

InEight Integration (Cloud) Estimate-Primavera



Changelog

This changelog contains only significant or other notable changes to the document revision. Editorial or minor changes that do not affect the context of the document are not included in the changelog.

Rev	Date	Description
1.0	18-FEB-2025	Initial publication.
2.0		

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Overview

This topic provides guidance for the settings requirements and integration of InEight Estimate and Primavera (P6) in the cloud. Instructions are provided for the configuration of Estimate and Primavera to manage, schedule, and analyze your project.

You can select Primavera as your integrated schedule to do the following in Estimate:

- Mark your items as scheduled.
- Choose to roll up cost items as needed.
- Sync Primavera's activity changes with your Estimate job.

Estimate configuration

The proper settings must be in place in the Estimate job properties to integrate with P6.

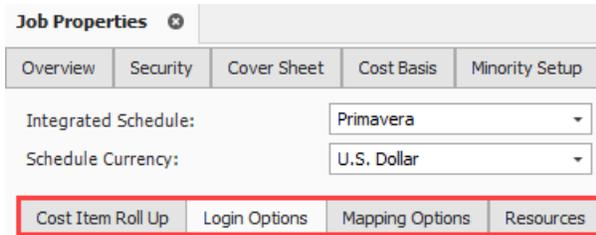
- Overview tab** – The estimate must be linked to a Primavera project. You can select a Primavera project in the Project ID field.

- Schedule Tab** – You must select Primavera as the integrated schedule. At the top of the Schedule tab, in the Integrated Schedule drop-down, select **Primavera**.

- The *Always use Plug Days when updating Estimate from the schedule* checkbox is not selected by default. On a job-by-job basis, you can select this feature later for jobs in which an estimator does not want updates from Primavera to change the duration and therefore the cost of your cost items in InEight Estimate.
- Cost Basis tab** – In Cost Basis > **Standard Shift Arrangements** section, the days and work hours configuration must match Primavera’s calendar days and work hours setup so that your plug day durations align.

Additional setting options

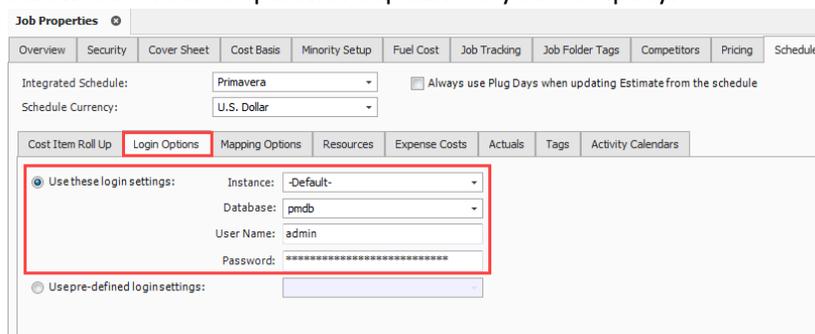
On the Schedule tab, there are other sub-tabs to set up to produce correct data behavior and ensure the correct passing of data to Primavera.



Login Options

In the Login Options tab, select **Use these login settings** and select the following:

1. Instance – Default
2. Database – Your database instance for Primavera.
3. User Name – Your username specific to your company.
4. Password – Your set password specific to your company.



When pre-defined login settings are required, select the **Use pre-defined login settings** option.

Mapping Options

The Mapping Options tab contains options critical to downstream applications. The following settings are selected by default:

1. **CBS Position Code** – This option is selected to populate the Primavera WBS Code and Activity ID fields.
2. **Manage the Primavera WBS structure in InEight Estimate** – This option is selected for the initial push from InEight Estimate to P6.
 - This means the WBS structure in Primavera will be controlled by the structure of superior and terminal cost items in InEight Estimate.
 - Selecting the other option would cause the WBS structure to be controlled in Primavera. Only terminal cost items would be sent from InEight Estimate to Primavera and all hierarchal structure (WBS Elements) would be created in Primavera manually.
 - This option can be changed later, on a job-by-job basis.

3. **Update the Project’s Planned Start Date in Primavera from the Forecast Start Date** - This option automatically pulls the Forecast Start Date from the Job Properties > Cover Sheet tab to become the Planned Start Date in Primavera.

NOTE: It is strongly recommended to verify that the correct start date is defined on the Job Properties > **Cover Sheet** tab.

Resources

The Resources tab dictates how resources are mapped between InEight Estimate and P6.

	Name	Description
1	Update Primavera Resources from Estimate	Provides options for sending InEight Estimate resources to Primavera. Typically, you would select the Update scheduled resources only option to send only resources that are employed on cost items. The Update all of this job’s resources option updates Primavera with all the resources in your project’s Resource Rate Register.
2	Map Resource Types to Primavera	Specify whether your resources import into Primavera as Resources or Roles.
3	Update Primavera Budgeted Units when using Plug Days	Allows you to specify how to handle Budgeted Units for items that use Plug Days.
4	Update Primavera Cost Accounts from Estimate Account Codes	Checking this box causes assigned account codes to import into Primavera as Cost Accounts.
5	Update Price/Unit on Primavera Resource Assignments	Checking the boxes in this section will cause the Charge Rate costs of your resources to import into Primavera along with your resources.

Expense Costs

The Expense Costs tab is useful for bringing costs in from InEight Estimate that are not connected to resources, for example, your plugged and/or quoted cost items. This tab is optional, and it is not required to make selections here.

