

Trimble Unity Construct - Processes Guide

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About the Processes Module

The Trimble Unity Construct Processes module (also referred to as Structured Workflow) is a collaborative system that automates business process according to a set of business rules.

Collaboration

A core capability of the Trimble Unity Construct system is its ability to facilitate collaboration. Effective collaboration and communication among the project teams is an essential ingredient for success on each construction project. The Trimble Unity Construct Processes module facilitates collaboration by providing a mechanism to route information based on defined business rules, track communications and ensure accountability for all parties along the process work path.

The system will empower an organization to store, retrieve, change and use the business rules that affect its operations in a simulated and repeatable environment. Consistent and standardized processes within an organization that would normally require human knowledge to carry out can now be taken care of by the system. In other words, the system allows all project team members to access and update a process with little to no knowledge of the entire process, because the process is automated.

Automated steps help do away with many of the project participant mundane tasks, leaving them time to focus their energy on their jobs. A business process is structured so each instance is managed according to the same business rules, every time. This consistency provides stability in the business and predictability for the resources.

For example, if a subcontractor had to fill out an RFI in the real world via a paper process the subcontractor has to know who to send it to for a particular project. Let's say procedurally it is defined that the subcontractor must send the RFI to the general contractor project manager before routing it to the owner project manager and the A/E. Traditionally, outside of a system like Trimble Unity Construct, the subcontractor would have to know to do that based on their contractual agreement. In the structured workflow enhanced feature set the subcontractor could submit the RFI and the system would know to route it to the general contractor project manager automatically. There is no thought required other than filling out the question in the RFI. And when the general contractor project manager received the RFI and reviewed it, they could determine there was a cost and/or a schedule impact. If there was such an impact, then when the general contractor project manager submitted, the system could automatically route to the owner project manager first to give them visibility to manage the exposure, and if not it could route directly to the A/E project manager to answer. It all depends on the way the structured workflow is configured. The Processes module makes the process efficient and less prone to error because the system is routing the process for you based on a set of predefined business rules.

Benefits of a Structured Workflow

Improved Project Execution

Well-defined processes that can be enforced in a system eliminate the chance of mistakes. An audit trail assists in identifying any mistakes in the process. A standard process also will drive standard reporting, which results in clear visibility into the projects. This enables the project team to act on information early in the process before they become too costly or time consuming to address.

Automated workflow allows for continuous process improvement. The module allows for the collection of detailed information on work processes over time. As business environments change the organization can modify its processes based on lessons learned and data collected to further improve project execution.

Faster On-Boarding of Employees

Faster "on-boarding" of employees enables the organization to scale. The process is consistent and easy to follow based on user roles and permissions. It does not require in depth knowledge of the process rules or policies and procedures. These variables are all addressed in the system so the new user simply follows the steps in the process. Additionally, employee turnover does not result in loss of quality or a break in the process.

Improved Employee Productivity

Improved employee productivity eliminates dead time between steps. Reportable statistics are automatically generated as a measure to continuously improve the process over time. Processes are transparent and result in increased accountability, which in turn results in improved productivity. Repetitive tasks are automated freeing resources to focus on tasks that add more value to the organization. Business rules are placed throughout each step in the process to ensure that the data is entered correctly and escalation occurs automatically if any of the steps are delayed unnecessarily. And, using defined workflow to automate these types of processes streamlines the organization by reducing data entry to key people, thereby reducing errors and improving productivity.

Elimination of Redundancy

In Trimble Unity Construct, many of the work processes result in action taken in the cost or document management modules. Therefore, the enhanced workflow features provide the capability to integrate cost and document functions into one process. A typical example of this would be a change order approval process that results in a change to the committed costs and backup or supporting documentation in the central file library for the project. In this example the commitment change can be created and the status of it (via routing for approval) can update and reflect automatically in the cost module for exposure. And the supporting documentation can automatically be configured to be placed in a predefined folder. No extra work required. It is completely managed in the process definition.

Tighter Compliance with Regulatory Organizations

The system provides an automatic audit trail for compliance reporting. Automatic routing of information through a process ensures that no steps are forgotten or missed resulting in improved compliance. In addition, a structured process in Trimble Unity Construct can be demonstrated to auditors and regulators and information can easily be reported.

Typical Job Functions Using this Module

eTrimble Unity Construct supports the different team members that are involved in the project. Based on their job function, users may be able to configure, initiate, view, update or close processes. Processes are project and role permission based. If required, a work flow (routing of process steps) can be defined to point to a set of projects or even a specific data field in a process layout can be set up to only be visible to a set of key roles. Any user who is involved in communication of a project can be involved with processes. Which users, process types, data fields, layouts, and work flows are utilized are specific to the process

requirements.

Each role or job function will have access to create or respond to specific processes defined by your managers and administrators. Listed below are a subset of users that have responsibilities and influence in defining, configuring and maintaining a set of processes in Trimble Unity Construct.

Project or Executive Assistant

User Role: Account Administrator

Background

The project or executive assistant for an owner company is responsible for coordinating, organizing, and handling the day-to-day activities or tasks required to support the executive or project manager, which includes managing project files, distributing all correspondence as directed by the executive or project manager, maintaining logs, and coordinating meetings. The project assistant needs to communicate to other departments and update the executive or project manager on messages and the status of delegated work. In addition, the assistant will ensure the adequacy of supporting documents (contracts, change orders, legal documents, invoices, etc.)

