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Lesson 1 Quantity Tracking Overview

InEight Software Overview / Plan Quantity Tracking Overview

Lesson Duration: 45 minutes

Lesson Objectives

After completing this lesson, you will be able to:

- Summarize the purpose of InEight software
- Describe the two modules of Plan
- Explain the high-level work flow of Plan > Quantity tracking

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1.1 InEight Software Overview

Project Management and Lifecycle

Most projects that you are working on will follow a typical lifecycle. It is broken down into different roles and the people involved. We will break those roles and people down into four locations:

- Front office
- Field office
- Jobsite
- Back office

Front Office

What are the essential functions of the front office? What roles are involved?

The front office focuses on getting work and typically houses estimators who, during the *bidding phase* of the project, start out by estimating its value. This is done by calculating cost estimates, analyzing quotes, and capturing all the data necessary to submit a bid to the client.

Once complete, they prepare the bid proposal, submit it to the client, and find out if they are the preferred contractor to do the work. If they have the winning bid, they can start the planning phase and preparing to build the project.



Field Office

What work roles are typically found in the field office? What are their primary tasks?

Budgeting and Forecasting

During the execution phase of a project, the field office manages the budget and forecasting for the project as well. They relay this information to the other field personnel, so they understand what the budgets for the work are, how they should build the job, who the suppliers of materials are, and if there are any subcontractors, etc.

Contract Procurement

Project engineers and managers procure contracts for materials and with subcontractors.

Work Planning and Quantity Tracking

The field office is where the field engineers and superintendents responsible for the work prepare work plans for the foremen and their crews, breaking down the work into manageable pieces. They then create quantity-tracking plans, formulate inspections and create daily plans to send to the foremen on the jobsite.

Change Management

As issues arise, project engineers record and submit issues, get them approved through the client, and execute change orders.

Inspections Management

Inspections, as well as actual time and quantities from the jobsite, come back to the field office where they are reviewed and approved before going to the back office.



Jobsite

What types of employees work at the jobsite? What type of information do they capture as they build the work? Where does that information need to go and why?

The jobsite is where you find the quality controller, safety manager and foreman. It is where the work is completed. The safety managers, superintendents and foremen are involved in safety inspections, with the quality controller and field engineers performing inspections before and after the work is complete. The foreman also captures the time of each of the craft workers and the quantity completed each day based on the plan provided from the superintendent and field engineer.

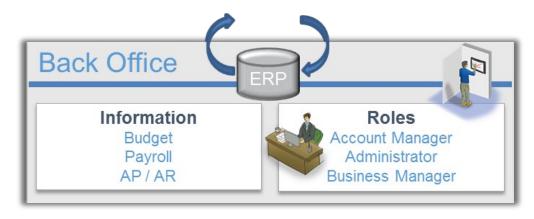
All this information is relayed back to the field office where it can be verified and approved.



Back Office

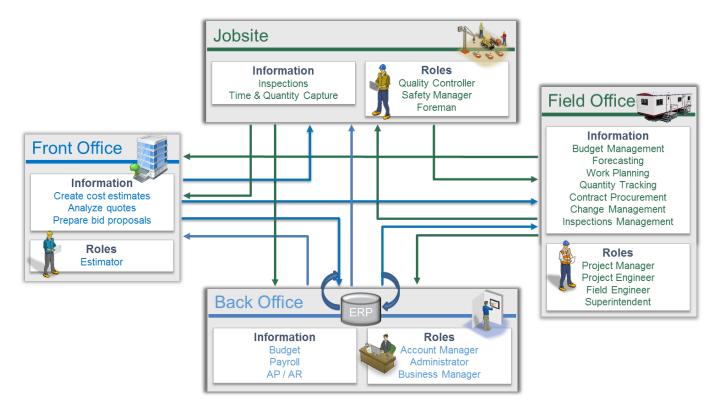
What functions take place in the back office, related to the project? Why is the back office a critical element of managing the project?

The back office is where the account managers and administration staff keep track of budgets, make sure the payroll is correct and completed in a timely manner, keep track of all the accounts payable and receivable, and take care of revenue. After a contract is created, the business manager verifies purchase orders are generated. All of the "actual" data, whether it be time or dollars then is communicated back to all of the other areas of the job.



Problems with Existing Systems

Often issues arise when it comes to communication between all the different areas of a project. Information must flow quickly and accurately between the different areas, but it is often lost, miscommunicated, or slowly received. In some cases, information must be re-entered in a new system and is duplicated. This can cause all sorts of issues when it comes to managing a project.



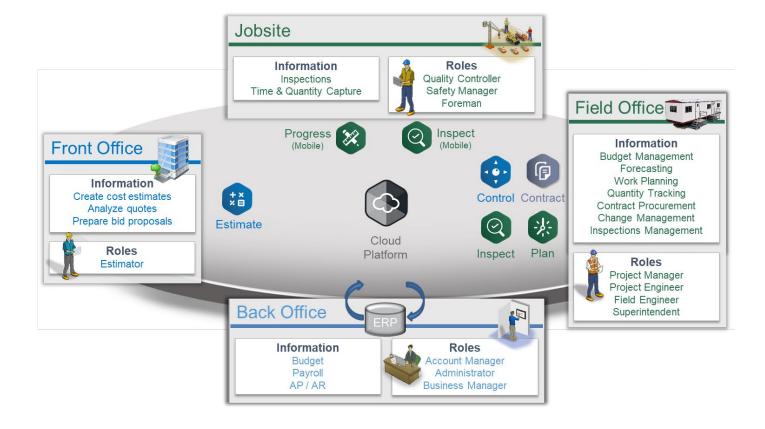
You may have many different programs and systems that you use to ease this communication issue, but information often does not communicate effectively between the different systems and you are duplicating data.

For example, inspections are completed on paper and must be manually input or scanned into another system. Time cards are lost and have to be reproduced so a crew can be paid. Quantities used in the daily plan do not line up with the quantity claiming system.

What issues can you think of that you have experienced on your projects?

What is the InEight Software?

InEight software was designed and is continually updated to address these issues. InEight provides a portfolio of software applications designed to help companies visualize, estimate, manage, control, and connect all aspects of capital and maintenance projects. InEight software is built on a cloud platform, so all the different applications can communicate with each other. It is also designed to communicate with multiple different ERP systems such as SAP or Oracle to share key information with the back office.



How Does In Eight Software Integrate into a Project?

Scenario: Step 1

Skyline Construction Company decides to bid on a project to build a concrete foundation.

Upon submittal, the client informs them that they are the preferred contractor for the work. They now need to take the project from the estimate to the project execution phase.

Using the **InEight Estimate** application, the estimating team in the front office builds the cost estimate and submits the bid proposal, including awarded quotes and all bid documents.

Once awarded the contract, project team then transfers all the information from the estimate to **InEight Control** where the project can be managed. This includes the cost item estimates, awarded quotes, bid and proposal documents, and the estimate budget structure. During this transition, the project management team can modify the estimate easily to conform to how the project will be built and tracked.





The field engineers and superintendents in the field office are ready to begin planning the work. They break the work plans down into work packages that contain the specific quantities, materials, labor, equipment, and budgets associated with each portion of work.

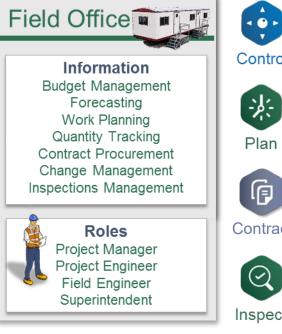
The project manager and engineers procure contracts for material and subcontracted work.

Then, inspections are created for quality of the work to ensure it meets the specifications as well as safety.

The field engineers in the field office can now go into **InEight Plan** to break down the work into work areas, work plans within those areas, and then work packages where the work is broken down into components. There, all the components are assigned a WBS code from InEight Control as well as other important information and claiming schemes.

Project Engineers use **InEight Contract** to create bid packages and submit them to vendors and subs and solicit contracts.

Engineers also utilize **InEight Inspect** to create the forms necessary for both the quality and safety inspections. They can then send these to InEight **Inspect Mobile** for the responsible person to complete them in the field.





Control





Contract



Joe, the concrete superintendent, now has all the work planned for a concrete foundation and is ready to communicate all the details to his foreman, Jill, so construction can begin tomorrow.

The superintendent can go into the web based **InEight Progress** module and create a daily plan for his crew to erect the formwork needed for the foundation. He brings in all of the quantities, budgets and claiming schemes from the work package his field engineer created and breaks it down into what Jill's crew needs to complete tomorrow. He adds production goals for the day and safety notes related to the formwork installation. He communicates this to his foreman by syncing it to her, where the foreman can open the **InEight Progress** app on her iPad.





Plan



Progress

In the morning, Jill reviews the plan for the day and determines if any changes are necessary due to one of the crewmembers calling in sick.

John, the quality controller on the project reviews the quality inspections that he needs to perform that day and creates a plan with Jill to schedule the proper times.

The foreman reviews the plan in the **InEight Progress** app on her iPad and adjusts as necessary to the plan (e.g., sick crewmember, unforeseen issues).

The quality controller speaks with the foreman and determines when they can complete the inspection for the day, and he uses the **InEight Inspect** app on his iPad to perform the inspection.







Throughout the day, Jill has kept track of the quantities completed on the formwork but had to adjust the plan to send her crew to build a quick access ramp for an earthworks crew. This was not in the plan, and she needs to account for it before signing out the crew.

In the **InEight Progress** app, the foreman can keep a log of notes on the day's progress and any unforeseen construction needs that come up. She can quickly add extra tasks to accommodate adjustments to the plan, review each crewmembers' hours, and sign them out at the end of the shift. She enters in the quantities completed and can see her crew's productivity for the day. She will be able to communicate this to the crew in the morning.

Once complete, she approves the daily plan and synchronizes it, so it can be reviewed by the superintendent in the field office.







Joe and his field engineer have received the quantities, hours, and inspections completed during the day and now want to review and approve them.

Upon review, they discover there was an issue with the foundation specifications that may result in a change order. They log this issue to communicate with the client.

The superintendent can open **InEight Progress** and review the hours for each crewmember, any new tasks created, and the quantities completed for each of the tasks. He is also able to review the daily costs and see how the crew performed in both man-hours and cost. He can approve the plan and can make any necessary changes to the plan tomorrow based on the productivity information he received.

The field engineer is can also verify the inspections were completed in the **InEight Inspect** application.

One of the project engineers records the concrete foundation issue in **InEight Contract** and will track it, converting it into a change order if necessary.

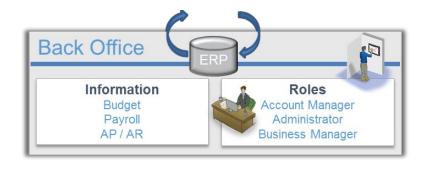


Scenario: Step 7

The account manager in the back office will now verify all the time for each crewmember and ensure they are paid correctly according to the union guidelines.

This information is then communicated to the front office so the project manager can analyze the job costs and update forecasting.

Within the **ERP system**, the account manager and administrators review all the time that has come in, adjust where necessary, and submit the payroll to ensure everyone is paid accurately and on time. They then synchronize this information into the **ERP system**, where it can be sent to **InEight Control** so project management in the front office can review the information.



At the end of the month, the project management in the front office views all the actual quantity and cost information, compares it to the budget, and projects the final cost of each operation. Forecasts are then finalized for the project.

In **InEight Control**, project engineers and managers can view all of the actual quantities and costs from the jobsite and analyze the information to determine if they are going to meet their budgets. After review, if they see that a few operations are spending more time and money due to weather delays, they can decide to update the forecasts for those operations accordingly.

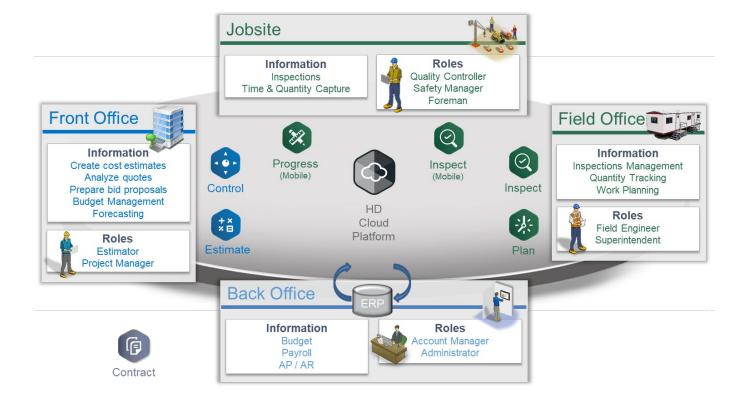
They also look at the total quantities for the month to determine how much of the scope can be billed to the client.





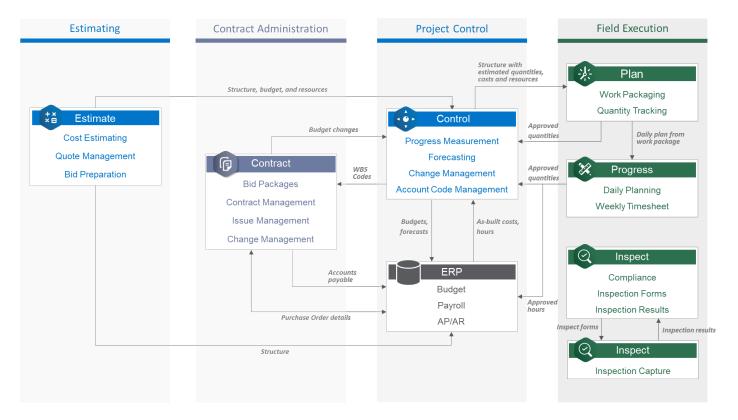
Summary

No matter what location you are in or what role you have, the information created for your project is communicated to all InEight software applications and shared through the Cloud Platform. The software is also able connect and communicate to your ERP system and other 3rd party applications to utilize the same information, eliminating the need to re-enter data. All of this information can then be archived for future reference, and selected information can easily be turned over to the client.



InEight Software Workflow

The following workflow diagram illustrates in greater detail what information travels between the InEight software applications and the ERP system and direction in which it flows.



1.2 Plan Quantity Tracking Overview

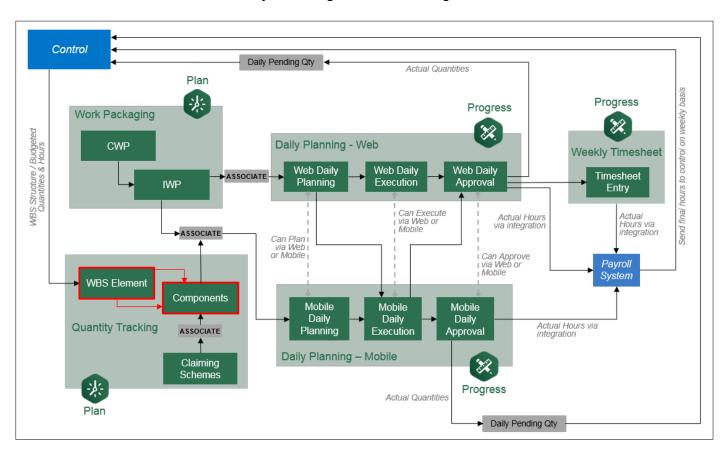
As one of the applications within the InEight portfolio of products, Plan is a tool for engineers and superintendents to plan their work and track quantities during the construction of their project.