Overview | Security | Cover Sheet | Cost Basis | Minority Setup | Fuel Cost | Job Tracking | Job Folder Tags | Competitors | Pricing | Schedule | Cash Flow

Integrated Schedule: Primavera Always use Plug Days when updating Estimate from the schedule
 Schedule Currency: U.S. Dollar

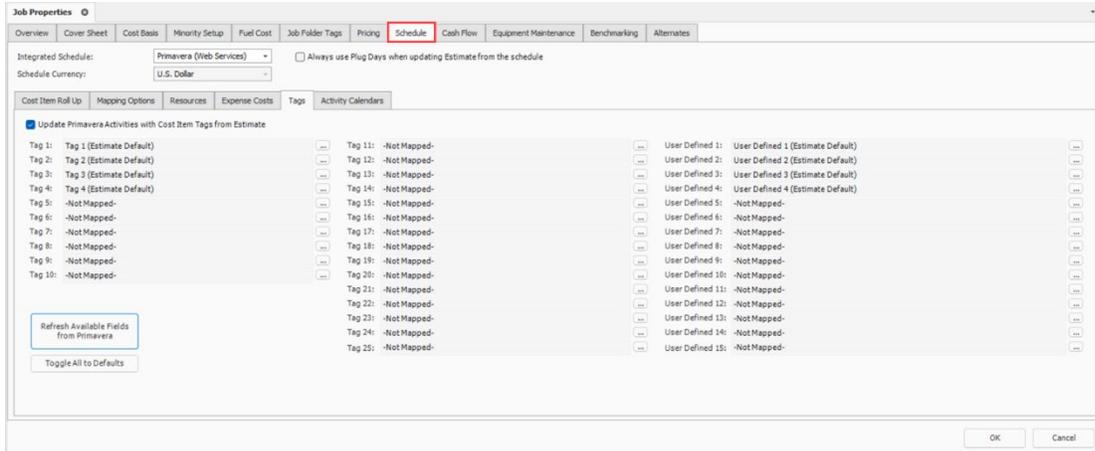
Cost Item Roll Up | Login Options | Mapping Options | Resources | **Expense Costs** | Actuals | Tags | Activity Calendars

Update Primavera Expense Costs from Estimate

Cost Category	Primavera Expense Category
Labor:	HD01 Labor
Owned Equipment:	HD02 Owned Equipment
Rented Equipment:	HD03 Rented Equipment
Supplies:	HD04 Supplies
Materials:	HD05 Materials
Subcontract:	HD06 Subcontract
Fees:	HD07 Fees
Allowance:	HD08 Allowance
Custom Category1:	HD09 Custom Category 1
Undefined:	HD10 Undefined

Tags

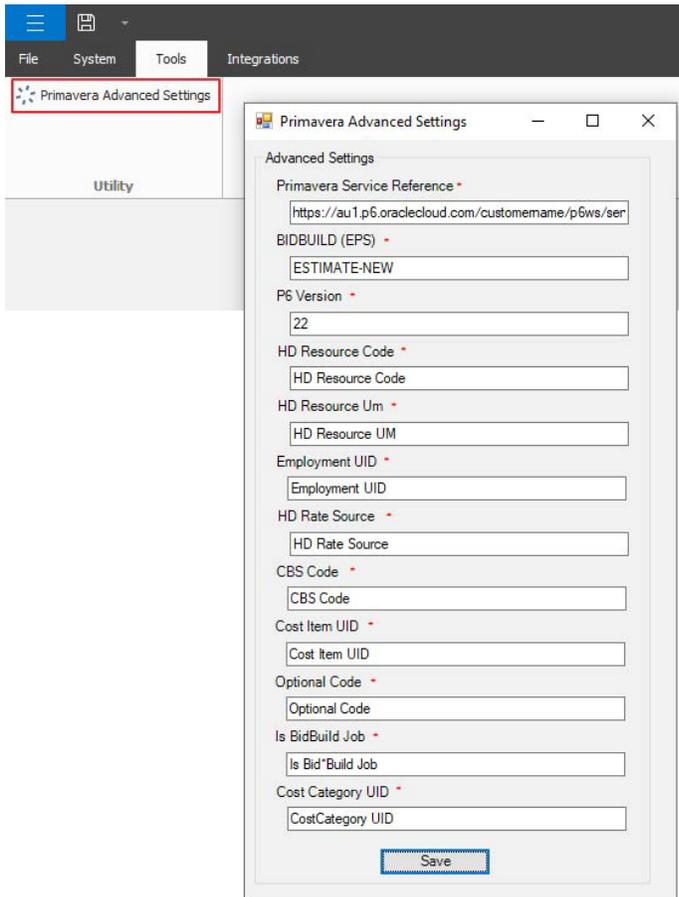
You can create tags and user defined fields (UDF) in Estimate and optionally select to update Primavera activities with Cost Item Tags from Estimate. Tags and UDFs only update in Primavera when the Update Primavera Activities with Cost Item Tags from Estimate is selected.



NOTE: When creating custom tag names, do not use periods. Using periods causes syncs to fail.

Primavera Advanced Settings

In Estimate, you can configure advanced settings for Primavera in the Tools > **Primavera Advanced Settings**.



Enter the following values:

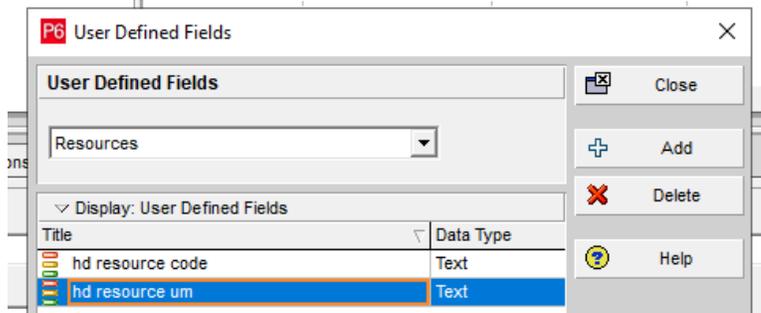
Primavera configuration related fields

- Primavera Service Reference** - This is the webservice endpoint for your P6 environment. HTTPS is recommended for connecting over the internet. For P6 Cloud, the URL address is <https://au1.p6.oraclecloud.com/customername/p6ws/services/>. For self-hosted EPPM, the URL address is <https://p6serverurl.ineight.com/p6ws/services>.
- BIDBUILD (EPS)** - The integration will create an EPS node by the name entered here. All projects will be created in this node. After the node is created, projects can be moved to any EPS node in P6 and the connection to Estimate will be maintained.
- P6 Version** – Enter the major version of P6 that you are connecting to.