Role

During a Trimble Unity Construct implementation, the project assistant will be working closely with the Trimble implementation team to set up the work flows. This means the assistant will be providing feedback and designing the work flow processes using the front end designer. Once the implementation team rolls off of the project, the assistant will be responsible for creating new work flows or modifying existing ones. Basically the assistant will manage the work flow environment. In addition, the assistant will override specific instances of a work flow should the need arise due to a user leaving the company (for example) to address the processes in their court.

Project Manager

User Role: Work flow Initiator

Background

The project manager is intimately familiar with each of the key processes required to successfully deliver capital projects within budget and on time. The primary responsibility is to project manage the project. Specifically, the manager will provide advice and consultation with respect to design, scope of work, and cost estimating. The manager will also assist and manage the pre-qualification and selection of the architect/ engineer and general contractor and negotiate on unforeseen conditions or oversights from the designer or general contractor. The project manager will use a schedule as a tool to assist in controlling the timing and performance of building the project and a cost management system to ensure the project remains within budget.

Role

The project manager is involved with the business process. The project manager will go to the work flow area to initiate a process or go to the specific module and start the process there. Two options exist for each process initiation. The manager may not initiate a process every day. Once the manager starts a

process the system will support the manager to do what is required. It will not let the project manager do something he should not do. The project manager will also be able to delegate work to his team members easily when needed.

Financial Director

User Role: Work flow Responder

Background

The financial director is responsible for enhancing financial controls, delivering strategic financial assistance to the board and continuing the development of external relationships to ensure future finance and investment opportunities are recognized. The director will assist in earned value analysis, projecting cash flow management, and reporting on overall profitability performance.

Role

As the work flow responder, the financial director will be able to act on work flow items sent in an easy way. The director will be instantly notified via email so that the item can responded to in a timely manner requiring little to no thought on what needs to happen next. Once in the system the steps will be clearly outlined on what the director needs to do within each process. The director may need to approve a funding request or a budget, for example, within Trimble Unity Construct and the process will be intuitive to ensure the process is completed in a timely manner.

Executive

User Role: Work flow Responder and Reporter

Background

The executive is primarily responsible for ensuring the company meets specific goals and objectives. The executive devises strategies and formulates policies to ensure that these types of objectives are met. The executive meets with the subordinate executives regularly to ensure that operations are conducted in accordance with the company's goals. The executive also meets with the board regularly and is required to report to them the overall health of the project portfolios. The executive is held accountable for the success or failure of the organization.

Role

The executive will be required from time to time to respond to work flow that requires their approval. As such, is it critical that the process required from them (starting with the email notification and finishing with the approval action) is very easy to access and complete. If the executive, for example, is reviewing cost items (budget, contract, etc.) then it can be configured so that the executive can review the financial data within the work flow itself to ensure the approval is efficient and automatically updated in the Cost module where appropriate.

The executive needs to maintain visibility of all the projects within the program. Reporting is a key requirement for the executive to be able to quickly ascertain the overall healthiness of the program.

Ultimately, the solution will provide adequate reports and dashboard views to allow the executive to manage the work flow processes by exception. The reports will be dynamic (or real time) and require little to no effort by the executive to generate.

Key Concepts

Before you start reading the Processes module help, you should familiarize yourself with some key concepts used throughout this section.

Project

Most everything in Trimble Unity Construct takes place within the context of a project. Projects in Trimble Unity Construct refer to the various projects that you are participating in. Each real world project is associated with a project in Trimble Unity Construct. If you are working on the real world project, then you can be added as a member of the project in Trimble Unity Construct. Your Project Administrator or Manager will be able to add you as a member of a project in Trimble Unity Construct.

Process Type

The process type is the name of the process. Examples of process types are Change Order Request, Submittal and Project Issue. Each process type has a work flow comprised of a series of steps. Each step has permissions assigned to it. This determines who can act or view on each step. Because of this, you may be able to act and view certain instances of process types, but, unable to initiate or act on an instance of another process type.

Module Integration

If the Cost Module is activated for your account process types can be integrated with cost items. A process type can include one and only one cost item. The cost items available are budget change, commitment, commitment change, commitment invoice and general invoice. When integrated the cost item details are contained in the process type automatically. That means that when a process is filled out that is configured as such, then the status and details of the cost item will automatically be updated in the Cost Module. This solution eliminates redundancy.

Data Fields

Fields can be configured to store information related to the process. These fields can present as drop down boxes, to date fields, to file fields and many other types that you may be familiar with as it relates to filling data out on an electronic document. Data fields automatically create unique variable names for use in reports and mail merge. Data fields have permissions assigned to them so that the field can be restricted only to certain roles.

Page Layouts

Page Layouts organize data fields into custom displays. A layout is associated with a step in a work flow. There can be both actor and non-actor layouts associated with each step, allowing you to restrict proprietary data not meant for to be edited or even viewable by non-actor users accessing the step. Data fields are added to layouts and each field can be marked as read-only or required based on your business requirements.

Sections

There are one to many sections in a page layout. Each section is a collection of data fields. The purpose of a section is to separate data into like areas to organize your data layout in a way that resonates with the potential actors.

Workflow

Workflow is the automation of a business process (entirely or partially) during which documents and other pertinent information is passed from one participant to another for action, according to a set of procedural or business rules. Each process type can have one or more work flows assigned to it. Each project has one work flow assigned to it. In each work flow there are a series of flows consisting of steps and connectors with a start and finish.

Actor

An actor is a person that can act on a step. When a work flow enters a step the actors receive a notification via email to login to Trimble Unity Construct and accept or decline the responsibility to complete that step. Once an actor takes an action the step is considered to be completed.

