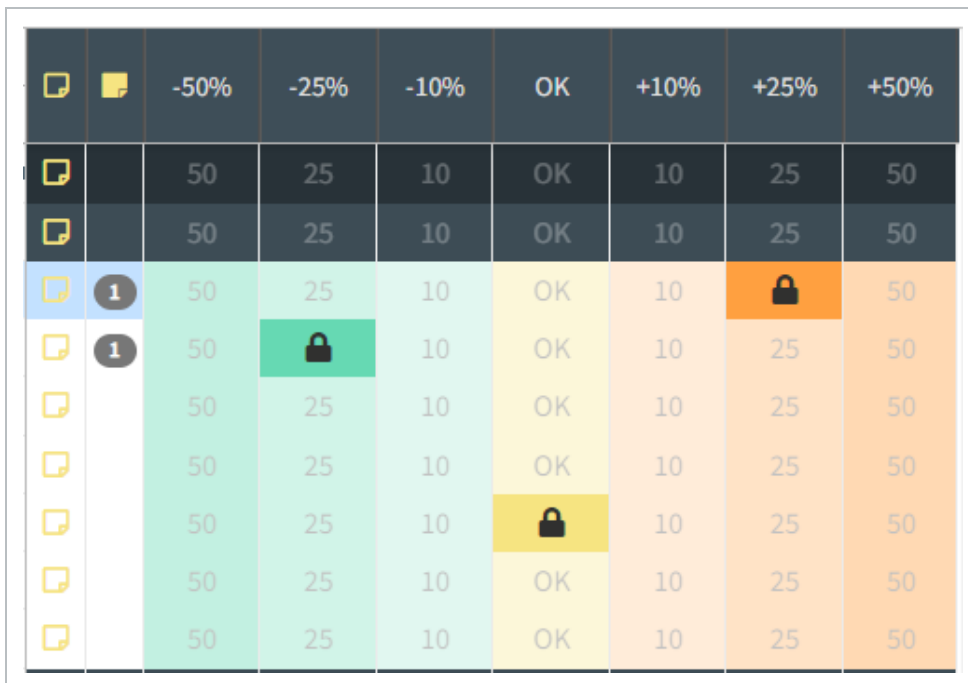
After the schedule is in the Markup view, contributors can begin to give feedback on the schedule. Markups made to increase or decrease durations on the schedule in turn generate uncertainty.

**Uncertainty** is an internal factor, such as quantity growth or productivity loss or gain. It evaluates duration or cost realism and plan confidence.



### Scorecard Values

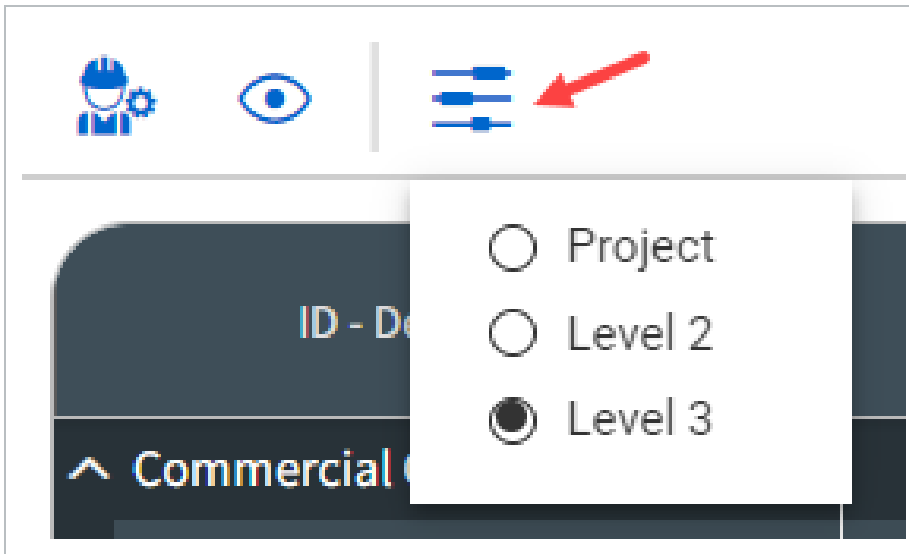
The scorecard provides a quick and easy way to give an estimate of whether the planned durations need to be increased or decreased. Selecting a percentage increases or decreases the duration by that amount.



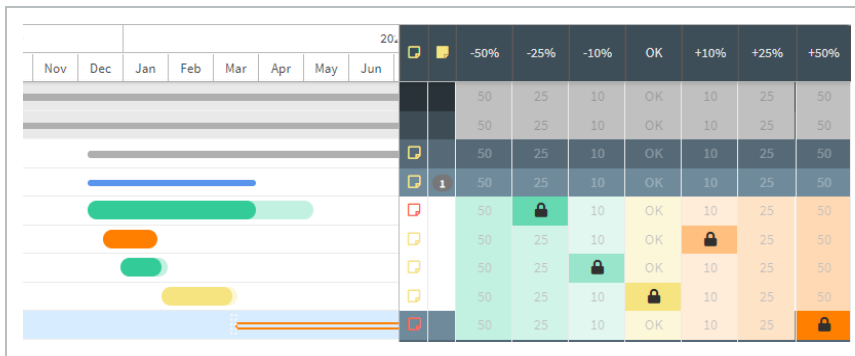
As markups are made on the scorecard, the bars on the Gantt chart adjust accordingly. This gives project contributors a live view of how the schedule is impacted by their markups.



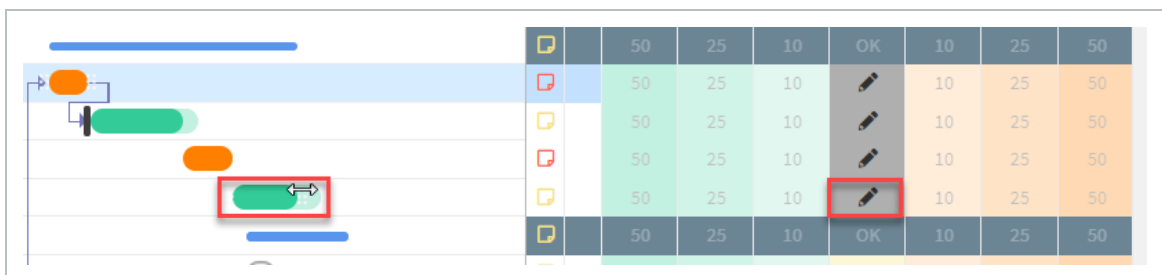




- Go to the scorecard and adjust activities by selecting a markup score. Activities should show a Lock icon once selected, confirming the markup made.



- Go to the Gantt chart and slide the start or end bars around to adjust duration.
  - The scorecard will change the icons to a pencil, signifying a custom duration adjustment was made.



**NOTE** Markups meeting or exceeding the threshold, established in the Manage Review Cycle settings, will change the Event Register icon to red, signifying the user is to add an event to the Events Register.

	50		10	OK	10	25	50
	50	25	10	OK		25	50
	50	25		OK	10	25	50
	50	25	10		10	25	50
	50	25	10	OK	10	25	

# LESSON 7 – COST RISK

## Cost Risk Overview

Cost Risk lets you conduct risk analysis and update cost based on review.

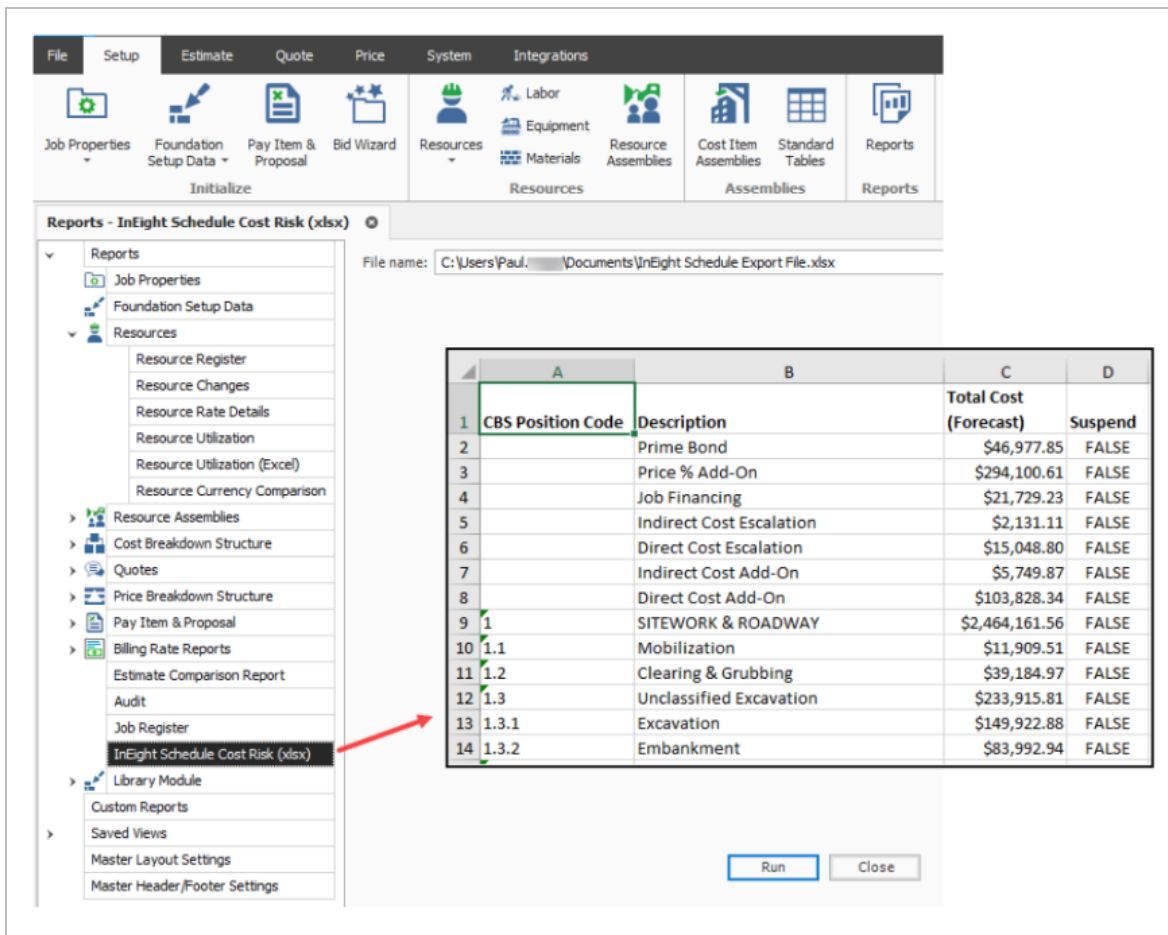
The Actual Cost column represents the actual cost for a selected cost item prior to simulations with the option to display risk adjusted amounts based on use selection.

ID	Description	Actions	Exclude	Actual Cost	Remaining Cost	Total Cost	P(80) Rem Cost
101004690_00.0	I-15   Tropicana_Proposal S...	...	<input type="checkbox"/>	\$10	\$20	\$30	
1.0100	Project Management	...	<input type="checkbox"/>	\$10	\$20	\$30	
1.1.0100	Contract Milestones	...	<input type="checkbox"/>	\$10	\$20	\$30	
1.1.1.NA	Notice of Award	...	<input type="checkbox"/>	\$0	\$0	\$0	
1.1.1.NT	Notice to Proceed 1	...	<input type="checkbox"/>	\$0	\$0	\$0	
1.1.1.NT	Notice to Proceed 2	...	<input type="checkbox"/>	\$0	\$0	\$0	
1.1.1.SC	Substantial Completion (Ma...	...	<input checked="" type="checkbox"/>	\$10	\$20	\$30	
1.1.1.PC	Project Closeout	...	<input type="checkbox"/>	\$0	\$0	\$0	
1.1.1.PC	Project Completion	...	<input type="checkbox"/>	\$0	\$0	\$0	
1.1.0200	Interim Milestones	...	<input type="checkbox"/>	\$0	\$0	\$0	
1.0200	Design	...	<input type="checkbox"/>	\$0	\$0	\$0	
1.2.1	Administration	...	<input type="checkbox"/>	\$0	\$0	\$0	
1.2.1	Design Milestones	...	<input type="checkbox"/>	\$0	\$0	\$0	
1.2.1	Design Complete	...	<input type="checkbox"/>	\$0	\$0	\$0	
1.2.1	Indirects	...	<input type="checkbox"/>	\$0	\$0	\$0	
1	Kiewit	...	<input type="checkbox"/>	\$0	\$0	\$0	
1	KIE Management Project Ma...	...	<input type="checkbox"/>	\$0	\$0	\$0	
1	KIE Management Project Ma...	...	<input type="checkbox"/>	\$0	\$0	\$0	
1	KIE Traffic Project Managem...	...	<input type="checkbox"/>	\$0	\$0	\$0	
1	KIE Roadway Project Manag...	...	<input type="checkbox"/>	\$0	\$0	\$0	
1	KIE Landscape Project Man...	...	<input type="checkbox"/>	\$0	\$0	\$0	
1	KIE Maintenance of Traffic P...	...	<input type="checkbox"/>	\$0	\$0	\$0	
1	KIE Utilities Project Manag...	...	<input type="checkbox"/>	\$0	\$0	\$0	
1	KIE Drainage Project Manag...	...	<input type="checkbox"/>	\$0	\$0	\$0	
1	KIE Transportation Structur...	...	<input type="checkbox"/>	\$0	\$0	\$0	
1	KIE Environmental Project ...	...	<input type="checkbox"/>	\$0	\$0	\$0	
1	Atkins	...	<input type="checkbox"/>	\$0	\$0	\$0	
1	ATK Landscape Project Man...	...	<input type="checkbox"/>	\$0	\$0	\$0	

This column can also be edited directly on the page.

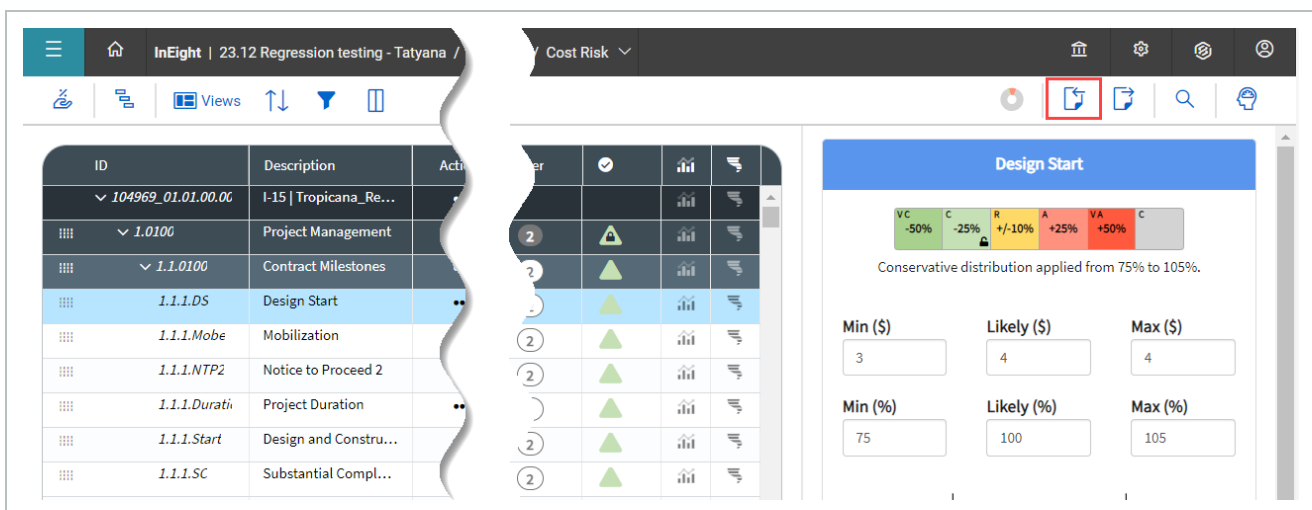
ID	Description	Actions	Exclude	Actual Cost
104969_01.01.00.00	I-15   Tropicana_Re...	...	<input type="checkbox"/>	\$4,323
1.0100	Project Management	...	<input type="checkbox"/>	\$4,323
1.1.0100	Contract Milestones	...	<input type="checkbox"/>	\$4,323
1.1.1.DS	Design Start	...	<input type="checkbox"/>	4323

You can also generate an InEight Schedule Cost Risk Excel file that allows you to import it into Schedule Cost Risk view and produce risk adjusted estimates. These risk adjusted estimates let you adjust contingency in an estimate to cover risk identified in a project.

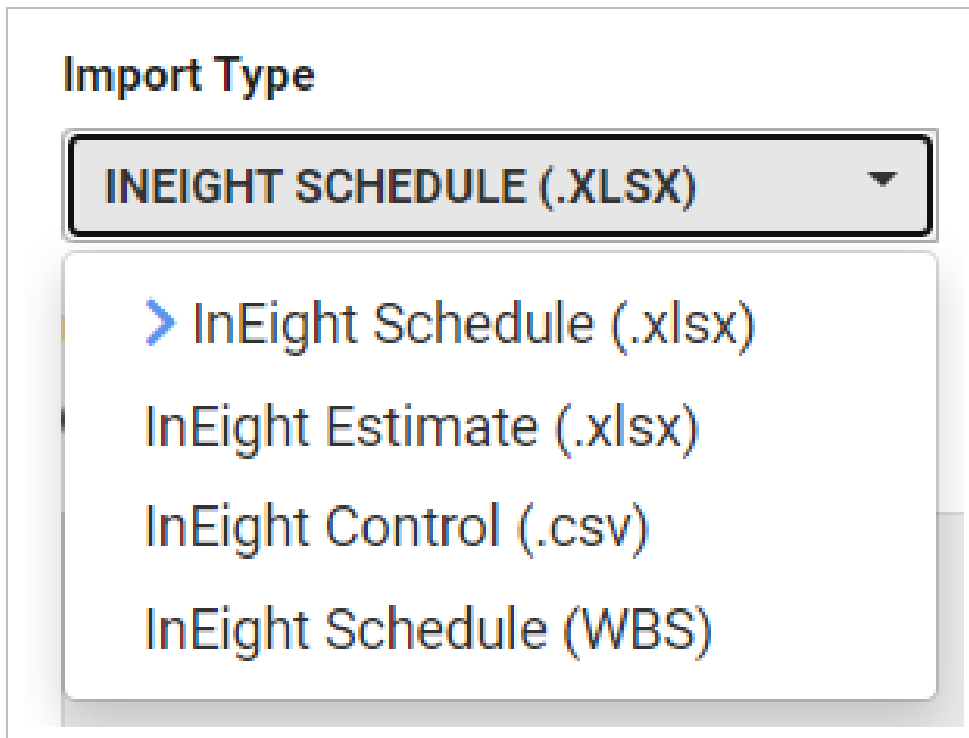


## Import Cost Risk Items

Select the import icon to import a Cost Breakdown Structure into the Cost Risk page, which helps you produce a risk adjusted estimate.



The cost risk file format import lets you import four different file types, which include InEight Schedule, InEight Estimate, InEight Control, and InEight Schedule.



InEight Schedule imports the WBS from the plan view page.

The Schedule .xlsx import lets you export an existing snapshot of the current cost risk schedule state, make any adjustments in Excel, and then import directly into the Cost Risk page.

You can import from Estimate and Control which imports values from each of these applications via .xlsx and .csv imports.

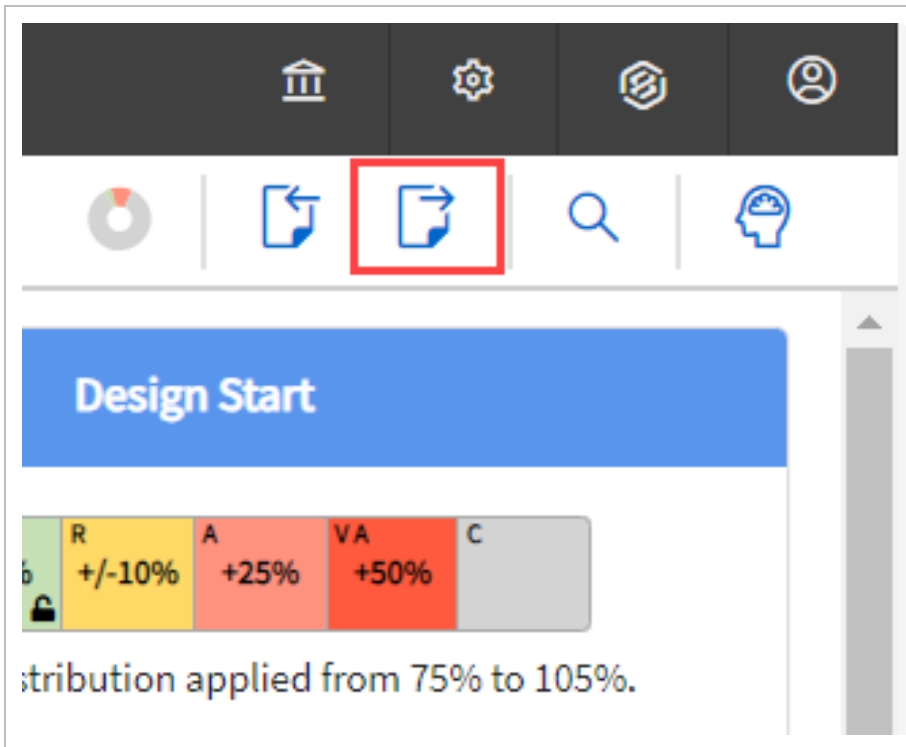
Only the InEight Schedule export type can be imported back in, and not the export.

If min/likely/max values or percentages are used, when importing fromSchedule, ensure the use min, likely, max percentages toggle is turned *On*. If the .xlsx file being imported has a custom range, the uncertainty status must read Custom, then the pre-defined values configurations can be used.

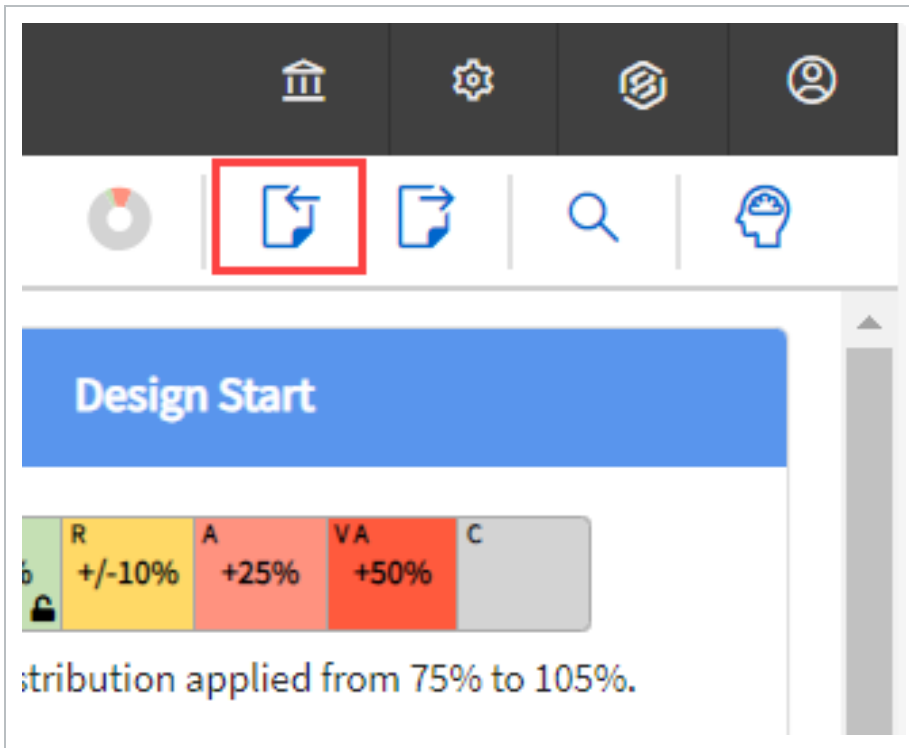
The Schedule WBS import pulls the Actual Cost and Remaining Cost values, based on the assigned resources from the schedule.

## Step by Step — Import Cost Risk Items

1. From the Schedule > **Cost Risk**, click the **Export** icon.

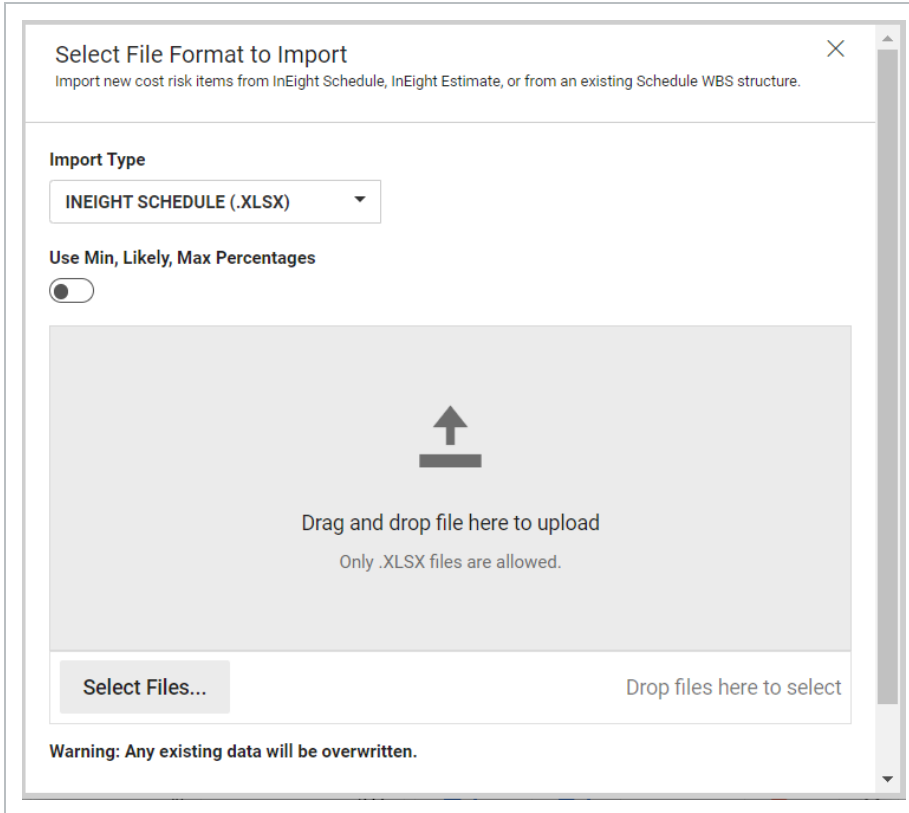


2. From the Export Type drop-down, select either **Data Import** or **InEight Schedule**. Open either file to change the contents of the file for step 4 below.
3. Click the **Import** icon.