The following fields map to values in P6. You can map to existing UDFs in P6, or you can create UDFs with the defined names.

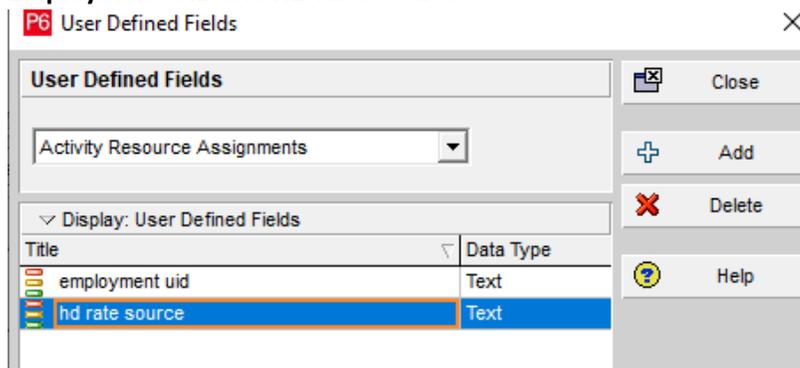
Resources related fields

- HD Resource Code and HD Resource Um**



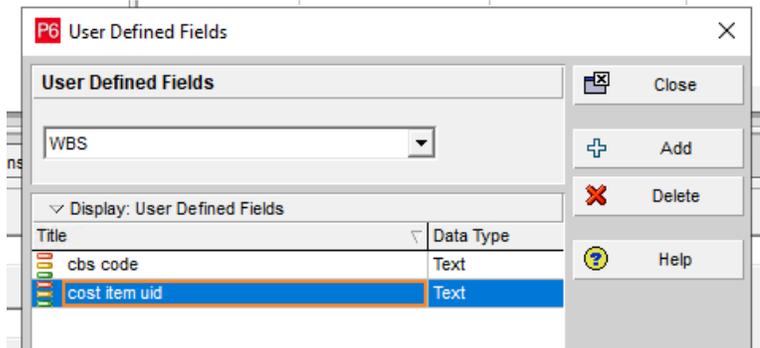
Activity Resource Assignments

- Employment UID and HD Rate Source**



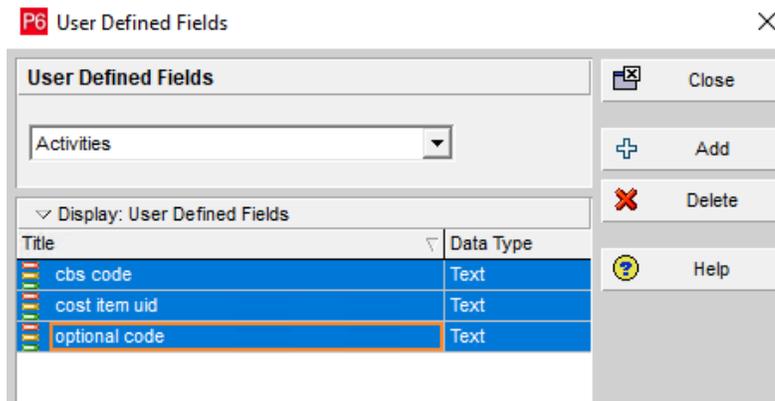
WBS

- **CBS Code and Cost Item UID**



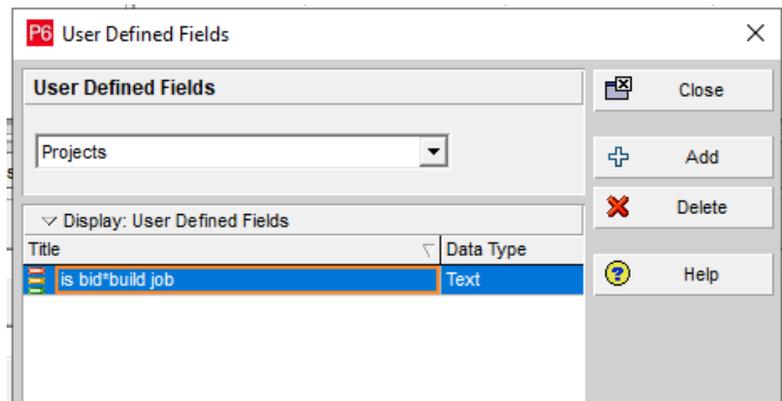
Activities

- **CBS Code, Cost Item UID, and Optional Code**



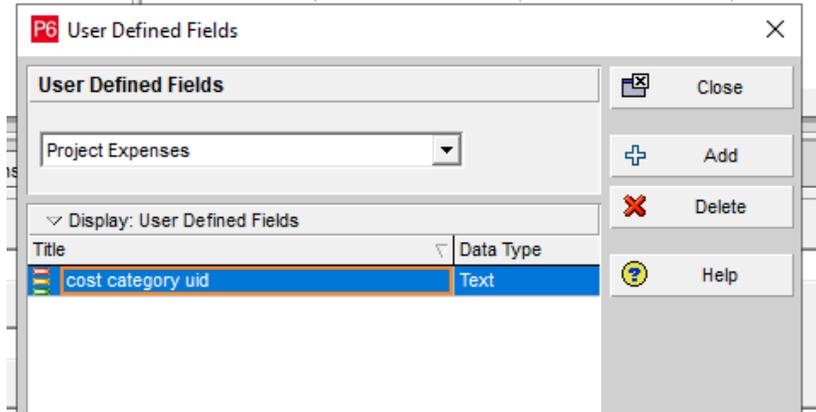
Projects

- **Is BidBuild Job**



Project Expenses

- **Cost Category UID**



Schedule cost items in Estimate

Before you integrate with Primavera, your cost items need to be marked as scheduled on the Cost Breakdown Structure (CBS) Register. You can view all of your schedule-related columns by selecting the **Schedule Setup View** from your Saved Views drop-down list in the CBS.