Action

An action is a trigger to complete a step in a work flow. Data entry steps are those steps where it requires a human to act on it. Each of these steps include one or more actions. When an action is taken the work flow routes to the next step.

Data Assignments

Data assignments can be configured to automatically set a value to a data field. There can one or more data assignments set for an action.

Step

A work flow step organizes the page layouts, actors and non-actors, actions, data assignments and standard due dates. Each step represents an activity that needs to be completed by an actor in order for the work flow to move on its path towards completion (or finish).

Data Entry Step

The data entry step requires a person in an actor role to complete it. Each data entry will require an actor to take an action in order for the work flow to move on its path towards completion. In addition, there can be data fields that are required to be entered or updated.

Conditional Step

A conditional step is a defined statement that can take a path of true or false. It is configured to let the system determine the route in the work flow.

Connector

A connector connects two steps together. A connector requires a from step, action and to step.

Spawn Process Step

A spawn process step allows a process to spawn another process when the work flow enters that step. A classic example of this would be a potential change order (PCO) that can spawn a change order request (COR) if it is approved by the appropriate parties.

To access the Processes module

1. Click the **Processes** tab located at the top of the page.

On the Processes page, you can click to view a process. To view only the processes for a project, select the project from the drop-down list.

Processes For Project Page

From the Processes For {project} page, you can start a process, access active processes in order to take further action, or view detailed information.

To access the Processes page

- 1. Click the **Processes** tab located at the top of the page.
- Choose a project from the All Projects menu. The Project Processes page is displayed.

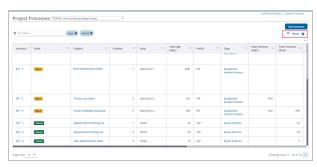
Project Processes

- Unfinished Drafts: See and take action on draft forms and processes
- **Processes for**: Click this drop-down arrow to access processes for different projects. This menu gives you a quick and easy way to switch between projects.

Filter Processes

Use filters to narrow your search results to just the process types that you need.

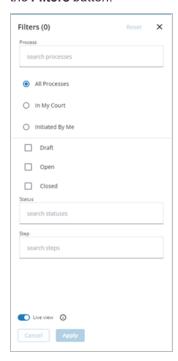
e-Builder automatically saves the filters and grid display options that were last used and displays them the next time you come back to the **Project Processes** page.



Project Processes Page - Filters button and Chip Filters

The following fields and buttons are available on the **Project Processes** page:

- * Refresh results [: When this button is clicked, the results for the selected filters are refreshed.
- **Filter by**: Enter text in the **Filter by** field to filter records and return results containing the specified search keyword criteria.
- Filters: Click the Filters button to open the panel. Within the Filters panel, click X to close it. To reset all the filter selections back to the default, click the Reset button in the Filters panel.
 Each filter that you select from this panel is displayed as a chip on the Project Processes page.
 Only one option button can be selected at a time but one or more check boxes can be selected at one time, if needed. The number of filters that are currently applied are displayed as a number on the Filters button.

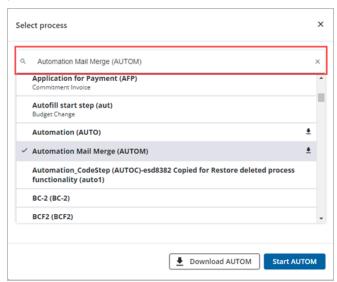


Filters Panel with Live View Enabled

The following fields are available in the **Filters** panel:

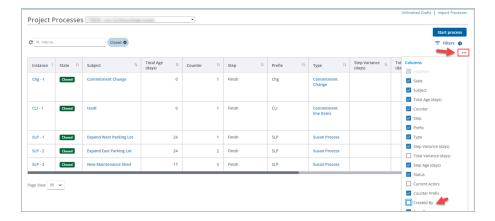
- Process: Enter or select a specific process type to filter records by. The type of process selected in this field determines the buttons that display on the page and the statuses or steps available.
- All Processes: Select this option to filter by all processes including processes in your court, processes you initiated and all processes.
- In My Court: Select this option to filter by processes in your court.
- Initiated By Me: Select this option to filter by processes you initiated.
- Draft: Select this check box to filter for draft processes.
- Open: Select this check box to filter for open processes.
- Closed: Select this check box to filter for processes that have been closed.

- Status: Enter or select a specific process status to search for and filter records by. If no Process Type is selected, then the Status list will display all Process Status Options from the process setup. Once a specific Process Type is selected, then the list is narrowed to the account defaults and the statuses included in the process design.
- Step: Enter or select a specific process step to search for and filter records by. Note that you
 will be able to select a step only after selecting a specific process type.
- Live view: Enable this toggle to immediately retrieve data as filters are changed in the Filters panel. When the Live View has been turned off, the Cancel and Apply buttons at the bottom of the Filters panel will be available to use. You will then need to select multiple filters and then manually apply them by clicking Apply to retrieve the results.
- Start New Process Instances: Use either of the following methods to start a new process instance:
 - Start a process: To start a new process instance, click the Start Process button. In the Select Process Window that is displayed, enter search criteria in the search box, select a process and then click Start.



Search box in the Select Process Window

- Start a selected process: When a process type is selected from the Filters panel, the Start
 <selected process> button will be available on the Project Process page.
- Select display columns: Click the *** icon to access a list of available columns and then select which columns to display in the grid by selecting or clearing the check boxes.