Plan is organized into two modules:

Plan Modules	
Work Packaging	Creating and managing work packages.
Quantity Tracking	Creating and managing components and claiming schemes. Claiming completed quantities.

InEight Plan Work Flow

This course focuses on the Quantity Tracking module of InEight Plan.



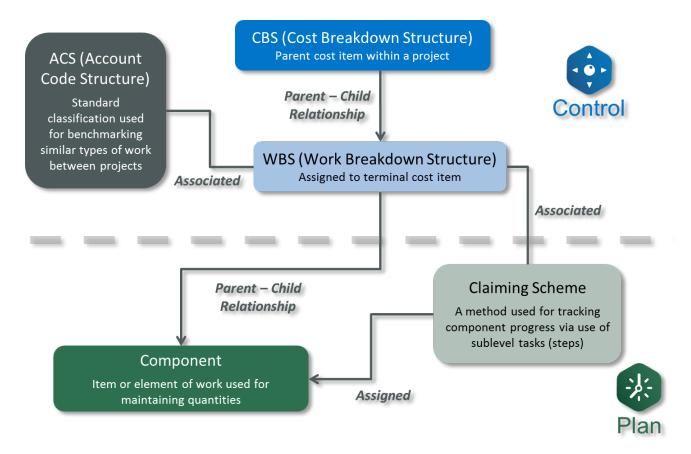
Quantity Tracking Terminology

Plan Quantity Tracking uses some key terminology to describe how the work is broken down for tracking.

The table below defines each of the key terms you should know.

Term	Definition	Managed In
CBS (Cost Breakdown Structure)	Hierarchy of budgeted work activities (cost items) in a project.	Control
WBS (Work Breakdown Structure)	Code assigned to terminal cost items for tracking purposes.	Control
ACS (Account Code Structure)	Standard Classification code used for benchmarking similar types of work between projects.	Control
Component	Item or element of work used for maintaining quantities.	Plan
Claiming Scheme	A method used for tracking component progress via use of sublevel tasks (steps).	Plan

The relationship between these terms is shown in the following diagram:



Scenario

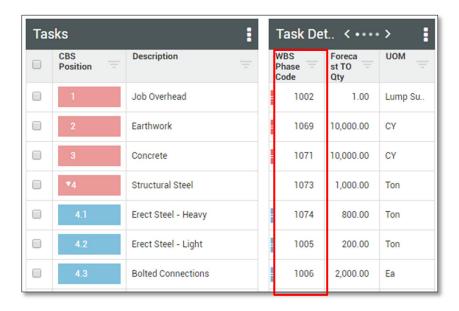
You are a structural steel field engineer responsible for accurately tracking installation progress for a steel structure project. See image below. The structural steel cost item is measured in tons, but steel is installed by piecemark, and it needs to be tracked as such. There are multiple steps to structural steel installation that are all coded to the same cost code, and you need a way to track completion of the different steps as well. You also want to easily communicate to your foreman what he needs to accomplish each day to stay on schedule and on budget.



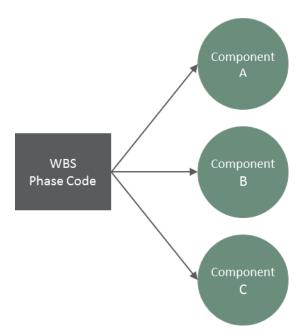
The image above depicts a layout for a steel structure project. The project consists of erecting 30 separate steel structures on opposite sides of a road. Each structure or module has been assigned a number 1-30.

Components

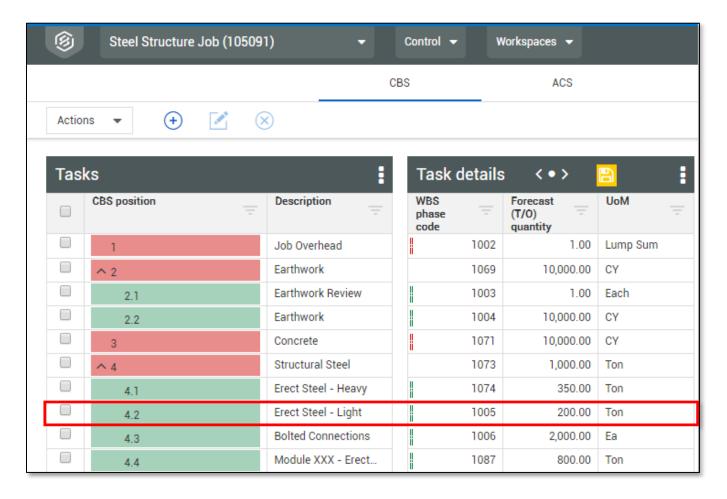
Within the InEight Control application, cost items are identified by a WBS Phase Code (commonly referred to as simply the WBS). A unique WBS is assigned to each cost item in the CBS, including superior and terminal items. The WBS code is assigned to the cost item upon creation and never changes.



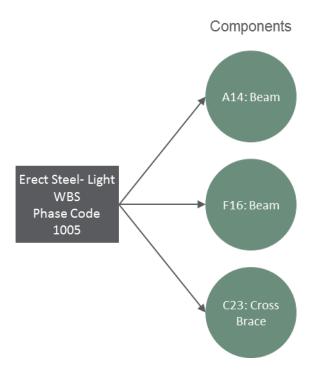
In InEight Plan, the Quantity Tracking module allows you to break down quantities into more manageable groups that you can track and claim against. You accomplish this by breaking down your WBS Phase Code quantity into smaller pieces called components.



Referring to the scenario above, your project has an 'Erect Steel – Light' cost item with a WBS Phase Code of 1005, as seen in the CBS register of the Control application.



For tracking purposes, in the Quantity Tracking module of Plan, you can break down the 'Erect Steel – Light' WBS Phase Code into distinct components by structural steel piecemark:



Each component has a measured quantity:

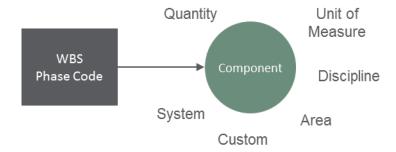
Component	Quantity
A14: Beam	0.44 Tons
F16: Beam	0.45 Tons
C23: Cross Brace	0.26 Tons

The sum of the quantities for each component adds up to the total quantity for the assigned WBS.

Component Attributes

Components can have a myriad of attributes assigned to them to help organize and store pertinent information that can be used for filtering and reporting. These include but are not limited to:

- Quantity
- Unit of Measure
- Discipline
- Area
- System
- Customizable Attributes

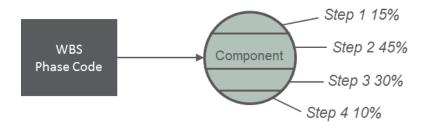


IMPORTANT A

In Lesson 4 – Component Management, you will learn how to create components either through import from an Excel template or by creating them manually.

Claiming Schemes

Claiming schemes break components down further, to a sequence of steps, so that foremen can track the individual steps as the installation of the component progresses. Each step has a weighted rule of credit, based on percentages, that will progress the overall component.



Claiming schemes can be assigned at either the component or WBS level. If a claiming scheme is assigned at the WBS level, then every component that is assigned to that WBS will automatically inherit the same claiming scheme.

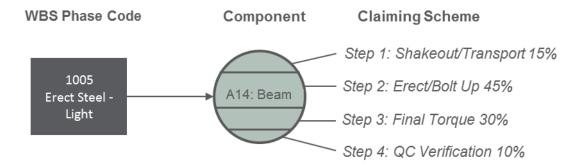
IMPORTANT **A**

The level at which claiming schemes will be assigned (WBS or component) will typically be dictated during project initiation in the project settings. See Lesson 3 – Claiming Schemes for more details on assigning claiming schemes.

For example, you may break down the 'A14: Beam' component into the following steps for tracking in the field:

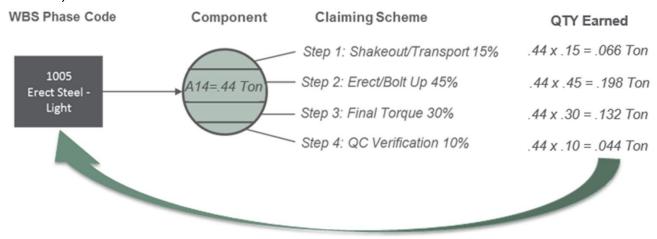
	Claiming Scheme for 'A14: Beam' Component	
Step	Description	Percentage
Step 1	Shakeout/Transport	15%
Step 2	Erect/Bolt Up	45%
Step 3	Final Torque	30%
Step 4	QC Verification	10%

The diagram below shows how the claiming scheme relates to the component and WBS Phase Code.



In the field, the foreman can indicate when each step has been completed for a specific component. By indicating Step 1: Shakeout/ Transport is complete for 'A14: Beam', this will claim the component as a whole is 15% complete. After syncing this information to InEight Control, 15% of the quantity for A14: Beam will be added to the earned value for that WBS code.

The diagram below shows the flow of quantity claiming through components and claiming schemes).



Quantities Sent to InEight Control

The quantities tracked at the component level will "roll up" to the assigned WBS Phase Code and be available for progress analysis and forecasting in the Control application.

In this example, the quantities claimed for steel components roll up to the 'Erect Steel – Light' WBS item, which then gets sent to Control upon request.

Lesson 1 Review

- 1. In Eight Plan consists of which of the following two modules?
 - a. Work packaging and Quantity tracking
 - b. Work packaging and Daily planning
 - c. Quantity tracking and Forecasting
 - d. Quantity tracking and Work planning
- 2. In InEight Plan, you can break your quantities into more manageable groups by breaking down your WBS Phase Code quantity into smaller pieces called:
 - a. Work plans
 - b. Components
 - c. Work packages
 - d. Bid packages
- 3. _____ break components down into a sequence of steps for tracking progress as a component progresses.
 - a. Cost items
 - b. Work packages
 - c. Disciplines
 - d. Claiming schemes
- 4. Which represents the order for breaking down tasks and their quantities from larger pieces into smaller, more measurable pieces for tracking work?
 - a. Component > WBS Phase Code > Claiming scheme
 - b. WBS Phase Code > Component > Claiming scheme
 - c. Claiming scheme > WBS Phase Code > Component
 - d. WBS Phase Code > Claiming scheme > Component

Lesson 1 Summary

As a result of this lesson, you can:

- Summarize the purpose of InEight software
- Describe the modules of Plan
- Explain the high-level work flow of Plan > Quantity tracking

Lesson 2 General Navigation

Page Navigation / Columns / Viewsets / Data Blocks

Lesson Duration: 30 minutes

Lesson Objectives

After completing this lesson, you will be able to:

- Navigate the Plan > Quantity tracking page
- Manage columns
- Create viewsets
- Manage data blocks

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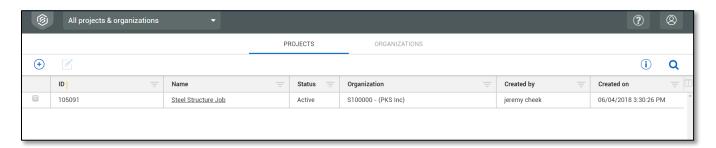
2.1 Page Navigation

In this lesson, you will explore the layout and start to navigate around the application.

Scenario

You are an engineer recently assigned to a Steel Structure project. You are taking over the role from another field engineer who recently moved to another position on a different project. You are responsible for tracking all installed quantities for the project. You are informed that you will use the InEight Plan application to track and manage your quantities, however, you have never used the Plan application. You would like to take some time to familiarize yourself with the application and also check to see what components have already been created.

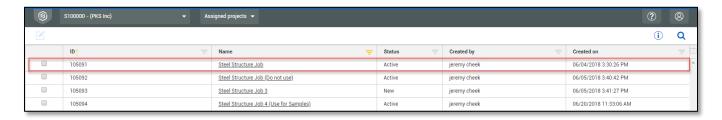
You access InEight Plan through your web browser. When you first log in, you will be taken to the **All projects & organizations** page within the InEight project platform. Here you can select any project you are associated with.



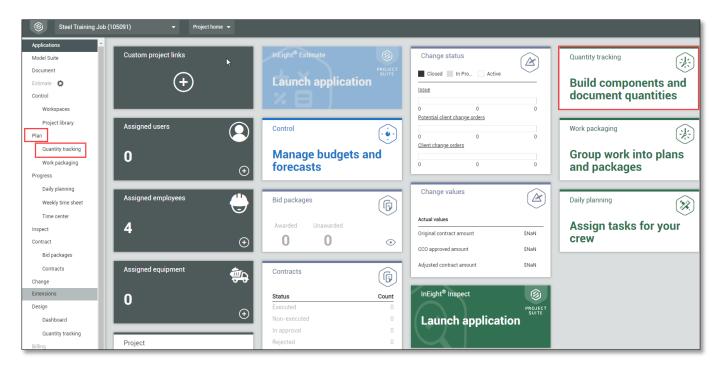
Selecting a project takes you to the Project home landing page for that project. From the home page, there are two different ways to access the Plan Work packaging module. The following Step by Step shows you both ways.

Step by Step 2.1.1 – Navigate to the Quantity Tracking Page via Project Home Page

1. From the All projects & organizations page, select the project name **Steel Structure Training Job.**



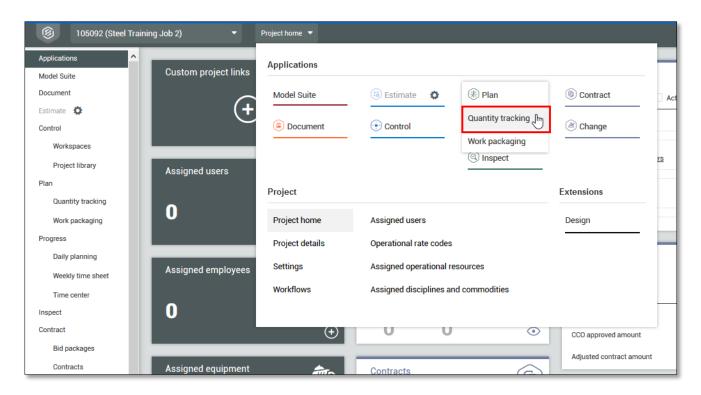
- This opens the project's home page
- Select the Quantity Tracking module by clicking on the Quantity tracking tile on the right or selecting Quantity tracking from the side bar menu on the left.



• This opens the Quantity tracking page

Step by Step 2.1.2 - Navigate to the Quantity Tracking Home Page via Navigation Bar

1. From the Projects page, select the **2**nd **level drop-down menu**, hover over **Plan** and select **Quantity tracking**.

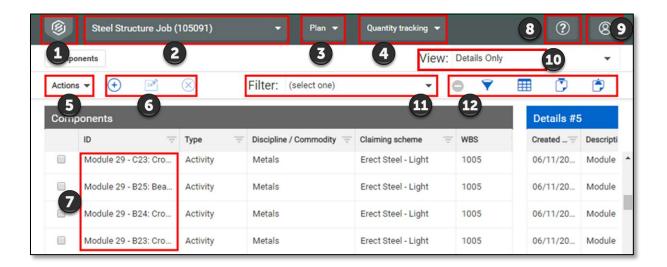




This is how you will navigate to the Work Packaging module as well. You will go over Work Planning in the InEight Plan – Work Packaging course.