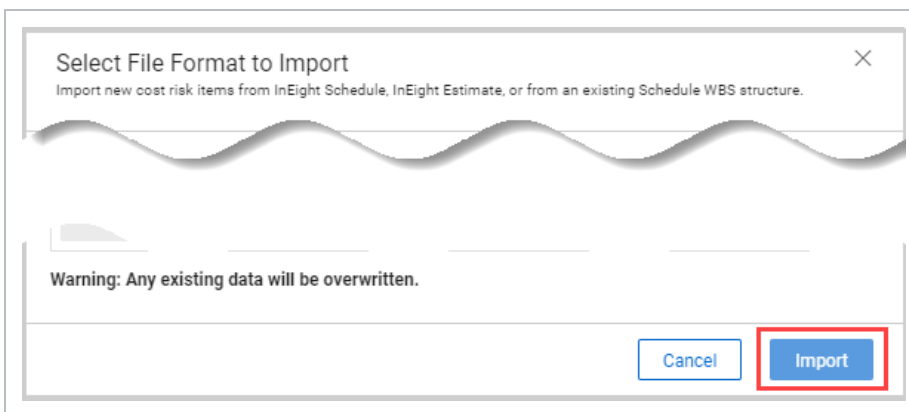


4. The Select File Format to Import pop-up window shows. The import type of InEight Schedule (.XLSX) is the default import type, and only accepts .XLSX file types. InEight Estimate also only accepts .XLSX file types. InEight Control only accepts .CSV file types, while InEight Schedule accepts only WBS file types.





- 5. You can either drag and drop a file into the upload portion of the window, or you can select the **Select Files** button to select a file.
- 6. Click **Import**.



## Estimate Cost Risk Export

You can generate a Schedule Cost Risk Excel file in Estimate, which lets you import it into the Schedule Cost Risk view and produce risk adjusted estimates. This can be accessed in Estimate > Setup > Reports > **InEight Schedule Cost Risk (.xlsx)**.

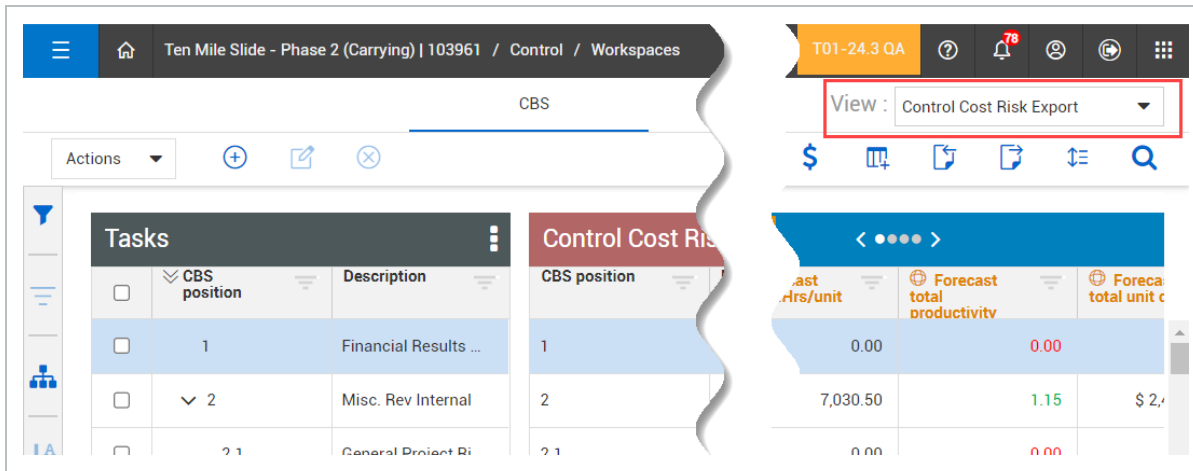
These risk adjusted estimates let you adjust contingency in an estimate to cover risk identified in a project.

The InEight Schedule Cost risk (.xlsx) fine can be generated from

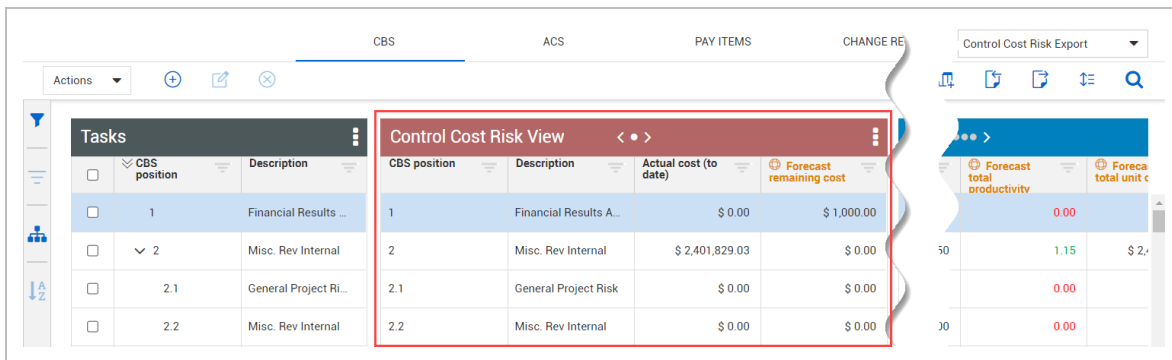
	A	B	C	D
1	<b>CBS Position Code</b>	<b>Description</b>	<b>Total Cost (Forecast)</b>	<b>Suspend</b>
2		Prime Bond	\$46,977.85	FALSE
3		Price % Add-On	\$294,100.61	FALSE
4		Job Financing	\$21,729.23	FALSE
5		Indirect Cost Escalation	\$2,131.11	FALSE
6		Direct Cost Escalation	\$15,048.80	FALSE
7		Indirect Cost Add-On	\$5,749.87	FALSE
8		Direct Cost Add-On	\$103,828.34	FALSE
9	1	SITWORK & ROADWAY	\$2,464,161.56	FALSE
10	1.1	Mobilization	\$11,909.51	FALSE
11	1.2	Clearing & Grubbing	\$39,184.97	FALSE
12	1.3	Unclassified Excavation	\$233,915.81	FALSE
13	1.3.1	Excavation	\$149,922.88	FALSE
14	1.3.2	Embankment	\$83,992.94	FALSE

## Control Cost Risk Export

You can create a Cost Risk .CSV export specific view from Control in Control Workspaces. See the [Viewsets](#) topic to view more information on how to create viewsets. This helps you to more quickly revert to the Cost Risk Export Workspace view, when you need to export the cost risk associated data from Control.



Create a new datablock to show the CBS Position Code, Description, Actual Cost (to date), and the Forecast Remaining Cost columns. View the [Datablocks](#) topic to view more information how to create datablocks.



Select the Export icon to export the Control Cost Risk View data from Control.

The screenshot shows the 'Control Cost Risk View' interface. On the left, a table displays cost data for various CBS positions. On the right, a detailed view for a selected row shows forecast unit cost and forecast method.

CBS position	Description	Actual cost (to date)	Forecast remaining cost
1	Financial Results A...	\$ 0.00	\$ 1,000.00
2	Misc. Rev Internal	\$ 2,401,829.03	\$ 0.00
2.1	General Project Risk	\$ 0.00	\$ 0.00
2.2	Misc. Rev Internal	\$ 0.00	\$ 0.00
2.3	Escalation/Conting...	\$ 0.00	\$ 0.00
2.4	Directs	\$ 705,957.35	(\$ 0.00)

Forecast unit cost	Forecast method
\$ 1,000.00	Current estimate
\$ 2,401,829.03	Rollup
\$ 0.00	Manual (EAC)
\$ 0.00	Manual (EAC)
\$ 0.00	None
\$ 705,957.35	Rollup

Select Export: **CBS as CSV**.

A close-up of the 'Export' menu in the application. The menu is open, and the option 'CBS as CSV' is highlighted with a red box. Other icons for export are visible above the menu.

# LESSON 8 – REVIEW PROCESS- RISK OVERVIEW

## Review And Risk Process Overview

The Review process is where you can review feedback from markup, and apply a variety of intelligence rankings in order to run a risk assessment on your project.

**Uncertainty** is an internal factor, such as quantity growth or productivity loss or gain. It evaluates duration or cost realism and plan confidence.

A **Risk Event** is an external factor where events are discrete and measurable, such as third-party delays or unexpected labor shortages. It evaluates the probability of the event occurring, the schedule impact should the event occur, and any impact in associated costs.

### NOTE

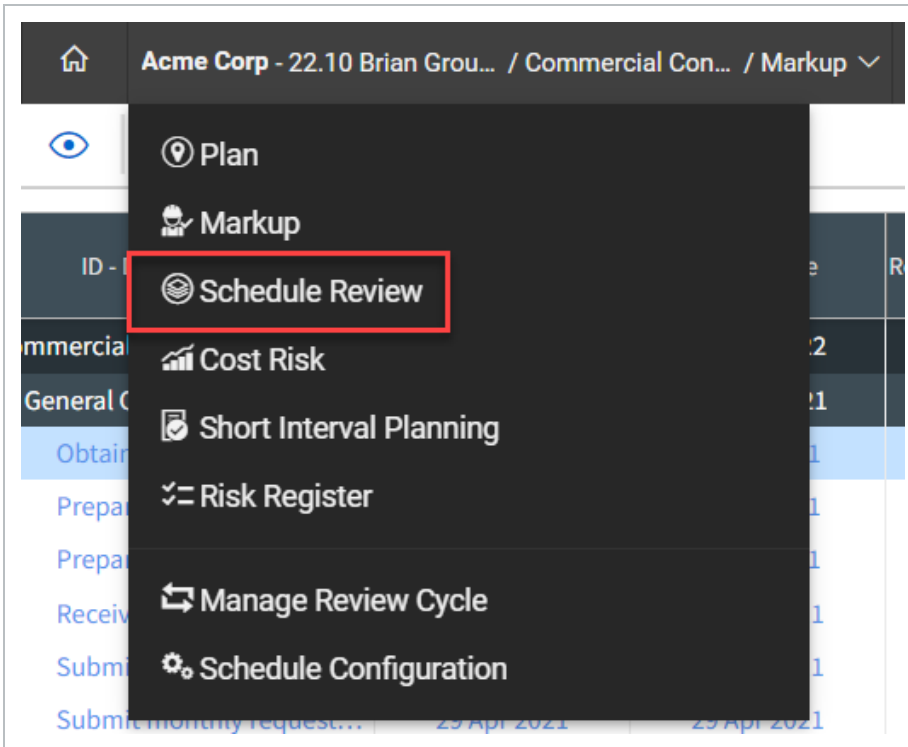
Projects often tend to mix uncertainty and risks events together resulting in less accurate mapping of risk characteristics to projects. It is important to evaluate risk items and place each in their appropriate categories, Uncertainty or Risk Event.

Uncertainty Category	Risk Event Category
 <ul style="list-style-type: none"> <li>• Quantity growth</li> <li>• Productivity loss/gain</li> <li>• Evaluates duration/cost realism &amp; plan confidence</li> </ul>	 <ul style="list-style-type: none"> <li>• External factors such as:               <ul style="list-style-type: none"> <li>◦ 3rd party delays</li> <li>◦ Labor shortages</li> </ul> </li> <li>• Evaluates probability of occurring event plus schedule impact &amp; associated impact costs</li> </ul>

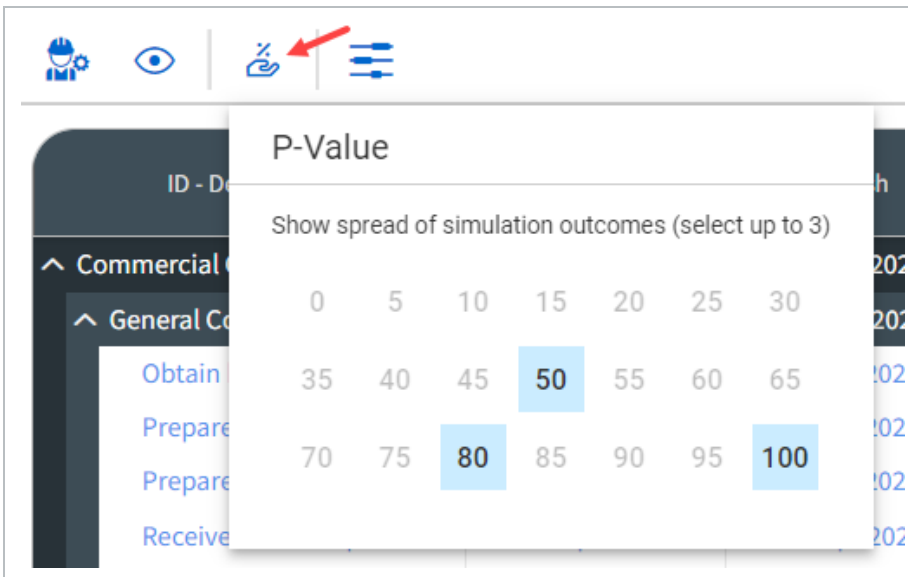
This feedback can come from the Markup process outlined in other topics. From here, the following review process steps can help you conduct a risk assessment utilizing a confidence level, called a **P-value**.

The below steps explain how to generate a Risk Adjust project:

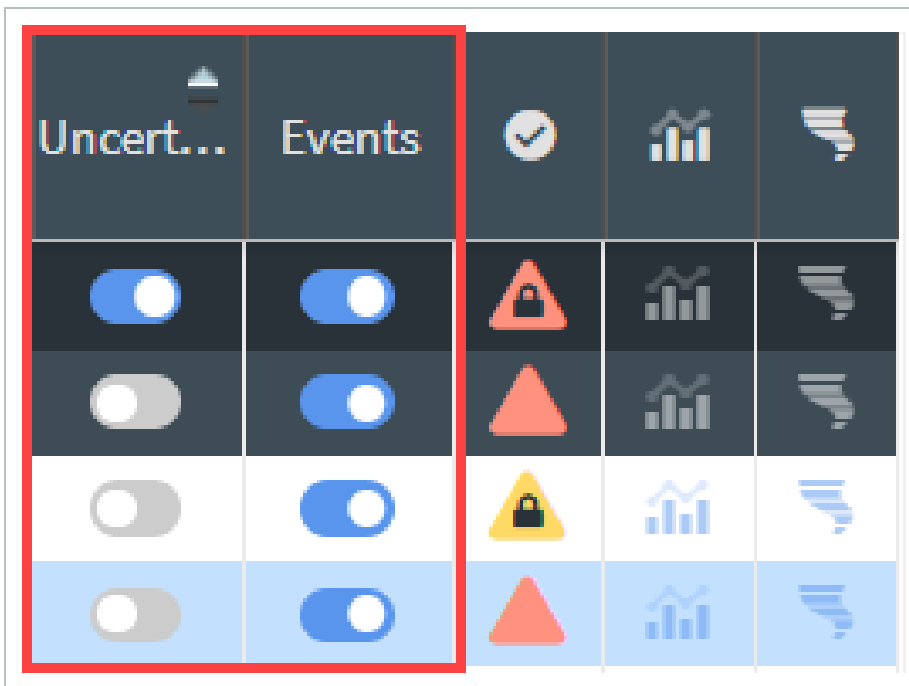
1. From the Project View drop-down, select **Review**.



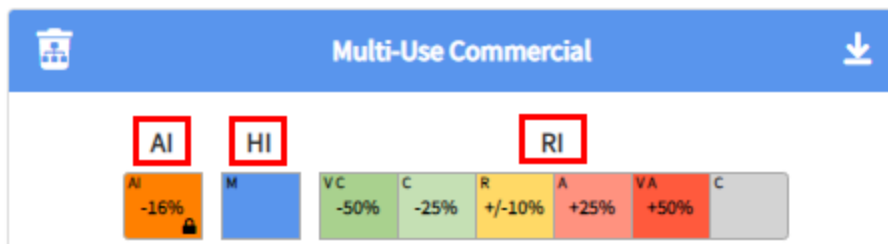
2. Select a P-value for instant insight during the review process by first selecting the **P-value** icon .



- A P-value of 100 represents a worst case scenario, while a value zero represents a best case scenario
  - You are assigning a confidence level against a target goal
3. Switch the **Uncert** and **Events On/Off** to be applied to the corresponding work package or terminal level.
- This feature includes or excludes that detail in the risk model. It is recommended to begin analysis with both options switched to the *On* position.



4. Move down the project and review contributor’s Uncertainty rankings for each line item.
- When reviewing Uncertainty, there are three main options for generating adjustments to the project: Artificial Intelligence (AI), Human Intelligence (HI), and Risk Intelligence (RI)




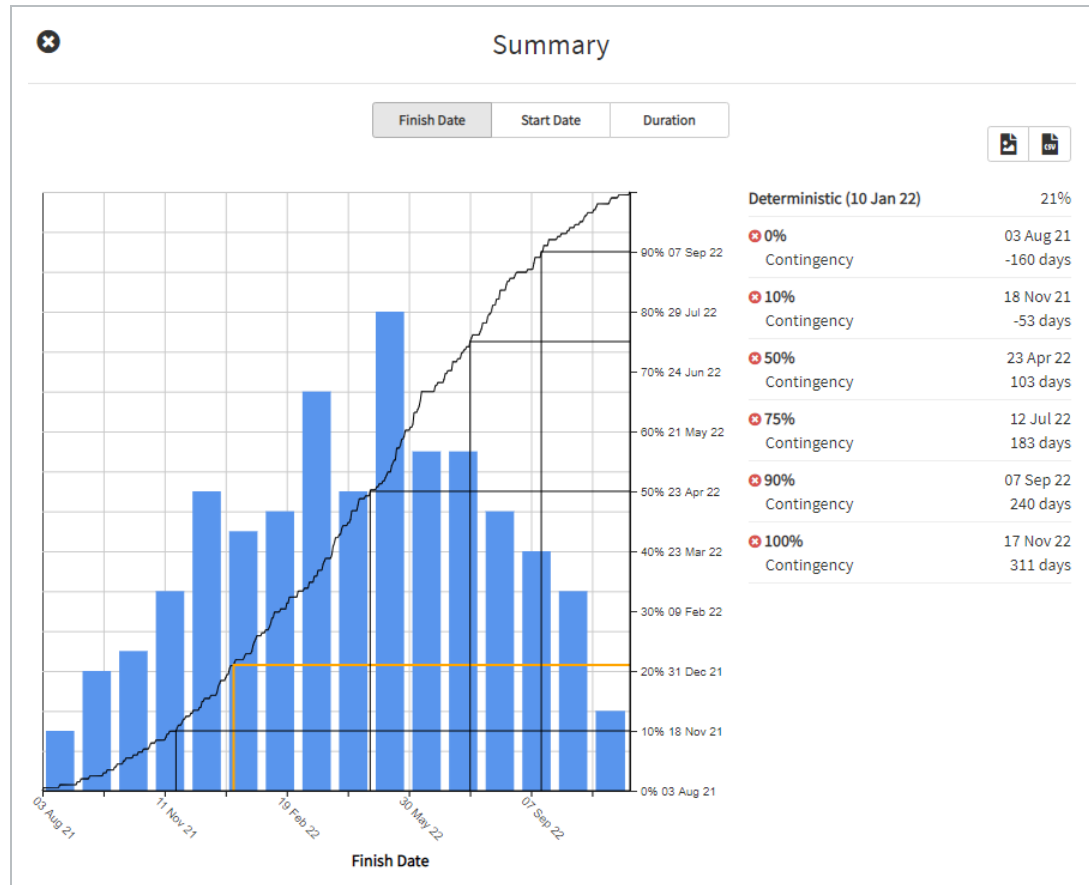
5. As needed, assign **Register Events** to project items.
  - Any item in a project may be assigned a Register Event
  - The default categories are shown below:


The screenshot shows a form titled "Add new register event". It features a dropdown menu for selecting a category, with "Threat" currently selected. To the right of the dropdown is a text input field labeled "\* Title (required)" with the placeholder text "Title". Below the dropdown menu, there is a list of categories: Threat (red dot), Opportunity (green dot), Issue (orange dot), Idea (blue dot), and Schedule Change Request (orange dot). At the bottom right of the form, there are two buttons: "Clear" and "Add".

- After all uncertainty and events have been agreed to, you can access two main reports that provide insight into the project's risk:

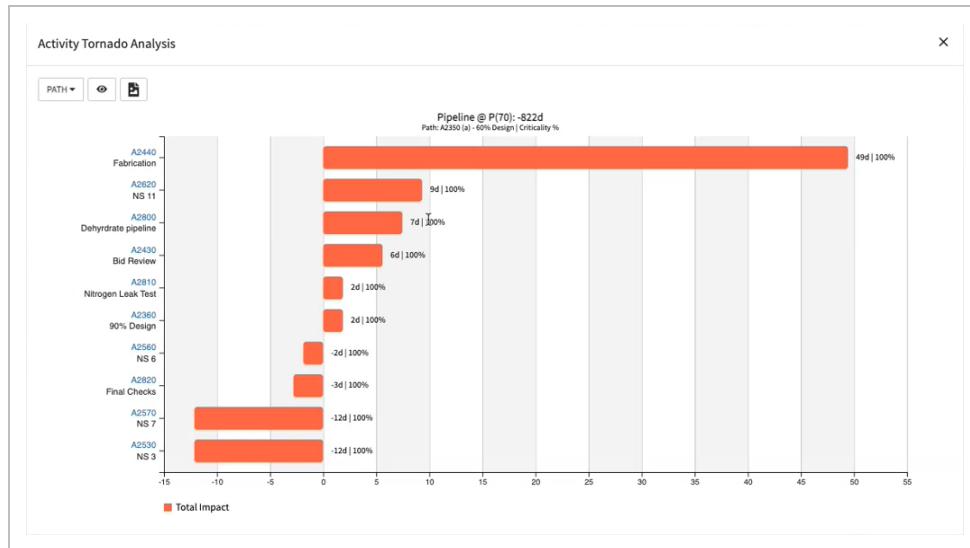


- Risk histogram 

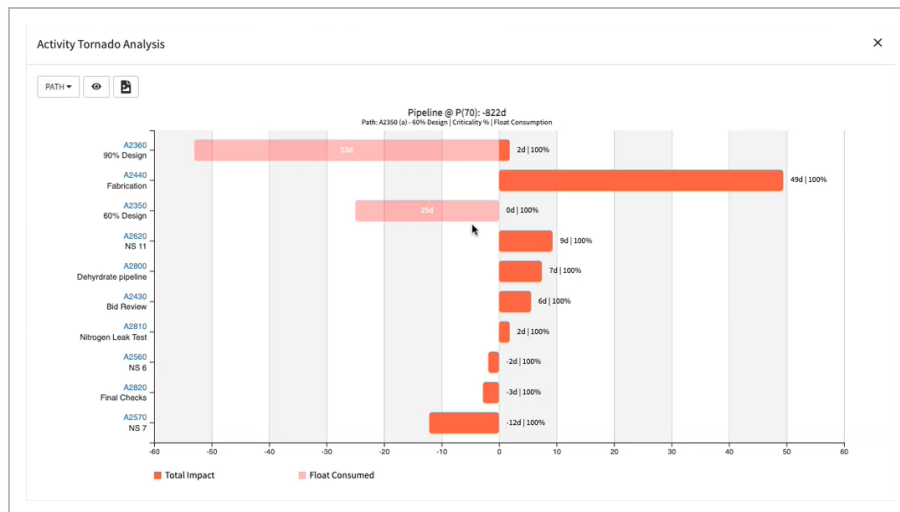


- Tornado analysis 

You can identify how often activities fall upon the critical path during Monte Carlo simulation runs. The image below shows the Criticality % view active.