- Grid: You can perform the following grid display actions on this page:
 - Sort: Sort the rows by clicking on the header text or on the sorting arrow icons in any column header.
 - Resize Column Width: Click and drag the borders of any column header to re-size the column.
 - Reorder Columns: Click and drag column headers to change the order of the columns.
 - Page View: Select the number of rows to display per page from the Page View drop-down list.
 - Navigate through Pages: When multiple pages of results are available, you will be able to click a page number to move to it.

Tip: You can change the Display Density settings to adjust the amount of white space that appears between each row in the grid on this page. (Setup> My Settings> Preferences> Interface Settings)

Processes Tab

- Processes Table: This table displays the results of your filter. This table lists detailed information
 about the process, including the process name, subject, in which step it's in, its duration in the current step, the due date and status. Processes that are grayed out are completed and those whose
 titles are in blue are currently active. Click the process number or subject to open the Process
 Details page.
- Print: This button is displayed only if there is an active process details mail merge template
 assigned to the selected process type. To print process details, select the check box next to the
 desired process and then click print for a printed copy of the process.
- Log: If a process log mail merge template is not assigned to this process, the default template is
 used. To print a process log, select the check box next to the desired process(es) and then click Log
 to generate a Microsoft Word® version of the process log. Please note that specific line items are
 not available in the process log. If available, the log includes merged data fields and comments.

Note: Your e-Builder administrator can customize the process log mail merge template, if you have a need for additional fields please contact your e-Builder administrator.

Reports Tab

Not all Process standard report subtypes are displayed on the Reports tab. Only the Process Log, Process Line Items, and Process Routing History standard report subtypes are shown here.

- Reports Tab: Click this tab to access a list of reports that have been generated for the selected process type.
- Add Report: Click this button to launch the Report Wizard and add a new report.

Start Processes

You can start processes that have been configured for your account. You can also configure your workflow process so that it can start offline.

To start a process

- 1. Click the **Processes** tab located at the top of the page.
- 2. Choose a project from the All Projects menu.

The Project Processes page is displayed.

3. Click Start Process.

The Start Process window is displayed with a list of all available processes for this account.

To start a process on a project

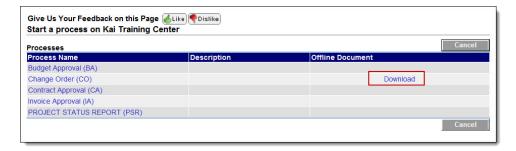
- 1. Start a process.
- 2. On the Start Process window, click the name of the process you want to start.
- 3. Complete all required data fields.
- 4. Depending on your account settings, you can optionally attach documents, process, forms, or viewpoints to the process.
- 5. To finalize the process, take any of the following actions:
 - Click Submit to submit the process step.
 - Click **Print** to print the select tab.
 - ° Click **Save Draft** to save changes to the process step and return to the item later.
 - Note: After 5 minutes of inactivity, the process will be autosaved as a draft.
 - ° Click Cancel to close this window and cancel this action. All unsaved data will be lost

To start an external workflow process

Internal Trimble Unity Construct user:

1. Start a Process.

The Start a process window is displayed. All workflows configured for offline initiation have a **Down-load** link in the Offline Document column.



- 2. Click the Download link.
- 3. Save this file to your computer.

Note: You can save the file either as a (.doc) or a (.docx) file.

4. Email this file to the external process participant so that they can start the process workflow.

External Participant:

- 5. Open the process document and complete the necessary fields.
- 6. Save the file.

Note: Save the file either as a .doc or a .docx file.

7. Email it to the address located in the directions section at the end of the document.

The workflow process will be initiated and updated in Trimble Unity Construct, ready for action to be taken on the next step in the workflow.

Unfinished Drafts Page

This page allows account administrators and users with the appropriate permissions to see and take action on draft forms and processes. Draft processes and forms are created for many different reasons. At times, team members do not remember to use a draft process and create a new one or co-workers who are unable to see the draft processes/forms of others do not know the draft exists and submits a new process for the same item. Permission settings to view drafts are located in the properties of the form and process, see the following links for more information:

- · View Draft Forms Permission
- · View Draft Processes Permission

To access the Unfinished Drafts page

- 1. Click the **Processes** tab located at the top of the page.
- 2. On the top-right corner of the tab, click **Unfinished Drafts.**

Fields and button descriptions

• **Show**: Narrow the results in the table below it. All processes / forms are selected by default. Make a selection to see drafts for a specific process / form.

- Project Name: Name of the project associated with the draft form / process.
- Form Type: Name of the form type.
- Process Type: Name of the process type.
- Subject: Subject of the draft form / process.
- Created By: Name of the person who created the draft form / process.
- Date Created: Date the draft was created.
- **Type**: Indicates whether the form is a workflow or static form. Workflow forms are routable and facilitate two-way communication. Static forms cannot be routed they are used mainly to disseminate information. To learn more, see About Forms.

Working with Process Instances

Depending on your access rights (actor or non-actor) the system will determine what you can action on a process. All actors on the process must complete required fields before any actions can be taken.

To access the Process instance page

- 1. Click the **Processes** tab located at the top of the page.
- 2. Choose a project from the All Projects menu.
 - The Project Processes page is displayed.
- 3. Filter for the process whose details you want to view.
- 4. Click the process number or subject of the process you want to access.

The Process instance page is displayed.

On the Processes page, you can click to view a process. To view only the processes for a project, select the project from the drop-down list.