Plug Days

The Schedule Plug Days column lets you define the duration in the schedule separate from the duration defined for your cost items on the Production tab.

For example, your 10" PVC Pipe activity may have extra days in the schedule due to the delivery date of the pipe material, but you do not want those extra days to drive the costs in your estimate, since your crews will not be working on the activity on those extra days.

When your Days (Duration driven) column in the CBS shows 4.65 days, and your Plug Days show 7 days, selecting Schedule Plug Days lets you maintain 4.65 days in Estimate and 7 days in the schedule.

CBS Position Code	Description	Days (Duration driven)	Schedule Plug Days	Plug Days
6	36 Inch RCP Culvert Class III	18.66	<input checked="" type="checkbox"/>	26.01
+ 6.1	Furnish RCP Materials	0.00	<input checked="" type="checkbox"/>	5.00
+ 6.2	Excavate RCP Trench	4.65	<input checked="" type="checkbox"/>	7.00
+ 6.3	Install RCP Pipe	4.10	<input type="checkbox"/>	4.10
+ 6.4	Backfill RCP Pipe	9.92	<input type="checkbox"/>	9.92

NOTE: All superior cost items are hard coded to use Schedule Plug Days.

Schedule and Roll Up Schedule

In the Scheduled column, you can select the CBS items to be included in your schedule. The Roll Up Schedule column lets you select which estimate items to roll up to the selected level when it imports into Schedule.

Drag columns here to group

CBS Position Code	Description	Scheduled	Roll Up Schedule	Schedule Plug Days	Plug Days
[-] JOB		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	238.00
+ Prime Bond		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.00
+ Price % Add-On		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.00
+ Job Financing		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.00
+ Indirect Cost Escalation		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.00
+ Direct Cost Escalation		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.00
+ Indirect Cost Add-On		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.00
+ Direct Cost Add-On		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.00
+ 1 SITWORK & ROADWAY		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	107.00
→ [-] 2 WATER & SEWER		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	85.66
+ 2.1 36 Inch RCP Culvert Class III		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	23.66
+ 2.2 10 Inch PVC Force Main (SDR21)		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	45.00
+ 2.3 24 Inch PVC Gravity Sewer (SDR35)		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	45.08
+ 2.4 4 Foot Diameter Manhole		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	17.00
+ 3 STRUCTURAL CONCRETE & BRIDGES		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	147.46
+ 4 INDUSTRIAL & REMEDIATION		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	58.54
+ 5 COMMERCIAL		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	20.00
+ 6 GUARDRAIL & SIGNING		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6.00
+ 7 Indirect Costs		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	238.00
+ 8 Special Risk Allowance		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.00

To schedule cost items, in the Scheduled column, select the check box for each cost item you want to schedule. When a cost item has subordinate cost items, selecting the superior cost item automatically schedules the subordinate cost items.

Your scheduled cost items will import into Primavera the next time you select to add a new schedule from Estimate in Primavera.

In the image below, you can see that all the cost items are scheduled, but the subordinates for *WATER & SEWER* will be rolled up to the superior level.

CBS Position Code	Description	Scheduled	Roll Up Schedule
+ 1 SITWORK & ROADWAY		<input checked="" type="checkbox"/>	<input type="checkbox"/>
[-] 2 WATER & SEWER		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
+ 2.1 36 Inch RCP Culvert Class III		<input type="checkbox"/>	<input type="checkbox"/>
+ 2.2 10 Inch PVC Force Main (SDR21)		<input type="checkbox"/>	<input type="checkbox"/>
+ 2.3 24 Inch PVC Gravity Sewer (SDR35)		<input type="checkbox"/>	<input type="checkbox"/>
+ 2.4 4 Foot Diameter Manhole		<input type="checkbox"/>	<input type="checkbox"/>
+ 3 STRUCTURAL CONCRETE & BRIDGES		<input checked="" type="checkbox"/>	<input type="checkbox"/>
+ 4 INDUSTRIAL & REMEDIATION		<input checked="" type="checkbox"/>	<input type="checkbox"/>
+ 5 COMMERCIAL		<input checked="" type="checkbox"/>	<input type="checkbox"/>
+ 6 GUARDRAIL & SIGNING		<input checked="" type="checkbox"/>	<input type="checkbox"/>
+ 7 Indirect Costs		<input checked="" type="checkbox"/>	<input type="checkbox"/>

Step-by-step – Schedule multiple cost items

You can schedule multiple cost items by doing the following:

1. Highlight the row for each cost item that you want to schedule.
2. Use the **Shift** or **Ctrl** keys to select multiple rows. To select all cost items, highlight the **JOB** row.
3. Right-click on the selected rows, and then select **Schedule Selection**.

The screenshot shows the 'Cost Breakdown Structure (CBS) Register' window. On the left is a 'CBS Tree (Navigation Mode)' with a tree view of cost items. The main table has columns for 'CBS Position Code', 'Description', 'Scheduled', 'Roll Up Schedule', 'Schedule Plug Days', and 'Plug Days'. The 'JOB' row (Code 1) is selected. A right-click context menu is open over the table, and the 'Schedule Selection' option is highlighted with a red box.

4. In the Schedule Cost Items dialog box, select if you want to roll up the selected cost items to a specific level of the CBS for scheduling purposes, and then click **OK**.

The 'Schedule Cost Items' dialog box is shown. It contains the following text: 'To roll the selected cost items up to a specific level of the CBS for scheduling purposes only, choose the desired level below.' There are two radio button options: 'Schedule selected cost items and their subordinates without rolling them up' (which is selected) and 'Schedule selected cost items rolled up to CBS level: 1'. There are 'OK' and 'Cancel' buttons at the bottom.