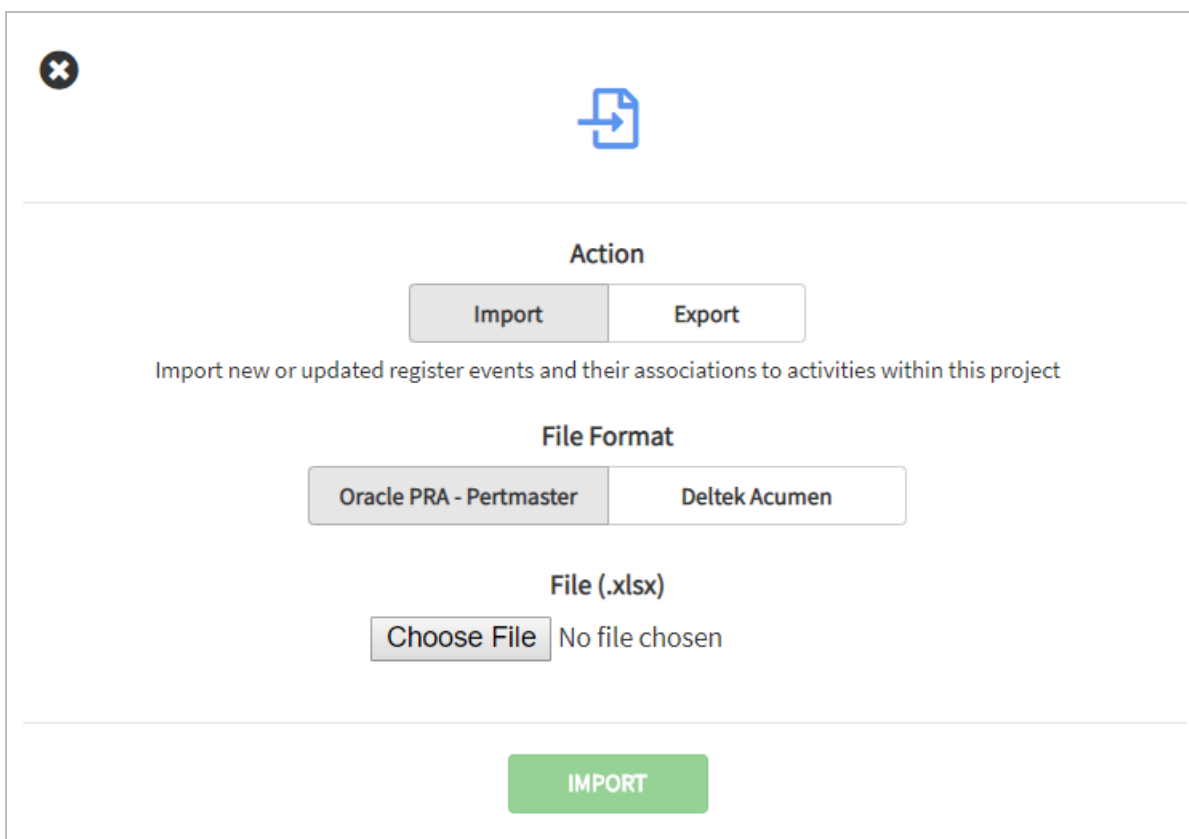
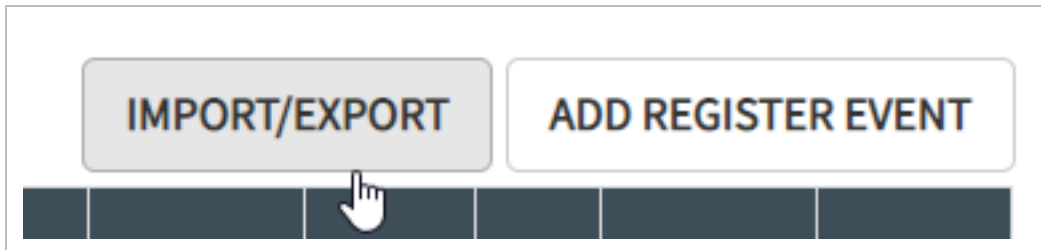
Using Float Consumption, you can visualize hidden risk assignments due to float consumption and compare activity risk tolerance versus net impacts. The image below shows the Float Consumed and the Criticality % views active.



- Adopt any part of the risk model by selecting **Adopt Markup** or **Apply Uncertainty adjustments to deterministic schedule**. Both options will run a Critical Path Method schedule calculation and generate a new risk adjusted project schedule.

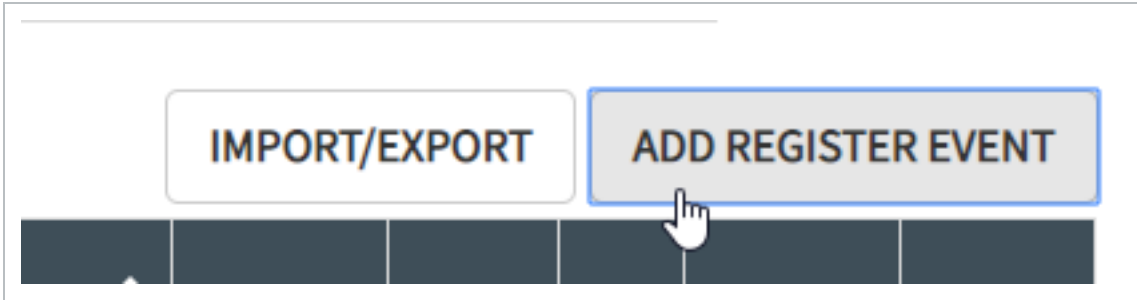
## Import/Export

You can Import and Export risks in the project register. There are options for Oracle PRA – Pertmaster and Deltek Acumen. These are simple Excel formats that can also be generated outside of any tool and used for importing into Schedule.



## Add Register Event

You can manually add a register event to the project register. Select **Add Register Event** and then define the event type and description.



Risk ▼

of

Event

Cause

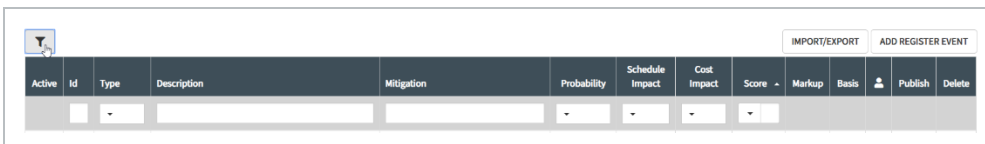
Effect

---

*Risk of \_\_\_\_\_ due to \_\_\_\_\_ resulting in \_\_\_\_\_*

## Filter

Select the **filter** icon to enable filtering for the register view.



## Matrix Definition

The default matrix in the Knowledge Library is adopted when the project is created. The matrix can be tailored by project to create a probability and severity range that is appropriate for the project.

Events Register Register Types **Matrix Definition**

ATTRIBUTES EDIT

Description	Probability	Schedule Impact	Cost Impact	Color
Very Low	5%	7 days	\$100	
Low	25%	30 days	\$1,000	
Medium	50%	60 days	\$10,000	
High	75%	90 days	\$100,000	
Very High	95%	180 days	\$1,000,000	

## P-Value Overview

Probability Values or **P-values** are the lens with which you can view instant feedback related to the affects risk or opportunity items have on the planned schedule and/or cost structure.

You can interact with P-Value to manipulate your visibility into a risk-adjusted project.



Select a P-value by clicking on the P-value icon to show a drop-down displaying the options for selecting a value.

**P-Value**

Expected Value

5	10	15	20
25	30	35	40
45	50	55	60
65	70	<b>75</b>	80
85	90	95	100

A P-value of 75 can be interpreted as “we are 75% confident in hitting or beating a target goal”.

The selected P-value shows adjustments to items such as dates and durations. When a risk assignment has an effect to the project, the P-value lens shows in red, how it affects the project. In this example, the duration for “Create Early Stage Construction Docs” increases from a planned duration of 63 to a P-value 75 adjusted duration of 91.

ID - Description	Start Date	Finish Date	Dur	Float	Uncert	Events
Multi-Use Commercial	18 Feb 19 A 18 Feb 19 A	07 Jan 22 17 Jan 23	1055 1430		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Preconstruction	18 Feb 19 A 18 Feb 19 A	21 Feb 20 11 Dec 20	369 663		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Design	18 Feb 19 A 18 Feb 19 A	17 Sep 19 26 Jun 20	212 495		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Create Early Stage Construction Docs	21 Jun 19 21 Feb 20	17 Sep 19 26 Jun 20	63 91	0 0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

## Markup Feedback and Consensus

Once a markup cycle has been completed, it is ready for review. When selecting a line item for review, options appear in IRIS located on the right of the panel.

Sitework Permit
↓

AI
HI
RI

AI  
+4%

HI  
+14%

VC  
-50%

C  
-25%

R  
+/-10%

A  
+25%

VA  
+50%

C

A +14% Markup distribution will be applied.

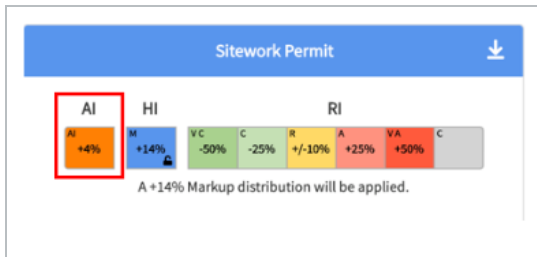
Layer	Rem Dur	Constraint
Deterministic	21	
<span style="color: blue; font-weight: bold;">+3</span> AA	24	

The reviewer has three options for providing markup feedback:

- **Inference Engine (AI)** suggested distribution
- **Human Intelligence (HI)** to leverage the feedback given during the Markup phase
- **Risk Intelligence (RI)** allows you to assign designated uncertainty ranges to any line item

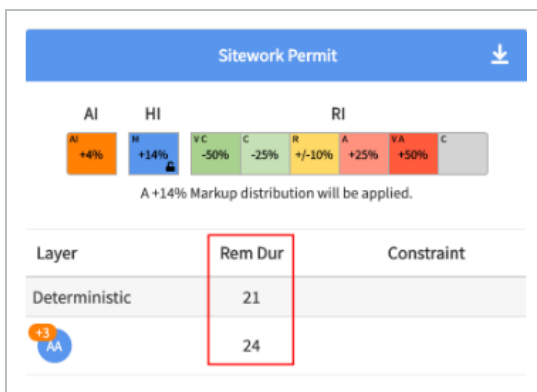
### Inference Engine (AI)

In this example, if you use the Inference Engine (AI), it applies the suggested distribution of 4%.



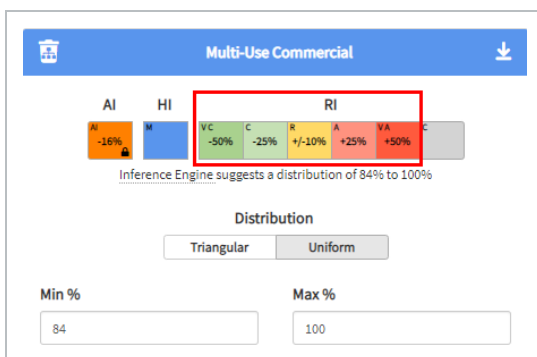
## Human Intelligence (HI)

If you use the **Human Intelligence (HI)** of +14%, using AA's (delegate's initials) feedback, that Remaining Duration will take +3 days longer (24d v 21d).



## Risk Intelligence (RI)

By selecting RI, you have chosen to not use HI or AI for that line item.



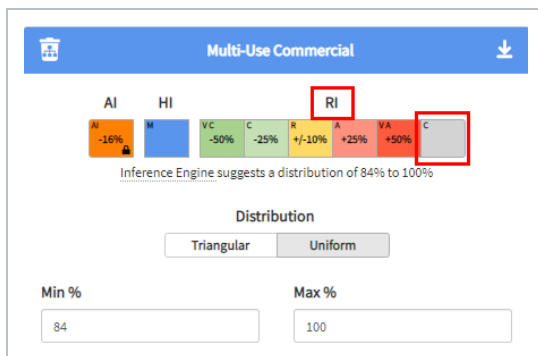
Uncertainty ranges are based on one of five categories the following categories:

Classification	Range	Guidance
Very Conservative	50% - 100%	Could take as little as 50% less
Conservative	75% - 105%	Most likely less
Realistic	90% - 110%	Within +/- 10%
Aggressive	95% - 125%	Most likely more
Very Aggressive	100% - 150%	Could take up to 50% more

**NOTE** You may only use one type of intelligence source per line. By selecting RI, you have chosen to not use HI or AI for that line item.

### Custom

Using the Custom Intelligence lets you use a user defined level of risk.

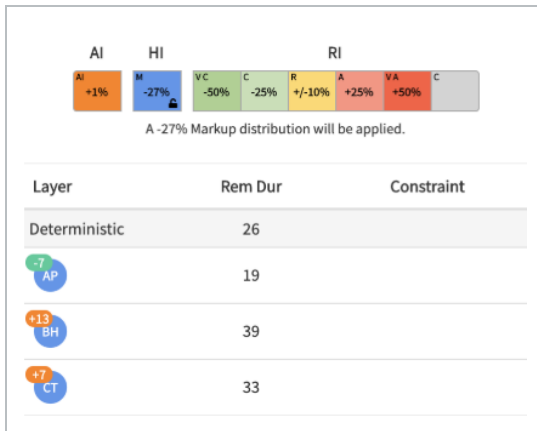


Any changes that impact the project, either positive or negative, are shown in red.

### Multiple User Feedback

In the event an item contains more than one member’s feedback, you can still decide between the different intelligence types. The Layer column shows all the members that contributed to that item.

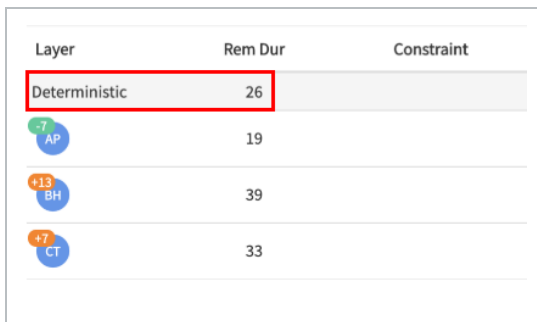




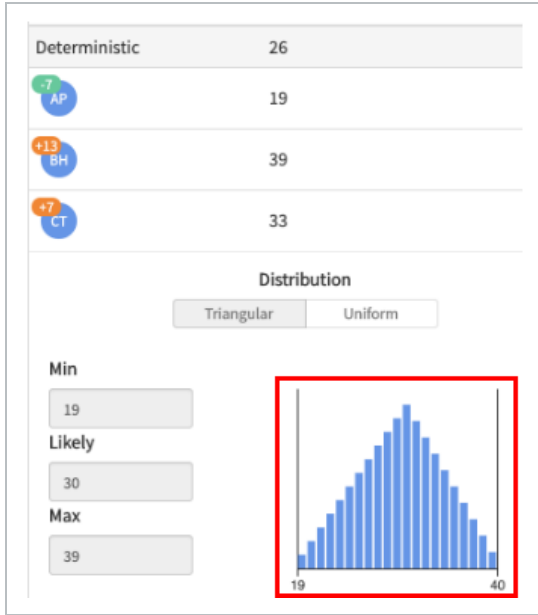
Notice here where three members contributed their feedback:

- AP (-7)
- BH (+13)
- CT (+7)

These values are added to the deterministic value to generate corresponding values.

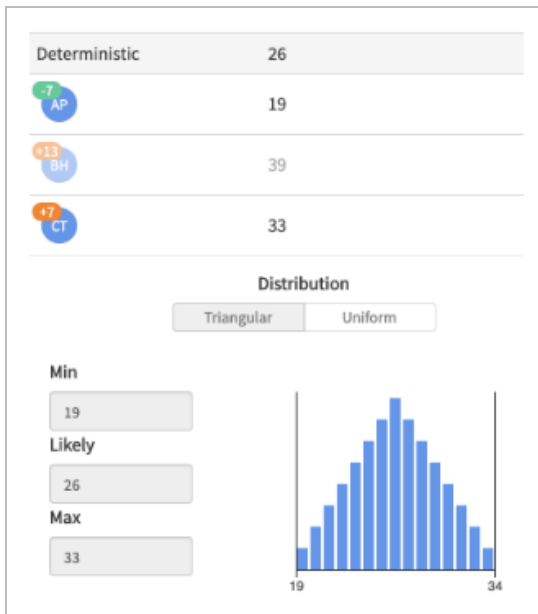


If you decide to consider all the HI feedback, then a distribution triangle is automatically applied for the risk simulation distribution.



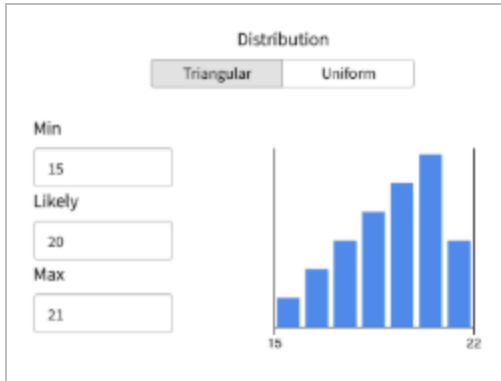
In some scenarios you have the option of setting a distribution to a triangular or uniform curve. A triangle uses the three points (min, likely, max) to generate a weighted distribution. A uniform distribution will use two points (min,max) as limits to a range and set the probability to an equal state for within the parameters.

If you want to discount or ignore a particular feedback, click on the contributor to remove them from the feedback. The distribution triangle adjusts automatically.



## Distribution Options

When applying RI to a project item, you have the options to either set distribution to triangular or uniform distribution. A triangle uses three points of information, Min, Likely, and Max, to form a weighted distribution.












A uniform distribution uses two points, Min and Max to set limits on the range and models an even likelihood of hitting any points along the distribution.



## Uncertainty Status

The Uncertainty Status column indicates what type of markup feedback is applied to each line item, using one of the following symbols:



Symbol	Markup Feedback Assigned
	Inference Engine (AI)

Symbol	Markup Feedback Assigned
	Human Intelligence (HI) with no markup values
	Human Intelligence (HI) with strong consensus, with little variations
	Human Intelligence (HI) with a large variation
	Risk Intelligence (RI) Very Conservative (-50%)
	Risk Intelligence (RI) Conservative (-25%)
	Risk Intelligence (RI) Realistic (+/-10%)
	Risk Intelligence (RI) Aggressive (+25%)
	Risk Intelligence (RI) Very Aggressive (+50%)
	Risk Intelligence (RI) Custom

**NOTE**

For Human Intelligence (HI) feedback, you can hover over the symbol to find the variation percentage.

For Inference Engine (AI) and Risk Intelligence (RI) feedback, the Uncertainty Status

Symbol will be a  if using Triangular distribution and a square  if using Uniform distribution.

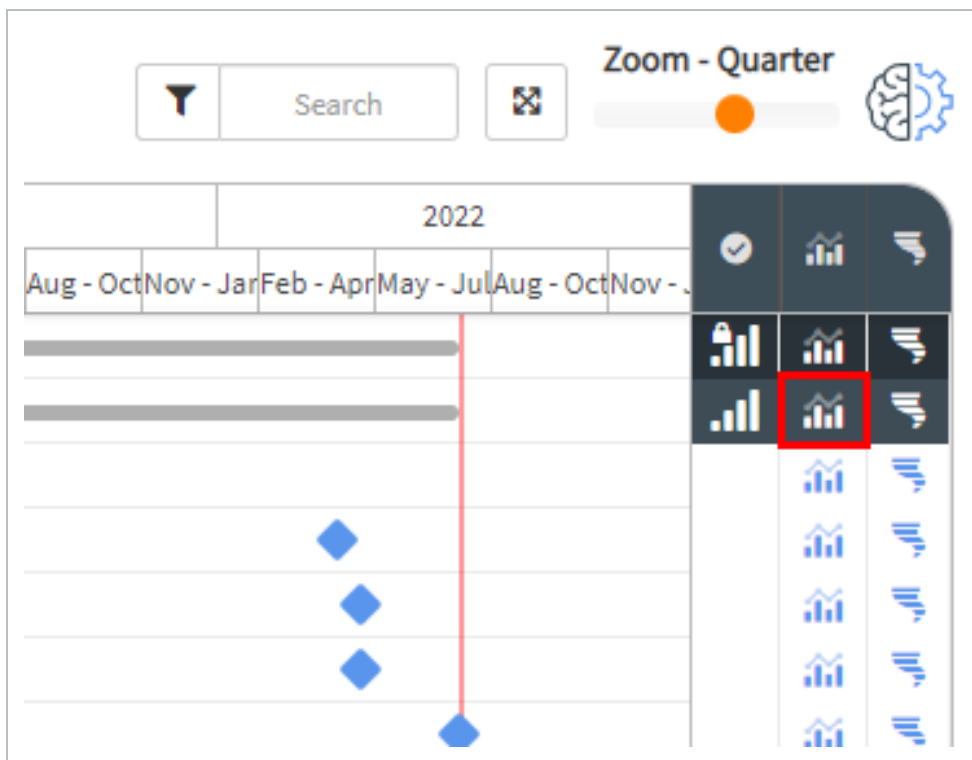
**TIP**

The lock symbol represents that an uncertainty value has been applied to that line item and locks that value in place. For example, if a user assigns an uncertainty value to a parent line item, that value will be assigned to all its' children lines, expect for those that are locked in with a value previously assigned.

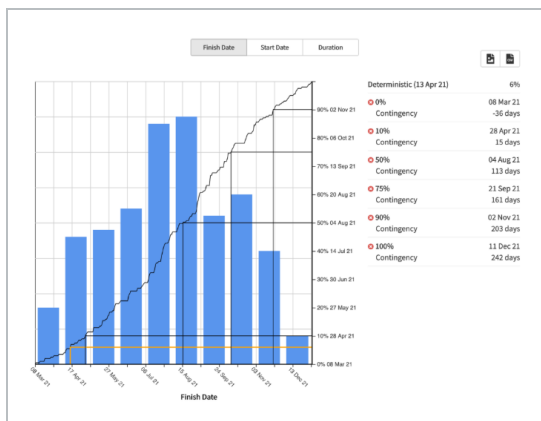
Once feedback on uncertainty and events are reviewed, you are ready to generate outcomes via Risk Histograms and Tornado Analysis.

## Risk Histogram

The Risk Histogram visualizes results from numerous iterations made using the distributions assigned to line items. Click on the **Risk histogram** icon next to any line item to report against that point in the project.



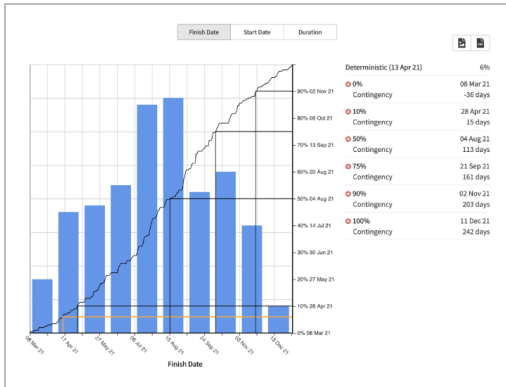
By clicking on the Risk histogram icon at the top level, you can report on the total project, as shown below.



Blue bars indicate the number of iterations that land on a specific date; for this example, finish date. The information on the right provides insight into the probability of hitting the deterministic end date and indicate which dates align with various P-values. This example shows the following:

- A 6% chance of completing the project by the deterministic date of 13 Apr 21.
- P-75% shows a date of 21 Sep 21, a 161-day extension upon the deterministic date. This corresponds to the need for a contingency value of 161 days to be 75% confident in finishing the project on 21 Sep 21 or earlier.

- P-0% is best case scenario and conversely, P-100% is worst case.

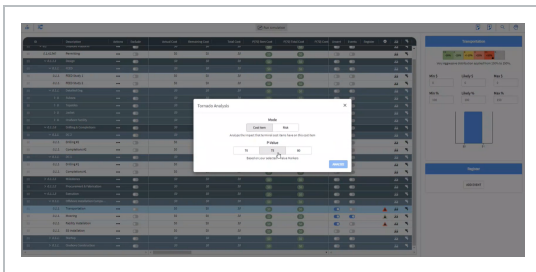


## Tornado Analysis

Tornado Analysis shows key drivers that are responsible for the largest impact to a risk model. There are two main modes to choose from, Activity Mode or Risk Mode. Click on the **Tornado analysis** icon to select a mode. Similar to Risk Histogram, selecting a tornado icon at the top level will report on the total project.

## Cost Item Mode

Analyze the impact that terminal cost items have on the selected cost item.

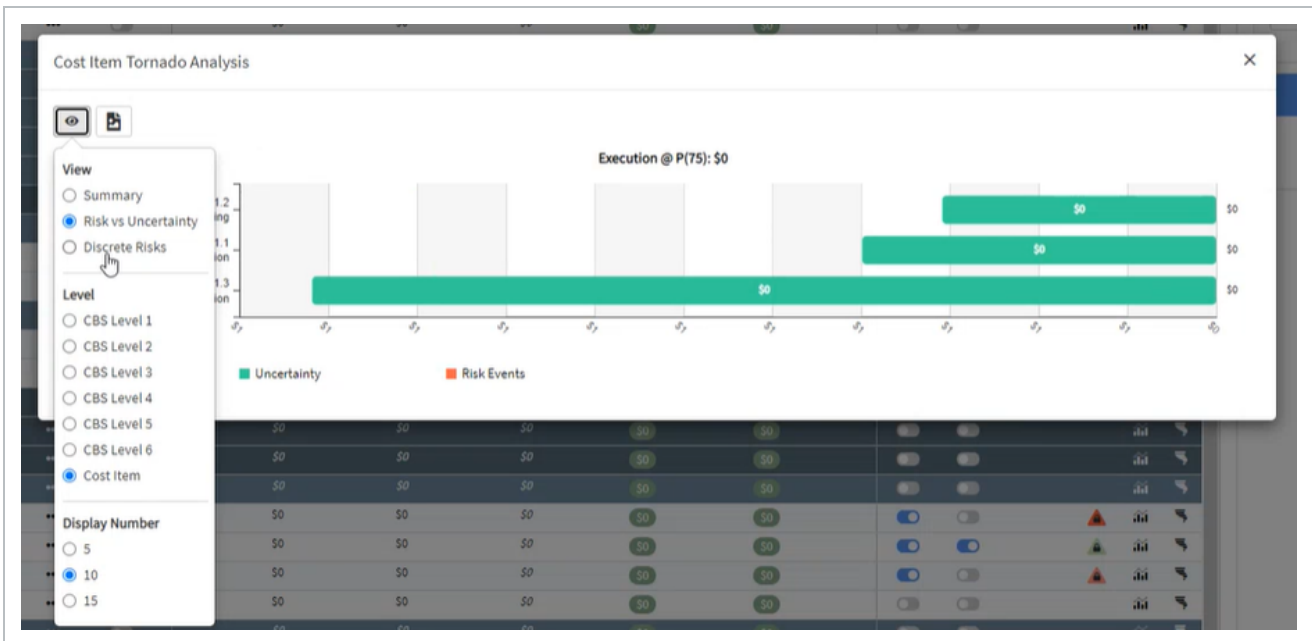


In this example, the P-Value is set to 75 based on the selected P-Values Markers. Selecting **Analyze** shows the Uncertainties and Risk Events for the Cost Item Tornado Analysis.