To take action on a process

- 1. Access the Process instance page.
- 2. Complete all required data fields.
- 3. Depending on your account settings, you may or may not have the option to take any of the following actions:

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- 4. Before finalizing the process step you can take any of the following actions:
 - Click Check Spelling to check the spelling of the selected tab.
 - ° Click the **Show Routing History** link to view the routing history of this process step.
 - ° Click the **Show Workflow Diagram** link to view the workflow diagram of this process.
 - ° Click **Print** to print the select tab.
 - Click Save to save changes to the process step and return to the item later.
 - Click Cancel to close this window and cancel this action. All unsaved data will be lost.

Troubleshooting Code Step Errors

If a Code Step error is displayed, make sure that you read the most recent comment on the Comments tab for more details or instructions on resolving the error. After resolving the error, click the **Retry Code Step Execution** button in the Error message to proceed.

Note: If you click the **Retry Code Step Execution** button before resolving the current error, a new error will be generated and added as a new comment on the Comments tab.

Mail Merge - Combined Attachment Size Limit

While executing automated steps, a Mail Merge error may be caused by large total upload size exceeding 300 MB. Trimble Unity Construct will check the combined file size of all attachments and display an error if the combined file size exceeds 300 MB.

Note: This limit does not apply to the manual Mail Merge Templates option.

As a workaround, you can use the Print feature to download the files instead. Note that the files can only be printed if they are viewable in PDF format.

To print attached documents

- 1. On the process instance details page, click the **Print** button. The Mail Merge Templates popup is displayed.
- 2. To use a template, select the **Merge Templates** option and select a template from the drop-down list.
- 3. Select the Print Attached Documents check box to download the files to your computer.
- 4. To proceed, click **Print**. The Document Print Options window is displayed. You can reorder the files here, if needed.
- 5. Click Print.

Note: If the output file exceeds 50 pages, you may be asked to confirm the file download by clicking OK.

Fields and Buttons

Below are descriptions of the fields and buttons located on this page.

Toolbar / Actions

- Accept/ Decline: The option to accept or decline to act on a process step is only available if there
 are multiple actors on the step. If you click Decline, the process step will no longer appear in your
 court.
- Workflow Override: This button is displayed only for administrators and users with Manage Workflow permissions. Click this button to override the step and move the process instance to another step in the process.
- All Fields View: This button is displayed for administrators and users with Manage Workflow permissions only. Click this button to view a list of all data fields and their values for the process.

- Show History: Click this link to open the Routing History page and view an audit trail of the process.
- Show Workflow Diagram: Click this link to view the workflow diagram. The current step will be high-lighted.
- Current Actors: Click this link to view current actors on the process steps.
- Take Action: Click the drop-down arrow to the left of this field to select an action to take, and then
 click this button to take the action. Taking action will move the process to the next step in the workflow.
- Check Spelling: Click this button to check the spelling of data fields on this page.
- Submit: Click this button to complete the start step when initiating a process.
- **Forward**: This button only appears if the step has been configured for flexible routing by your account administrator. Click this button to forward the process to another user on the project.
- **Reply**: This button is only displayed if the step has been configured for flexible routing by your account administrator. Click this button to reply to the user on the project that forwarded the process to you.
- Print: Click this button to print the process step. Based the settings for this step, this button may or
 may not appear. For more information, on disabling the printing option for a process step, see Edit
 Step Page Overview.
- Copy: This button is displayed for processes that are already in progress. Click this button to duplicate the process instance. This capability allows you to carry over existing, reusable information, reducing data entry efforts. Once a process instance is copied, data entry fields are copied as well, such as custom fields, data fields, company and contact information and reason codes. If this is a cost process, all cost data is also carried over with the exception of line items and dynamic line items.
- Delegate: Click this button to delegate the current step to another user on the project.
- Save: Click to Save the current filled out data and return to it at a later time.
- **Delete Draft**: This button is available only for account administrators, the process initiator and users with the permissions to access draft processes. Click to delete the draft. To learn more about managing draft processes, see View Draft Processes Permission.
- Cancel: Click this button to cancel the current action. All unsaved data will be lost.
- Map location: If the process has been geo-enabled, click the Choose from map button to view the map and select the process location. Once a map location has been added, click XYZ coordinates to see the coordinates along 3 axes. You can also use the Map Tools.

Details tab

The Details tab lists all data fields for the process.

Note:

 If you're an actor on the step, required fields must be completed before you can take an action on the step. • File fields may or may not include a thumbnail of the attached file. Administrators can choose to show thumbnail images by selecting the Show Attachment Thumbnail check box on the File Data Field Properties page. For instructions on accessing this page, see Add Data Fields.

Comments Tab

Displays a list of comments added to the process in chronological order. Date and time stamps are also included. The Comments tab also displays comments containing more details or instructions to resolve any code step errors.

If a comment was entered by a user (commenter) on behalf of another (delegator), the user IDs of the commenter and the delegator will be displayed.

Note: The commenter will not be able to delete their comment once they have left the delegation session. However, the delegator is able to delete the comment left by the commenter.

If a document or process is attached, it also can be referenced here. From here you can also add and request comments.

Attached Documents Tab

From this tab you can download and view a list of documents attached to the process. You can also attach documents as a reference or supporting evidence, such as a sketch, plan, specification, or budget.

Attached Processes Tab

On this tab, you can attach or view a list of processes attached to the process.

Attached Forms Tab

This tab will only appear if the Forms module is enabled on your account. Click the Attached Forms tab to view a list of forms attached to the process. You can also attach forms as reference or supporting evidence.

Attached To Tab

Displays a list of processes that this process is attached to.