The next time you select to add a new schedule from Estimate in the Primavera application, your scheduled cost items sync and create a new project in Primavera.

Update Primavera from Estimate

After you set up your Primavera options in Job Properties and schedule your cost items in the CBS, you can then send your project information to Primavera.

When you first update Primavera from InEight Estimate, Primavera will automatically create a new project with the following information from InEight Estimate:

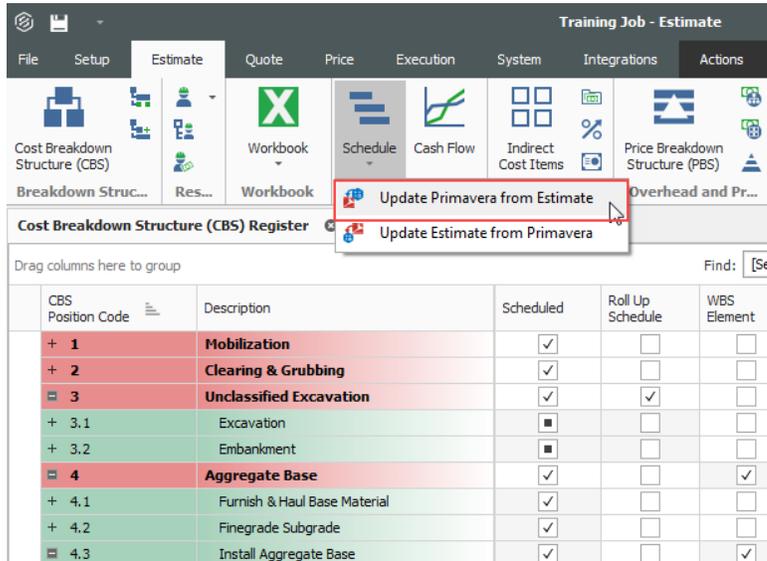
Data Type	InEight Estimate	Primavera
Project Data	Job Code	Project ID
	Job Description	Project Name
Activity Data	CBS Position Code/Schedule ID	WBS Code/Activity ID
	Description	WBS Element/Activity Name
	Hours	Planned Duration (Hours)
	Shift and Rate Rules	Activity Calendar
	Cost Item Tags and UDFs	Activity Codes or UDFs
	Cost Category Total Cost	Cost Category (custom text columns)
Resource Data	Resource Code	Resource ID
	Resource Description	Resource Name
Cost Data	Resource Cost/Unit	Resource Price/Unit

NOTE:

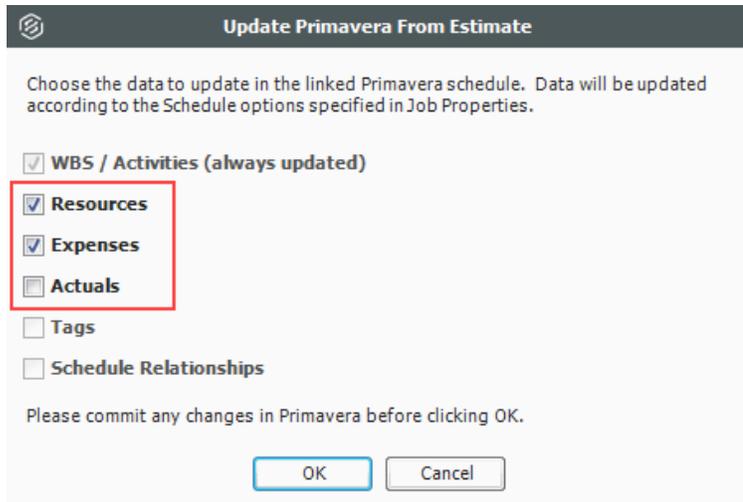
Tags, resource data, and cost data update in Primavera when selected in the Job Properties > **Schedule settings** only.

Step-by-step - Update Primavera from Estimate

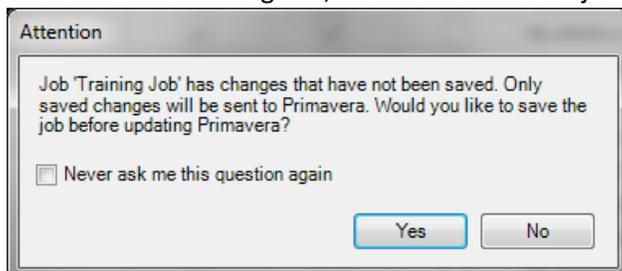
- From the Estimate tab, select Schedule > **Update Primavera from Estimate**.



- In the **Update Primavera From Estimate** dialog box, you can select which data to update in Primavera. Select **Resources**, **Expenses** and deselect **Actuals** (For Job Tracking purposes) if auto selected, and then click **OK**.



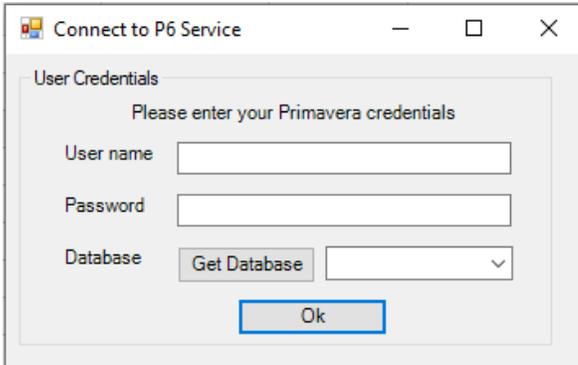
- In the Attention dialog box, click **Yes** to save the job before updating Primavera.