Interact with the following options to explore your project in Cost Item Mode:

- View
- Level
- Display Number



## Root node in Cost Risk

Importing the Schedule Export report from Estimate to Schedule > **Cost Risk** inserts a root node into the project. The root node captures project-level data in Cost Risk for you to reference and report on. It also retains the hierarchical breakdown of the Estimate file.

The screenshot illustrates the workflow for importing a Schedule Export report. In the 'Estimate' window, the user selects the 'Run' button (marked with a red circle '1') to execute the export. The resulting 'Schedule' window displays a table of cost items. A dialog box prompts the user to select a file format to import, with 'IN8IGHT ESTIMATE (.XLSX)' selected. The 'Import' button in the dialog box is marked with a red circle '2'.

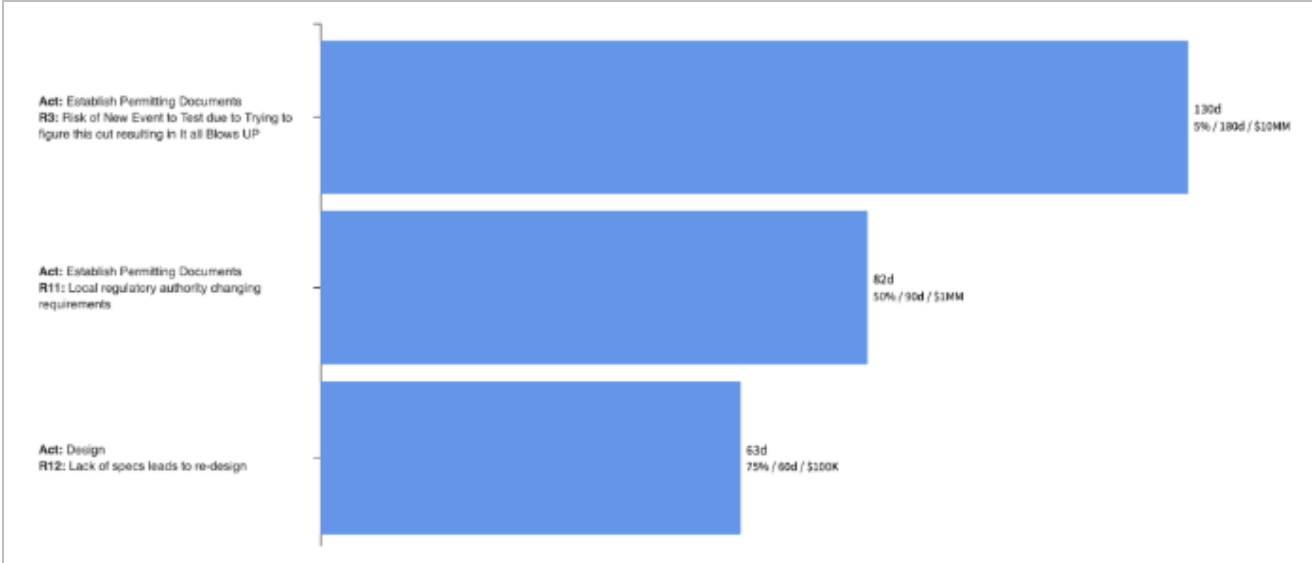
ID	Description	Actions	Remaining Cost	Total Cost	Notes	Min Cost	Uncoltd	Events
01	Cost Risk Test for Doubling ...	...	\$30,482,515	\$30,482,515				
01	Cost Risk Test for Doubling ...	...	\$2,494,162	\$2,494,162		\$2,494,162		
01	Prime Bond	...	\$553,789	\$553,789		\$553,789		
01	Prime % Add-On	...	\$487,363	\$487,363		\$487,363		
01	Job Financing	...						
01	Indirect Cost Excavation	...						
01	Direct Cost Excavation	...						
01	Indirect Cost Add-On	...						
01	Direct Cost Add-On	...						
01	2 SITEWORK & ROADWORK	...						
01	2.2 Mobilization	...						
01	2.2 Cleaning & Grubbing	...						
01	2.3 Unclassified Excavation	...						
01	2.3.2 Excavation	...						
01	2.3.2 Embankment	...						
01	2.4 Aggregate Base	...						
01	2.4.1 Furnish & Install Base Material	...						
01	2.4.2 Fingrade Subgrade	...						
01	2.4.2 Install Aggregate Base	...						
01	2.4.2 Place Aggregate Base	...						
01	2.4.2 Blue Top Aggregate Base	...						

## Risk Mode

Analyze the impact that risks have on the selected line item.

In the example below, you can visualize the most impactful risk events and their corresponding activities. The largest driver is Risk #3 (R3) on activity Establish Permitting Documents and accounts for 130d of risk exposure.





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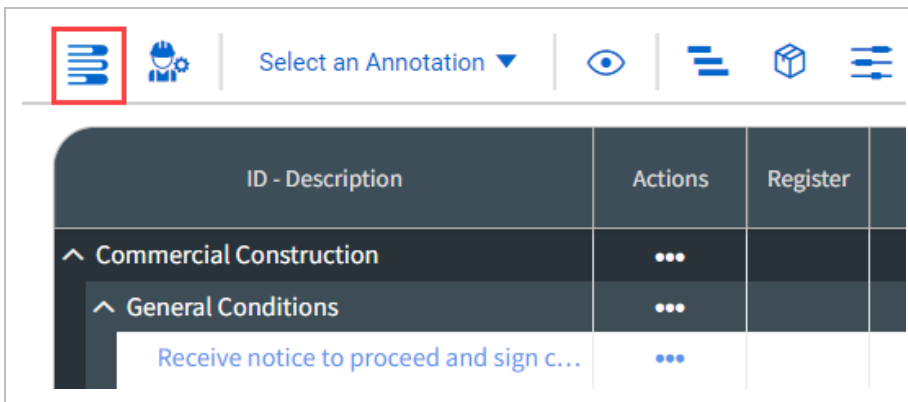
# LESSON 9 – SCHEDULING

## Scheduling Overview

### Scheduling

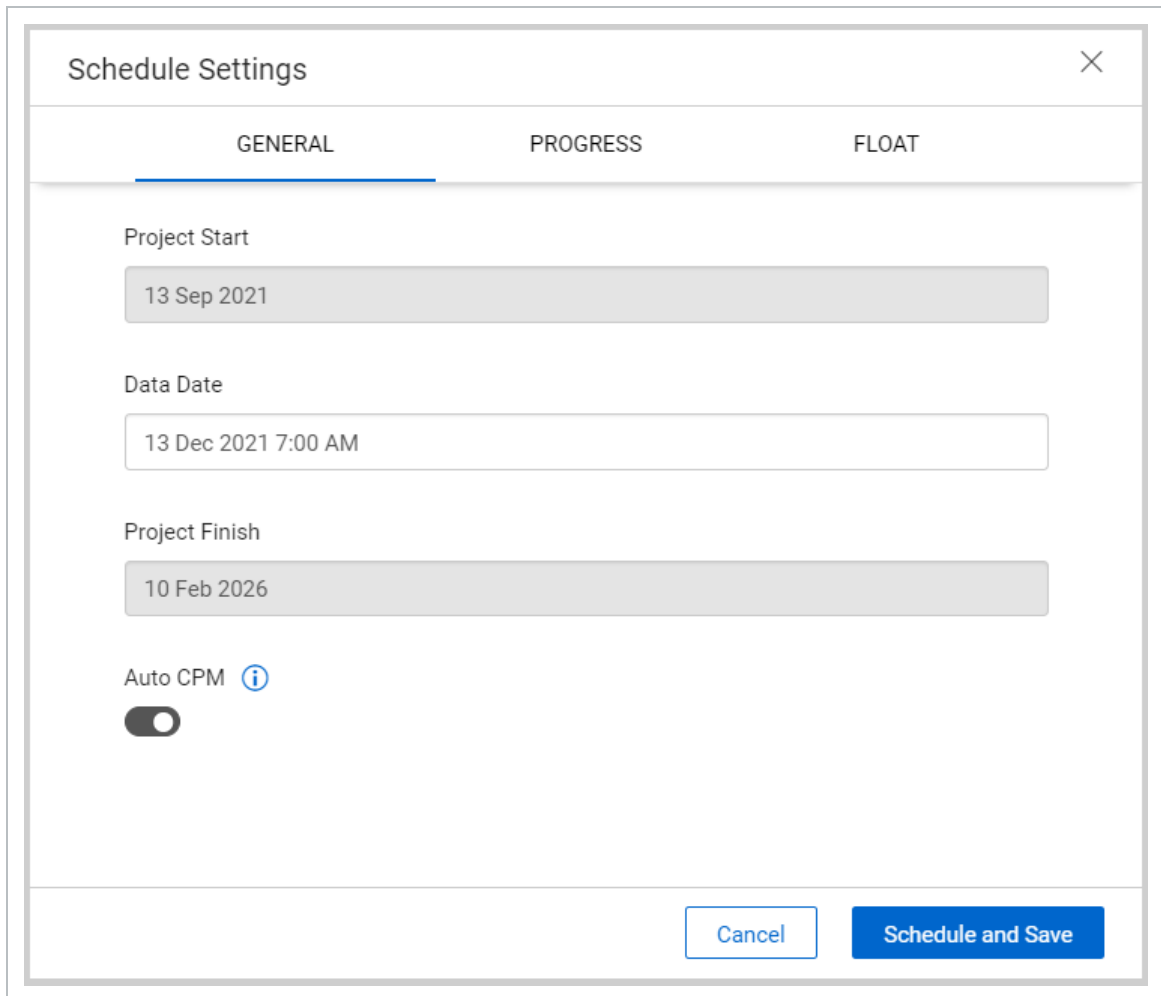
#### Setting Schedule Progress Attributes

1. Click the **Scheduling** icon in the Smart Planning tab.



2. Populate the following information on the General tab:
  - **Project Start** - This is the project start date.
  - **Data Date** - Sets the “current” or as-of date that you are looking at in the system.
  - **Project Finish** - This is the project finish date.
  - **Auto CPM** - This should generally be set to *On*, so logic is automatically applied to

items in your schedule.



The screenshot shows a 'Schedule Settings' dialog box with three tabs: GENERAL, PROGRESS, and FLOAT. The GENERAL tab is selected. It contains the following fields and controls:

- Project Start:** A date field with the value '13 Sep 2021'.
- Data Date:** A date and time field with the value '13 Dec 2021 7:00 AM'.
- Project Finish:** A date field with the value '10 Feb 2026'.
- Auto CPM:** A toggle switch currently turned off, with an information icon (i) to its right.

At the bottom right of the dialog, there are two buttons: 'Cancel' and 'Schedule and Save'.

3. Populate the following information on the Progress tab:

- **Schedule Mode** - The Schedule Mode can either be **Scheduling** or **Planning**. Activities without predecessor logic or constraints will be scheduled against the Data Date.
- **Out of Sequence Progress** - This should remain on retained logic, retains planned dependencies between unworked portions of activities.
- **Auto Progress** - If set to *On*, Schedule assumes that work is proceeding as planned. Activities will be progressed to where they were planned to be on the data date. If set to *Off*, you manually progress activities. This should be done prior to advancing the data date of the project.

- **Recalculate Actual Units When Duration % Complete Changes** - Actual units on assigned resources update per the duration % complete. For example, if a 10-day activity is progressed to 50% duration % complete then a resource assigned to that activity with 100 units planned would update to 50 actual units. Off - Duration % complete and Actual units are unlinked.
- **Relationship Lag Mode** -Dictates which calendar between a predecessor and its successor the lag of a relationship is used when establishing Finish and Start dates in CPM.

The screenshot shows the 'Schedule Settings' dialog box with the 'PROGRESS' tab selected. The dialog has three tabs: 'GENERAL', 'PROGRESS', and 'FLOAT'. The 'PROGRESS' tab contains the following settings:

- Schedule Mode**: A dropdown menu set to 'Scheduling'.
- Out of Sequence Progress**: A dropdown menu set to 'Retained Logic'.
- Auto Progress**: A toggle switch that is currently turned off.
- Recalculate Actual Units When Duration % Complete Changes**: A toggle switch that is currently turned on.
- Relationship Lag Mode**: A dropdown menu set to 'Predecessor'.

At the bottom of the dialog, there are two buttons: 'Cancel' and 'Schedule and Save'.

4. Populate the following information on the Float tab:

- **Identify Critical Activities by** - Identify critical activities by either the **Total Float** or the **Longest Path**. If the Total Float value is less than or equal to the defined number of hours (default 0) then it is an indication that an activity is critical. The Longest Path is the path

through a project network from start to finish where the Total Duration is longer than any other path.

- **Total Float** - Set the Total float to less than or equal to **8 hours**. The Total Float represents the amount of time a task can be delayed without affecting the completion date of the project.
- **Manually Configure Settings** - Set the Manually Configure Settings to **On**.
- **Define Critical Activities Using** - You can define critical activities using either **Total Float** or **Free Float**. Free Float represents the amount of time a task can be delayed without affecting the start date of its subsequent tasks.
- **Number of Paths to Calculate** - You can calculate up to 10 sub-critical paths. This helps you to better envision the activities that have a potential of being delayed, which gives you additional time and consideration to push out the schedule. You can choose to execute certain actions such as defining the critical activities by using either free float or total float, select an activity to stop showing multiple float paths, and determine the number of float paths to calculate.

**Schedule Settings** [X]

GENERAL      PROGRESS      **FLOAT**

Identity Critical Activities by

Total Float

Total Float

≤ 0 Hours

**Float Paths**

Manually Configure Settings

On

Define Critical Activities Using

Total Float

Select Activity to Stop Displaying Multiple Float Paths at

Number of Paths to Calculate

9

Cancel      Schedule and Save

To see the float paths in plan , you can group by float path in the Group By Builder to see which activities are critical and sub-critical, and the float path where they reside.

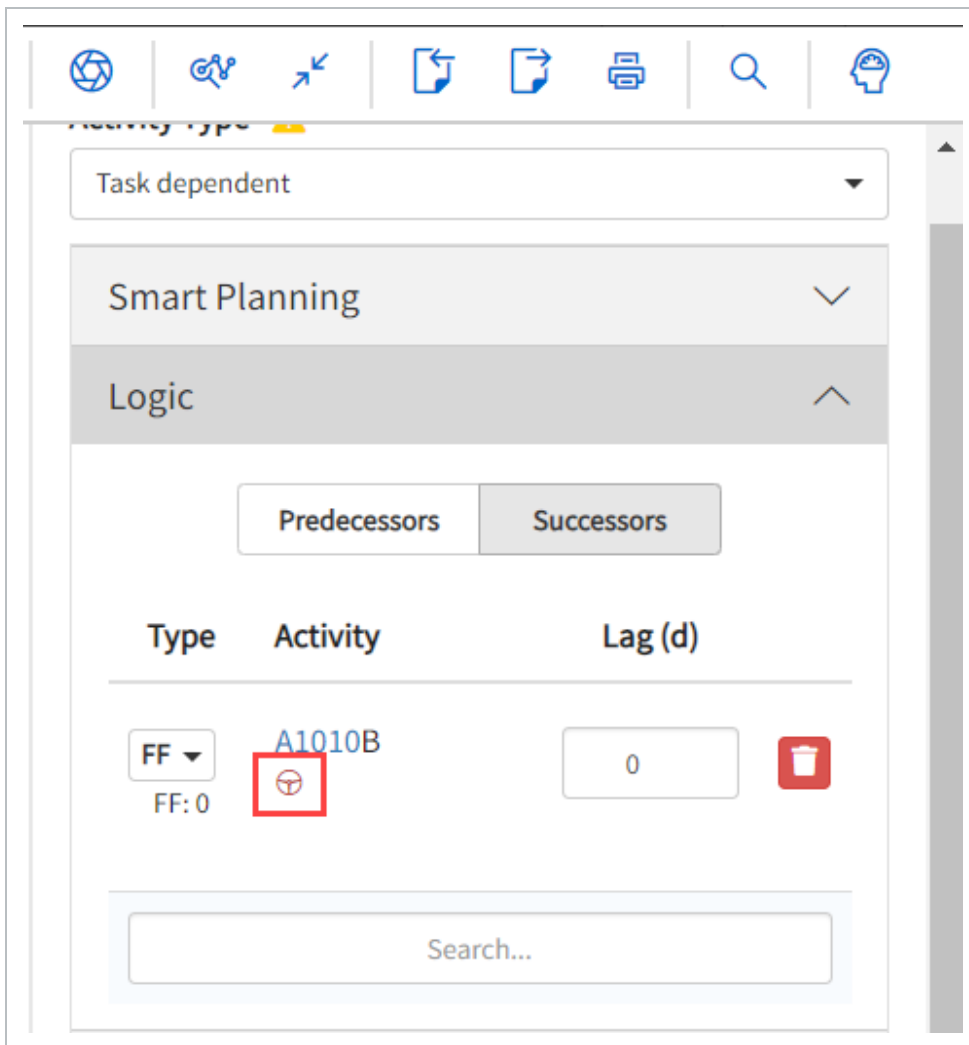
ID - Description	Actions	Start	Finish	At Complet...	Total Fl...	Free Float
∨ No Float Path	***	23 May 2014 A	9 May 2017	748		
∨ 9	***	28 Jul 2015 A	20 Apr 2017	402		
∨ 8	***	8 Sep 2014 A	21 Apr 2017	663		
∨ 4	***	6 Jul 2016 A	13 Apr 2017	179		
∧ 3	***	22 Sep 2014 A	17 May 2017	619		
Install Civil U/G Aggregates ...	***	3 Oct 2016 A	20 Apr 2017	125	124	0
Install Civil U/G Aggregates ...	***	3 Nov 2016 A	20 Apr 2017	103	124	0
Install Civil U/G Aggregates ...	***	1 Sep 2015 A	20 Apr 2017	378	124	0
Install Civil U/G Load at Sto...	***	3 Mar 2015 A	20 Apr 2017	499	124	0
Paving	***	19 Oct 2016 A	20 Apr 2017	114	124	0
Stockpile / Waste Knockdo...	***	22 Sep 2014 A	20 Apr 2017	601	124	0
Structural Backfill - Water T...	***	16 Apr 2015 A	20 Apr 2017	470	124	0
SUB.Final Site Seeding & La...	***	21 Apr 2017	17 May 2017	18	124	124
∧ 2	***	18 Dec 2015 A	19 Jun 2017	348		
Install Misc Metals NE Mezz ...	***	18 Dec 2015 A	20 Apr 2017	309	103	0
Install Misc Metals North O...	***	18 Mar 2016 A	13 Apr 2017	252	103	0
Site Finish / Paving	***	3 Oct 2016 A	19 Jun 2017	164	103	0
SUB.Project Painting Plant ...	***	28 Sep 2016 A	19 Jun 2017	167	103	103
∨ 10	***	4 Dec 2015 A	14 Apr 2017	313		
∨ 5	***	10 Dec 2015 A	21 Apr 2017	315		
∨ 6	***	27 Mar 2017	1 May 2017	25		
∧ 1	***	23 May 2014	27 Nov 2017	885		
Contract Final Acceptance 1...	***		27 Nov 2017*	0		
PP: Contract Administratio...	***	23 May 2014	23 May 2014	0	0	885
PP: Contract Administratio...	***	23 May 2014	23 May 2014	0	0	885
∧ 7	***	27 Aug 2015 A	31 Mar 2017	368		
Install Civil U/G Subgrade Fi...	***	27 Aug 2015 A	31 Mar 2017	368	137	13

5. Clicking **Schedule** updates the data date and logic based on the settings selected.

### Critical Path - Driving Indicator

The driving indicator (steering wheel) appears in the Logic section of the IRIS panel. The driving indicator indicates that a predecessor or successor is on the critical path.





## Progressing

To begin Progressing, select the activity that you want to progress, and reference the smart planning panel.

**ID**

1.1. A3320

**Description**

Activity A3320

**Calendar**

test.7 day.1874

**Constraint**

None

**Smart Planning** ▼

**Planned (d)**

120

**Cost (\$)**

7515000 👤

**Remaining (d)**

0 R

**Start** 🔴

09 Oct 2017

**Actual (d)**

167

**Finish** 🔴

24 Mar 2018

**At Complete (d)**

167

**Percent Complete**

Phys 100

<b>Early Start</b>	<b>Late Start</b>	<b>Planned Start</b>
None	None	09 Oct 2017
<b>Early Finish</b>	<b>Late Finish</b>	<b>Planned Finish</b>
None	None	05 Feb 2018
<b>Total Float</b>	<b>Free Float</b>	
0	-	

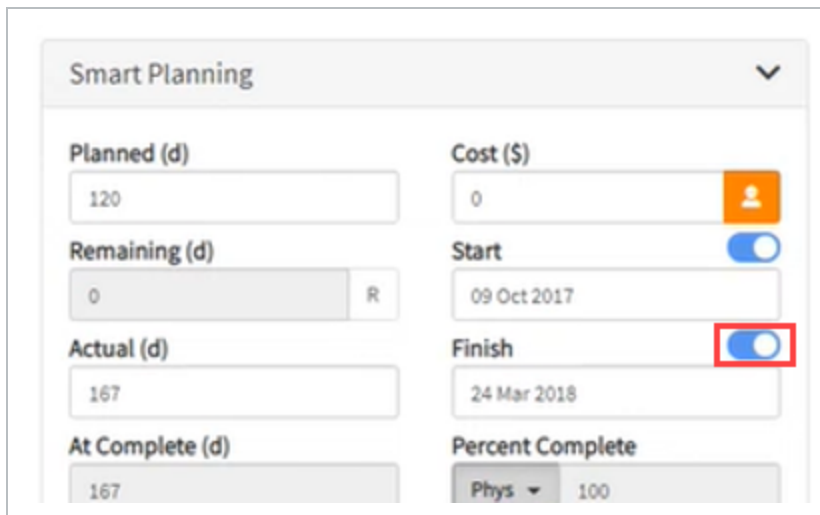
**Logic** >

**Knowledge Tags** >

**Project Register** >

**Delegation** >

Activities can be marked as started by clicking the **Start** toggle. As activities progress, they can be updated by changing the remaining duration, the finish date, or the Percent Complete fields. When a task is finished, the Finish flag can be switched to *On* to indicate this in the system.



The screenshot displays the 'Smart Planning' configuration panel. It includes the following fields and controls:

- Planned (d):** Input field with value 120.
- Cost (\$):** Input field with value 0, accompanied by an orange user icon.
- Remaining (d):** Input field with value 0 and a small 'R' icon.
- Start:** Date field with value 09 Oct 2017 and a blue toggle switch.
- Actual (d):** Input field with value 167.
- Finish:** Date field with value 24 Mar 2018 and a blue toggle switch highlighted with a red box.
- At Complete (d):** Input field with value 167.
- Percent Complete:** A dropdown menu set to 'Phys' and a value field showing 100.

## Percent Complete

Percent complete can be calculated in three different ways:

- Duration
- Units
- Physical

Smart Planning
▼

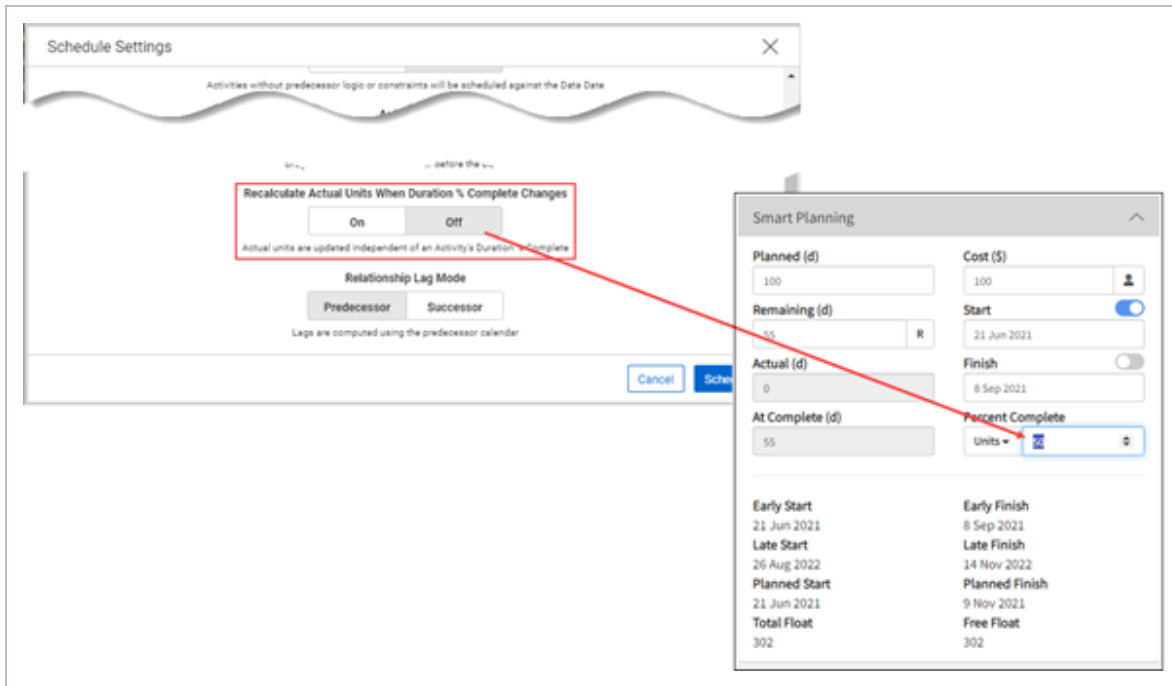
<p><b>Planned (d)</b> <input type="text" value="120"/></p> <p><b>Remaining (d)</b> <input type="text" value="0"/> R</p> <p><b>Actual (d)</b> <input type="text" value="167"/></p> <p><b>At Complete (d)</b> <input type="text" value="167"/></p>	<p><b>Cost (\$)</b> <input type="text" value="0"/> </p> <p><b>Start</b> <input checked="" type="checkbox"/> <input type="text" value="09 Oct 2017"/></p> <p><b>Finish</b> <input checked="" type="checkbox"/> <input type="text" value="24 Mar 2018"/></p> <p><b>Percent Complete</b> Phys ▼ <input type="text" value="100"/></p>
--	---

<b>Early Start</b> None	<b>Duration</b>	<b>Planned Start</b> 09 Oct 2017
<b>Early Finish</b> None	<b>Physical</b>	<b>Planned Finish</b> 05 Feb 2018
<b>Total Float</b> 0	<b>Units</b>	
	<b>Late Finish</b> None	
	<b>Free Float</b> -	

Duration percent complete uses the duration that was originally loaded onto the activity. For example, if the duration was set to ten days for completion and only five days have been completed, the system automatically sets duration to 50 percent complete.