Accept/Decline Process Step

The option to accept or decline to act on a process step is only available if there are multiple actors on the step.

If you are a potential actor on a step (a user that can take action) and there are more than one potential actors, then each of you can choose to accept or decline ownership of the step. Accepting or declining a process step lets other potential actors know of your intentions. This feature is strictly informative; you do not have to accept or decline the step to take action on it. If all other potential actors have declined the step and you are the last one then you can only accept taking action on the step.

Process steps with the option for you to accept or decline are displayed in your court on the Home tab. When you decline taking action on a step, the item is no longer displayed in your court. When you accept or decline to take ownership of a process step, Trimble Unity Construct automatically tracks the date and time in the Routing History.

Tip

To see who else has accepted or declined this process step, click the Show Routing History link, click the

Step Name, and then click the Actors tab.

To accept or decline to act on a process step

- 1. Open the Process Instance page.
- 2. Click Accept or Decline, which is located in the upper left-hand corner of the page.

Take Action on a Process

To take action on a process step

- 1. Open the Process Instance page.
- Click the drop-down arrow located to the left of the Take Action button and make a selection from available options.
- 3. Click Take Action.

Note:

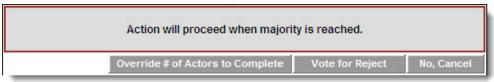
- You are not required to click the **Take Action** button if the process has been configured to
 allow the action to take place by simply making a selection from this drop-down menu. For
 more information on this setting, see Workflow Properties Page Overview.
- If this action requires you to electronically sign a document, the signing process instance page will appear.
- 4. If: You are prompted to comment and select reviewers:

Enter comments. If applicable, choose whether to make your comments private by selecting the **Private** check box, select reviewers from the **Available Users** box, and then click **Add**. Click **Yes**, [action name] to send comments and request reviews.



5. If: You are prompted to vote:

Click **Vote for [Action Name]** or **No, Cancel**. If you are an administrator, you have the option to override the number of actors needed to complete the action.



Electronically Signing (e-Sign) Documents

Once a process step is configured with a signing action, this action will be listed in the Action drop-down menu for you to select.

Note: Only PDF files can be electronically signed.

To electronically sign a document in Adobe Acrobat Sign

- 1. Open the Process Instance page.
- 2. Complete all necessary fields.
- 3. Click the Action drop-down arrow and select the signing action.

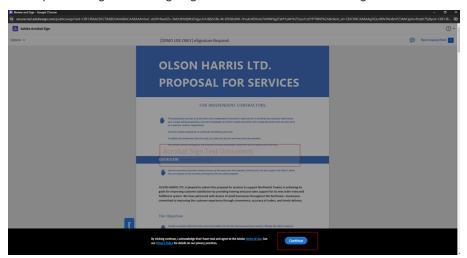
Note: Step names are configurable; therefore, the name of this step will be different for every user.

4. Click Take Action.

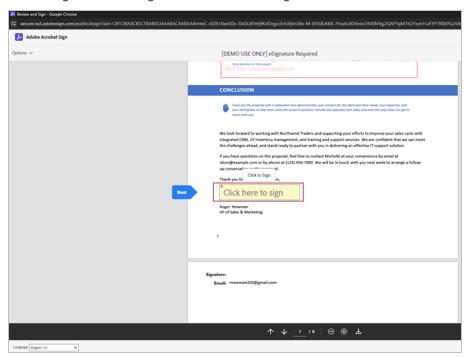
A message prompting you for an electronic signature is displayed.

Note: You are not required to click the **Take Action** button if the process has been configured to allow the action to take place by simply making a selection from this drop-down menu. For more information on this setting, see Workflow Properties Page Overview in the Online Help.

- 5. Click the link, Click here to review and sign your document(s).
- Click Continue to agree to Adobe's terms of use.
 This opens an agreement signing session in Adobe Acrobat Sign.



- 7. Click **Start** to navigate to the location where your signature is necessary.
- 8. Click to sign at each e-Signature location in the agreement.



9. Select **Apply** once you determine your preferred method to e-Sign. You can type your name, draw your signature or select a signature image from your computer or use your mobile device to easily draw or capture your signature.



Type Name Option



Draw Signature Option

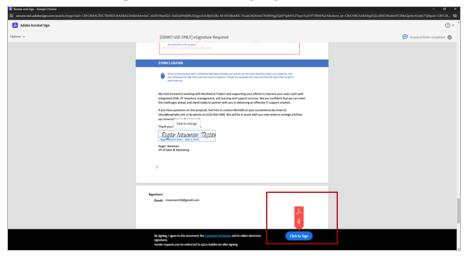


Select Signature Image Option



Use Mobile Device Option

10. Click the Click to Sign button to end the signing session.



Ending the Signing Session

A success message will be displayed on the e-Builder page.

11. Click Continue to complete this step and send the process to the next workflow step.

To electronically sign a document in DocuSign

- 1. Open the Process Instance page.
- 2. Complete all necessary fields.

3. Click the Action drop-down arrow and select the signing action.

Note: Step names are configurable; therefore, the name of this step will be different for every user.

4. Click Take Action.

A message prompting you for an electronic signature is displayed.

Note: You are not required to click the **Take Action** button if the process has been configured to allow the action to take place by simply making a selection from this drop-down menu. For more information on this setting, see Workflow Properties Page Overview in the Online Help.

- 5. Click the link, Click here to review and sign your document(s).
- 6. Click Review Document.

The file opens in DocuSign.

- 7. Review and locate where your signature is necessary.
- 8. Drag and drop your signature from the Signature Context menu.