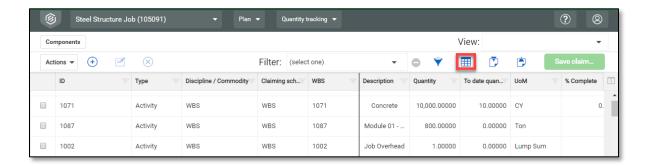
Overview – Quantity Tracking Home Page

Title		Description
1	Home Button	Navigates you to the project's home page.
2	First Level Menu	Shows the selected project and provides access to favorites, All projects and organizations, reports, master data libraries, and suite administration.
3	Second Level Menu	Select what application you want to use (Control, Plan, etc.), as well as other project settings.
4	Third Level Menu	Navigate to separate individual modules inside each application (e.g., Contract > Bid packages, Plan > Quantity tracking). Options in this menu change based on what application you are currently using.
5	Actions Menu	Select available actions for the current register tab you are viewing.
6	Left Toolbar	Contains 3 main buttons used most commonly throughout the InEight software applications. In this case, add is used to add cost items, Edit to edit cost items, and delete to remove a cost item from the project.
7	Components Register	Contains list of all components for the project.
8	Help Menu	Contains Walkthrus to walk you step by step through processes within the module.
9	Notifications and User Profile	View notifications, user profile and log out.
10	Viewset Menu	Display different preset views or create your own viewsets.
11	Filter	Allows you to apply a pre-defined filter.
12	Right Toolbar	Contains functions for the page you are on: clear all filters, filter, grid view, export, and import.

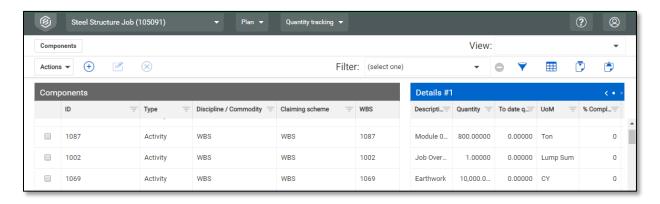


Standard Grid vs Data Block View

The Components page has two separate views; Standard Grid view and Data Block view. By default, when first opened, the Components page will open in the Data Block view. Selecting the Standard Grid view button will change the layout to a traditional spreadsheet look with rows and columns.



The Data Block view allows for the grouping of columns for a cleaner viewing experience. Data Blocks are covered in more detail in topic 2.4 of this lesson.



You can easily switch between the two views by clicking on the **View as Standard Grid** button on the right toolbar.

2.2 Columns

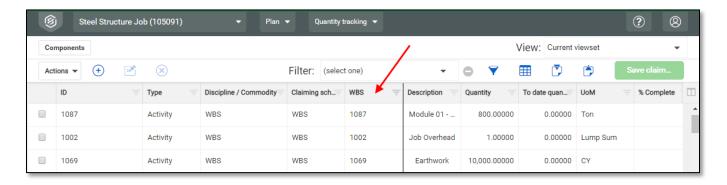
Within the InEight software, you can customize columns according to your preferences. Changes made to the placement of your columns will be retained the next time you access any page you have customized.

Move Columns

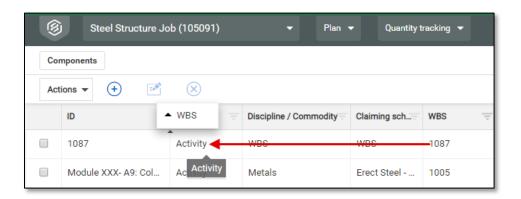
You can move a column from one place to another to customize your view using drag and drop.

Step by Step 2.2.1 – Move Columns

 In the Standard Grid view of the Quantity Tracking module, click on the WBS column header.



- 2. Drag the column to the left, dropping it to the right of the ID Column.
 - Two black arrows appear to guide you to the location the column will be dropped

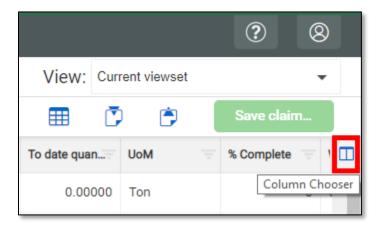


Add and Remove Columns

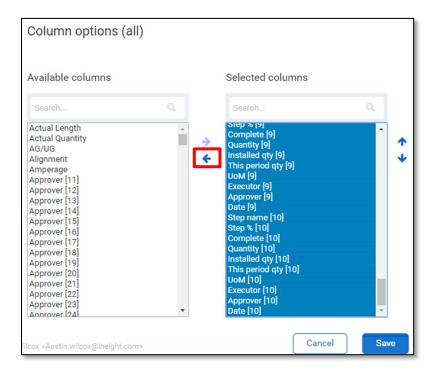
You can add or remove columns to customize your view and work more efficiently when in the Standard Grid view.

Step by Step 2.2.2 – Add Additional Columns

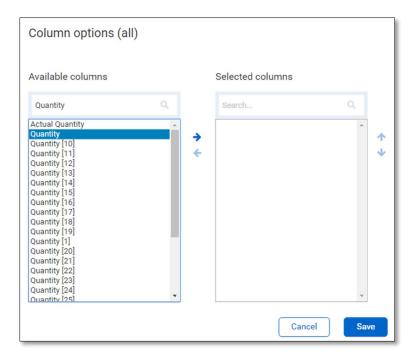
1. From the Standard Grid view, select the **Column Chooser icon** ...



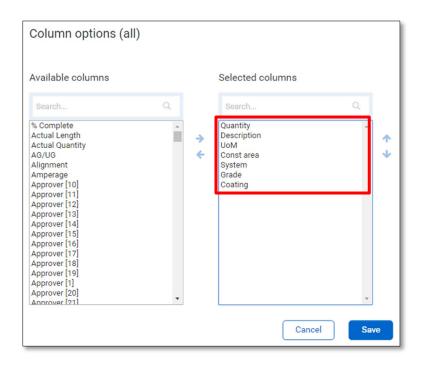
- This opens up a pop-up window where you can search for and select columns
- 2. In the selected columns list on the right, select all columns by selecting the first item in the list and then holding the Shift key and selecting the last item in the list, then select the **left pointing arrow**.



3. In the Available columns list on the left, type **Quantity** in the search bar, then select the **Quantity** option from the filtered list.



- 4. Select the right facing arrow.
- 5. Repeat step 3 for the following values: **Description**, **UoM**, **Const Area**, **System**, **Grade** and **Coating**.



6. Select Save.

Sort Columns

You can sort in ascending or descending (both for alpha and numeric fields) on any column by clicking once on the column header.

Step by Step 2.2.3 – Sort Columns

- 1. In the Standard Grid view of the Components page, click on the **Quantity** column to sort the column in ascending order.
 - Notice the yellow up arrow designating you are sorting in ascending order



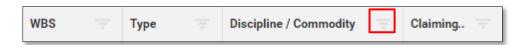
- 2. Click the **Quantity** column again and the column filters in descending order.
 - Notice the yellow arrow is now pointing down

Filter Columns

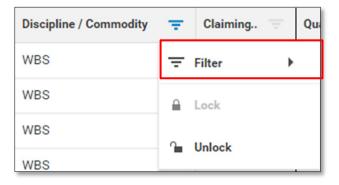
You can filter columns as a way to see relevant information pertaining to your specific needs.

Step by Step 2.2.4 - Filter Columns

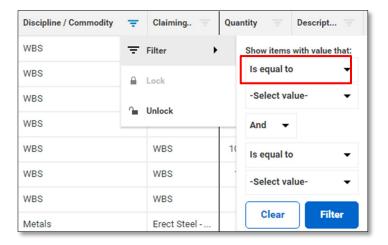
1. Click the **filter pyramid** in the Discipline/Commodity column.



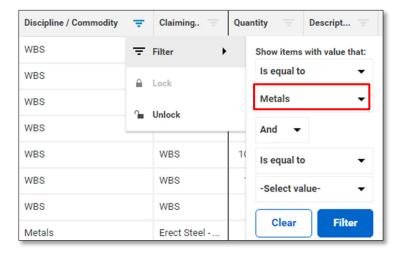
2. In the drop-down list, select Filter.



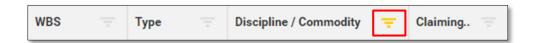
3. In the expanded drop-down, select **Is Equal to**.



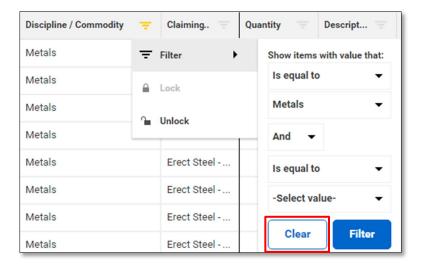
4. In the first value box select **Metals**.



- 5. Click Filter.
 - The table now only shows items that have a discipline of Metals
 - Notice that the Filter Pyramid is now in yellow, indicating that this column is filtered
- 6. Select the yellow pyramid.



7. Hover over **Filter**, then click **Clear** to clear your filter.





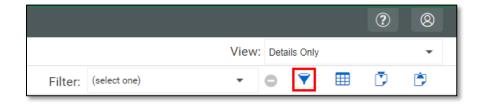
You can apply multiple rules to your filter. For example, setting a "Contains" or "Is equal to" filter for your column would allow you to bring in two distinct results at once.

Saved Filters

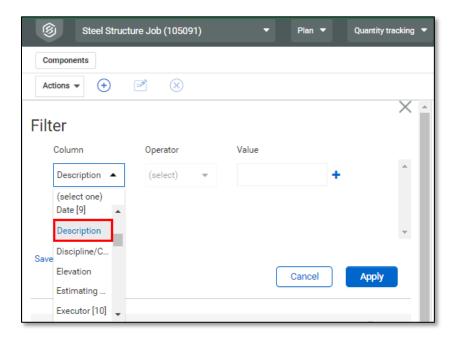
You can save a specific filter so that it can be used anytime you want. You can also share your filters with the team so that they can use your filters as well.

Step by Step 2.2.5 - Create a Saved Filter

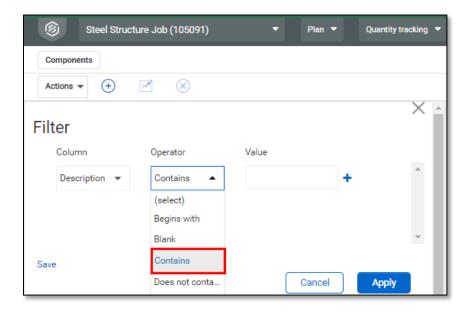
1. On the Components page, select the **Filter** icon.



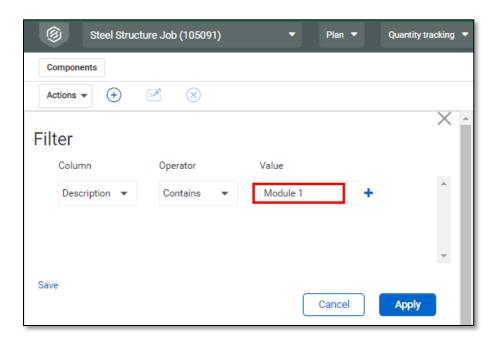
2. On the resulting left slide out panel, select **Description** in the column field.



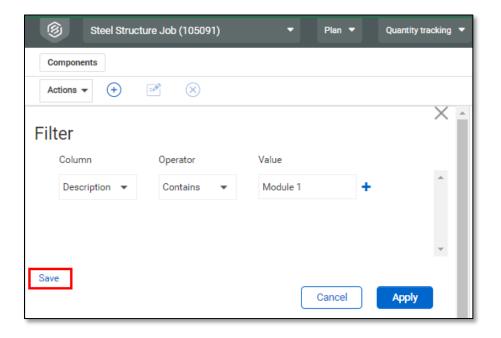
3. For Operator, select Contains.



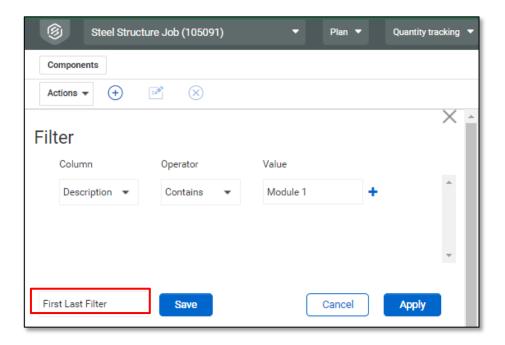
4. For Value, type Module [your user ID].



5. Click **Save** in the bottom left of the box.



6. Change the Filter name to [Your Name] Filter.



- 7. Click Save.
 - You now have a saved filter
- 8. Click **Apply** to apply your filter.



You can share pre-defined filters with the different members of your team.

Exercise 2.1- Saved Filters

In this exercise, you will practice creating saved filters from the Components page.

- 1. Find a discipline that you most identify with by using the Discipline column sort function.
- 2. Select the Filter icon and select two (2) parameters you think would help you perform your job.
- 3. Save and apply the filter.

Congratulations, you have completed this exercise!

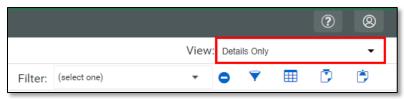
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2.3 Viewsets

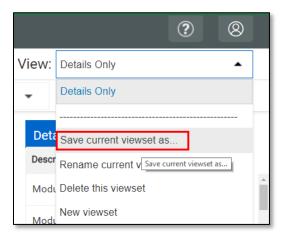
Once you have all columns organized, you can create a saved view of your page so that you can always revert back to it. This saved view is called a viewset.

Step by Step 2.3.1 – Create a Viewset

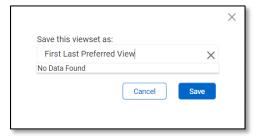
1. Select the **View** drop-down arrow to save the column setup you created in Step by Step 2.2.2.



2. Select **Save current viewset as** from the viewset drop-down list.



3. In the resulting window, type [Your Name] Preferred View.



- 4. Click Save.
 - You now have a saved view



Each viewset is user specific and can be used from plan to plan. Viewsets do not carry over from the Standard Grid view to the Data Block view. You have to create your viewsets for both the Standard Grid and Data Block views.

Exercise 2.2- Create a Viewset

Now that you have learned some of the basics of navigating in InEight Plan, from the Components page, in the Standard Grid view, create a components viewset that you would use.

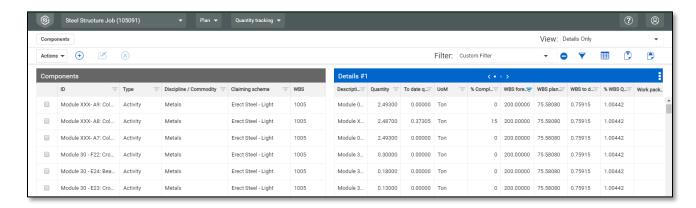
- 1. Bring in any columns you find useful or relevant.
- 2. Apply filters to your data if desired.
- 3. Save the viewset.

Congratulations, you have completed this exercise!

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2.4 Data Blocks

Each data block is a set of columns grouped together based on categories of information. Using data blocks helps you organize and manage all of the columns on a page. Data blocks are customizable, and can be viewed side by side and moved around in the register. The information in each data block is displayed in a grid like format, maintaining a spreadsheet look and feel.



Add Data Blocks

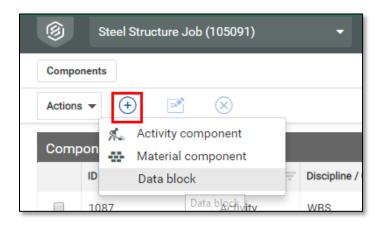
Some data block fields allow you to fill in key component information.