Units percent complete uses the resource budgeted units. Schedule uses any units that have been budgeted to that activity to automatically calculate the percent complete. For example, if there are 100 man hours someone needs to work and they only worked 50 hours, the system would calculate it to 50% complete.

You can also update the Units Percent Complete at the activity level. When the Recalculate Actual Units When Duration % Complete Changes toggle in Schedule Settings is set to Off, you can manually edit the Unit Percent Complete field in Smart Planning.



Updating the Units Percent Complete at the activity level in Smart Planning also updates the actual and remaining for the associated resource assignments.

**Smart Planning**

Planned (d)	100	Cost (\$)	100
Remaining (d)	55 R	Start	21 Jun 2021
Actual (d)	0	Finish	8 Sep 2021
At Complete (d)	55	Percent Complete	Dur 44.88

**Resource Assignments**

ID	Category	Curve	Plan	Remaining	Actual
	Labor	Linear	40	20	20
	Labor	Linear	40	20	20

Modify

You can modify the resource assignment, which automatically recalculates and updates the Duration Percent Complete in Smart Planning.

The screenshot displays the 'Smart Planning' window for activity 'A1000: Activity A1000' (21 Jun 2021 - 8 Sep 2021) with a duration of 55.125 days. The 'Planned (d)' is 100, 'Remaining (d)' is 55, and 'At Complete (d)' is 55. The 'Cost (\$)' is 100. The 'Start' date is 21 Jun 2021 and the 'Finish' date is 8 Sep 2021. The 'Percent Complete' is 37.5%. A red arrow points from the 'Percent Complete' field to a table in the resource allocation window.

The resource allocation window shows 'Available Resources' and a table of resource usage:

FTE/Qty	Plan	Rem	Act	
0.09	40	30	10	⊗
0.09	40	20	20	⊗

Physical percent complete uses the Phys % Complete column as a text field to type in the percent complete. This only applies to an activity that has started and is not completed. Physical percent complete interacts with earned value management. For example, if you have 20% physical complete and 5% duration complete, there are three ways of updating this. You can change the remaining duration, you can change the finish date, or you can change the duration percent complete. The system automatically adjusts the math.

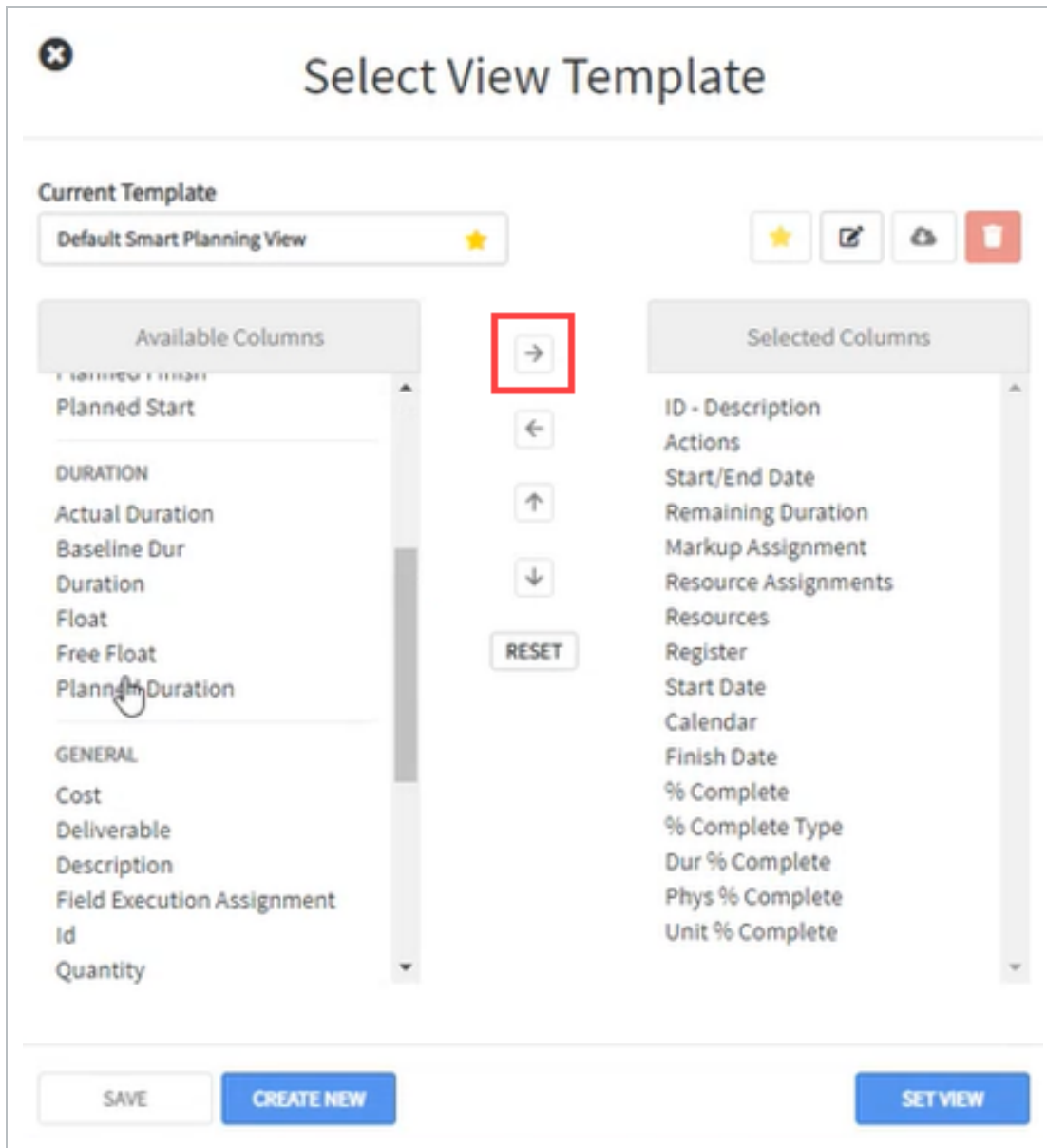
## Adding % Complete columns to the Gantt Chart

1. From the Gantt Chart, select the **Select View Template** icon.



2. In the Available Columns column, scroll to the Duration section. Then select the following columns for percent complete:
  - % Complete
  - % Complete Type
  - Dur % Complete
  - Phys % Complete
  - Unit % Complete
3. Use the arrows to move the columns to the Selected Columns column.





4. Select **Set View** to add the percent complete columns to the Gantt chart.

## Snapshot And Schedule Settings

### Set Snapshot

Setting the snapshot lets you compare any future changes that we make to the plan to our current plan.

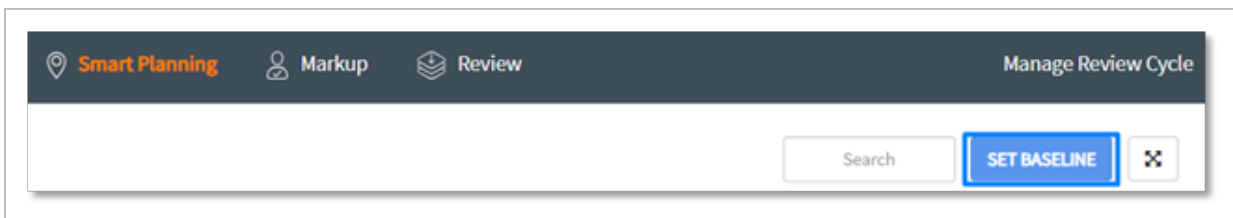
It is important to set the snapshot before applying any progress to the schedule. This lets you compare the current progress against the snapshot plan.

**NOTE** Before setting the snapshot, the SN1 Start and SN1 End dates columns show no values.

ID - Description	Rem Dur	Progress	Start Date	Finish Date	Baseline Start	Baseline End	New
North Tower Commercial Building			01 Aug 19	31 Mar 22			[-] [+] [◆]
Multi-level			01 Aug 19	31 Mar 22			[-] [+] [◆]
Preconstruction			01 Aug 19	07 May 20			[-] [+] [◆]
Design			01 Aug 19	31 Dec 19			[-] [+] [◆]
Proposal Submissions	9	0%	01 Aug 19	13 Aug 19			
Proposal Reviews & Approvals from Bo	23	0%	14 Aug 19	13 Sep 19			
Establish Permitting Documents	32	0%	16 Sep 19	29 Oct 19			
Create Early Stage Construction Docs	45	0%	30 Oct 19	31 Dec 19			
Permitting			30 Oct 19	07 May 20			[-] [+] [◆]
Fire Permit	25	0%	30 Oct 19	03 Dec 19			
Sitework Permit	17	0%	01 Jan 20	23 Jan 20			
Building Permit	41	0%	24 Jan 20	20 Mar 20			
Foundation Permit	21	0%	23 Mar 20	20 Apr 20			

## Set the Snapshot

1. Click **Snapshot icon > Set Snapshot..**



- After the snapshot is set, you can view the SN1 Start and SN1 End dates shown in the column. The snapshot dates are now populated in Schedule.

ID - Description	Rem Dur	Progress	Start Date	Finish Date	Baseline Start	Baseline End	New
North Tower Commercial Building			01 Aug 19	31 Mar 22			← — ◆
Multi-level			01 Aug 19	31 Mar 22			← — ◆
Preconstruction			01 Aug 19	07 May 20			← — ◆
Design			01 Aug 19	31 Dec 19			← — ◆
Proposal Submissions	9	0%	01 Aug 19	13 Aug 19	01 Aug 19	14 Aug 19	
Proposal Reviews & Approvals from Bo	23	0%	14 Aug 19	13 Sep 19	14 Aug 19	14 Sep 19	
Establish Permitting Documents	32	0%	16 Sep 19	29 Oct 19	16 Sep 19	30 Oct 19	
Create Early Stage Construction Docs	45	0%	30 Oct 19	31 Dec 19	30 Oct 19	01 Jan 20	
Permitting			30 Oct 19	07 May 20			← — ◆
Fire Permit	25	0%	30 Oct 19	03 Dec 19	30 Oct 19	04 Dec 19	
Sitework Permit	17	0%	01 Jan 20	23 Jan 20	01 Jan 20	24 Jan 20	
Building Permit	41	0%	24 Jan 20	20 Mar 20	24 Jan 20	21 Mar 20	
Foundation Permit	21	0%	23 Mar 20	20 Apr 20	23 Mar 20	21 Apr 20	
Water Permit	13	0%	21 Apr 20	07 May 20	21 Apr 20	08 May 20	
Permit Completion Milestone			08 May 20	07 May 20	08 May 20	08 May 20	

**NOTE** If the snapshot has not been set when a Markup Cycle is started, Schedule requests confirmation to establish the snapshot so any markups or changes to the schedule can be compared before and after review.

**NOTE** Gantt bars of up to 2 snapshots can be visualized against the current schedule Gantt bars for comparison. Gantt grid columns show variances between the current schedule and the snapshot columns.

## Scheduling

Schedule uses CPM for scheduling a set of activities. This method calculates the activity dates based on the durations and logic.

To schedule the project or review schedule options, click **Schedule**.

ID - Description	Actions	Register
^ Commercial Construction	...	
^ General Conditions	...	
Receive notice to proceed and sign c...	...	

### Schedule Settings

**Project Start**  
26 Apr 2021

**Data Date**  
26 Apr 2021 12:00 AM

**Project Finish**  
21 Sep 2022

**Schedule Mode**  
 Planning  Scheduling

Activities without predecessor logic or constraints will be scheduled against the Data Date

**Auto CPM**  
 On  Off

Automatically perform CPM on any changes to the schedule

**Critical Activities Contain Total Float Less Than or Equal To...**  
0 hours

**Out of Sequence Progress**  
 Retained Logic  Progress Override  Actual Dates

Relationships are maintained between the predecessor and successor for unworked portions of activities and continued after the predecessor has finished (recommended)

**Auto Progress**  
 On  Off

Drag activities forward that occur before the Data Date

**Recalculate Actual Units When Duration % Complete Changes**  
 On  Off

Actual units are updated independent of an Activity's Duration % Complete

**Relationship Lag Mode**  
 Predecessor  Successor

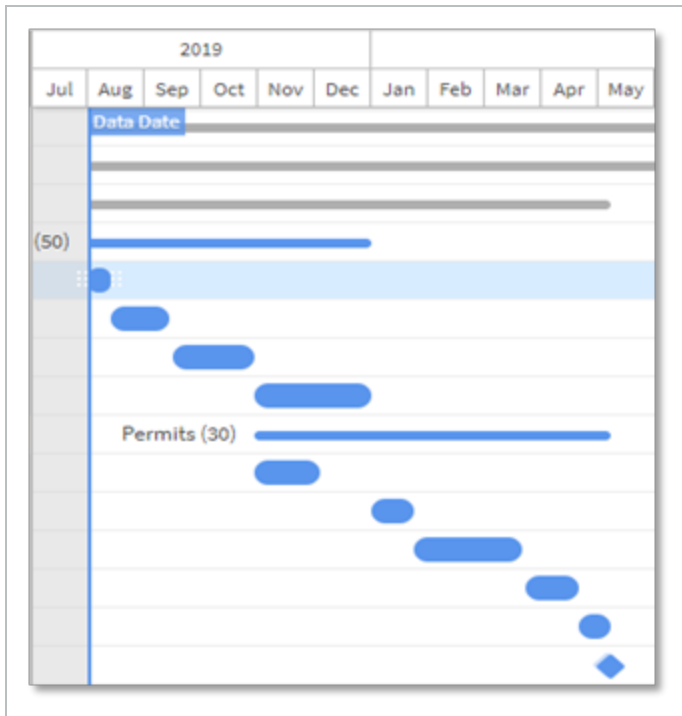
Lags are computed using the predecessor calendar

## Data Date

**Data Date**

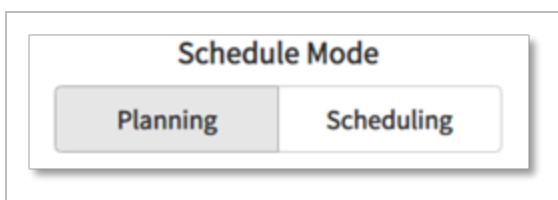
20 Nov 2020

Set the Data Date to the day and hour you want to update the schedule to. The Data Date is used as the starting point to calculate the dates of all remaining activities. The Data Date is represented by the blue vertical line on the Gantt chart



### Schedule Mode (Planning vs. Scheduling Mode)

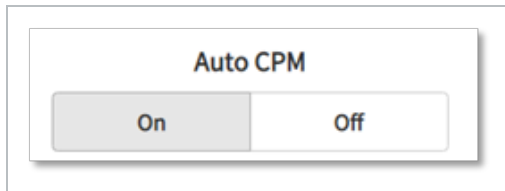
The Schedule Mode determines how activities without predecessor logic or constraints will respond to the updates being made to the schedule.



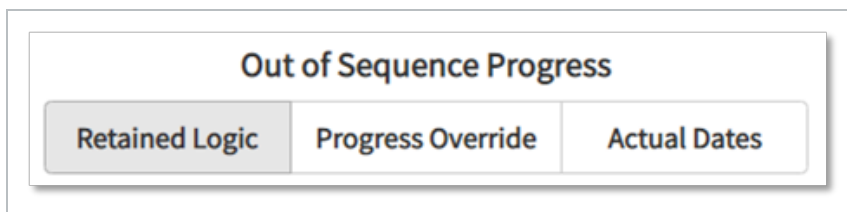
- In **Planning Mode**: Activities without predecessor logic or constraints do not snap back to the Data Date. This allows activities without predecessors to be scheduled throughout the project's timeline.
- In **Scheduling Mode**: Activities without predecessor logic or constraints are scheduled against the Data Date.

## Auto CPM

Selecting the Auto CPM option *On* updates activity duration and sequence as actual progress is entered into Schedule. Switching this to *Off* prevents the schedule from automatically adjusting when activity is updated, and it must be adjusted manually. This is particularly useful if schedulers plan to update multiple activities in bulk, and then determine the CPM.



## Out of Sequence Progress



- **Retained Logic:** Relationships are maintained between the predecessor and successor for unworked portions of activities and continued after the predecessor has finished.
- **Progress Override:** Relationships between the predecessor and successor are disregarded, and unworked portions of activities continue before the predecessor has finished.
- **Actual Dates:** When actual dates in the future occur, the remaining duration of in-progress activities are calculated after the conclusion of the future activity.

## Auto Progress

Auto Progress determines if activities automatically start and progress when the Data Date has passed.

- If Auto Progress is *On*, activities that occur before the Data Date will automatically start progressing.
- If Auto Progress is *Off*, activities that occur before the Data Date will be pushed forward to the current Data Date without having started.

## Baseline/Snapshot

Snapshots take all information from your current project file and saves it to the Snapshot Management menu. After a snapshot is saved, you can set another snapshot, overwrite a snapshot, delete a snapshot, save as a new schedule, or promote to a schedule.

**NOTE**

There are only two snapshot slots available per project. The information on the snapshot cannot be edited after it has been created. Only the name of the snapshot can be changed.

The active baseline and any available snapshots are in a grid format, in addition to a color-coded metric table. This lets you see a comparison between the current schedule, active baseline, and available snapshots.



1 active user

🔍
🌐
🗨️
📌
📄
🖨️
🔍
🧠

### Baseline/Snapshot Management ✕

**Active Baseline** 🔒

Baseline based on Copy 1221 Gemini Solar - Co... Gopala Penmesta - 2 Feb 2023

[Assign schedule](#)

**Snapshot 1**

Snapshot - 18 Apr 2023: Paul [redacted] - 18 Apr 2023

[Overwrite snapshot](#) [Promote to project list](#) 📄 ✕

**Snapshot 2**

Snapshot - 18 Apr 2023 (1): Paul [redacted] - 18 Apr 2023

[Overwrite snapshot](#) [Promote to project list](#) 📄 ✕

Set or overwrite snapshot above, or [Create copy of current schedule](#)

**Snapshot 3** has been saved to your schedule list
View in schedule list

	Current Schedule	Active Baseline	Snapshot 1	Snapshot 2
Data Date	30 Jun 2022	20 May 2022	30 Jun 2022	30 Jun 2022
Number of Activities	9	9	9	9
Start Date	30 Jun 2022	20 May 2022	30 Jun 2022	30 Jun 2022
Finish Date	13 Dec 2022	2 Nov 2022	13 Dec 2022	13 Dec 2022
Remaining Duration	167 days	167 days	167 days	167 days
Average Float	35 days	10 days	35 days	35 days
Labor Resource Units	0	0	0	0
Total Cost	\$0	\$0	\$0	\$0
Critical Activities	4	4	4	4
Activities Completed	1	0	1	1
Activities in progress	1	0	1	1
Activities not started	7	9	7	7
Constraints	3	3	3	3

You can also assign other schedules that are part of the same project workspace as the current schedule to your active baseline and snapshots using the assign schedule function.

Baseline/Snapshot Management

Active Baseline

Baseline based on Copy 1221 Gemini Solar - Co... Gopala [redacted] - 2 Feb 2023

[Assign schedule](#)

1

Baseline/Snapshot Management

Select schedule

2

Cancel Save

Baseline/Snapshot Management

Select schedule

Snapshot 3 3

Snapshot 3

Test Copy of Current

Test Schedule Copy

Test Schedule Copy 2

Baseline/Snapshot Management

Active Baseline

Baseline based on Snapshot 3: Paul [redacted] - 18 Apr 2023

[Revert to default](#)

4

Select *Revert to default* to return to the previously assigned defaulted schedule.

Baseline/Snapshot Management

Active Baseline

Baseline based on Snapshot 3: Paul Trippi - 18 Apr 2023

[Revert to default](#)

Baseline/Snapshot Management

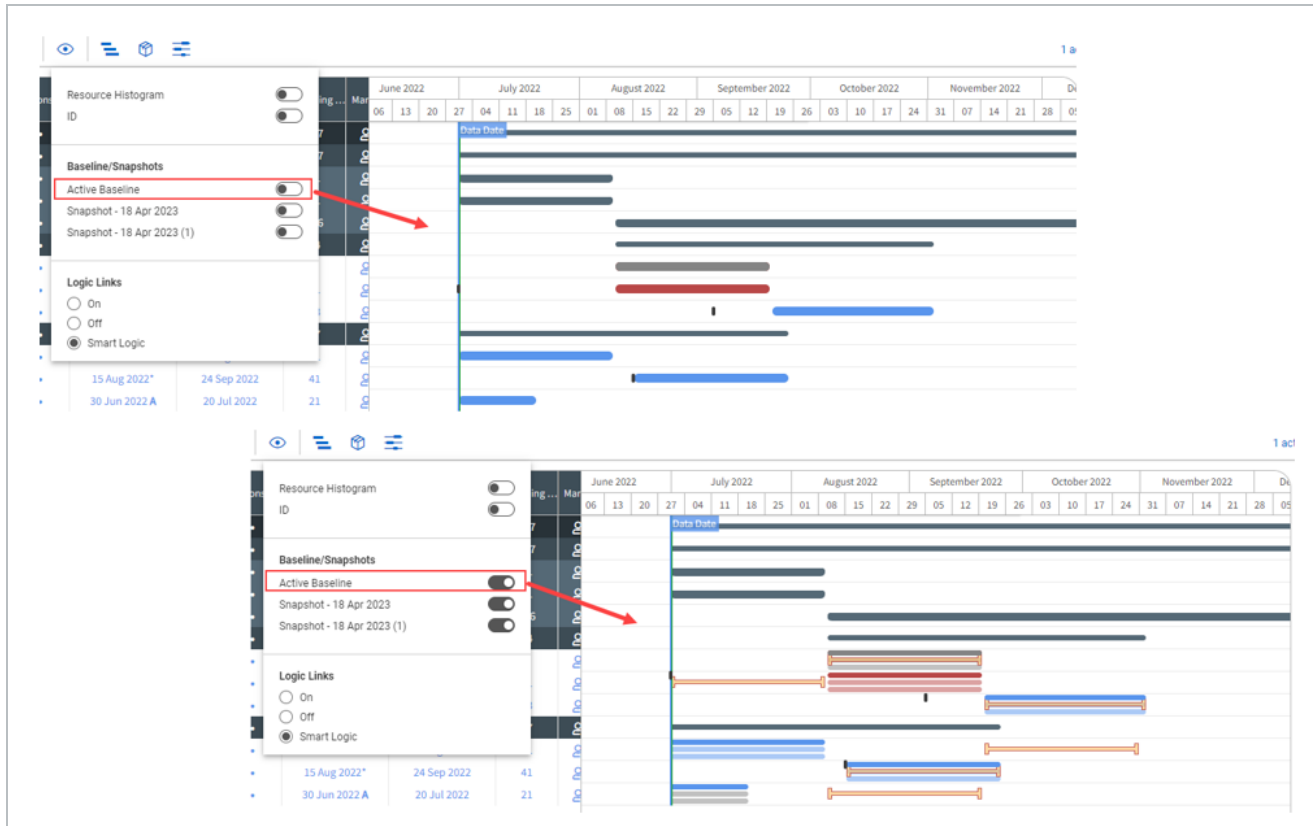
Active Baseline

Baseline based on Copy 1221 Gemini Solar - Co... Gopala [redacted] - 2 Feb 2023

[Assign schedule](#)

## Active baseline

The images below show what the Gantt chart illustrates when the active baseline is turned off and then on.



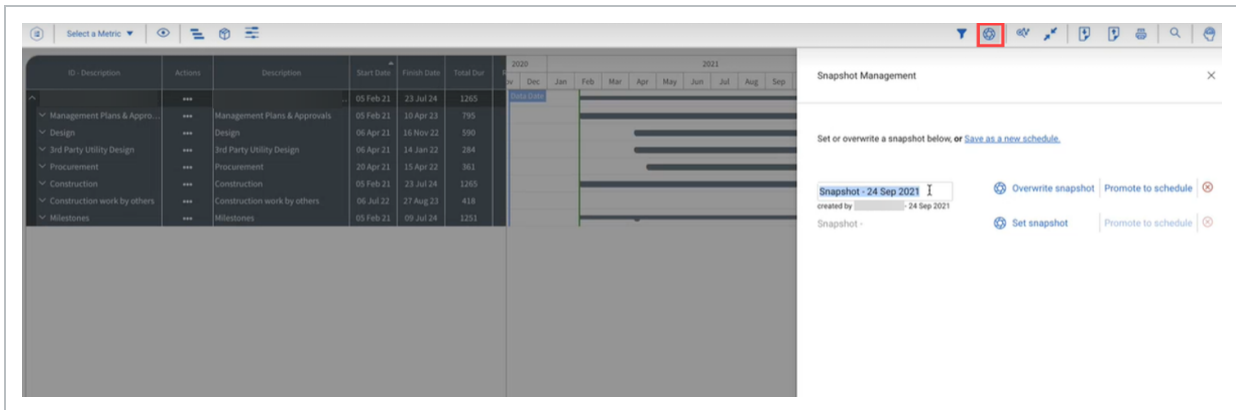
## Create a snapshot

The following step-by-step walks you through how to create a snapshot.