Note: This context menu displays by default, but should you need to reopen it, click the pencil icon

9. Click Finish.

You are prompted for confirmation.

10. Click Yes.

A success message displays on the e-Builder Process Instance page.

11. Click **Continue** to complete this step.

Forward Process Step

The ability to forward a process instance may or may not be available on a process step depending on process settings. If your e-Builder administrator enabled flexible routing, then the Forward option is available, otherwise you are not able to forward the process step. You can only forward to non-actors on the step. You are not restricted on taking action on the step while you wait for a reply from the recipient.

To forward a process step

- 1. Open the Process Instance page.
- 2. Click Forward.

The Forward Process page is displayed.

- 3. Click the **Select Recipient** drop-down arrow and select a recipient.
- 4. If applicable, to make your comment private, click the **Private** check box.
- 5. Enter your comment in the Comment box.
- 6. Depending on your account settings, you can optionally attach documents, process, forms, or viewpoints to the process.
- 7. Click Forward.

Comment / Request Comments on Processes

Comment on Processes

To comment on a process, the process does not need to be in your court. That means you can add a comment any time, even when the process step is closed. Both actors and non-actors have the ability to comment on a process step.

To add a comment

- 1. Open the Process Instance page.
- 2. Click the Comments tab.
- Click Comment.

The Add Comment dialog box displays.

- 4. Enter your comment in the **Comment** box.
- 5. Depending on your account settings, you can optionally attach documents, process, forms, or viewpoints to the process.
- 6. Click Add Comment.

Request Comment on Processes

Only actors on the step can request comments. Comments can be requested from internal e-Builder users or external project participants who may not have access to the project via e-Builder.

To request comments

- 1. Open the Process Instance page.
- 2. Click the **Comments** tab. For detailed information about the fields located on this page, see below.
- 3. Complete all required fields.

Tip

When adding external participants to the message, use your keyboard to auto-fill the desired email addresses. Begin typing the recipient's name or email address then use the arrows to highlight the email of choice, and then click **Tab** to make the selection.

4. Click Request Comment.

Request Comment Field Descriptions

Below are descriptions of the fields and buttons located on this page:

- Request Comment: Click this button after all fields have been completed and you are ready to send the request for comment.
- Cancel: Cancels the comment request and close this window. All data will be lost.
- Select from Users on Project: Select the users you wish to request a comment from, and then click the right arrow to add them to the adjacent box.
- All Users:Use this drop-down section to narrow down the list of users by user role.

Enter External Users Email: You have the ability to request comments from external project
participants who may not have e-Builder access. Enter their e-mail addresses (one per line) in
this box. If these participants are saved in the project's contact list, you can click Lookup to
search for them or begin typing the recipient's name or email address to use the auto-fill feature.

Tip

Use your keyboard to input this field. Start typing the recipient's name or email address then use the arrows to highlight the email of choice, and then click **Tab** to make a selection.

- Allow external users to attach files? Select this check box to allow external users to attach
 files with their comment. When selected, you are prompted to select a folder that recipient's files
 will be loaded into.
- **Respond By**: Enter a date by which recipients should respond by. Click the Calendar icon to select a date from the calendar.
- Message: Enter a message to accompany the request for comments.
- Private: If this option is available to you, select or clear the Private check box to make your comment either private or public.

Note: The Private Comments feature can be enabled by account administrators. This feature allows only users in select roles to view and add private comments. For more information, see Manage Private Comments.

Attach to a Process

Attach Documents to a Process

Depending on your account settings, you may be able to attach documents to a process. The user who attached the documents, an administrator or anyone with manage document permissions can remove the attached documents.

To attach documents to a process

- 1. Open the Process instance page.
- 2. Click the Attached Documents tab.
- 3. Click Attach Documents.
- 4. To upload a file from your computer:
 - a. Click Upload from your Computer.
 - b. Select a destination folder and click Select.
 - c. Click **Browse** to search for files to upload or drag and drop a file from your computer.
 - d. Click Done.
- 5. To select a file from the project's Documents module:
 - a. Click Select from Documents Module.
 - b. Select the file(s) and click **Attach**.

To remove attached documents from a process

- 1. Open the Process instance page.
- 2. Click the Attached Documents tab.
- 3. Select the check box next to the form you want to remove, and then click **Remove Documents**.

Note: For process instances that have already been submitted (not drafts), the word "Removed" is displayed in parentheses next to the document title, indicating that it was removed from the process. You're able to reattach the document by clicking the **Reattach** link located underneath the title of the document.

Attach Processes to a Process

Depending on your account settings, you may be able to attach processes to a process. The user who attached the processes, an administrator or anyone with manage process permissions can remove the attached processes.

To attach processes to a process

- Open the Process instance page.
- 2. Click the Attached Processes tab.
- 3. Click Attach.

The Attach Processes page is displayed.

- 4. Filter for the processes you want to see.
 Results are displayed in the table below.
- 5. Select the check box next to the processes you want to attach.
- 6. Click Attach.

To remove attached processes from a process

- 1. Open the Process instance page.
- 2. Click the Attached Processes tab.
- 3. Select the check box next to the form you want to remove, and then click Remove .

Note: For process instances that have already been submitted (not drafts), the word "Removed" is displayed in parentheses next to the process title, indicating that it was removed from the process. You're able to reattach the process by clicking the **Reattach** link located underneath the title of the process.

Attach Forms to a Process

Depending on your account settings, you may be able to attach forms to a process. The user who attached the forms, an administrator or anyone with manage form permissions can remove the attached forms.