Step by Step 2.4.1 – Add Data Blocks

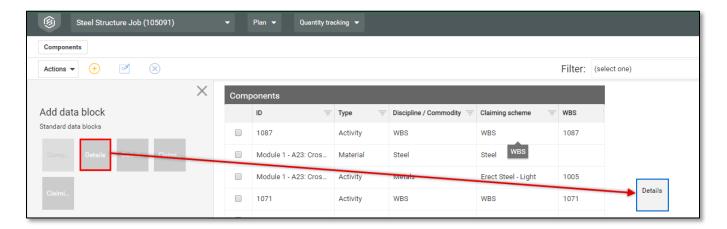
1. From the Components page grid view, select **View as data blocks**.



2. On the left toolbar, select the **Add** icon 🛨 and select **Data block**.



3. On the resulting left slide out panel, select **Details** and drag it into the blank white portion of the page to your right.

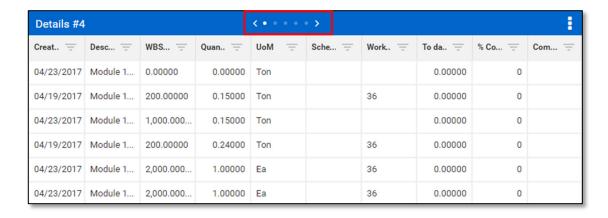


IMPORTANT **1**

You can Sort and Filter columns whether they are a part of a tab or in a data block.

Navigate Data Blocks

You can utilize the arrows to view more columns associated with each data block that are not seen in the current view.



Each dot within the arrows signifies another grouping of columns (i.e., panel) to be seen.

Context Menu

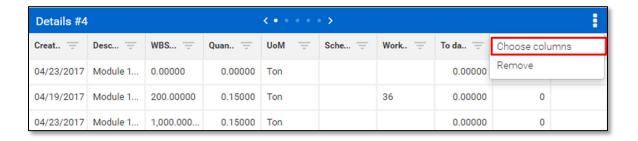
The **Context Menu** allows you to customize the order of columns in each data block. There are also additional columns you can add or remove from some data blocks.

Step by Step 2.4.2 – Utilize the Context Menu

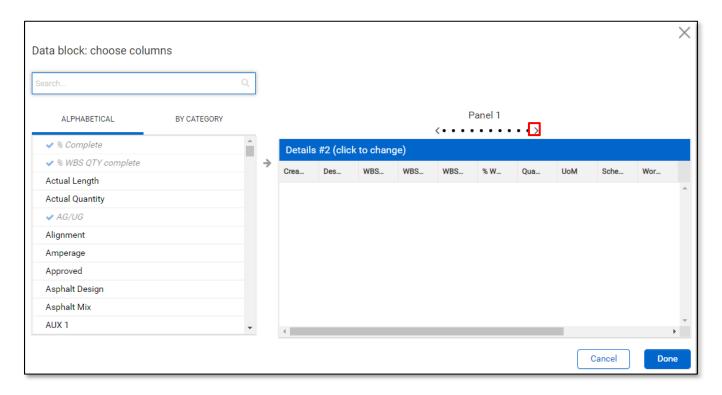
1. Select the **Context Menu** of the Details data block.



2. Select Choose columns.



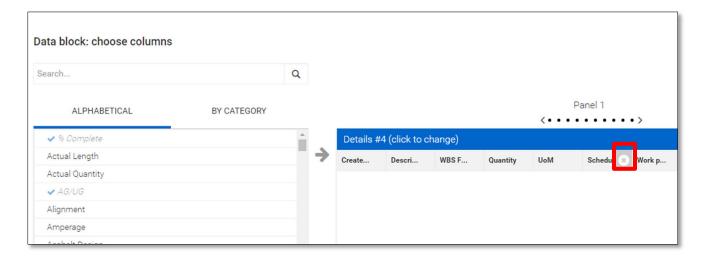
3. On the resulting slide out panel, click the right arrow to navigate to **Panel 2** of the data block.



4. Click and drag the **Elevation** column to the far left.



- a. You can also drag columns from the **Data Block: choose columns** list into a data block
- b. This allows you to quickly add and remove columns to customize your view
- 5. Arrow back to Panel 1.
- 6. On the Schedule ID column, click on the **Remove icon** to remove it from the data block.



- You now have a new layout for the data block
- 7. Click Done.



Each type of data block has its own unique default settings. Default settings include specific columns and total number of columns and panels.

Lesson 2 Review

- 1. What shows you the project you are on?
 - a. First level menu
 - b. Third level menu
 - c. Left toolbar
 - d. Profile
- 2. On the Components page, you can add, edit, or delete components from the:
 - a. Breadcrumbs
 - b. Left toolbar
 - c. Viewset menu
 - d. Actions menu
- 3. What can you do to columns to make them more aligned with how you want to view a page?
 - a. Move them
 - b. Add/Remove them
 - c. Sort/Filter them
 - d. All of the above
- 4. Viewsets can be used from plan to plan, but do not carry over from the Standard Grid view to the Data Block view.
 - a. True
 - b. False
- 5. Which icon do you select to switch to the Standard Grid view?
 - а 🎹
 - b. 🗡
 - c (+)
 - d Actions ▼

Lesson 2 Summary

As a result of this lesson, you can:

- Navigate the Plan > Quantity tracking page
- Manage columns
- Create viewsets
- Manage data blocks



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Lesson 3 Claiming Schemes

What is a Claiming Scheme? / Claiming Scheme Creation / Claiming Scheme Management

Lesson Duration: 30 minutes

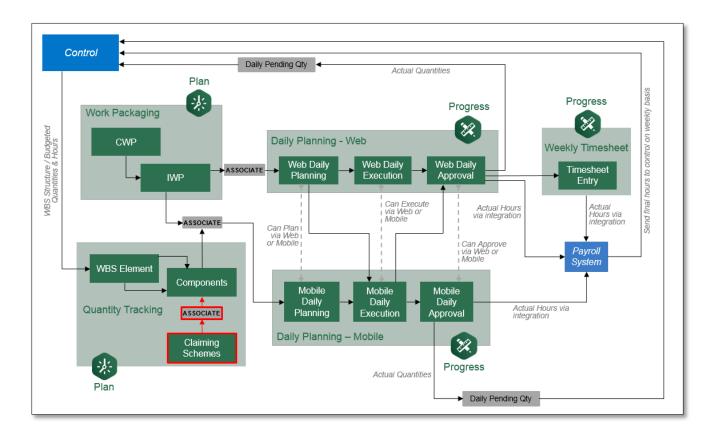
Lesson Objectives

After completing this lesson, you will be able to:

- Explain what a claiming scheme is
- Create a claiming scheme
- Manage claiming schemes

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InEight Plan Workflow - Claiming Schemes



3.1 What is a Claiming Scheme?

A claiming scheme is a formula used to generate partial quantities of a component. The installation sequence is broken down by steps or milestones and assigned a completion percentage based on the level of effort to complete each step. This allows you to progressively track progress as phases of construction are completed on a daily or weekly basis.

Scenario

Imagine you are a field engineer responsible for tracking completion progress for the installation of structural steel for your assigned module. Work includes shaking out and transporting steel to the work area, erecting and bolting up steel members and final torqueing of bolts to the required specification. These steps happen over a period of time, and you need to report percent complete as work is performed. Predefined claiming schemes help you accomplish this without having to wait until the very end when all steps are complete.

Why would you not want to wait until all work steps are complete to claim an activity?

The answer: Delayed reporting of progress can hide issues and cause more impactful schedule and budget concerns if gone unnoticed. Short interval claiming via claiming schemes provides up-to-date reporting at all times.

What is the purpose?

Quantity tracking/claiming is the backbone for accurate cost reporting. Completed quantities drive your earned budget, overall percent complete, and forecasted cost at completion. It is imperative to have accurate completion percentages at short intervals (daily or weekly) to quickly recognize negative trends and react in a timely manner. Claiming schemes are designed to methodically claim portions of work that are completed within shorter intervals than the overall scope of work.

For example, referring to the scenario above:

You can predefine the percent complete of each step required to complete the structural steel installation, including final quality verification.

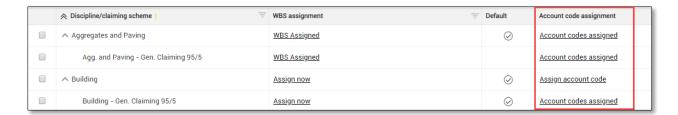
- Step 1: Shake out / Transport
- Step 2: Erect / Bolt up
- Step 3: Final Torque
- Step 4: Quality Verification

The percent complete assigned to each step should be based on the level of effort required to complete that step.

Setting up a Claiming Scheme

Claiming schemes are managed in the Quantity Tracking section of InEight Plan. They are created for both construction activities and commodities. Claiming schemes are organized by discipline and commodity type respectively. All disciplines and commodity types are preloaded with a default claiming scheme containing one step for 100%. You can edit and add claiming schemes under the discipline or commodity types. You can associate a schedule group and an activity ID format to the claiming scheme. To manage schedule groups as an administrator, go to Settings for Plan, under the Quantity Tracking tab and use the Maintain schedule group values table.

Once a claiming scheme is created, you can assign it to specific WBS phase code(s) or component(s) depending on the project set up. You can also assign account codes to claiming schemes. Account codes can be used to further categorize and standardize claiming schemes for integration with other applications. Below shows how claiming schemes are organized by discipline in Plan, with account codes assigned:





When creating claiming schemes, you should aim for 3-5 steps. As a general rule, each step should be able to be completed within one week.

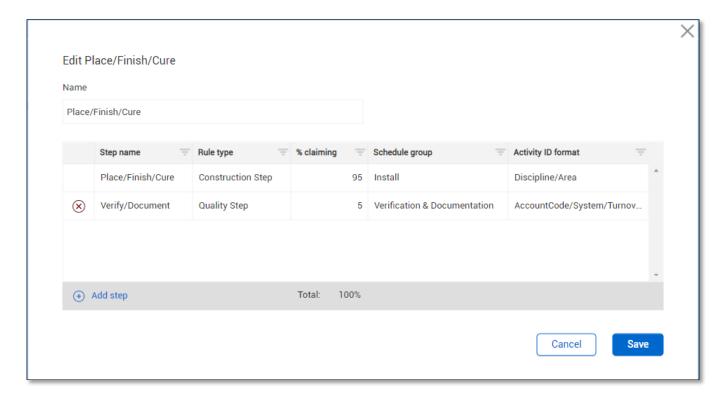
The following table displays an example of how a claiming scheme could be set up for structural steel installation.

Structural Steel Claiming Scheme					
Stage	Title	Percent Claimed			
1	Shakeout / Transport Steel to Area	15%			
2	Erect / Bolt Up	45%			
3	Final Torque	30%			
4	QC Verification	10%			



To associate schedule groups or activity IDs when creating or editing a claiming scheme, select the cells under the **Schedule group** or **Activity ID format** columns and select from the drop-down menus.

Here is an example of what the Structural Steel Claiming Scheme would look like in Plan:



By default, when you assign a claiming scheme to a component, the steps automatically inherit the same quantity and unit of measure as the component. However, depending on the component and situation, it may be necessary to change the unit of measure and quantity per step. This can be done and will be covered in greater detail in *Lesson 4 – Component Management*.

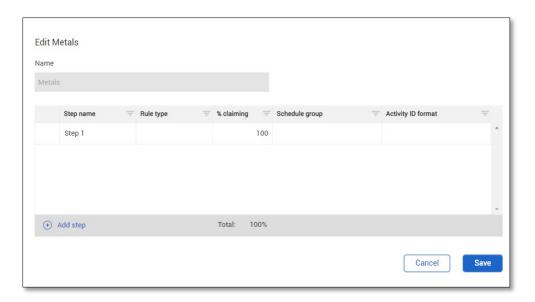
Problems Claiming Schemes Solve

Claiming schemes:

- Allow you to track your claiming in one central location
- Reduce your need for individual side spreadsheets
- Allow for drill down transparency to see what specific work has been claimed complete
- Keep claiming consistent with a clear breakout of quantities reserved for specific activities
- Communicate actual work steps to your foreman in the field when completing their plan

3.2 Claiming Scheme Creation

You will now create a claiming scheme in Plan for the erect steel code you created for your module during the InEight Control lesson. By default, the Plan application has a claiming scheme already created for each discipline. These default claiming schemes are all one step claiming schemes and can be modified as needed.



In most cases, you will need multiple claiming schemes for a single discipline. For example, in Structural work you will need a different claiming scheme for bolted connections than you will need for erecting light steel. Plan allows for the creation of multiple claiming schemes under the discipline of Metals.



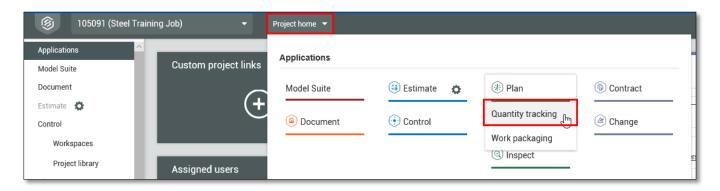
There is a parent-child relationship between the discipline claiming scheme and those added beneath it.

You will practice by creating a claiming scheme under the Metals discipline for the 'Module [User ID #] – Erect Steel Heavy' WBS that you created previously.

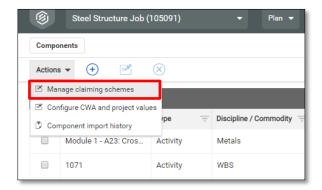
The following step by step walks you through how to create child-level claiming schemes.

Step by Step 3.2.1 – Build a Claiming Scheme

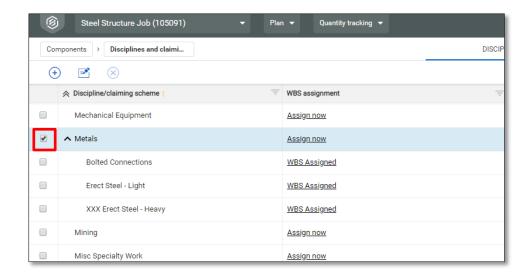
1. Navigate to the **Quantity Tracking** page for the **Steel Structure Training Job**.



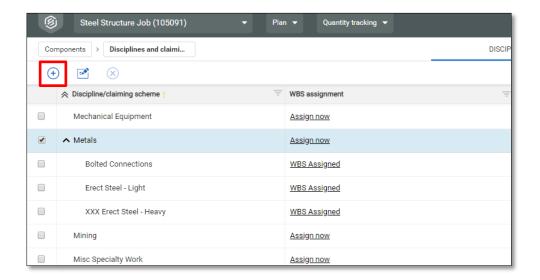
2. From the Actions drop-down menu, select Manage claiming schemes.



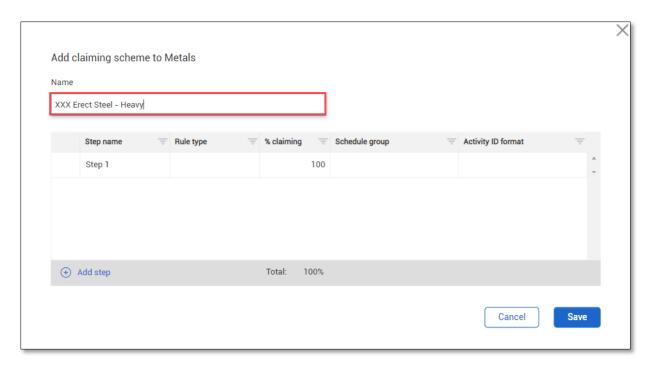
3. To place the claiming scheme in the Metals discipline, click on the check box next to **Metals** in the Claiming Scheme list.