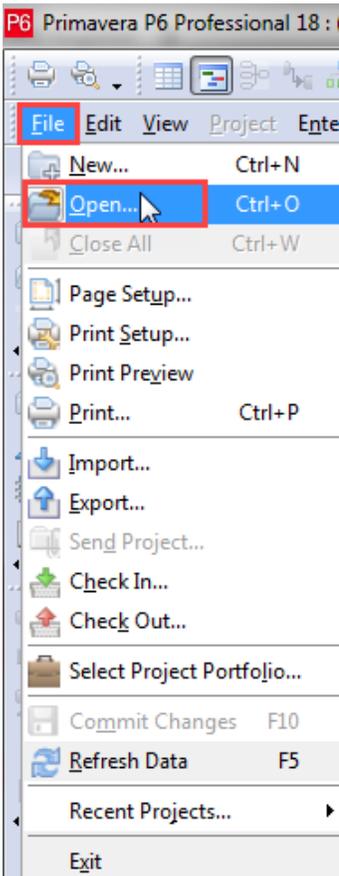
A window shows the progress of the data sync between InEight Estimate and Primavera. Depending on the size of the job, this can take several minutes.

NOTE: Custom tag names with periods causes syncs to fail. Remove any periods in custom tag names.

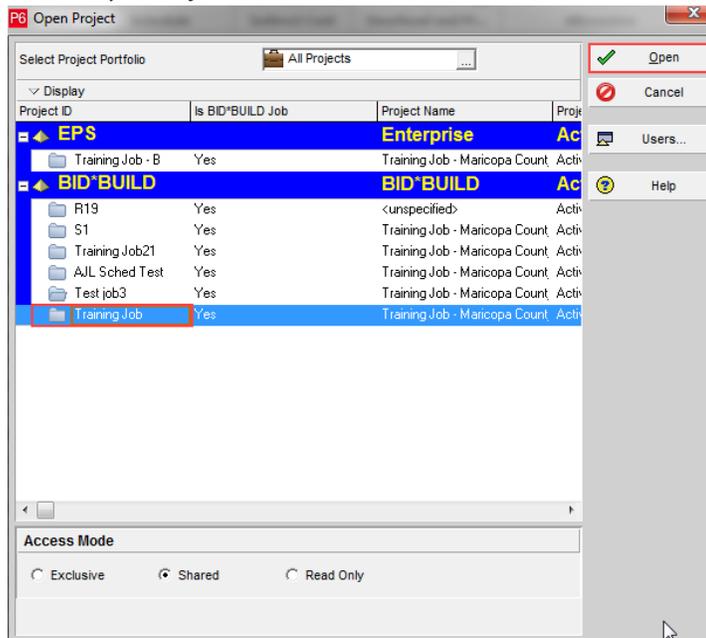
4. Open Primavera P6.
5. Log in to Primavera, using the Username and Password entered on the Schedule > **Login Options** tab in InEight Estimate **Job Properties**.



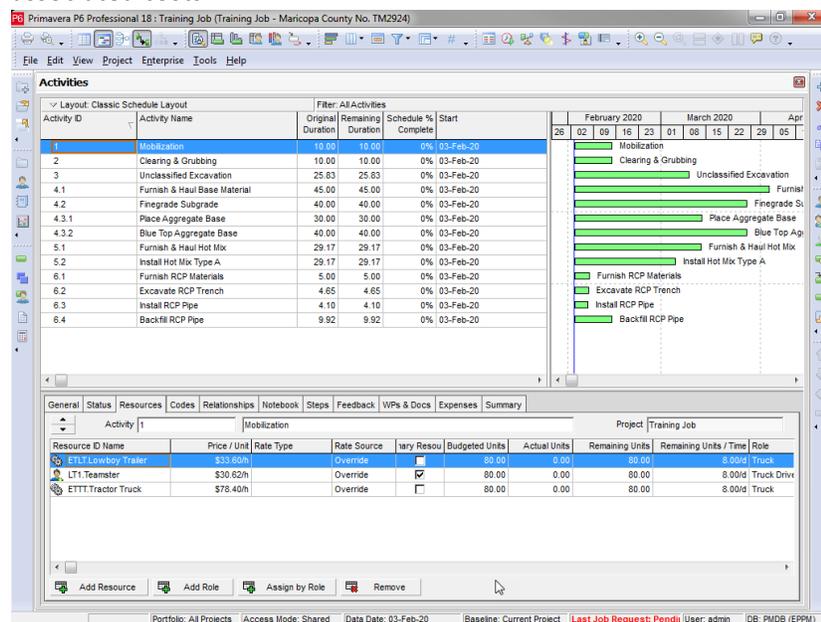
6. In Primavera, open the project.



- In the Open Project dialog, expand the database instance folder. The available projects are sorted by their job names.



- Select the applicable job so that it is highlighted, and then select **Open**.
 - The WBS Layout shows for the project. You can see the breakdown structure imported from InEight Estimate with durations, rolled up as specified by the Roll Up Schedule option in InEight Estimate.
 - Initially, the start date for your activities is the start date defined on the Job Properties > **Cover Sheet** tab (these will change as activity relationships are defined).
 - Select the **Resources** tab to see the resources that imported for each activity, with their associated costs.