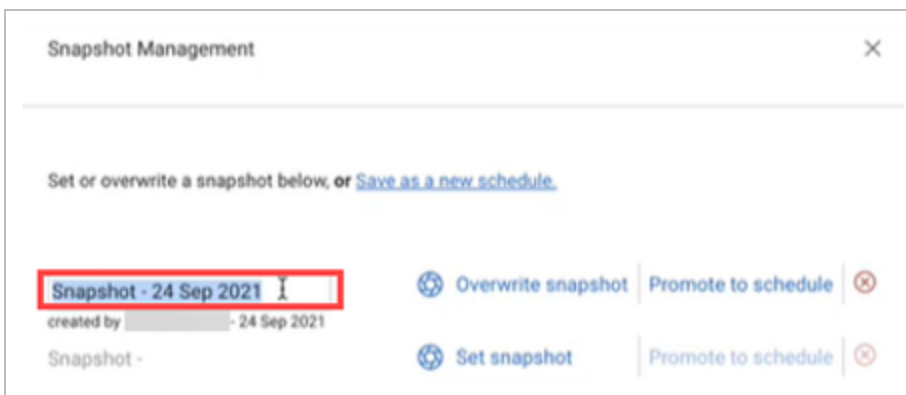
**NOTE** You can only create snapshots from the Plan view.

## Create a snapshot

1. From the Plan view, select the **Snapshot** button in the toolbar. The Snapshot Management menu opens.



- In the Snapshot Management menu, select **Set snapshot**. The snapshot automatically saves as Snapshot – [date].
- Click the **Edit** icon next to the snapshot name to change the dialog box into an editable text box. You can now rename the snapshot to a name of your preference.



## Overwrite a snapshot

You can overwrite a previous snapshot if the information saved in the first snapshot does not have the most up-to-date information.

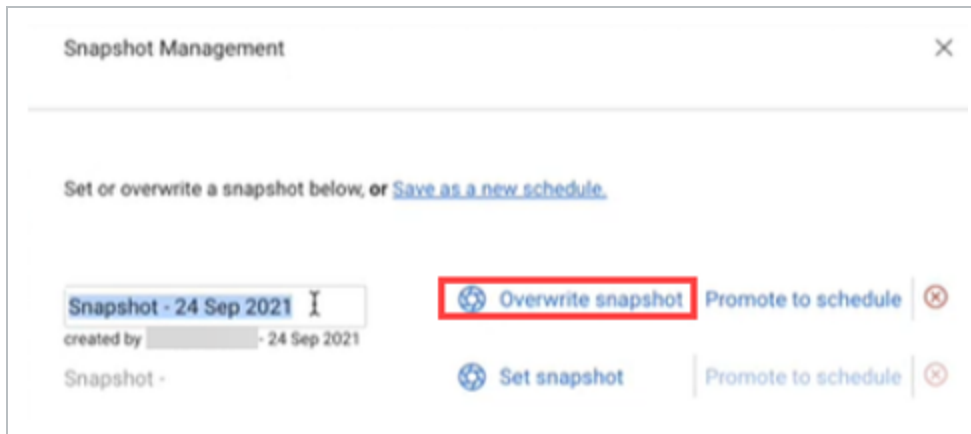
### NOTE

If another user saved the snapshot you want to overwrite, confirm with that user that the information in the snapshot to be overwritten is no longer needed.

The following step-by-step walks you through how to overwrite an existing snapshot.

## Overwrite a snapshot

1. From the snapshot Management menu, find the snapshot you want to overwrite.
2. Select **Overwrite snapshot**.



The old snapshot is overwritten and a new snapshot is saved in that snapshot slot.

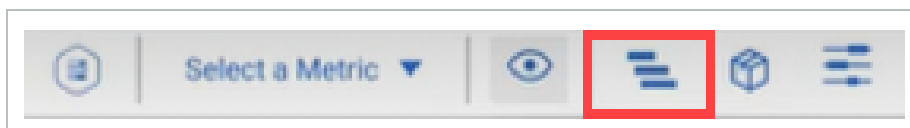
## Analysis View template

The Analysis View template works alongside the snapshots. This view lets you bring in new columns from SN1 Actual Finish to the additional variance columns. These columns are used in snapshots to compare information between snapshots and the current project. This template includes anything with a snapshot or a variance.

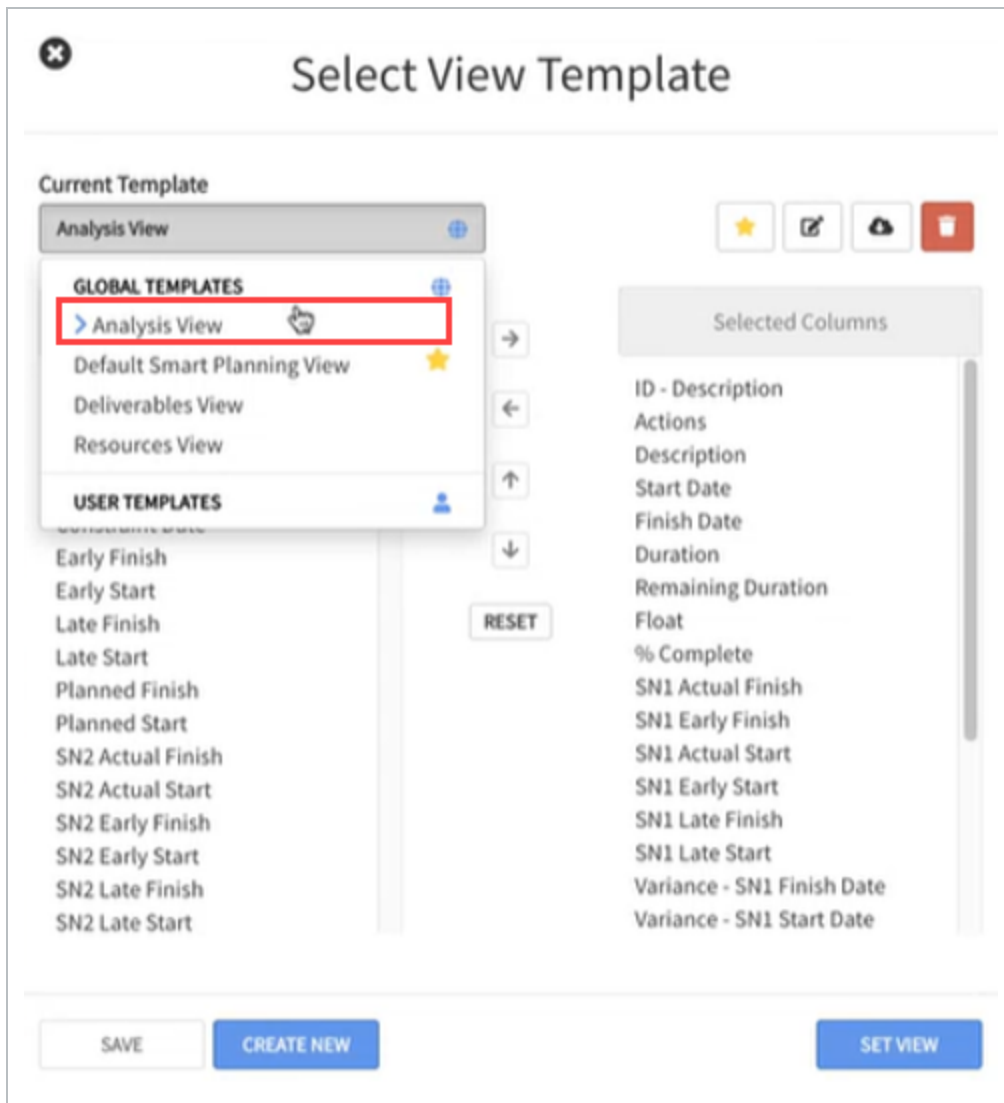
The following step-by-step walks you through how to select the Analysis View template.

### Analysis View template

1. In the toolbar, select the **Select View Template** icon.

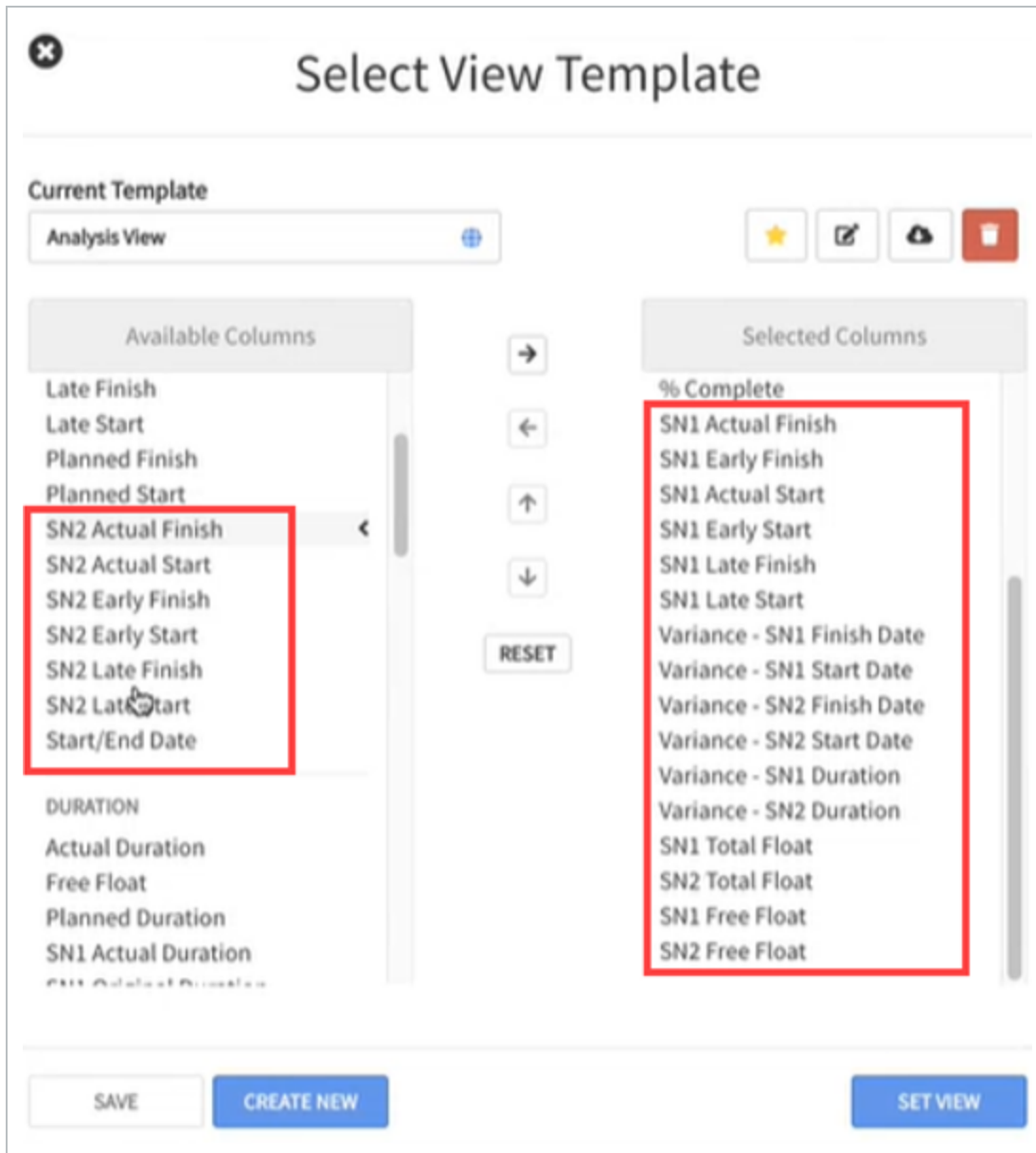


2. In the Current Template field, select the blue icon on the right. A drop-down menu opens.



3. Under Global Templates, select **Analysis View**.

Columns that are available for viewing snapshot changes are available in this template. You can also add any available columns to the template as needed.

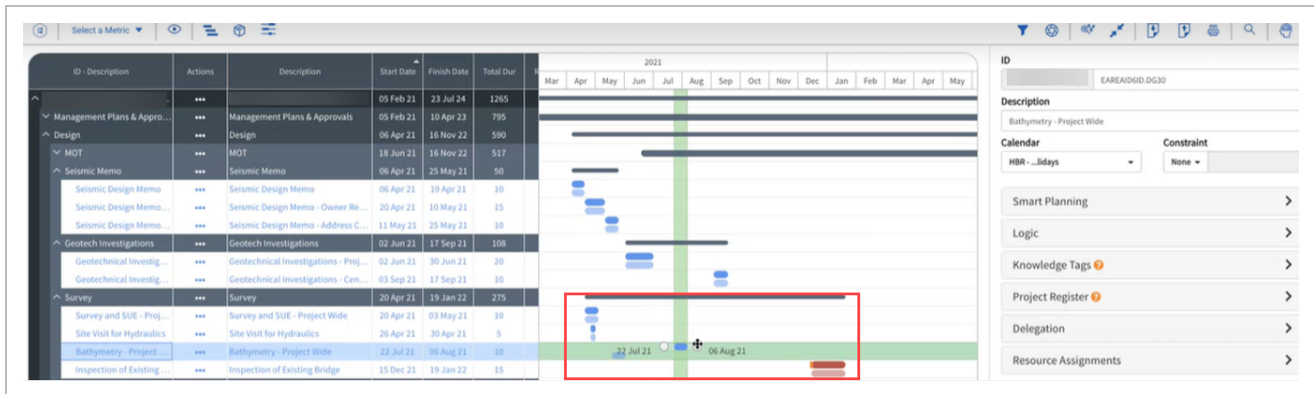


4. Use the arrows to move the columns over to the Selected Columns column as needed.
5. After the Analysis View template has been edited, select **Set View** to add the columns to the Gantt chart.

### View snapshots in the Gantt Chart

After the snapshot has been created, your Gantt chart is updated with bars for the information that relates to the current schedule status and the snapshot status. The darker bars can be moved to

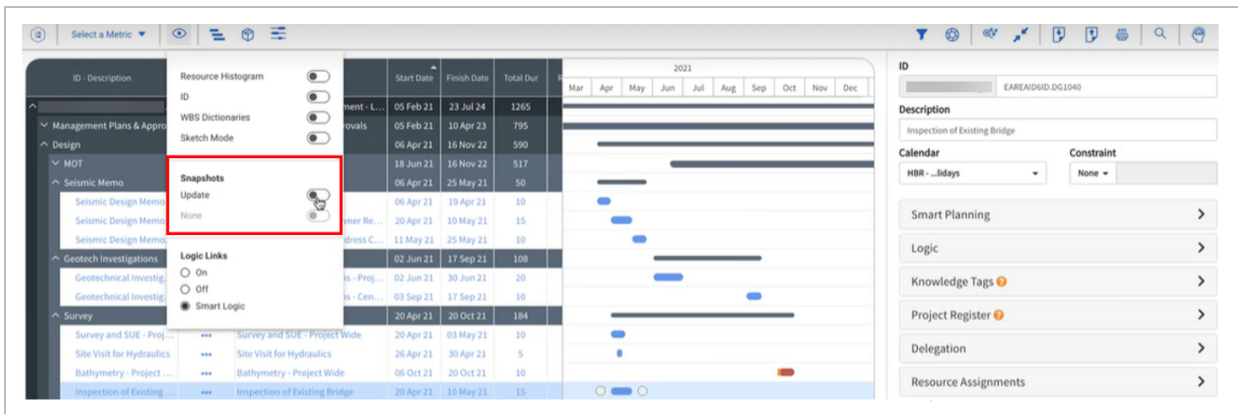
change the schedule on the Gantt Chart. The lighter bars represent the snapshot. The bars are blue when the schedule is not critical and red if they are critical.



The following step-by-step walks you through how to view existing snapshots on the Gantt Chart.

### View snapshots

1. In the toolbar, select the **View options** icon.
2. Under the Snapshots section, select the slider for the snapshot you prefer to see in the Gantt chart. A drop-down menu opens.



Two bars now show for items in the Gantt chart. You can move around the darker blue or darker red bars. The lighter bars represent the information saved in the snapshot and cannot be moved.

### Variance Columns

Each variance column compares the snapshot to the current project.



The columns show a badge depending on how the information changed. If there is a net zero change, then no badge appears. For example, the variance columns might show a green badge number if there is a decrease in duration between the snapshot and the current project. The badge numbers could also show in red if the duration increased between the snapshot and the current project. If there is no change between the snapshot and project, the number shows as 0.

The screenshot displays a software interface with a Gantt chart on the right and a data table on the left. The table has columns for various dates and variance metrics. A red box highlights two rows in the 'Variance - SN1 Start Date' column. The first row has a green badge with the number '240', and the second row has a red badge with the number '141'. Other rows show '0' in the same column. The Gantt chart shows task bars for the year 2021, with some bars highlighted in blue and others in red.

SN1 Actual Finish	SN1 Early Finish	SN1 Actual Start	SN1 Early Start	SN1 Late Finish	SN1 Late Start	Variance - SN1 Finish Date	Variance - SN1 Start Date	Variance - SN2 Fin	Variance - SN2 St	Variance - SN1 Duration
20 Apr 21		06 Apr 21	10 Mar 22	24 Feb 22		0	0			0
11 May 21		20 Apr 21	31 Mar 22	10 Mar 22		0	0			0
26 May 21		11 May 21	14 Apr 22	31 Mar 22		0	0			0
01 Jul 21		02 Jun 21	27 Jul 21	25 Jun 21		0	0			0
18 Sep 21		03 Sep 21	29 Jan 22	17 Jan 22		0	0			0
20 Jan 22		15 Dec 21	20 Jan 22	15 Dec 21		240	240			0
04 May 21		20 Apr 21	04 Jan 22	06 Dec 21		0	-1240d			0
01 May 21		26 Apr 21	23 Sep 21	16 Sep 21		0	0			0
02 Jun 21		18 May 21	07 Oct 21	23 Sep 21		141	141			0

## Promote to Schedule

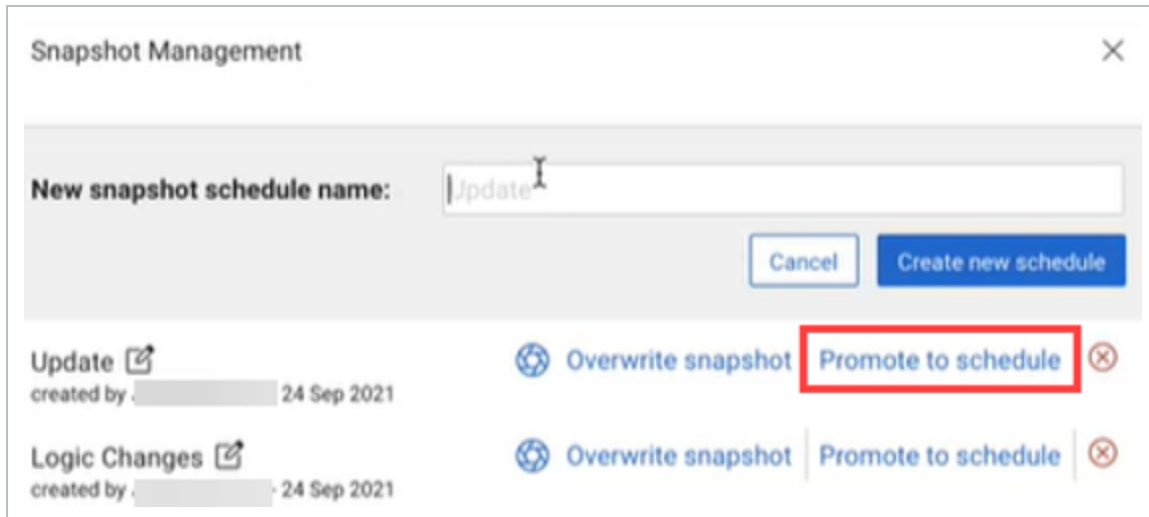
When you choose to promote a snapshot to schedule or to save a snapshot as a new schedule, the snapshot selected is then saved to the project list.

Promote to Schedule saves a snapshot to the project list. If you select **Save as a new schedule**, this option saves the current project as a copy onto the project list view as a new schedule.

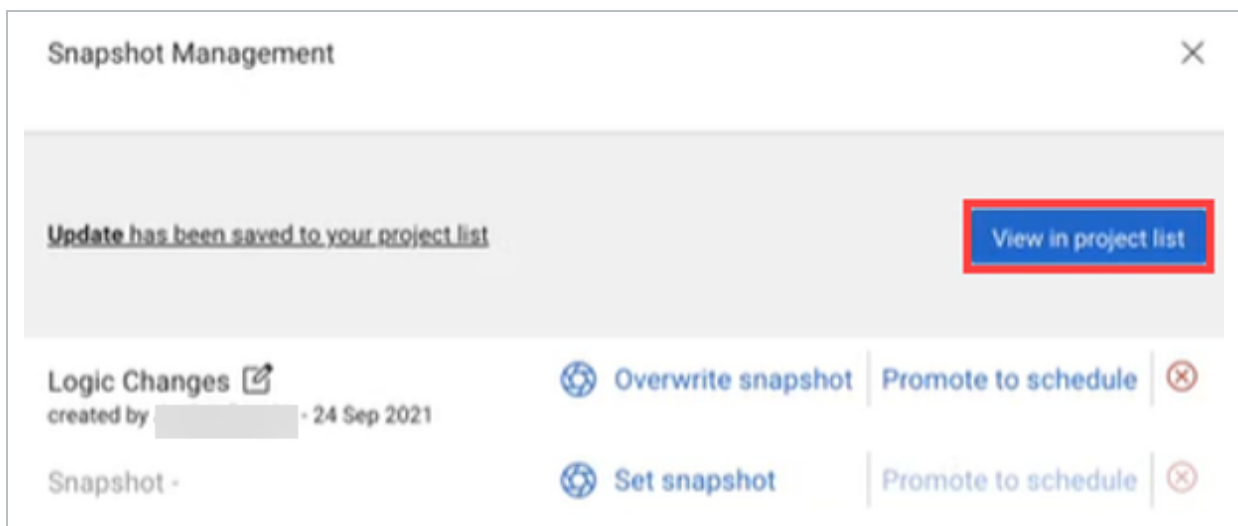
The following step-by-step walks you through how to save a snapshot to the project list.

## Promote to Schedule

1. In the Snapshot Management menu, click the **Promote to Schedule** button.



2. If preferred, enter a new name for the snapshot in the New snapshot schedule name field.
3. Click **Create new schedule**. The new schedule has been saved to the project list.
4. Click **View in Project List** to view the new schedule.



## Project list view

You can organize your schedules in project folders. Project folders can be created in the project list to better organize schedules into a project hierarchy. You can list as many schedules as needed under

each project workspace.

The projects can be organized alphabetically using the column header sort function. Use the options from the Action menu on folders to perform the following:

- Edit Project Workspace Name
- Move schedules
- Delete

Projects	Schedule ID	Start	Finish	Schedule Type	Data Date	Markup
new workspace						
1	SCHED-130			Estimate	23 Sep 2021	● ☆
1 - Promo 2	SCHED-129	13 Jul 2021	30 Jul 2022	Estimate	13 Jul 2021	● ☆

Use the options from the Action menu on individual schedules to perform the following:

- Edit Schedule Name
- Edit Schedule ID
- Move schedule
- Copy
- Delete

Projects	Schedule ID	Start	Finish	Schedule Type	Data Date	Markup
new workspace						
1	SCHED-130	23 Sep 2021	23 Sep 2022	Estimate	23 Sep 2021	● ☆
1 - Promo 2	SCHED-129		Jul 2022	Estimate	13 Jul 2021	● ☆
Test	12345678910111213141-		ep 2022	Estimate	24 Sep 2021	● ☆
duplicate name	12345678910111213141-1	24 Sep 2021	24 Sep 2022	Estimate	24 Sep 2021	● ☆

You can also edit the Schedule Type for each schedule. By default, the Schedule Type field is set to **Estimate**.

**NOTE**

If you do not organize your schedules into specific project folders, then the schedule is placed under the None folder by default.

If you import a project file into Schedule, you must include the Schedule ID, Schedule Name, and a Project Workspace.

# LESSON 10 – SHORT INTERVAL PLANNING PLANNING

## SIP Overview

### Process Overview

Activities from the CPM Schedule show in the Short Interval Planning (SIP) view that are grouped, based on how the Plan view WBS is organized. Each activity can be planned daily by adding the specific steps, or tasks, to be completed. Red and blue bars represent the CPM planned duration. The green colored boxes represent the days that tasks for the step will be conducted.

Activities	Start	End	Days	Planner	Units	T	W	TH	F	SA	SU	M	T	W	TH	F	SA
Commercial Construction	26 Apr 21	22 Sep 22				18	19	20	21	22	23	24	25	26	27	28	29
General Conditions	26 Apr 21	18 May 21															
Long Lead Procurement	30 Apr 21	5 Aug 21															
2.1 Submit shop drawings and order long L	30 Apr 21	13 May 21															
2.2 Submit shop drawings and order long L	19 May 21	1 Jun 21															
2.4 Submit shop drawings and order long L	19 May 21	1 Jun 21															
2.5 Submit shop drawings and order long L	19 May 21	1 Jun 21															
2.5 Submit shop drawings and order long L	19 May 21	1 Jun 21															
2.6 Submit shop drawings and order long L	19 May 21	1 Jun 21															
2.7 Detail, fabricate and deliver steel	14 May 21	5 Aug 21															
Mobilize on Site	29 Apr 21	12 May 21															
Site Grading and Utilities	13 May 21	23 Aug 21															
4.1 Clear and grub site	13 May 21	19 May 21															

### Planning Steps/Tasks

Steps are created by selecting the Add icon on the row of the activity being planned out. After steps are added, you can then select the step to fill in information (description, dates, duration, and planner) for the task to be completed.