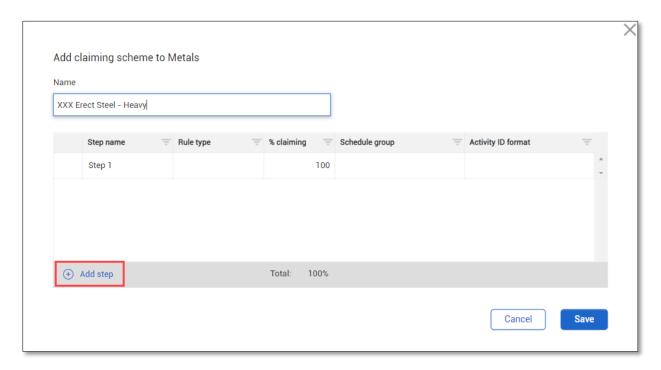
Click the **Add** button on the left toolbar.



- You will now see a claiming scheme setup box
- 4. In the Name field, name the new claiming scheme [Your Initials] Erect Steel- Heavy.



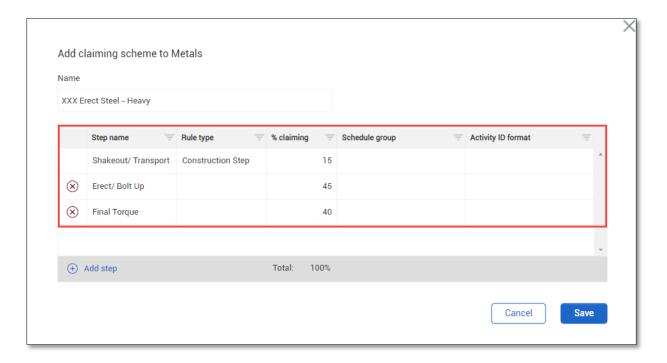
5. To add steps to your claiming scheme click **Add Steps** two times.



6. Update the three Step names, Rule types and Percentages to the following:

Step Name	Rule type	% Claiming
Shakeout / Transport	Construction Step	15%
Erect / Bolt Up	Construction Step	45%
Final Torque	Construction Step	40%

• To associate schedule groups or activity IDs when creating or editing a claiming scheme, select the cells under the **Schedule group** or **Activity ID format** columns and select from the drop-down menus



7. Click the Save button.

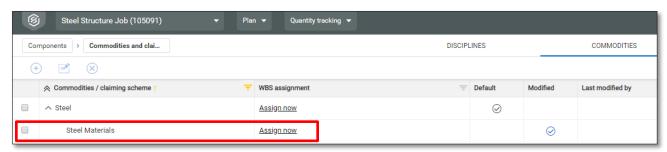
Exercise 3.1 – Claiming Scheme

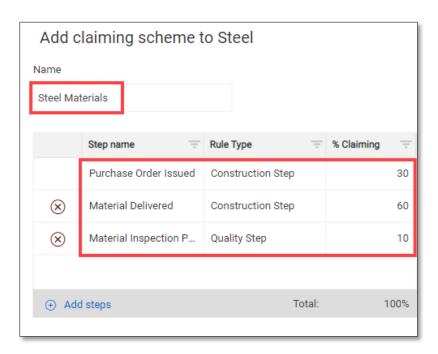
Now that you have learned about claiming schemes and how to create them, you will complete an exercise to test your knowledge.

Claiming Schemes for commodities are created the exact same way.

- 1. Create your own claiming scheme for any commodity by adding a child claiming scheme to that commodity.
- 2. Create at least 3-4 Steps.
- 3. Define a percentage for each step so the total percentage of all steps equals 100.

Example Exercise 3.1:





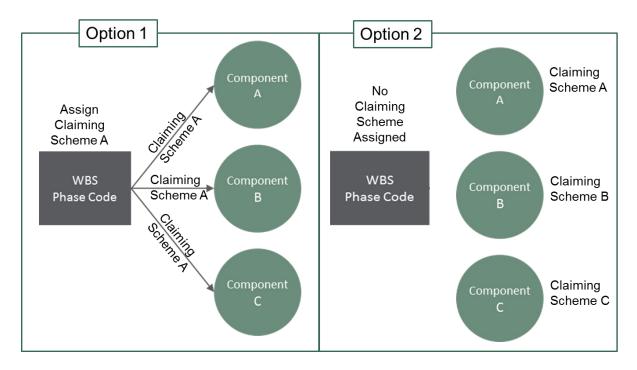
Congratulations, you have completed this exercise!

3.3 Claiming Scheme Management

Assigning Claiming Schemes

Once you create a claiming scheme and it is ready to be used, the next step is to assign that claiming scheme. You can assign claiming schemes in two different ways:

- Option 1: Assign to WBS cost items
- Option 2: Assign to each component



To assign claiming schemes at the component level, you must assign them to each component individually. If you assign a claiming scheme at the WBS level, then every component that is created underneath that WBS will inherit the same claiming scheme.

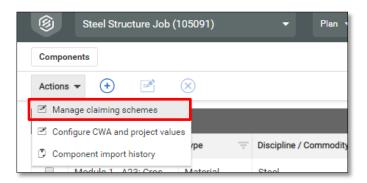
IMPORTANT **A**

What level claiming schemes are assigned at is controlled in the project settings. When choosing to assign claiming schemes at a WBS level you must have a claiming scheme assigned to a WBS before you can add components with that WBS. If you choose to assign claiming schemes at a component level, you will not be able to assign any to a WBS.

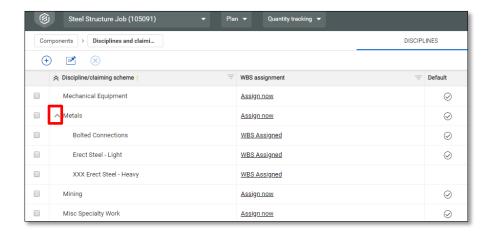
The following step by step walks you through how to assign a WBS item to a claiming scheme.

Step by Step 3.3.1 - Assign a WBS to a Claiming Scheme

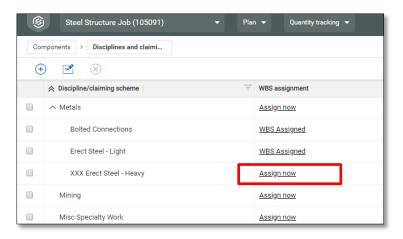
1. From the Quantity Tracking page navigate to the **Manage claiming schemes** page.



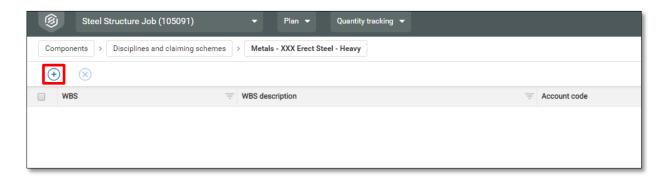
2. Click on the arrow next to the Metals discipline to expand the list of children.



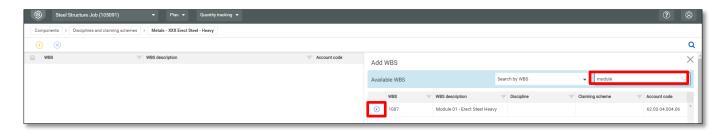
3. In the WBS assignment column, click on **Assign now** for the claiming scheme you created in section 3.2 [your initials] Erect Steel - Heavy.



4. Click on the Add button on the left toolbar.



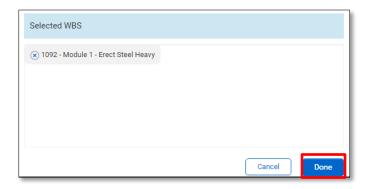
- On the resulting slide out panel on the right, search for the WBS you created during the Control lesson: Module [User ID #] - Erect Steel Heavy. (If you can't find your WBS use WBS 1004.)
- 6. When the WBS appears, click on the Add button on the left.





A WBS can only be assigned to one claiming scheme. However, multiple WBS items can be assigned to a single claiming scheme. Make sure to select the Module # of the computer you are using.

- You should see that WBS now move down to the Selected WBS field below
- 7. Click on the **Done** button in the bottom right of the screen.



Edit Claiming Schemes

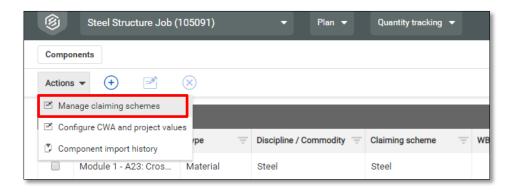
In many cases, it may be necessary to edit a claiming scheme. For example, you may occasionally forget a step at the time of creation. In Plan, editing claiming schemes is a simple process.

In this step by step you will add a quality verification step to the claiming scheme you created previously for [Initials] Erect Steel – Heavy.

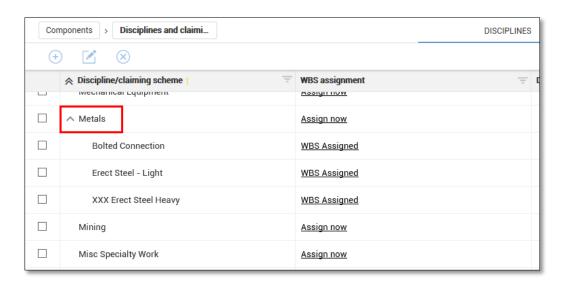
The following step by step walks you through how to edit a claiming scheme.

Step by Step 3.3.2 – Edit a Claiming Scheme

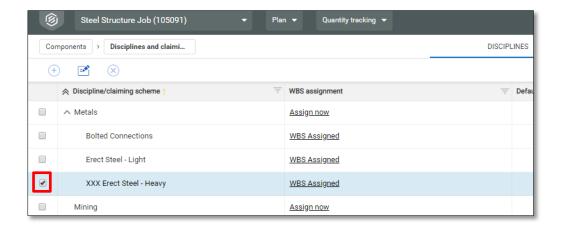
1. From the Quantity Tracking page navigate to the **Manage claiming schemes** page.



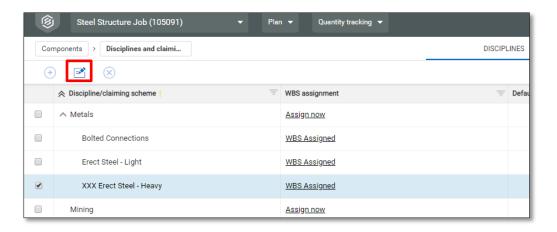
2. Click on the **arrow** next to the Metals discipline to expand the list of child-level claiming schemes.



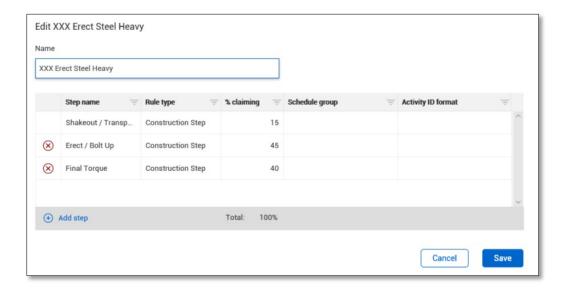
3. Click in the **check box** to the left of the claiming scheme you created in section 3.2, [your initials] Erect Steel - Heavy.



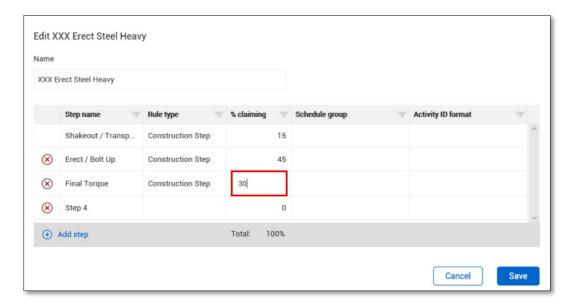
4. Click on the Edit button on the left toolbar.



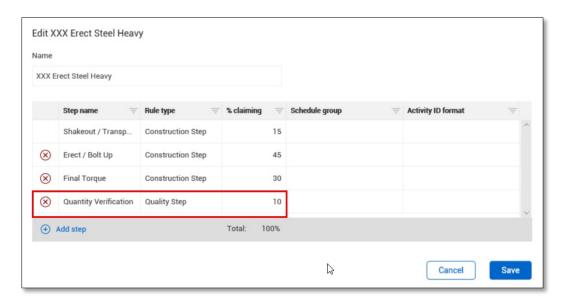
5. Click on the **Add steps** button.



6. Change the percentage for the 'Final Torque' step to 30%.



7. Change the Step 4 name to **Quality Verification**, Rule type to **Quality Step** and enter **10%** for the % Claiming. All steps must sum to 100%.



8. Click the Save button.

IMPORTANT **A**

You cannot edit any claiming scheme that has quantity claimed against it. Also, if claiming has begun on a child scheme, then the parent scheme automatically becomes un-editable. To edit a claiming scheme that has claiming against it, you must un-claim all quantities, edit the claiming scheme, and then re-claim the quantities.

Lesson 3 Review

- 1. The purpose of a claiming scheme is to break a component down into steps so that you can do which one of the following?
 - a. Progressively track progress of quantities installed as phases of construction are completed.
 - b. Schedule components in multiple phases.
 - c. Measure the quality of the component installation in multiple phases.
 - d. Monitor safety during the installation of the component.
- 2. On the page for creating claiming schemes, claiming schemes are organized under:
 - a. Areas
 - b. Work Types
 - c. Disciplines
 - d. Components
- 3. A claiming scheme must add up to:
 - a. 85%
 - b. 90%
 - c. 95%
 - d. 100%
- 4. How do you break out the steps of your claiming scheme?
 - a. EA
 - b. LF
 - c. Percentages
 - d. Decimals
- 5. You can edit a claiming scheme that has quantity claimed against it.
 - a. True
 - b. False
- 6. A WBS can only be assigned to _____ claiming scheme(s).
 - a. no
 - b. one
 - c. two
 - d. three

Lesson 3 Summary

As a result of this lesson, you can:

- Explain what a claiming scheme is
- Create a claiming scheme
- Manage claiming schemes

Lesson 4 Component Management

Component Creation from Scratch / Component Creation from Import

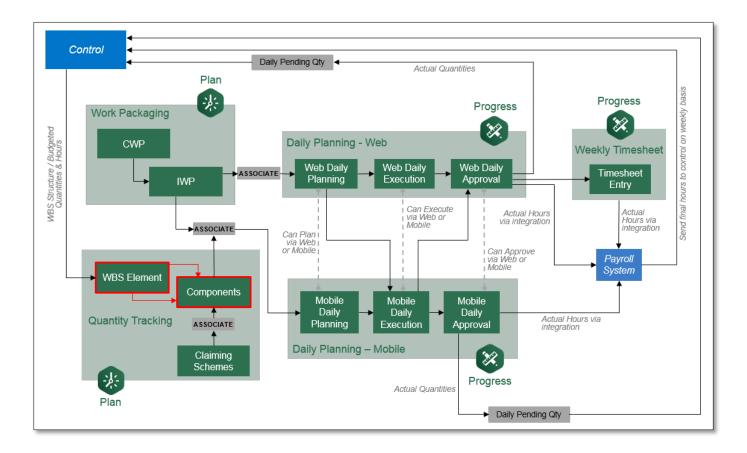
Lesson Duration: 60 minutes

Lesson Objectives

After completing this lesson, you will be able to:

- Create components in Plan from scratch
- Create components in Plan using an import template

InEight Plan Workflow - Component Management



4.1 Component Creation from Scratch

In this topic, you will create a new component from scratch in InEight Plan.