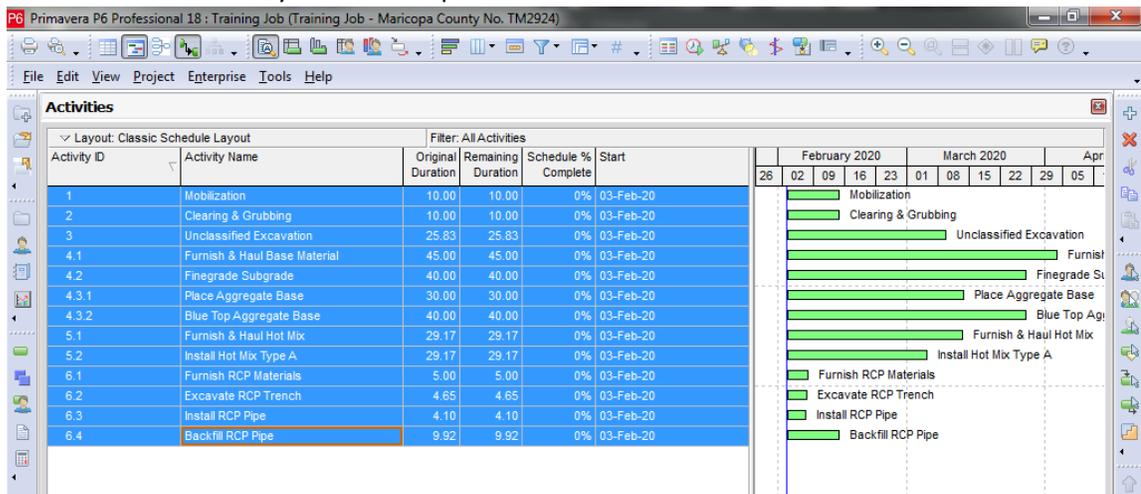
Update Estimate from Primavera

You can also sync information from Primavera to Estimate. The following table shows the field data sent from Primavera to Estimate:

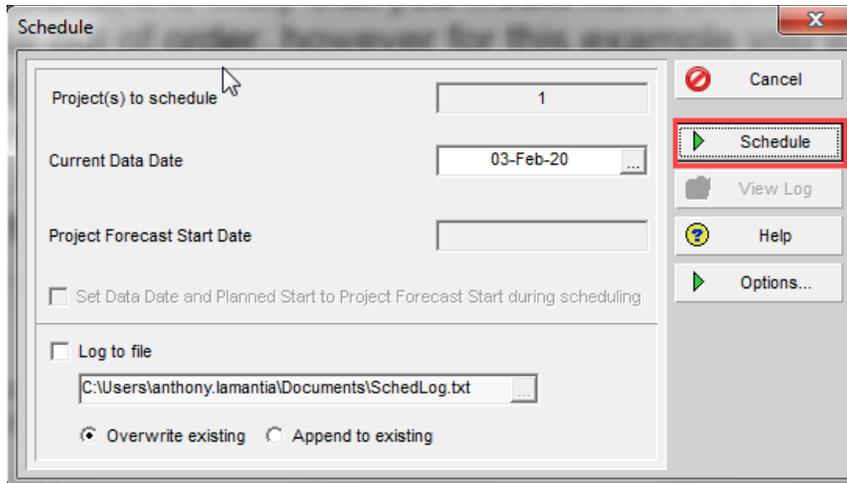
Data type	Primavera	Estimate
Data Type	Primavera	InEight Estimate
Activity Data	Start Dates	Start Dates
	Finish Dates	Finish Dates
	Relationships	Schedule Relationships
	Hours	Plugged Days

Step-by-step - Update Estimate from Primavera

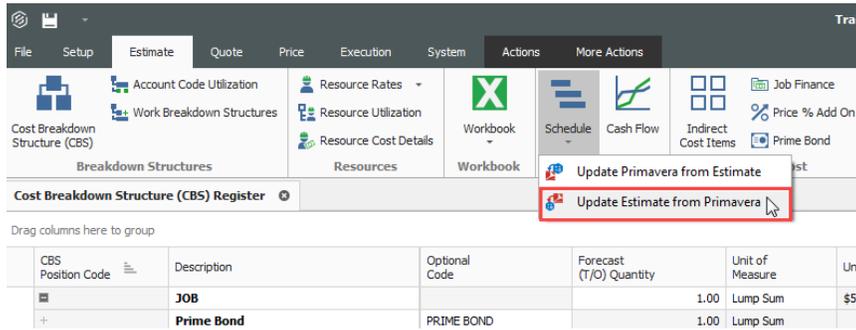
1. Open your project in Primavera.
2. Select all the activities you want to update to Estimate.



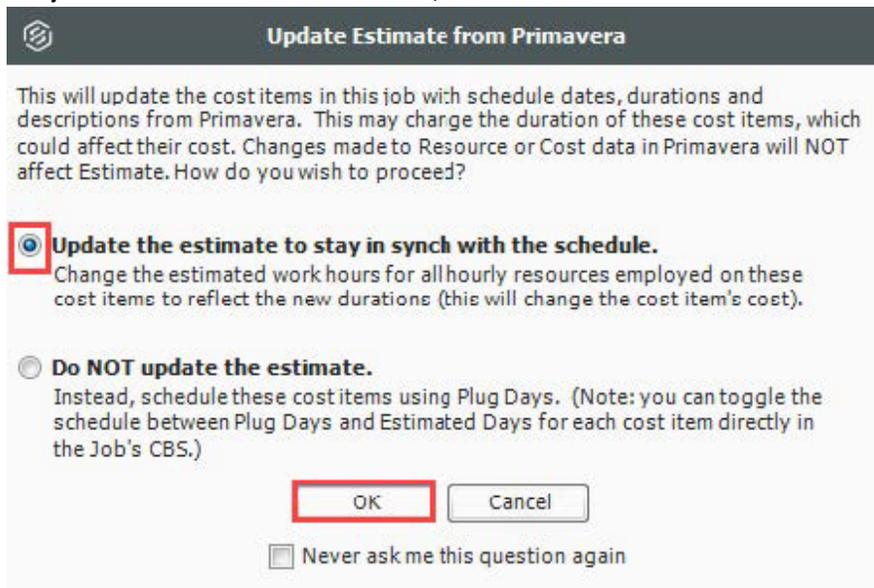
3. Right-click a selected row, and then select **Link Selected Activities** to create the Finish to Start relationship. You may have to select the Relationship Lines button to show the linked activities in the graph on the right side of the screen.
4. To schedule this new relationship, select the **Schedule** button (or press the **F9** key).
5. On the Schedule Project window, keep the default settings and select the **Schedule** button.



6. To update InEight Estimate with this change, go back to InEight Estimate and select the **Estimate** tab.
7. Select **Schedule > Update Estimate from Primavera**.



8. On the Update Estimate from Primavera prompt, keep the default **Update the estimate to stay in synch with the schedule** selected, then click **OK**.