A2350 60% Design		11 Nov 21	16 Feb 22			9,000
Step 35		11 Nov 21	17 Nov 21	5	None	
Pressure Calculaitons		15 Nov 21	19 Nov 21	5	None	6,000
Slope Feed Calculations		10 Nov 21	16 Nov 21	5	Jordan Broo...	3,000

## Milestones

Milestones are visually indicated on the SIP timeline and in the SIP activities. This provides clarity and reference to important dates when updating the short term plan on a project. When a blue milestone icon (◆) or a red critical milestone icon (◆) shows in the date timeline, you can click the icon to open a link and jump to the milestone in the step task chart.

SA	SU	M	T	W
12	13	14 ◆	15	16

◆ 1.11

◆ 1.9

## Resources

When adding steps, you can assign predefined SIP resources to complete the steps or create and assign them in real time. If the resource does not exist in the schedule, enter a UoM and units, save the resource, and then apply it to steps while planning.

## Add SIP Resource

✕

---

**Step 2**  
18 February 2019 - 22 February 2019  
A3050 | Proposal Submissions

---

\* SIP Resource name

UOM ?

Units

Color assignment

●
●
●
●
●
●
●
●

●
●
●
●

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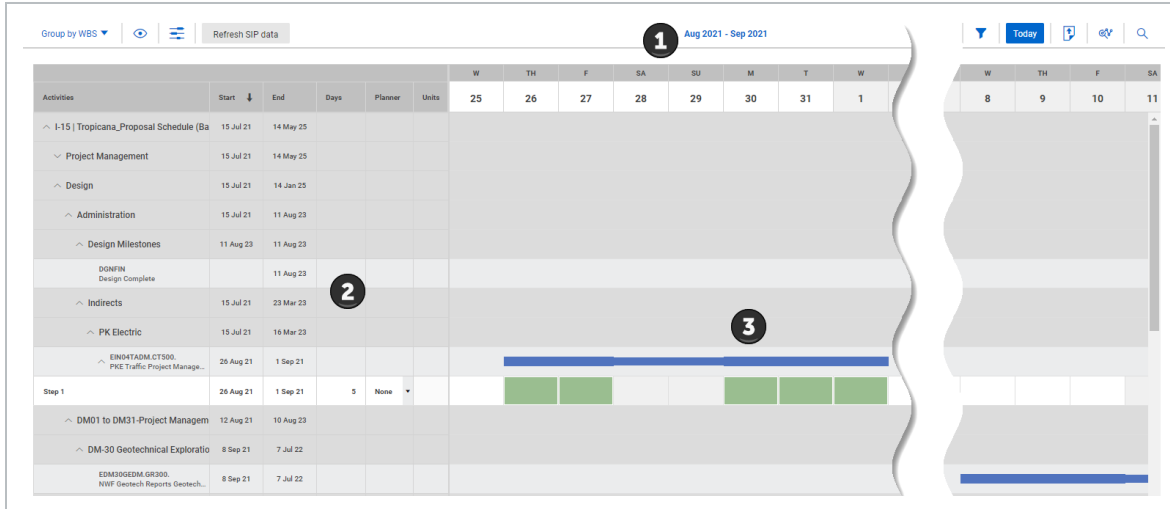
Days	Units
18 February 2019	0
19 February 2019	0
20 February 2019	0
21 February 2019	0
22 February 2019	0
<b>TOTAL: 0</b>	

## SIP General Navigation

### Short Interval Planning View

When a schedule is ready for production, schedulers can move to the Short Interval Planning (SIP) view to begin planning out the day-to-day tasks involved with completing scheduled activities. This type of planning can be done in intervals of 17, 25, and 50 days based on a selected interval.

To open the Short Interval Planning view, in the project navigation menu click **Short Interval Planning**.



In the SIP view there are three primary sections:

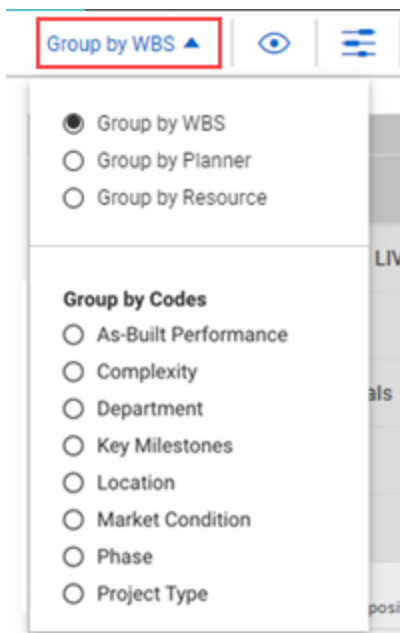
1	Toolbar	Contains view adjustment settings such as, filtering, grouping, annotations, and date range.
2	Activities	Work package and activity structure are brought in from the Plan view. Tasks are further broken out in the SIP view.
3	Calendar	Shows a segment, or interval, of the schedule based on settings in the toolbar.

## Toolbar – Icons, Functions, Settings

### Group By

The Group by drop-down menu lets you see activities grouped together based on the option selected. This functionality provides flexibility to schedulers and execution planners in how they want to organize and assess tasks, resource utilization, and activity progress. You can also group activities and task by codes when knowledge tags are used on the project.

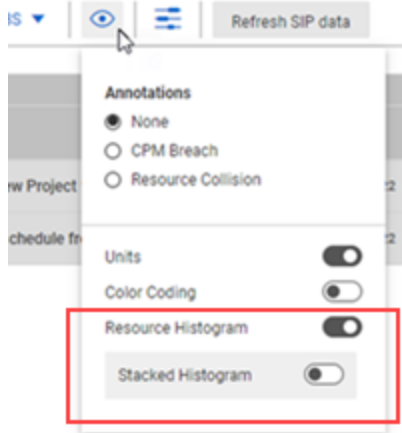




## SIP Functions

Description	Function
View options	Select metrics, annotations, color coding for the view, and resource histogram.
Detail level	Select the level of detail shown in the Activities section.
Filter	Opens the filter function to set parameters for the activities and tasks that show in the view.
Export	Export the current view to an Excel spreadsheet.
Zoom level	Sets the date range interval shown in the calendar.
Search	Search and find a specific task or step.

The SIP resource histogram lets you perform resource management at a short-term plan level that gives you another level of granularity when analyzing resources. The SIP resource histogram shows the assigned SIP resources for the project with functionality like the Plan view resource histogram. In the SIP view, click the **View options** icon, and then select **Resource histogram**.



You can choose to view a single resource or select **Stacked Histogram** to show all SIP resources assigned to the specific date. You can also resize the grid and histogram areas to show more or less of the date time line.

### Activities – Steps, Icons, Functions

In the Activities section, Schedule activities from the CPM are shown. Each of these activities can be broken into steps or tasks for more detail when planning field execution.

Activities	Start	End	Days	Planner	Units
^ Pipeline	1 Jun 18 A	1 Nov 33			22,600
^ Design	1 Jun 18 A	10 Feb 23			17,600
^ Piping	1 Jun 18 A	7 Jun 22			17,600
^ A2340 30% Design	1 Jun 18 A	12 Jul 18 A			
Step 38	1 Jun 18	7 Jun 18	5	None	▼
Step 37	1 Jun 18	7 Jun 18	5	None	▼
Step 36	1 Jun 18	7 Jun 18	5	None	▼
Step 26	1 Jun 18	7 Jun 18	5	None	▼

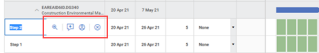
Planning packages and activities are shown in a hierarchy. Planning packages group activities the same way as in the CPM schedule. Each activity line shows a planned start date, end date, activity ID, and the activity description.

When steps are defined, they show as a subordinate of the activity. An overview of the step details are noted that includes, start date, end date, duration, planner, and quantity.

To create a new step, click the **Add** icon. A step is created to input task details.



Hover over the step to show the available Action icons.



- **Zoom to start** moves the Gantt chart to one day prior to the step start date.
- **Add comment** opens a text box where you can type text and save a comment.
- **Add SIP resource** opens a SIP resource window that lets a planner assign an existing SIP resource or create a new SIP resource that can have units assigned to it.
- **Remove step** that when selected, deletes the step.

### Calendar – Views, icons, functions

The Calendar date range is adjusted in the header of the SIP view by selecting the Zoom level icon. In the calendar, there are two primary indicators, the blue and red CPM schedule activity bars, and the colored step bars.

Activities	Start	End	Days	Planner	Units	T	F	S	S	M	T	W	T	F
						31	1	2	3	4	5	6	7	8
A2340 30% Design	1 Jun 18 A	12 Jul 18 A				[Calendar grid showing activity bars]								
Step 38	1 Jun 18	7 Jun 18	5	None		[Calendar grid showing step bars]								
Step 37	1 Jun 18	7 Jun 18	5	None		[Calendar grid showing step bars]								
Step 36	1 Jun 18	7 Jun 18	5	None		[Calendar grid showing step bars]								
Step 26	1 Jun 18	7 Jun 18	5	None		[Calendar grid showing step bars]								

The blue and red CPM schedule activity bars represent working days and non-working days. The thicker segments indicate working days in the activity’s calendar and thinner segments are non-working days.

The colored step bars are the days that step is being worked. As a Planner you have the ability to click and drag the bars along the timeline to adjust the start date and end date of the step, and add or delete days for the step.

## Weather Settings

InEight Schedule has built in functionality to pull in weather data when a project location has been set up in Project Settings > **Project configuration**. When this function is setup, the weather shows in the date column header for the current day and a forecast for the next seven days.

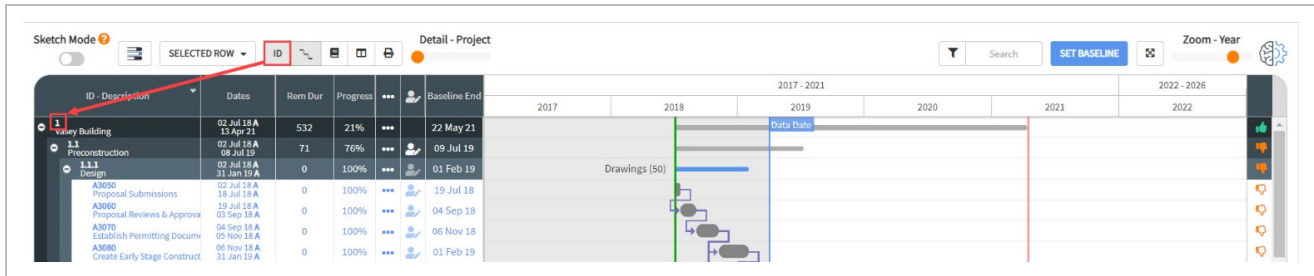
F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S
10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26

You can click the weather icon to open the selected day's weather forecast. This data is powered by Open Weather.

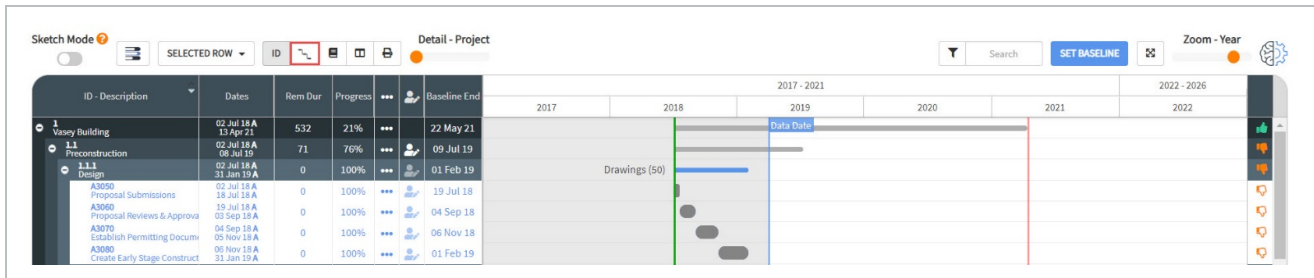
# LESSON 11 – USER INTERFACE

## Show/Hide Logic, WBS

From the plan project view from the 1st level drop-down menu within a project, click on the **ID** icon to show or hide WBS Codes.

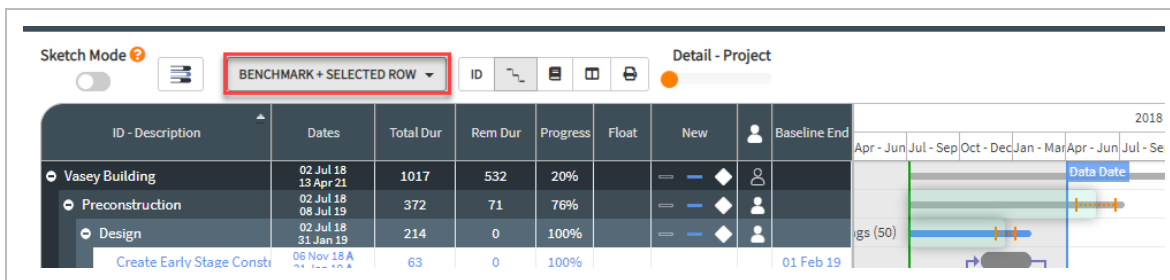


Click on the **Logic** icon to show or hide logic relationships.

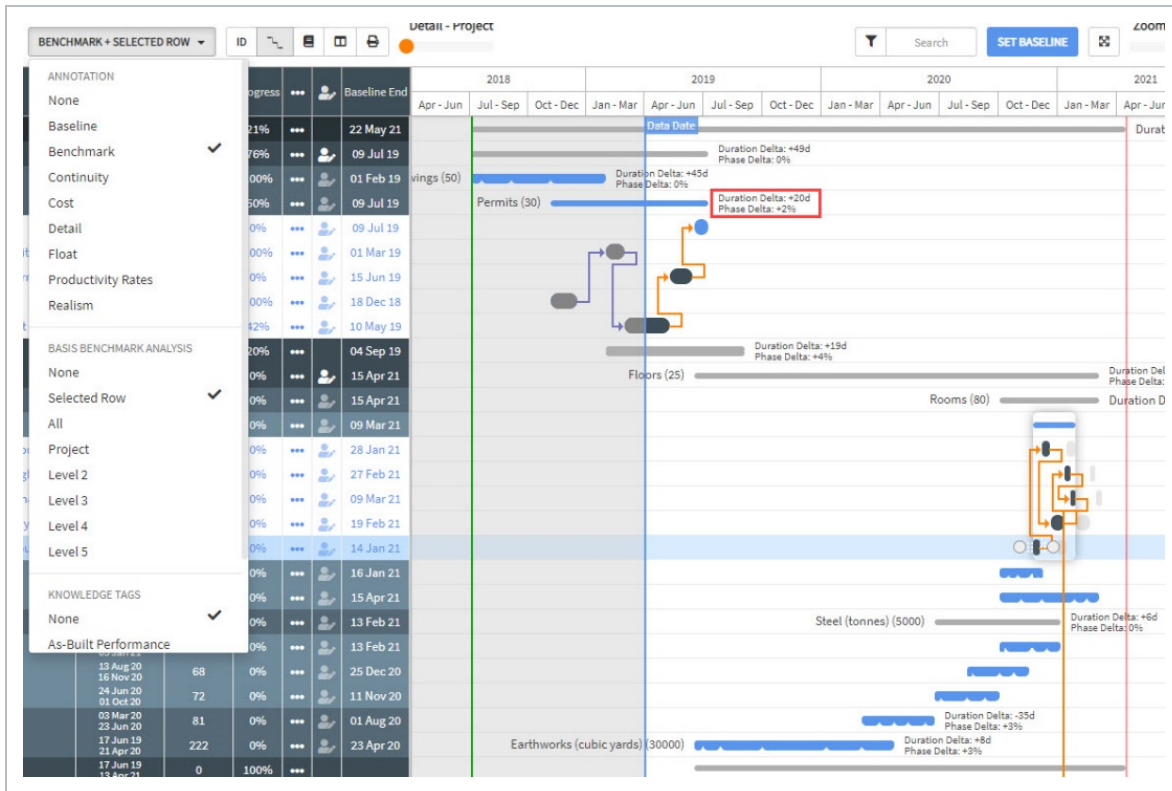


## Annotations

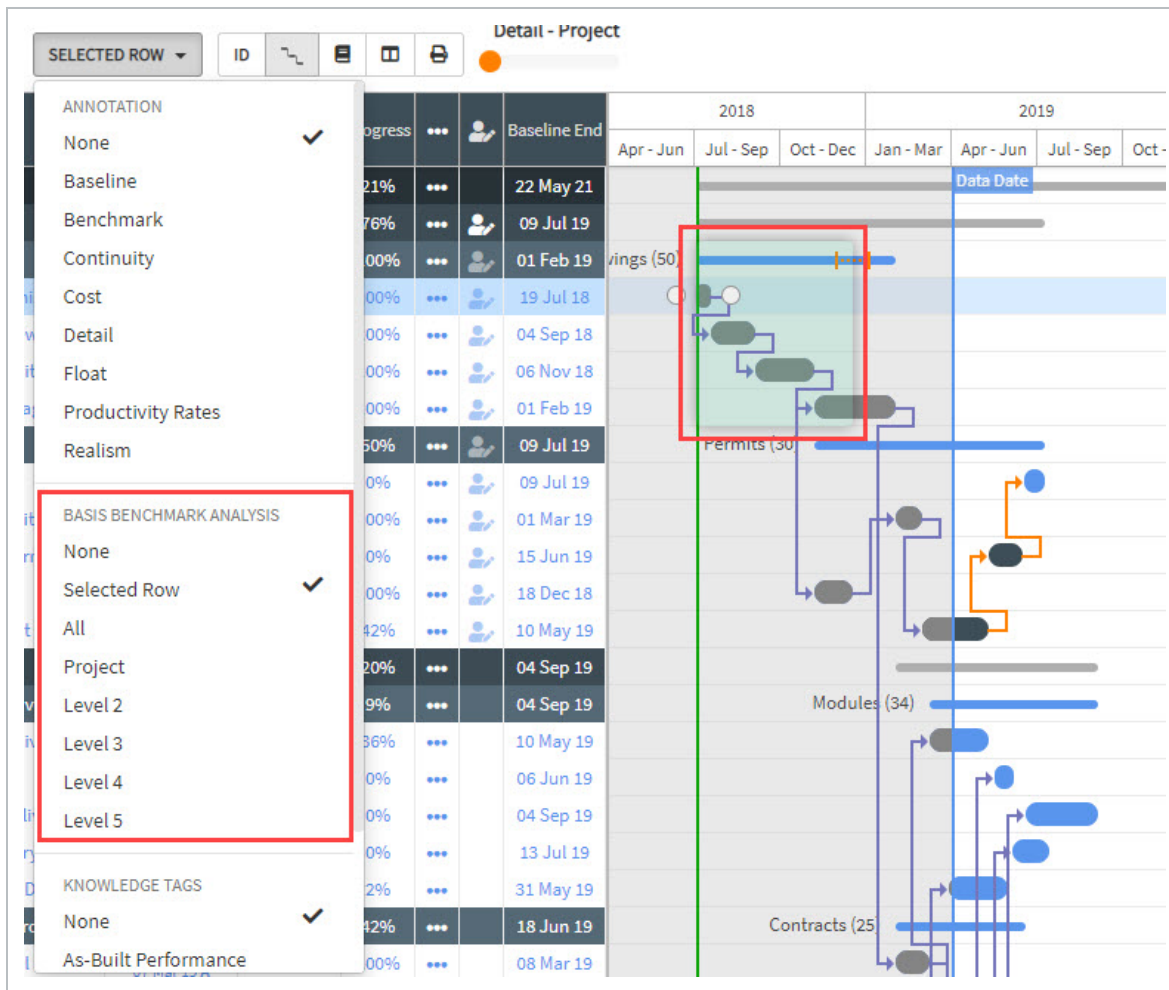
From the plan project view from the first level drop-down menu in a project, click the **Annotations** drop-down menu.



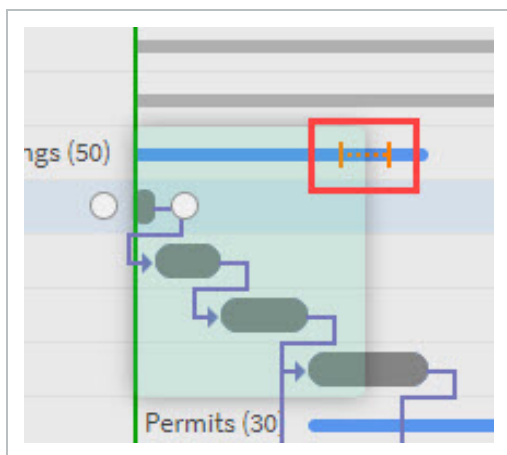
From here, Annotations can be changed by clicking the various options, which will update the information displayed on the Gantt Chart.



The Benchmark Analysis options can also be used to change what level or WBS elements the phase windows appear.



The phase window indicates the time period that the benchmark falls within in the Knowledge Library project, conformed to the current project using the current project's start date and knowledge tags normalizers. For items that have the phase window showing, there is also a set of brackets indicating a range that the complete date of a summary WBS element is expected to fall within.



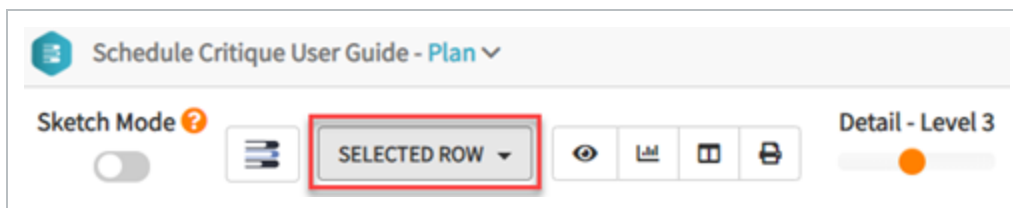
This is based on the % of tolerance defined in the project settings, the start date of the summary WBS in the current project, and the duration of the benchmark from the Knowledge Library.

## Schedule Critique Overview

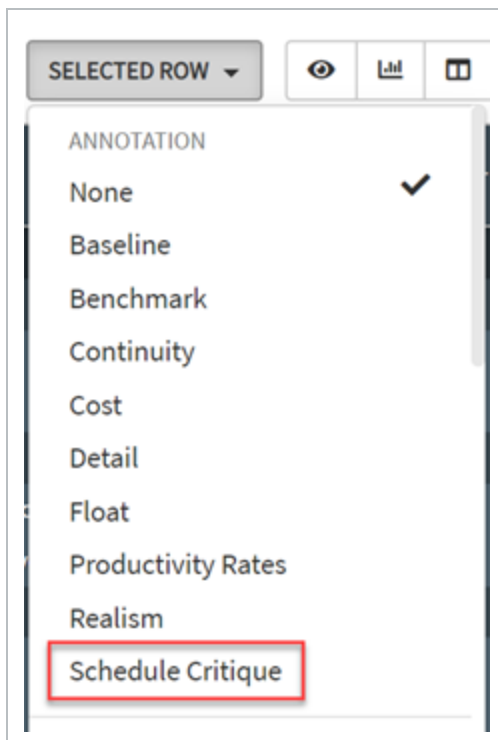
The **Schedule Critique** annotations and filters are available in the Plan view in Schedule. These functions aid schedulers in quickly identifying and isolating potential concerns with the current schedule logic.

### Toggle Schedule Critique Annotations On / Off:

1. Start from the plan view of a project and select the 1st level drop-down menu.











2. Under the Annotation section select **Schedule Critique**.





3. Once selected, the following icons will populate in the Gantt chart, representing potential logic and schedule concerns. These icons are detailed in the table below:

Icon	Description	Definition
	Missing Predecessor	The activity does not have any predecessor logic links and is not at the start of the project.
	Missing Successor	The activity does not have any successor logic links and is not at the end of the project.
	Lead or Lag	Predecessor and / or successor logic links contain lag.
	Insufficient Detail	The activity spans more than 10 % of the overall project duration.
	Incoming Bottleneck	The activity has 3 or more predecessor logic links.
	Logic Complexity	The activity has 3 or more predecessor logic links and 3 or more successor logic links.
	Hard Constraint	The activity uses a Must Start On / Must Finish On constraint.
	Negative Float	Total float is less than zero.

**NOTE**

The color of each icon represents the criticality of a critique. Blue icons are typically not desired as they often impede the flow of a schedule. Orange icons are considered with more caution, as these have a higher potential for schedule delay. Red icons identify activities of serious concern.

## Missing Predecessor or Successor

A **Missing Predecessor** or **Missing Successor** indicator appears when an activity does not have a predecessor or successor activity associated. Adding a predecessor or successor activity resolves this critique.

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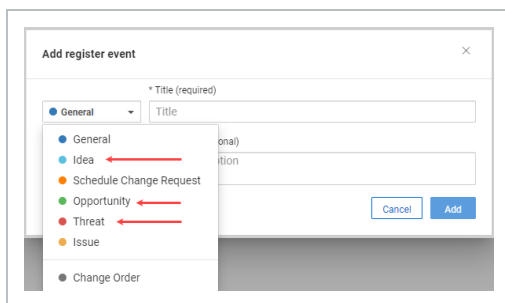
# LESSON 12 – REGISTER ITEMS

## Project Register Events

The Project Register houses all events pertaining to the project. These events are used to notify schedulers of potential project ideas, changes, opportunities, threats, and issues.

## Event Types

There are several Event types available in the Project Register. Of the available events, the following three are focused on: Idea, Opportunity, and Threat.



## Idea

Ideas are events that do not necessarily yield a positive or negative schedule impact. Often, ideas are schedule notes regarding an activity. They might have a favorable or unfavorable outcome in the schedule and can be replaced with a Threat or Opportunity event if circumstance dictates it.

## Opportunity

Opportunities are events with the potential to yield a favorable schedule outcome such as time savings or cost reduction.

## Threat

Threats are events that may occur, posing possible schedule delays or increased cost on the project.