Why Create Components?

In InEight Control, a direct cost item (WBS phase codes) has a quantity that is the sum of many components with smaller quantities which are created in InEight Plan. For example, a structural steel cost item measured in tons is made up of many pieces of steel, each with a specific weight (in tons). When claiming work complete, you could calculate the weight of each piece of steel installed and claim that much at the WBS level.

- If you did this, how would you know what work is complete and what specific work is remaining?
- What have you already claimed and what have you not?
- What if a Foreman doesn't have the time to weigh each piece of steel before installing, or what if he weighs incorrectly?

This is why you create components. Components allow you to break down the WBS quantity into smaller, more manageable sub items for claiming. When you claim components, you can easily see what specific items have been completed and what is remaining. You do not have to guess at what has already been claimed to date. Foremen do not need to do any calculating in the field; they simply report the components they completed. Components already have an assigned quantity based on takeoff calculations.

- Can you think of how components would help claiming of other disciplines like Pipe, Electrical, or Concrete?
- How are these disciplines measured vs how is the work performed?

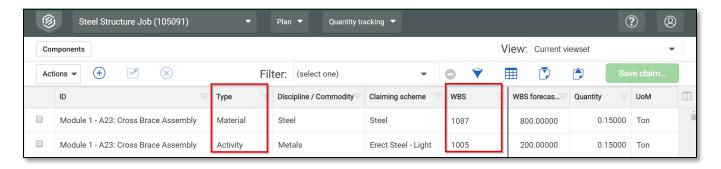
Components aim to bridge that gap.

Types of Components

There are two types of components in the Plan – Quantity Tracking module:

- Activity Components
- Material Components

This allows you to claim procurement activities and construction activities separately. To do this, material cost and labor cost must be broken out in separate WBS codes. If that is the case, you can add the same steel components as activity components and material components as pictured below:



When you create components for both the material and activity, you can then earn hours based on a unit rate for the activity and earn dollars based on material unit cost for the material and assign them to two separate WBS codes.

Methods of Creating Components

There are two methods for creating components:

Component Creation							
From scratch	Create each component manually using the New component slide out panel.						
Import Template	Import multiple components into InEight Plan simultaneously.						

Component Attributes

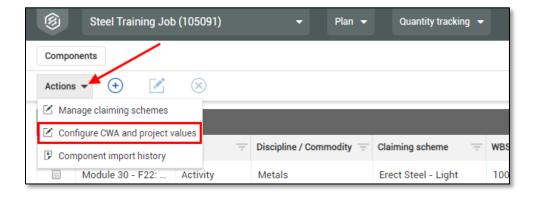
When creating components, a number of fields called attributes are available to be filled out. It is not necessary to fill out every single field, but the more information input, the better. Attributes help make tracking components easier. In many cases, depending on the size of the job, you may have hundreds of thousands of components. In such a case, it can be difficult at times to distinguish the differences between components if only a few attributes are filled out.

Validated Fields

You will rely heavily on certain component attributes for reporting purposes. For these attributes, it is important that data integrity is maintained.

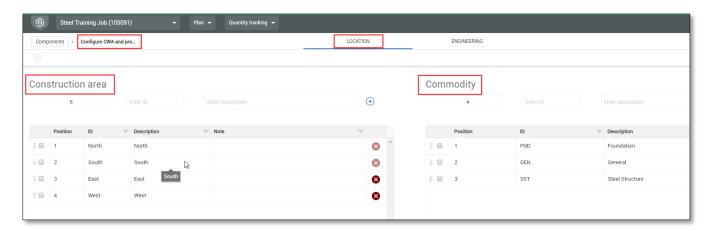
For example, the area and system fields are commonly used for reporting. For these fields, it is important that the area and system entered are always spelled and formatted exactly the same way every time. Imagine a scenario where the data entered for the area field is spelled and formatted five different ways by five different users. In this case, when a report is run for areas, the report will only identify the data that is spelled and formatted one of the five ways. All data for the other four will be left out and your report will be missing crucial information.

To solve this problem, validated fields are used. Validated fields are simply a pre-defined list of values that populate into a drop-down menu. Instead of making these fields free text fields, a drop-down list is utilized. This drop-down list is maintained in the Configure CWA and project values page. You access the Configure CWA and project values page from the Actions menu on the Components page within Plan > Quantity tracking.



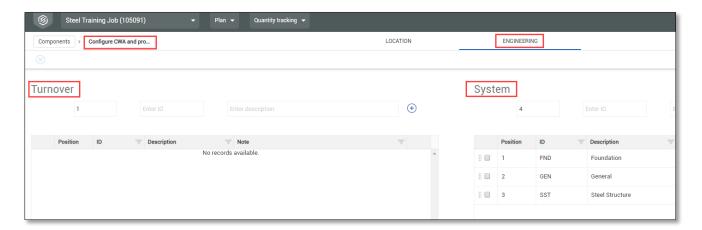
Location

In the Location section of the Configure CWA and Project Values page, you can add a construction areas and commodities as data validated tag values to assign to components. Construction area can be North, South etc. Examples of commodities can be rebar, steel etc. These can then be used to map your components for reporting.



Engineering

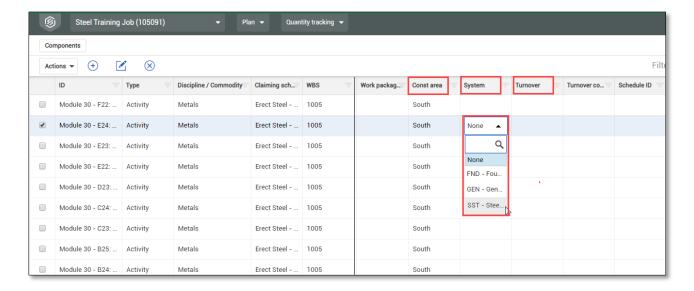
In the Engineering section of the Configure CWA and Project Values page, you can associate turnover packages and systems of work such as fire, water, sprinkler system etc. to a component. You can further define subsystems for a component.



Depending on your permissions, you might not be able to edit these component attributes. This list will typically be maintained by an administrator. If you need the drop-down list for a validated field updated, contact your system administrator.

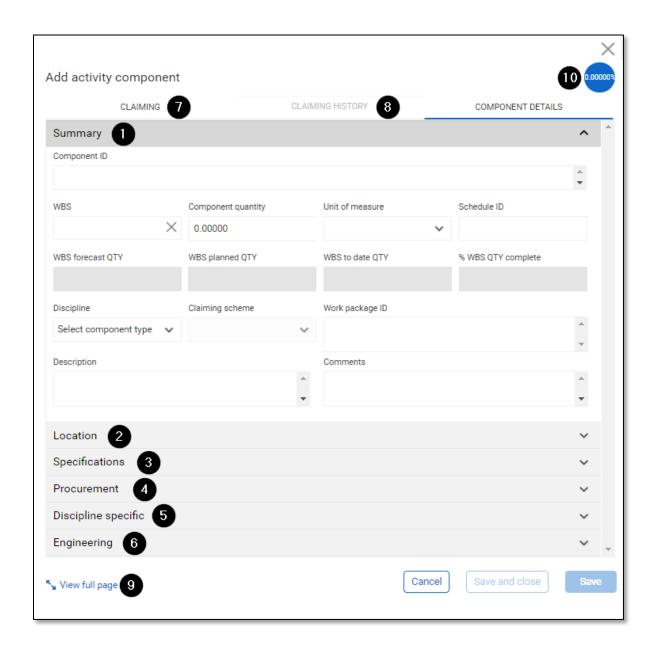
Using Component Attributes

Back on the Quantity tracking Components page, you can add the component attribute columns to your view. Clicking into a field under one of the component attribute columns will provide the drop-down values for the attribute as defined previously on the Configure CWA and Project values page.



Overview - New Component Slide Out Panel

Title		Description						
1	Summary Menu	Contains general high-level information such as: Component ID, WBS, Quantity, Unit of Measure, Discipline, etc.						
2	Location Menu	Contains exact location information of the component such as: Building, Elevation, Construction area, System, etc.						
3	Specifications Menu Contains information regarding exact specification for the component such as: Size, Weight, Thickness, Material code, etc.							
4	Procurement Menu	Contains information regarding the procurement of the component such as: Supplier, PO #, Shop/Field, etc.						
5	Discipline Specific Menu	Contains information that is specific to the discipline selected in the summary menu. Will be different for every discipline.						
6	Engineering	Contains information regarding the engineering of the component such as: Turnover, Test Package, Owner Code, etc.						
7	Claiming Scheme Menu	Displays the claiming scheme selected in the summary menu.						
8	Claiming History	Shows log of what has been claimed to date for this component and by whom.						
9	View Full Page Link	Pops the slide out panel into a separate window and expands all menus. Allows for scrolling through the menus instead of opening accordions individually.						
10	% Complete Field	Displays overall percent complete of the component.						

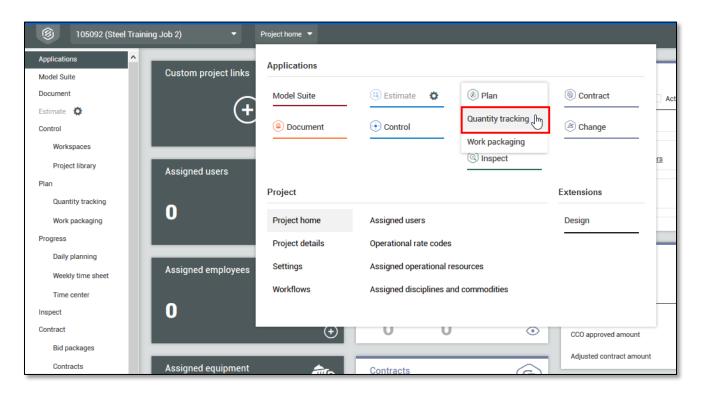


Component Creation

The following step by step walks you through how to create a component from scratch.

Step by Step 4.1.1 – Create a Component from Scratch

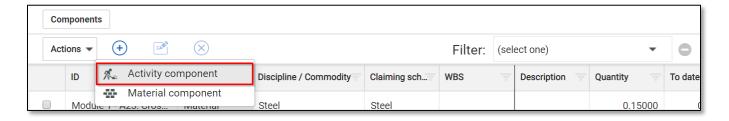
1. Navigate to the **Quantity Tracking** page.



2. To create a component, select the Add button on the left toolbar.

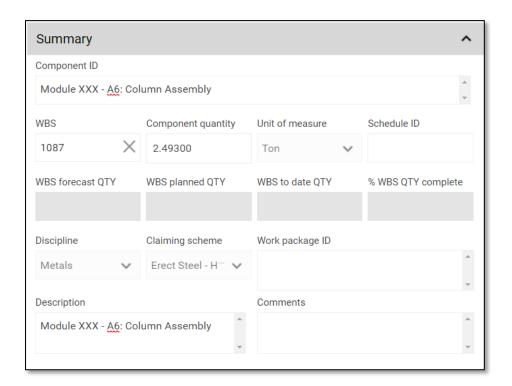


3. Select Activity Component.



 This opens the New Activity Component slide out panel. By default, the summary accordion menu should be expanded

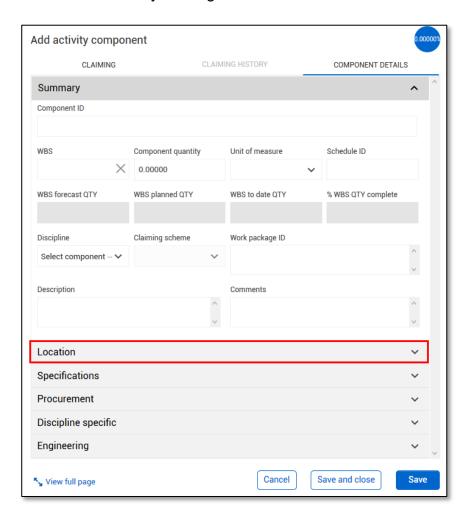
- 4. In the Summary menu, enter the following:
 - Component ID Module [your user ID] A6: Column Assembly
 - WBS The WBS # you created for 'Module [your user id] Erect Steel Heavy'
 - Discipline Metals
 - Component Quantity 2.493
 - Unit of Measure Ton



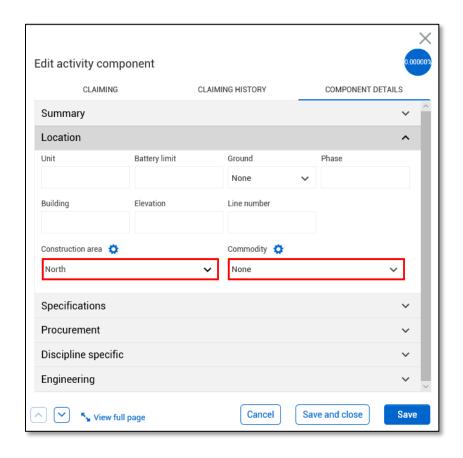


Depending on what project setting you have set up, when you assign your WBS, the Unit of Measure, Discipline, and Discipline/Claiming Scheme fields may be auto populated and locked for editing.

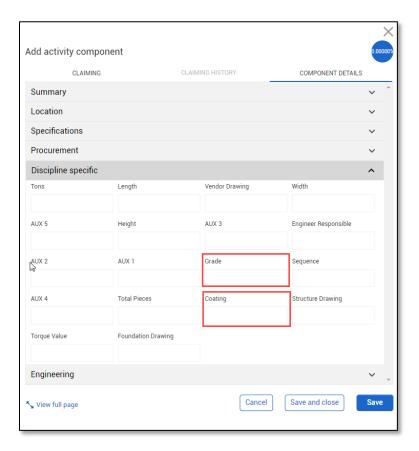
5. Open the Location menu by clicking on the **Location** title header.



- 6. In the Location menu, enter the following:
 - Construction area: If User ID is Odd: North, If User ID is Even: South



- 7. Open the **Discipline specific** menu and enter the following:
 - Grade: A992Coating: GALV



- 8. Once you have completed filling out your information, click the **Save** button.
 - You may have to scroll to reach the bottom of the slide out panel

4.2 Component Creation from Import

In this topic, you will learn how to upload multiple components at once via the Import Template.

Scenario

Imagine you are the structural steel field engineer responsible for tracking all steel erection for your module. You receive a bill of materials from your steel fabricator that matches the erection drawings. The bill of materials has all the information you need to input for components - piecemarks, weight, grade, coating, etc. You need to add all the piecemarks as components, so you can track them as they are installed.

Import Template

As is the case with this scenario, you will often receive lists of components from an outside source.

Can you think of other examples?

- Electrical Cable or Termination Schedules
- Pipe Spool Fabricator Bill of Materials
- Mechanical Equipment List
- Take off sheets from the estimators

In these situations, it saves time to import multiple items at once. This can be done using the export and import feature within Plan.

What is the Import Template?