9. On the Schedule Setup View, you can see the start and finish dates updated from Primavera.

CBS Position Code	Description	Start	Finish	Early Start	Early Finish	Late Start	Late Finish
[-]	JOB	2/3/2020	2/23/2021	2/3/2020	2/23/2021	2/3/2020	2/23/2021
+	Prime Bond						
+	Price % Add-On						
+	Job Financing						
+	Indirect Cost Escalation						
+	Direct Cost Escalation						
+	Indirect Cost Add-On						
+	Job Management & Equipment						
+	General Expense						
+	Direct Cost Add-On						
+ 1	Mobilization	2/3/2020	2/14/2020	2/3/2020	2/14/2020	2/3/2020	2/14/2020
+ 2	Clearing & Grubbing	2/17/2020	2/28/2020	2/17/2020	2/28/2020	2/17/2020	2/28/2020
[-] 3	Unclassified Excavation	3/2/2020	4/6/2020	3/2/2020	4/6/2020	3/2/2020	4/6/2020
+ 3.1	Excavation	3/2/2020	4/6/2020	3/2/2020	4/6/2020	3/2/2020	4/6/2020
+ 3.2	Embankment	3/2/2020	4/6/2020	3/2/2020	4/6/2020	3/2/2020	4/6/2020
[-] 4	Aggregate Base	4/6/2020	11/9/2020	4/6/2020	11/9/2020	4/6/2020	11/9/2020
+ 4.1	Furnish & Haul Base Material	1/6/2020	6/8/2020	1/6/2020	6/8/2020	1/6/2020	6/8/2020
+ 4.2	Finegrade Subgrade	6/8/2020	8/3/2020	6/8/2020	8/3/2020	6/8/2020	8/3/2020
[-] 4.3	Install Aggregate Base	8/3/2020	11/9/2020	8/3/2020	11/9/2020	8/3/2020	11/9/2020
+ 4.3.1	Place Aggregate Base	8/3/2020	9/14/2020	8/3/2020	9/14/2020	8/3/2020	9/14/2020

Manage changes between Estimate and Primavera

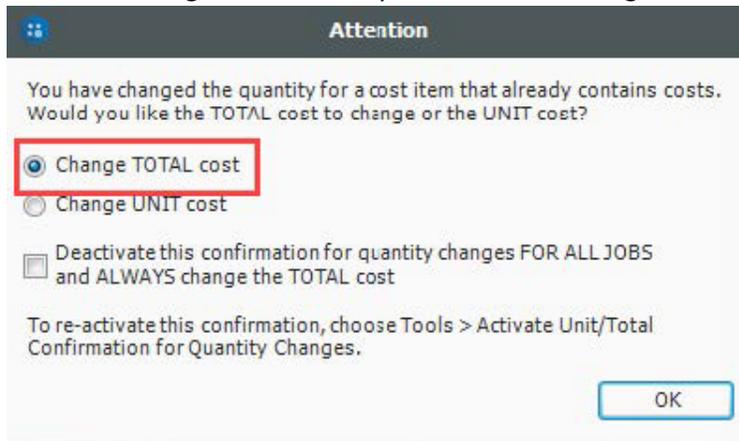
As changes to scope, resources, and costs come up in your estimate, and changes to relationships and dates occur in the schedule, you can continue updating your estimate and schedule as needed.

Update Primavera with Estimate changes

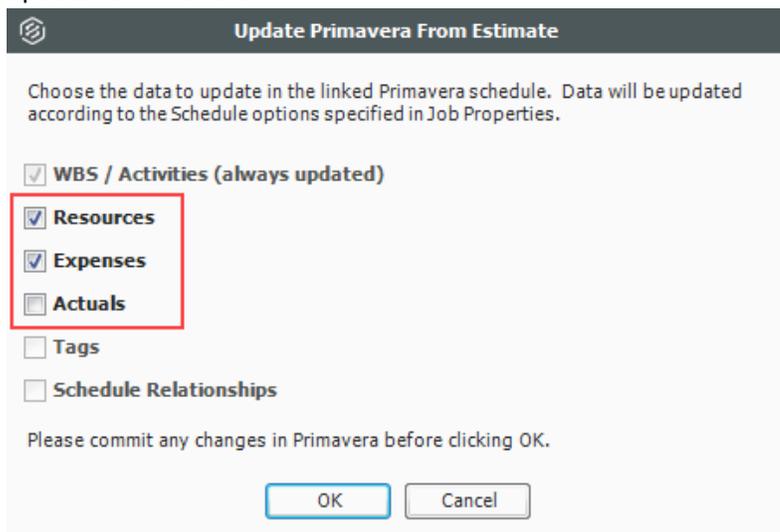
You can make scope changes to your estimate and sync schedule changes to Primavera.

Step-by-step - Update quantities in Estimate and sync to Primavera

1. In your CBS, change the quantity in the Forecast (T/O) Quantity field for a quantity driven item. Your duration days in the Days (Duration driven) column is automatically updated and the Attention dialog box shows for you to select to change total cost or unit cost.



2. Select **Change Total cost**. The unit costs stay intact.
3. Select Schedule > **Update Primavera from InEight Estimate** to sync the changed hours to Primavera. The Update Primavera From Estimate dialog box shows to select which data to update to Primavera.



4. Select **Resources** and **Expenses**, and then click **Ok**.
A status window shows the progress of the sync. Depending on the size of the job, this can take a few minutes. When the update has completed, the status window disappears.
5. Open your project in Primavera, and on the Activities tab, validate the duration value to Estimate's Days (Duration driven) value.
6. To schedule the change to Primavera, select the **Schedule** button (or press the **F9** key), and then select the **Schedule** button on the Schedule Project window. Your start and finish dates are updated.
7. In Estimate, from the Estimate tab, select Schedule > **Update InEight Estimate from Primavera** to update Estimate with the new dates.