## Event Values

When assigning an event to an activity, there are three additional fields to be populated depending on the type of event: Probability, Duration and Cost. These fields vary from event type to event type and not always need to be filled out. However, it is in the best interest of the team input as much information as possible for the Risk Analysis to be conducted.

● Lack of specs leads to re-design				SCORE
ID	Prob.	Dur.	Cost	
R5	%	🕒	💰	

- **Probability:** Likelihood of the listed event to occur and impact the schedule.
- **Duration:** Estimated days increased or decreased due to the event
- **Cost:** Estimated cost associated with the event
- **Score:** System generated value based on the Probability, Duration, and Cost Factors involved

## Event Values

### Events Library

In the Project Register Events Library, all events on the project and from the Knowledge Library are listed. These events can be selected and assigned to activities.

If a new event is to be created, the Project Register has an input field for new events.

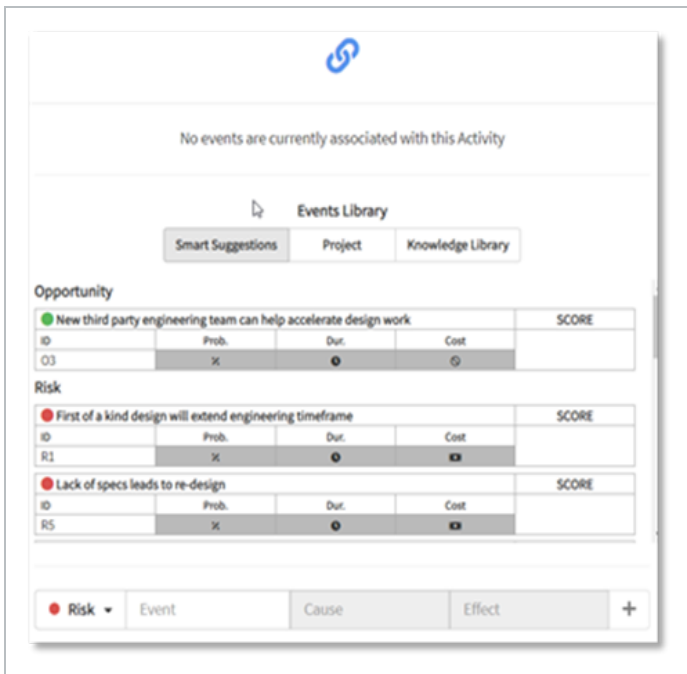
### Create an Event

1. To open the Project Register Events Library from the Markup Screen, click on the **Sticky note** icon of the activity or planning package the event will be associated to.

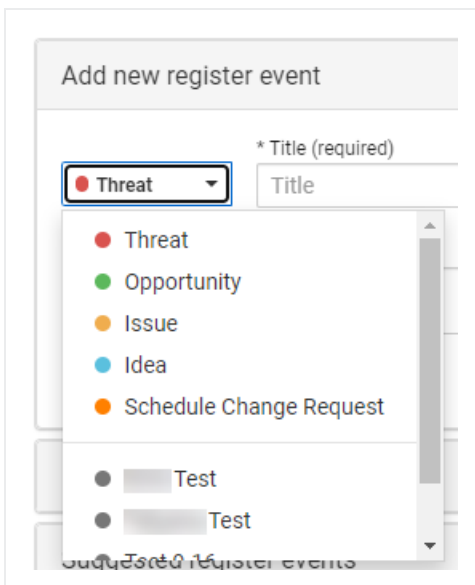
#### NOTE

This icon might be red or yellow depending on the markup provided.

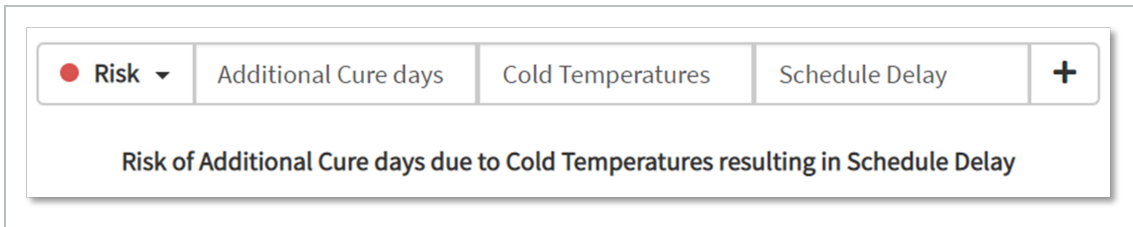
2. A new window opens with the Events Library.



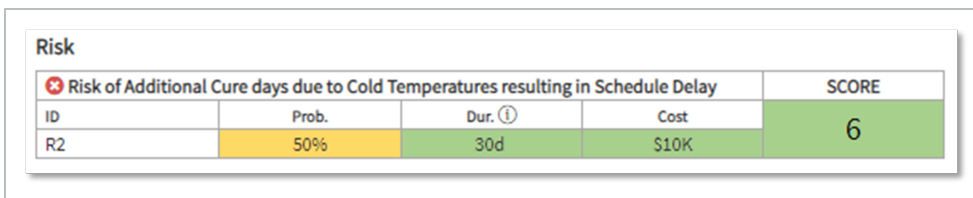
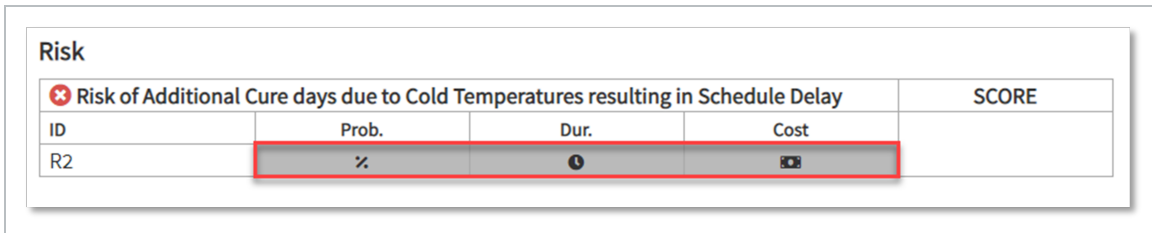
3. At the bottom of the Events Library is the **Event Creation** function.
4. Click the **Event Type** drop-down menu to select from Risk, Opportunity, Issue, Idea and Schedule Change Request.



5. Fill out the Event, Cause, and Effect fields. As these fields are populated, a summary of the event is shown below.



6. Click the **Add** icon.
7. Your selection now appears at the top of the window. Fill out the remaining fields (i.e. Risk - Probability, Duration, and Cost).



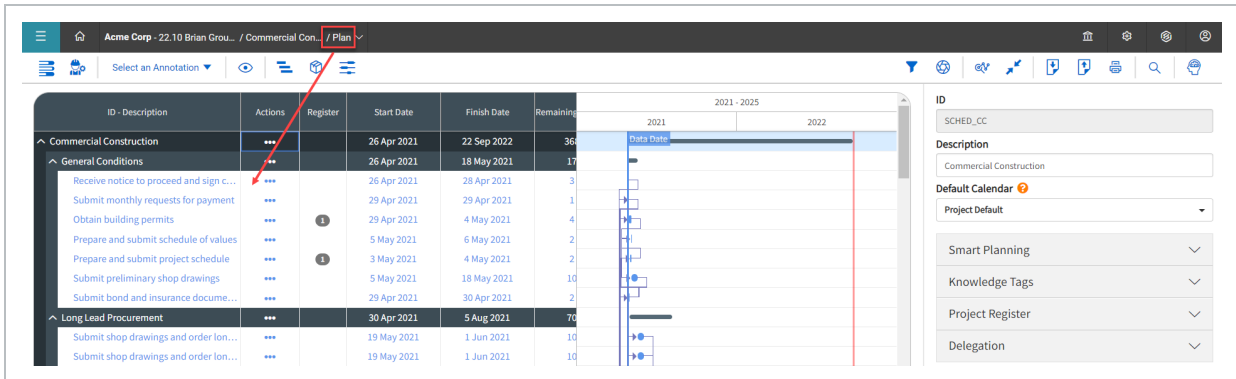
8. Close when finished.

## Assign Register Items

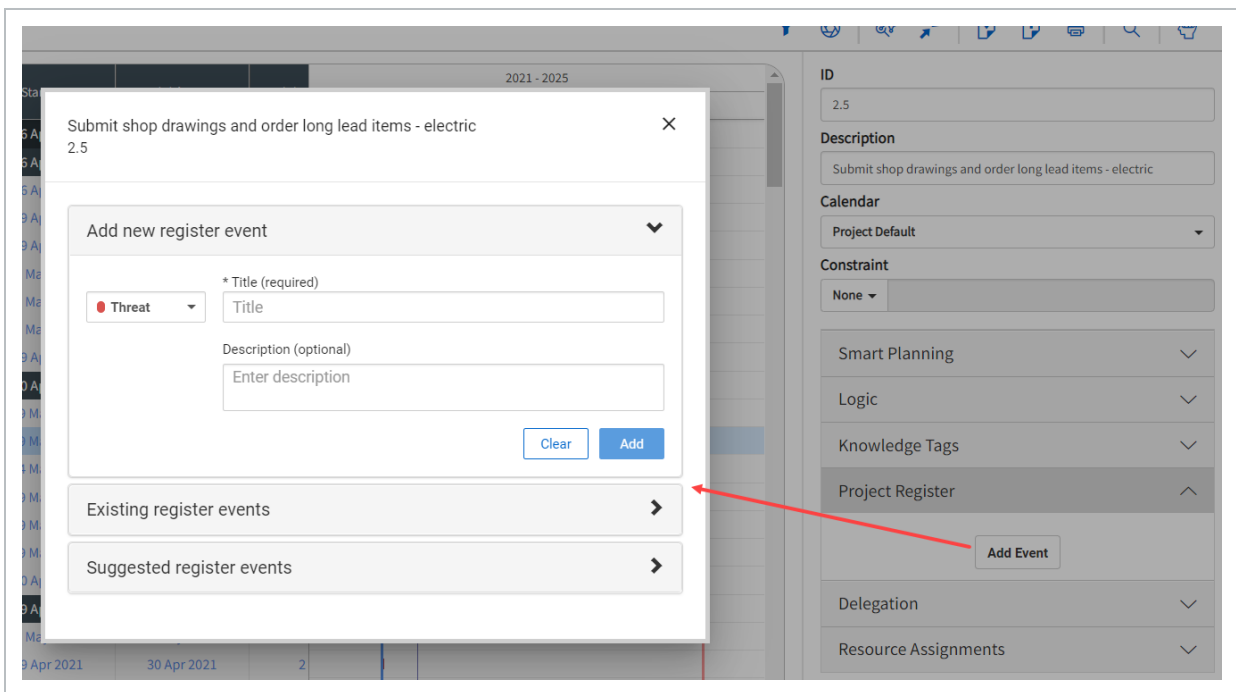
Register items consist of risks, opportunities, change orders, and any other qualifiers that your organization has defined.

### Assign a Register Item

1. Go to the plan project view from the first level drop-down menu in a project, and then select a WBS element.



- In the rightmost panel, expand project register, and click **Add event**. This causes a dialog box to pop up, showing any currently existing register items. New items can be added by selecting the item type, and typing in the event, cause, and effect.



- Press the icon to add the register item to the WBS element. Enter a probability, schedule impact, and cost impact to quantify the event. The available quantifiers are set up by your administrator based on the register item type.

**Risk**

Site access delays				SCORE
ID	Prob.	Dur.	Cost	
R2	50%	30d	\$100K	9

**Events Library**

Smart Suggestions | Project | Knowledge Library

**Risk**

Site access delays				SCORE
ID	Prob.	Dur.	Cost	
R1	0%	0d	\$0K	0

Risk ▾ | Event | Cause | Effect | +

CLOSE

- An item has now been added to this WBS element.

**NOTE**

When the Register column is in the gantt view there is an indicator on the line, telling other users that the WBS element has register items associated with it.

Interior	25 Mar 21 26 Aug 21	155	111	0%		03 Dec 21
Floor 1	25 Mar 21 26 Aug 21	155	111	0%		03 Dec 21
Floor 2	25 Mar 21 31 May 21	68	48	0%		07 Sep 21
Floor 3	14 May 21 20 Jul 21	68	48	0%		27 Oct 21
Electrical Rough-in	14 May 21 27 May 21	10	10	0%	0	03 Sep 21
Finishes - Drywall	11 Jun 21 02 Jul 21	16	16	0%	0	09 Oct 21
Finishes - Final Paint	13 Jul 21 20 Jul 21	6	6	0%	0	27 Oct 21
Finishes - Lighting Inst	05 Jul 21 12 Jul 21	6	6	0%	0	19 Oct 21
Plumbing Rough-in	28 May 21 10 Jun 21	10	10	0%	0	17 Sep 21
Structure	15 Dec 20 28 Jun 21	196	140	0%		05 Oct 21

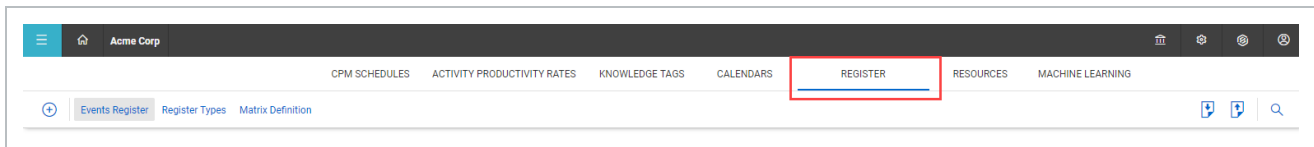


# LESSON 13 – KNOWLEDGE LIBRARY

## Knowledge Library Register Items

### Events Register

Knowledge Library Register Items can be viewed by accessing the Knowledge Library, and clicking on the **Register** tab



From the Knowledge Library, items can quickly be edited using the following fields:

1	2	3	4	5	6	7	8	9			
Verified	Id	Type	Description	Mitigation	Probability	Smart Suggestion Impact	Cost Impact	Score	Activities	KA	Delete
<input type="checkbox"/>	R3	Risk	Risk of competing work in the fabyard	Identify overflow yards	High	High	High	16	2	KA	<input type="checkbox"/>
<input type="checkbox"/>	R2	Risk	Risk of change in permitting authority	Schedule review with permitting office	Medium	High	Medium	12	5	KA	<input type="checkbox"/>
<input type="checkbox"/>	R7	Risk	Risk of unknown soil conditions		Medium	High	Medium	12	2	KA	<input type="checkbox"/>
<input type="checkbox"/>	R4	Risk	Risk of final route may not be known until 30 days before site access		Low	High	Medium	8	4	KA	<input type="checkbox"/>
<input type="checkbox"/>	O2	Opportunity	Opportunity of identify third party engineering firm to support design		Medium	Low		6	5	KA	<input type="checkbox"/>
<input type="checkbox"/>	R1	Risk	Risk of design rework due to first of a kind design resulting in engineering delay	Work with client to refine requirements prior to design	Low	Medium	Low	6	14	KA	<input type="checkbox"/>
<input type="checkbox"/>	R6	Risk	Risk of weld issues causing rework		Low	Medium	Low	6	1	KA	<input type="checkbox"/>
<input type="checkbox"/>	R5	Risk	Risk of local regulatory changing requirements		Very Low	Medium	Low	3	5	KA	<input type="checkbox"/>
<input type="checkbox"/>	O1	Opportunity	Opportunity of use alternate pre-fab modules to accelerate delivery		Medium					KA	<input type="checkbox"/>
<input type="checkbox"/>	R10	Risk	Risk of Hurricane due to weather resulting in destruction						1	BH	<input type="checkbox"/>

Name	Description
Verified	Items can be either created directly in the Knowledge Library, or pushed from individual projects. Items pushed from projects shows here as unverified, and are not used as Smart Suggestion options in other projects until verified.

Name	Description																																																								
Type	This describes the type of register item, such as Risk, Opportunity, and Action Item.																																																								
Description	Items descriptions can be edited at any time.																																																								
Mitigation	Mitigation strategies can be captured here.																																																								
Probability/Schedule Impact/Cost Impact	Probability and impact can be reviewed and edited in a centralized view. The scoring here becomes the default score when the risk is applied to a project.																																																								
Score	Based on the probability and impact of items, a score is automatically generated.																																																								
Activities	<p>The number of times the register item appears schedules are shown here. Specific Project and WBS element appearances can be reviewed by clicking on the number. You can select the All drop-down to filter the list by project.</p> <div data-bbox="506 989 1398 1335" style="border: 1px solid #ccc; padding: 10px; margin: 10px 0;"> <table border="1"> <tr> <td>Event ID</td> <td colspan="7">R3</td> </tr> <tr> <td>Event Description</td> <td colspan="7">Risk of competing work in the fabyard</td> </tr> <tr> <td colspan="8">All ▾</td> </tr> <tr> <th>Project</th> <th>ID</th> <th>Description</th> <th>Duration</th> <th>Probability</th> <th>Schedule Impact</th> <th>Cost Impact</th> <th>Created By</th> </tr> <tr> <td>Linear Pipeline</td> <td>3</td> <td>Construction</td> <td>835d</td> <td>75%</td> <td>90 days</td> <td>\$100,000</td> <td>KA</td> </tr> <tr> <td>Offshore Platform</td> <td>1.2.1</td> <td>FPSO</td> <td>158d</td> <td>75%</td> <td>90 days</td> <td>\$100,000</td> <td>KA</td> </tr> <tr> <td colspan="8" style="text-align: center;">CLOSE</td> </tr> </table> </div>	Event ID	R3							Event Description	Risk of competing work in the fabyard							All ▾								Project	ID	Description	Duration	Probability	Schedule Impact	Cost Impact	Created By	Linear Pipeline	3	Construction	835d	75%	90 days	\$100,000	KA	Offshore Platform	1.2.1	FPSO	158d	75%	90 days	\$100,000	KA	CLOSE							
Event ID	R3																																																								
Event Description	Risk of competing work in the fabyard																																																								
All ▾																																																									
Project	ID	Description	Duration	Probability	Schedule Impact	Cost Impact	Created By																																																		
Linear Pipeline	3	Construction	835d	75%	90 days	\$100,000	KA																																																		
Offshore Platform	1.2.1	FPSO	158d	75%	90 days	\$100,000	KA																																																		
CLOSE																																																									
Created By	The name of the user that raised the register item.																																																								
Delete	Deletes the item.																																																								

## Register Types

Additional Register Types can be defined by selecting the **Register type** tab.

The screenshot shows a web application interface with a top navigation bar containing tabs for CPM SCHEDULES, ACTIVITY PRODUCTIVITY RATES, KNOWLEDGE TAGS, CALENDARS, REGISTER, RESOURCES, and MACHINE LEARNING. Below the navigation bar, there are three sub-tabs: Events Register, Register Types (highlighted with a red box), and Matrix Definition. The main content area displays a table with the following data:

Name	Prefix	Probability	Schedule Impact	Cost Impact	Positive Impact	Edit
Opportunity	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Idea	I	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Srini Test	SR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Tatyana Test	TP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Schedule Change Request	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Test 9-16	TP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Type 1	TP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
General	GEN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Threat	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Issue	U	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Click **Add Register Item** to create a new register item with a custom defined caption and code prefix.

This screenshot shows the same Register Items table as above, but with an 'Add Register Type' dialog box open in the foreground. A red arrow points from the 'Add Register Item' icon (a plus sign in a circle) in the top-left corner of the table area to the dialog box. The dialog box has a title bar with 'Add Register Type' and a close button (X). It contains a text input field labeled 'Name' and two buttons at the bottom: 'Cancel' and 'Save'.

Click the **Edit** icon to define which qualifiers apply to that particular item.

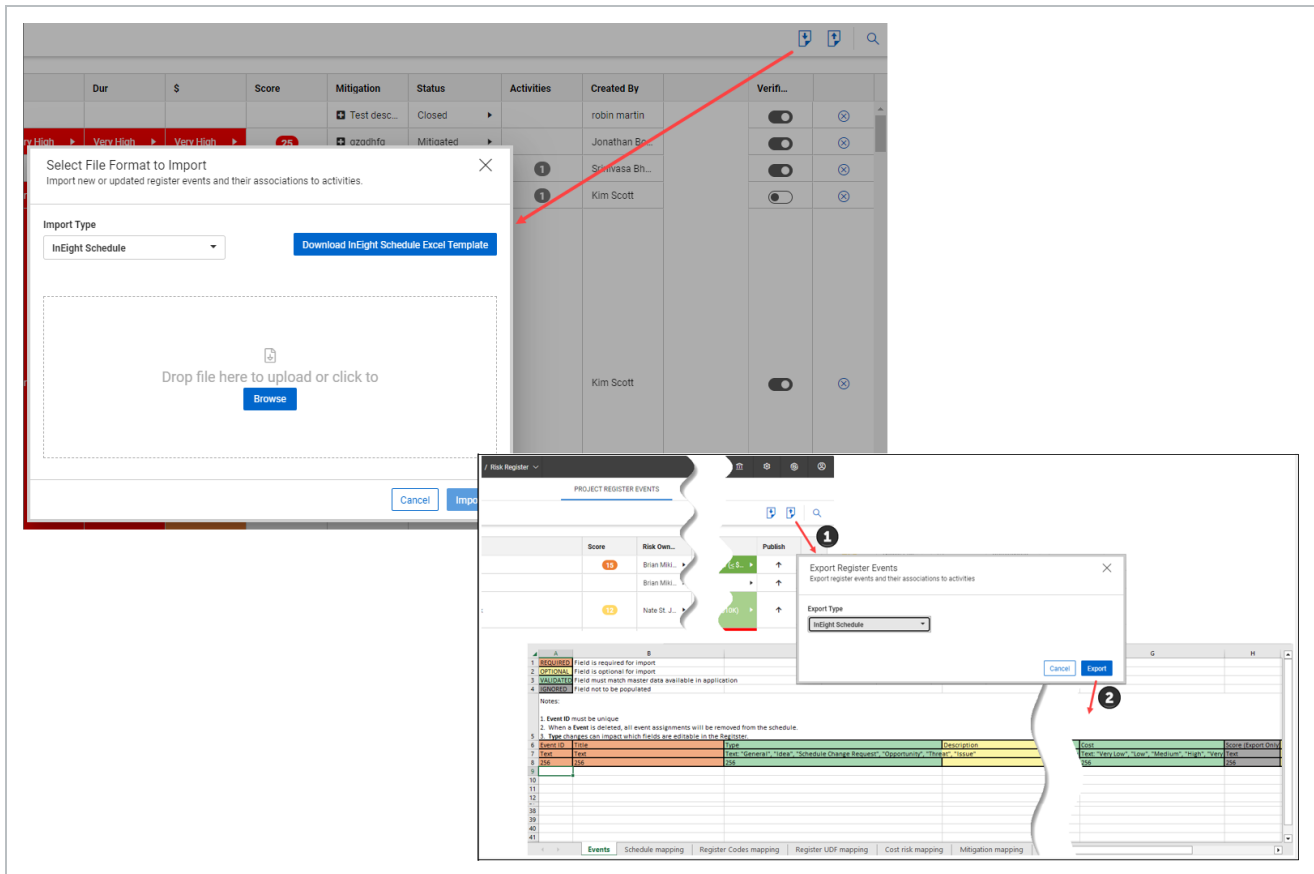
Name	Prefix	Probability	Schedule Impact	Cost Impact	Positive Impact	Edit	
Opportunity	O	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Idea	I	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Srini Test	SR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Tatyana Test	TP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Schedule Change Request	S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Test 9-16	TP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Type 1	TP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
General	GEN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Threat	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Issue	U	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

## Import and Export

You can import and export risks in the project register.

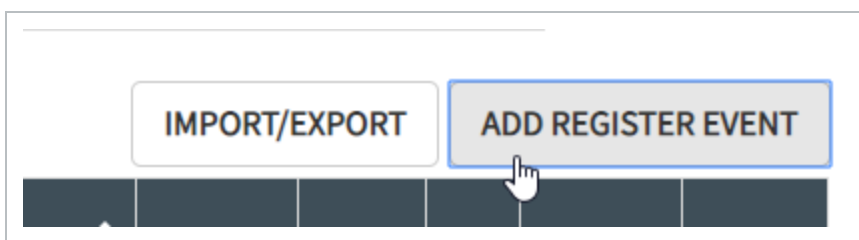
There are options for Oracle PRA – Pertmaster as well as Deltek Acumen. These are Excel formats that can also be generated outside of any tool and used for importing into Schedule.

The export file closely reflects what is exported from the Schedule plan view. A color-coded key has been added in the upper left corner in the export file that shows you the required, optional, validated, and ignored records. Additional mapping tabs are also included at the bottom of the Microsoft Excel file.



## Add Register Event

You can manually add a register event to the project register. Select **Add Register Event** and define the event type and description.



of

---

*Risk of \_\_\_\_\_ due to \_\_\_\_\_ resulting in \_\_\_\_\_*

ADD

CANCEL

## Filter

Select the **Filter** icon to enable filtering for the register view.

⌵

Active	Id	Type	Description	Mitigation	Probability	Schedule Impact	Cost Impact	Score	Markup	Basis	Publish	Delete
<input type="checkbox"/>		▼			▼	▼	▼	▼				

## Matrix Definition

Qualifiers applied to register items can have the Probability percentage, schedule impact, and cost impact updated to reflect your organization’s preferred values. This becomes the default matrix when creating a new project.

Events Register
Register Types
Matrix Definition

Description	Probability	Schedule Impact	Cost Impact	Color
Very Low	10%	≤ 11 days	≤ \$13	<span style="color: green;">●</span>
Low	25%	≤ 30 days	≤ \$10,000	<span style="color: lightgreen;">●</span>
Medium	50%	≤ 60 days	≤ \$100,000	<span style="color: yellow;">●</span>
High	75%	≤ 90 days	≤ \$1,000,000	<span style="color: orange;">●</span>
Very High	95%	≤ 180 days	≤ \$10,000,000	<span style="color: red;">●</span>