The Import Template is an Excel spreadsheet used to upload multiple components into Plan at once. The import template is generated first by setting up your view to show the columns of information you wish to import. Then you export the import template to Excel. You can export with or without data (by choosing Data Export), as well as, Excel equations. This means you can export just the column headers or all the information in the cells below as well. Once exported, you can fill in your information in the spreadsheet, save it, and import it. You have the option to import only new items or overwrite information on existing items (based on unique component IDs).

Upon import, Plan will check the file for any errors. Errors may include:

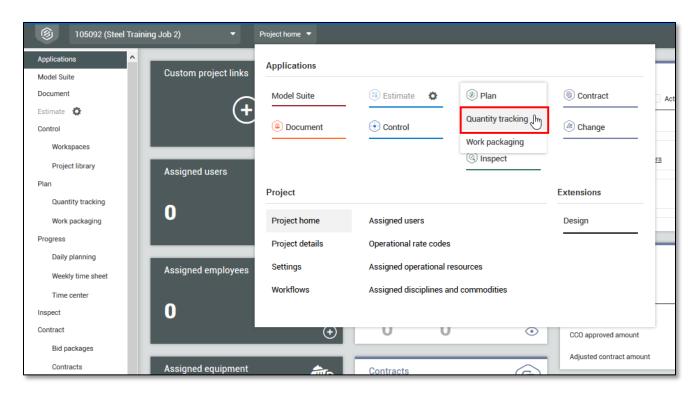
- Validated fields that don't exist
- WBS codes that are not available
- Non-unique component IDs

A report is generated to help you find and correct any errors before continuing the import.

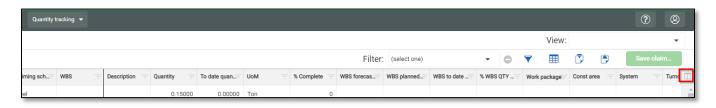
The following step by step walks you through how to export the Import Template, populate it, and upload it back into Plan.

Step by Step 4.2.1 – Create Components from Excel Import

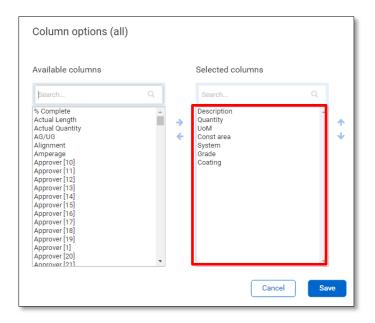
1. Navigate to the **Quantity Tracking** page.



2. From the grid view of the Quantity tracking page, select the **Column Chooser** on the far right of the column header row.



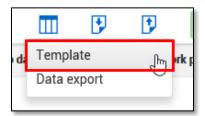
- 3. From the Column Chooser pop up select the following fields and click **Save:**
 - Description
 - Quantity
 - UOM
 - Const Area
 - System
 - Grade
 - Coating



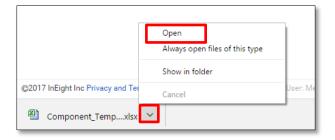
4. Click on the **Export** button on the right toolbar.



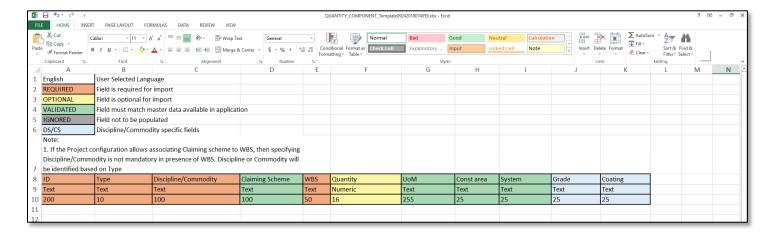
5. Select Template.



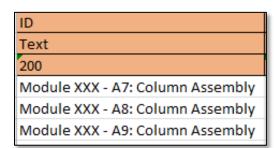
 An Excel spreadsheet should automatically open or appear at the bottom of your screen to download 6. Click on the drop-down arrow for the file and select **Open**.



 The resulting spread sheet is now your Import Template and should only contain the columns that were displayed in Plan at the time of exporting.



- 7. In the ID Column, enter the following:
 - Module [your user ID #] A7: Column Assembly
 - Module [your user ID #] A8: Column Assembly
 - Module [your user ID #] A9: Column Assembly





Component ID's must be unique within the same type of component (activity or material). You cannot have 2 components of the same type with the exact same ID, but you can have an activity component with the same ID as a material component.

8. Enter the following for all component ID's:

• Type: Activity

• Discipline: **Metals**

• Description: Copy ID column

 WBS: WBS you created in control for 'Module [your user ID] – Erect Steel Heavy' or 1004

Quantity: 2.487

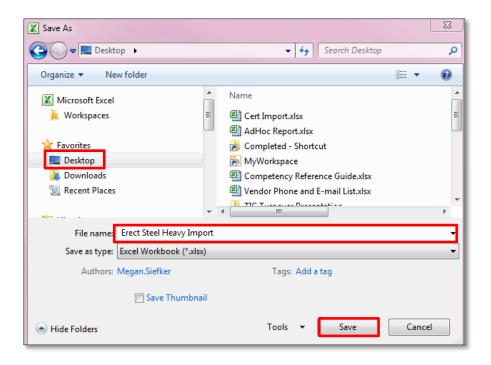
Unit of Measure: Ton

Const Area: North for odd user ID's, South for even user ID's

System: SSTGrade: A992Coating: GALV

English	User Sele	ected Language									
REQUIRED		equired for import									
•		ptional for import									
VALIDATED	Field must match master data available in application										
IGNORED	Field not to be populated										
DS/CS	Discipline/Commodity specific fields										
Note:											
1. If the Project configuration allow											
Discipline/Commodity is not manda											
be identified based on Type											
ID	Туре	Discipline/Commodity	Claiming Scheme	WBS	Description	Quantity	UoM	Const area	System	Grade	Coating
Text	Text	Text	Text	Text	Text	Numeric	Text	Text	Text	Text	Text
200	10	100	100	50	200	16	255	25	25	25	25
Module XXX - A7: Column Assembly	Activity	Metals		1087	Module XXX - A7: Column Assembly	2.487	Ton	North	SST	A992	GALV
Module XXX - A8: Column Assembly	Activity	Metals		1087	Module XXX - A8: Column Assembly	2.487	Ton	North	SST	A992	GALV
Module XXX - A9: Column Assembly	Activity	Metals		1087	Module XXX - A9: Column Assembly	2.487	Ton	North	SST	A992	GALV

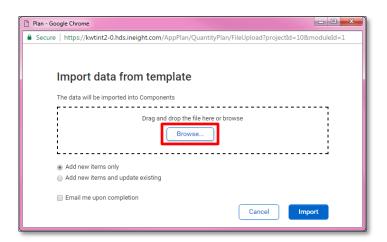
9. Save the file to your desktop so you can find it. Save as 'Erect Steel Heavy Import'.xls or .csv file.



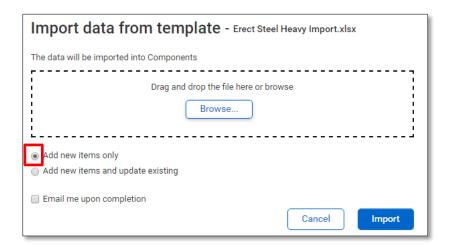
10. Return to Plan and click the **Import** button on the right toolbar.



- An Import data pop-up window appears
- 11. Select the **Browse** button.



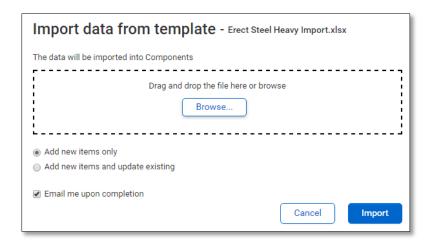
- 12. From the resulting Open window, locate and select the **Erect Steel Heavy Import** file then select **Open**.
- 13. Select **Add new items only**.





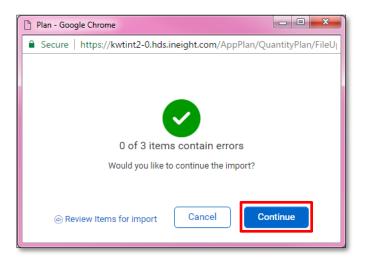
By selecting Add new items only, the system will flag an error if you've accidentally created a component with the same ID as a previously created component. If you select Add new items and update existing, then instead of flagging an error for a component ID that already exists, the system will overwrite the data for that component.

14. Click the **check box** for Email me upon completion.

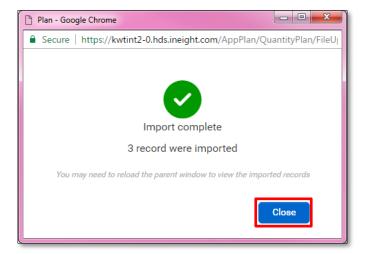


· This will alert you to the completion of the upload

- 15. Click the **Import** button.
 - · Another window appears, indicating whether any errors occurred
- 16. Select **Continue** if no errors occurred.



17. Select **Close** from the window, verifying that the import is complete.



Scenario Recap

Now you can see how easy it is to upload multiple components. Picture a project with thousands of components from multiple sources that can be combined on an import template and easily loaded in quickly.

Exercise 4.1 – Create Components

Now that you have learned how to upload components from a template and create components from scratch, create 5 components on your own using either method. Use **Type**- **Material** to create material components and assign them to **WBS 1087**.

- 1. Create some sample components that you might actually use on one of your projects.
- 2. Don't forget that Component ID's must be unique within the same component type.

Congratulations, you have completed this exercise!

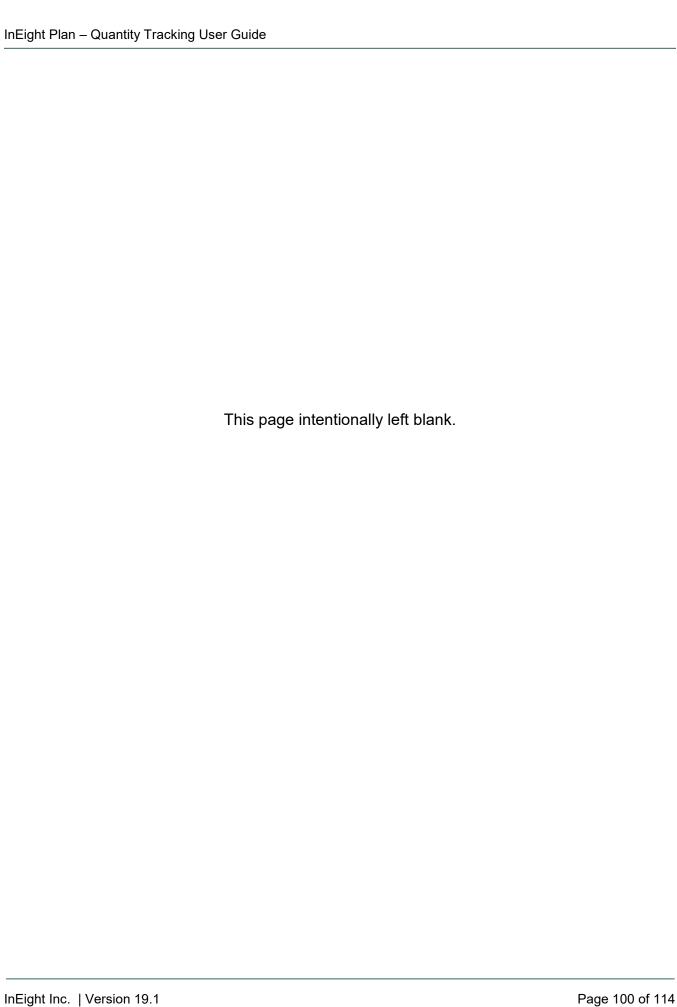
Lesson 4 Review

- 1. What do you create in Plan to track quantities?
 - a. Cost Codes
 - b. Values
 - c. Attributes
 - d. Components
- 2. If you need to upload multiple components at once, which method is preferred?
 - a. From scratch
 - b. Copying existing components
 - c. Import template
 - d. None of the above
- 3. A component ID within the same component type must be _____.
 - a. At least 6 characters long
 - b. Unique
 - c. Contain both letters and numbers
 - d. All of the above

Lesson 4 Summary

As a result of this lesson, you can:

- Create components in Plan from scratch
- Create components in Plan using an import template



Lesson 5 Quantity Claiming

Quantity Claiming / Edit Claimed Quantities

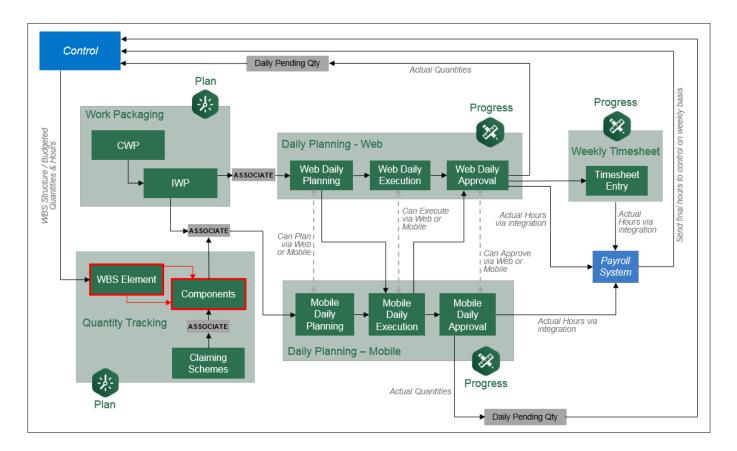
Lesson Duration: 45 minutes

Lesson Objectives

After completing this lesson, you will be able to:

- Claim quantities in Plan
- Edit claimed quantities

InEight Plan Workflow - Quantity Claiming



5.1 Quantity Claiming

This topic covers how to claim component quantities in the InEight Plan application.

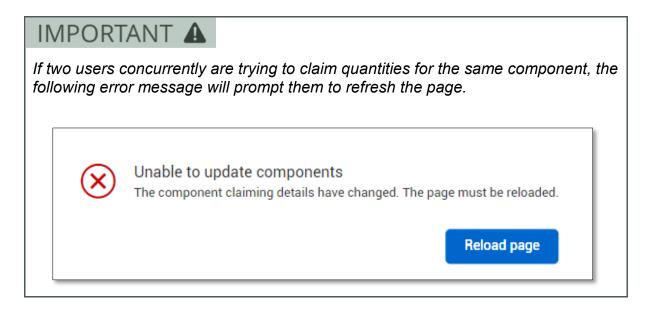
Process for claiming quantities

Quantities can be claimed in Control, Plan or Progress. There are reasons to claim in each of the different modules, but this lesson will focus on claiming in Plan. Since labor and material are expensed in the field, quantity for activities and materials can be claimed during the daily planning process of InEight Plan or Progress. This allows foremen to select (not calculate) the work they completed during the shift while filling out the time sheet at the end of the day, and it is reviewed by field engineers or superintendents before final quantities are approved. Sometimes, claiming in this fashion isn't accurate and what was originally claimed needs to be revised. To manage claiming quantities without having to create daily plans, it is important to understand how to use the Quantity Tracking module of Plan.

Why claim at a component level?

Claiming directly in the quantity tracking module of Plan is different than claiming in the Control module. In Quantity tracking, claims are made at the component level. This is more specific than claiming in Control at the WBS level. For example, suppose a WBS cost item has a quantity of 200 tons of steel. If 20 tons are erected so far, how would you know which specific pieces make up that 20 tons? How could you audit this claiming?

Direct labor and material codes should be claimed at the component level in the interest of transparency. Completed component quantities roll up into the WBS completed quantity. In Quantity Tracking, it is possible to analyze the quantities completed for the subordinate cost items.



Claiming in the Standard Grid View

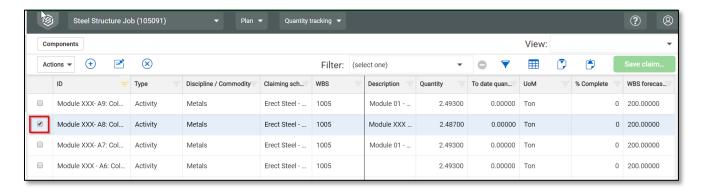
Scenario

Imagine you are the field engineer responsible for tracking the installation of structural steel for your module. You have been informed from the warehouse crew that one column you requested (column A8) has been shaken out in the laydown yard and transported to your work area. This is the first step in your claiming scheme for heavy structural steel and you need to claim it complete.

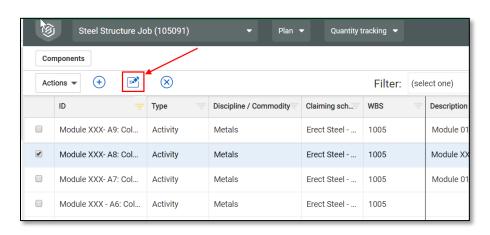
In the following Step by Step you will claim quantities in the Standard Grid view via the Edit component slide out panel.

Step by Step 5.1.1 – Quantity Claiming (Standard Grid View)

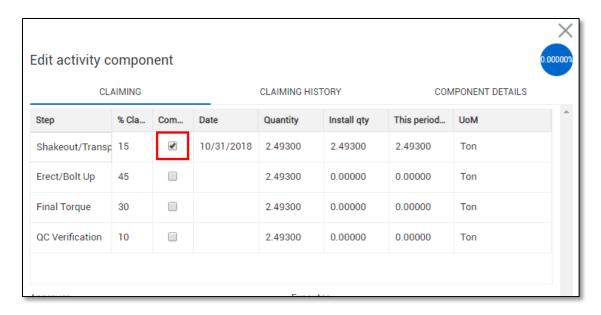
- Navigate to the Quantity Tracking page (make sure you are in the Standard Grid view).
- Find and select the check box to the left of the component Module [your user ID] –
 A8: Column Assembly you created in Lesson 4 Component Management.



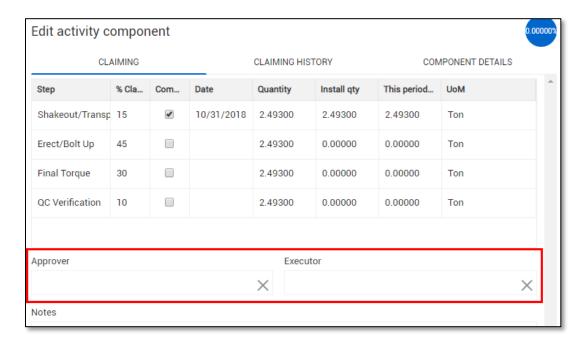
3. Click the **Edit** button to open the component editor slide out panel.



- 4. On the Claiming tab, check the box in the **Complete** column for step 1 'Shakeout / Transport'.
 - You will notice that once you check the box, the 'Install qty,' "This period qty,' and 'Date' fields automatically populate



5. Enter an Executor and Approver.



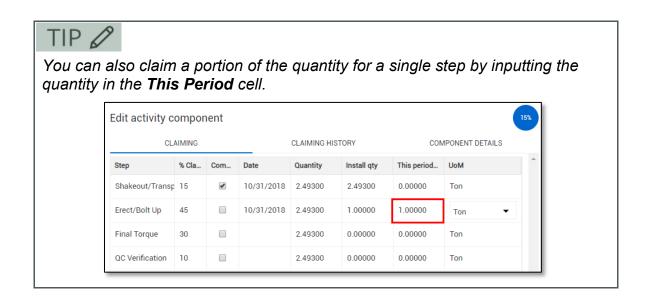
6. At the bottom of the slide out panel, click the **Save** button.

IMPORTANT A

You must select Save to have claimed quantities be added/deducted from your percent complete or to show up in your claiming history report.

Notice that the percentage indicator in your component view has changed





Claiming in the Data Blocks View

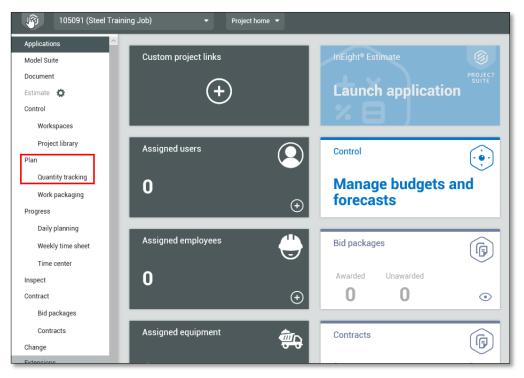
Scenario

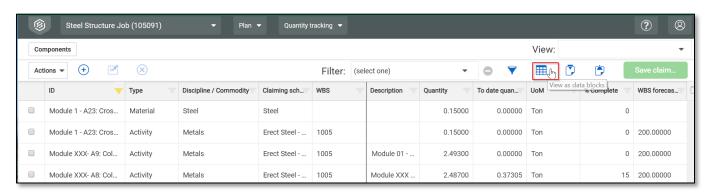
Imagine the warehouse crew gave you a list of all the steel they had transported to your work area. Instead of having to go through and open each component, you can use the data block view to claim multiple items faster.

In the following Step by Step you will claim quantities in the Data Blocks view.

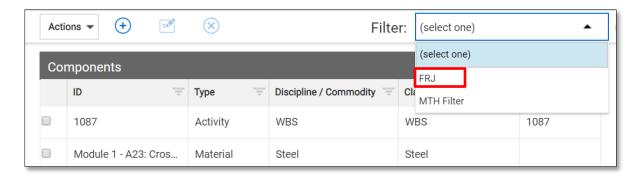
Step by Step 5.1.2 – Quantity Claiming (Data Blocks View)

 Navigate to the Quantity Tracking page and make sure you are in the Data Blocks view.

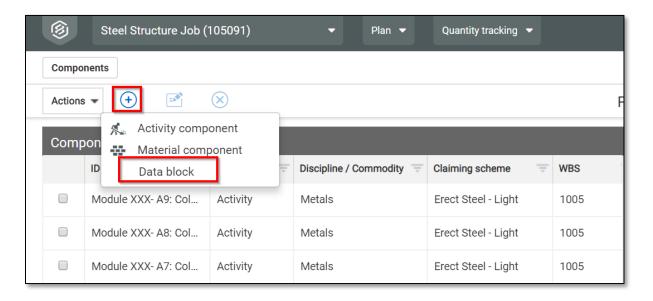




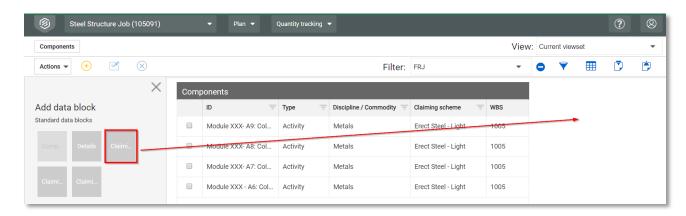
2. Turn on the **[your name] filter** that you created in Quantity Tracking *Lesson 2 – General Navigation* using the filter drop-down menu on the right toolbar.



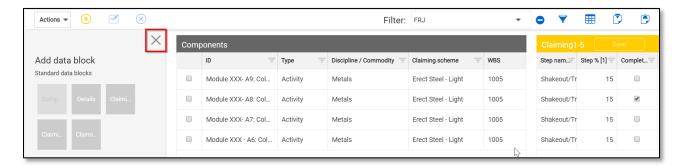
3. Click the **Add** button on the left toolbar and select **Data Block**.



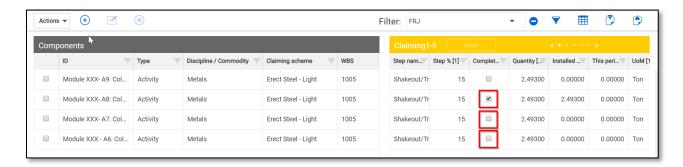
4. Select the **Claiming 1-5** data block and drag it to the white space to the right of the components data block.



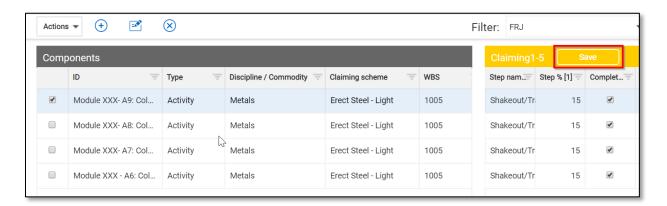
- Note that you can rearrange the order of the data blocks once they are added
- 5. Close the Add data block menu by clicking on the **X** in the upper right corner.



Select the **check box** in the Complete [1] column for three of the components in your module.



7. Click the **Save** button in the data block header.



Scenario Recap

You have now claimed multiple items complete by using the Data Block view. You can use the Standard Grid view and bring in columns for each claiming step to claim in that view also. Some setup is required for this option.

5.2 Edit Claimed Quantities

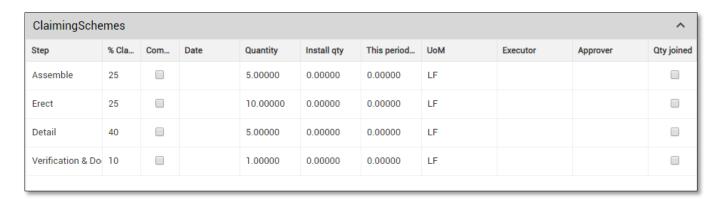
This topic covers how to edit the claimed quantity of a component in the InEight Plan application.

It is possible that you may need to update the quantity that has been claimed for a component. You might find the need to:

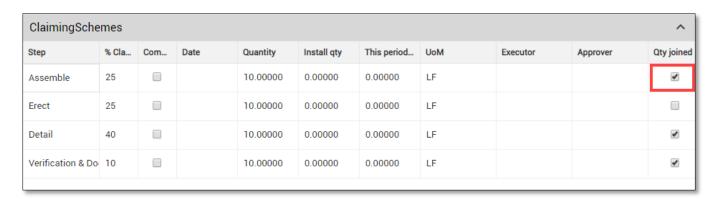
- Claim more quantity for a step in a specific component
- Back out quantity that was reported incorrectly

Quantity Joined

In Quantity Tracking, when the quantity joined box is unchecked for a step in the claiming scheme, the step quantity and the component quantity are no longer connected. Any updates made to the component quantity will not be reflected for that step. You can re-join step quantities with the component quantity.



You can re-join step quantities with the component quantity. By checking the re-join box, the step quantity is linked again to the component quantity, so when the component quantity is changed, the step quantity will automatically change along with it.

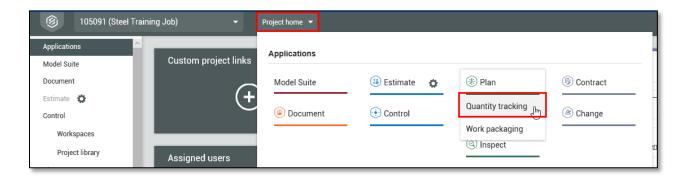


Quantity Editing

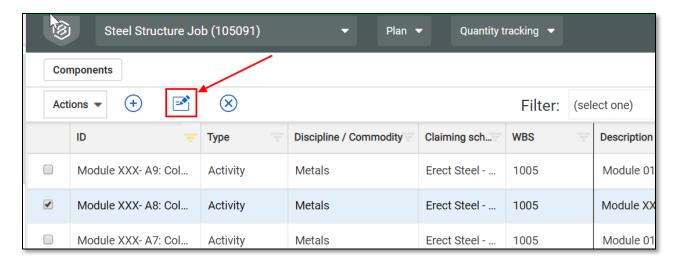
Using InEight Plan, you can easily add or subtract quantity from components. The following Step by Step will detail this process.

Step by Step 5.2.1 – Edit Claimed Quantity

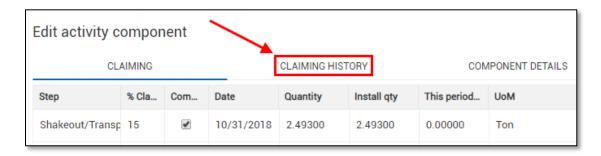
1. Navigate to the **Quantity Tracking** page and make sure you are in the Standard Grid view.



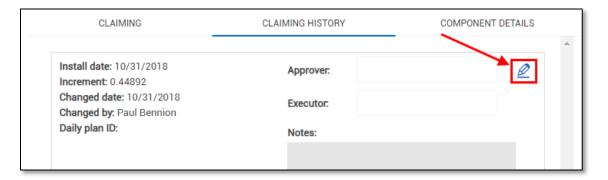
- 2. Find and select the **check box** to the left of one of the components you created.
- 3. Click the **Edit** button to open the Edit component slide out panel.



4. On the Edit activity component slide out panel, click on the Claiming History tab.



5. Click on the **Edit** icon for your latest entry.



- Note you can only change the Approver and Executor, and add notes
- You cannot change the quantity and date information on the left
- This preserves an audit trail to document accurately the claiming of this component
- 6. Click on the Claiming tab.
- 7. Uncheck the **Complete** box for Shakeout Transport.
- 8. Type 1 in the Installed quantity field.
 - Note that the This Period quantity automatically recalculates
- 9. Click Save.
- 10. Click on the **Claiming History** tab.
 - You can now see your new entry with its negative quantity adjustment along with the original entry made

Exercise 5.1 – Quantity Claiming

Now that you have learned how to claim and edit quantities in InEight Plan, practice claiming quantities on your own.

- 1. Using the components you created in Exercise 4.1, claim quantities for each of them.
 - Claim at least one of the components from the Edit component slide out panel (accessed from the Standard Grid view of the Quantity tracking page)
 - Claim at least one of the components from the Data Blocks view
- 2. After completing step 1, change the installed quantities back to 0.

Congratulations, you have completed this exercise!

Lesson 5 Review

- 1. Why is it recommended to claim quantities at a component level, instead of at a higher WBS code level?
 - a. Improved scheduling information
 - b. Because Accounting needs the information
 - c. Improved accuracy for inspections
 - d. Improved tracking visibility because it is more specific
- 2. What individual(s) can you assign to a component when you are claiming quantities? (Select all that apply)
 - a. Project Manager
 - b. Field engineer
 - c. Executor
 - e. Approver
 - f. Superintendent
- 3. When you claim actuals on components, the quantity complete rolls _____ to the WBS quantity complete, but allows you to drill _____ and see what specific items make up that quantity.
 - a. up, down
 - b. down, up
 - c. left, right
 - d. right, left
- 4. When editing claimed quantities on the Edit activity component slide out panel, which of the following columns can you edit? (Select all that apply)
 - a. % Claim
 - b. Complete
 - c. Install qty
 - d. Step
 - e. This period qty
- 5. You can only add quantities, not deduct any.
 - a. True
 - b. False

Lesson 5 Summary

Upon completion of this lesson, you can:

- Claim quantities in Plan
- Edit claimed quantities