To attach forms to a process

- 1. Open the Process instance page.
- 2. Click the Attached Forms tab.
- 3. Click Attach.

The Attach Forms page is displayed.

- Filter for the forms you want to see.
 Results are displayed in the table below.
- 5. Select the check box next to the forms you want to attach.
- 6. Click Attach.

To remove an attached form from a process

- 1. Open the Process instance page.
- 2. Click the Attached Forms tab.
- 3. Select the check box next to the form you want to remove, and then click Remove Forms.

Note: For process instances that have already been submitted (not drafts), the word "Removed" is displayed in parentheses next to the forms title, indicating that it was removed from the process. You're able to reattach the forms by clicking the **Reattach** link located underneath the title of the forms.

Delegate a Step in a Process

If you are an actor in a step, you can choose to delegate a step in a process to another project participant. You can only delegate if there is not an action that requires a vote (or requires a majority or all to vote on the action to execute it).

You may choose to delegate a step because you do not have the time to address the item or could use some help to address it. When you delegate the step, you are granting this user to be a temporary actor. In other words you have given this other user absolute rights to act on your behalf as an actor.

Note: The ability to delegate steps is only available if your e-Builder Administrator has enabled this feature in the Administration Tools (Processes > Manage Processes > Properties tab > Enable the Ability to Delegate Work)

To delegate a process step to another user on the project

- 1. Open the Process instance page.
- 2. Click Delegate.

The Delegate Full Authority page is displayed.

- 3. Click the **Select a Role** drop-down arrow to select the role that the delegate belongs to.
- 4. Click the **Select a User** drop-down arrow to select the delegate.
- 5. Click **Delegate Authority**. The delegate receives an email notification and can take action on the process. The subject of the email contains DELEGATED

View Routing History

Users have the ability to view the routing history for the process steps that they have access to. The routing history of a process step includes the actors that have taken action on each step of the process thus far. You can view the action taken and the date and time stamp when it was completed. The age of the step and current status is also available.

To view routing history

- 1. Click the **Processes** tab located at the top of the page.
- 2. Choose a project from the **All Projects** menu.
 - The Project Processes page is displayed.
- 3. Filter for the process whose details you want to view.
- 4. Click the process number or subject of the process you want to access.
 - The Process instance page is displayed.
- 5. Click the **Show History** link located directly below the process document title.

Routing History Page Field Descriptions

The fields and buttons located on this page are:

Toolbar Buttons

- Show Workflow: Click to view the workflow diagram. The current step will be highlighted.
- Cancel: Click this button to cancel the current action and close out of this page.
- Export to Excel® icon: Click to export the steps and/ or data history table to an Excel spreadsheet.

Details

- · Name: The name of the process.
- Status: The current status of the process.

Steps

This section lists step details for all the steps that the process has gone through up until now.

- **Step Name**: Click the step name to view step-specific routing history. A separate window opens that includes an Actors tab, which offers additional information about the actors involved in the step, the actions they've taken and whether or not they've accepted or declined the step. From here, click the **Show Full History** button to return to the previous page.
- Actor: This field lists the actor in the step. If multiple actors exists on the step, click on the Current
 Actors link to view all actors and the actions they took.

Note: The word (removed) appears next to actors that have been removed from the role, project, or account.

- **Due Date**: The step due date.
- · Completed: The date and time the step was completed.
- Age(d): The amount of days this step has been in progress.
- · Status: The current status of the step.

Tabs

Data Fields: Displays the changes performed on the fields, including the old and new values, the
user who performed the edit, or the user who performed the edit on behalf of another user (access
delegation).

 Comments: Displays comments added by users, including those entered on behalf of the user through Trimble Unity Construct's access delegation feature. Also includes actions taken in the process as well as attached documents.

View Process History

The Process History tab captures every detail of every action taken on a process. It also captures who viewed a process instance and when workflow overrides were completed. These details are especially important for cost and approval related actions. In addition, these records can also be exported and printed from this page.

To access the Process History page

- 1. Go to the Process Details page.
- 2. Click the **Show History** link located on the Process Instance page.
- 3. On the Routing History page, click the **History** tab.

View Process History Field Descriptions

Below are descriptions of the fields and buttons located on this page.

Toolbar Buttons

- Show Workflow: Click to view the workflow diagram. The current step will be highlighted.
- Cancel: Click this button to cancel the current action and close out of this page.
- Export to Excel® icon: Click to export the steps and/ or data history table to an Excel spreadsheet.

Details

- Name: The name of the process.
- Status: The current status of the process.

History

This section lists step details for all the steps that the process has gone through up until now.

- Name: Displays the name of the person that took action on the step.
- Company: Displays the company name associated with the person that took action on the step.
- **Time Step:** Displays the date and time the action was taken.
- Step Name: Displays the name of the step the action was taken on.
- · Access : Displays the method in which the step was accessed.
- **Description:** Displays a description of the action taken.

View Workflow Diagram

The workflow diagram is available for you to see the process in its entirety. While working on a process step, as the actor (or non-actor) you are taking action on a specific step that is part of a larger process. The workflow diagram can be viewed from two pages within the Processes module:

- · Process Instance Page: Click the Show Workflow Diagram link.
- Routing History Page: Click the Show Workflow button.

Print Process Information

Printable process information is based on the mail merge templates created by your e-Builder administrator. You have the ability to print process details, which includes line item information and process logs, which do not include specific line items.

To print process details

Note: The Print button is only displayed if there is an active process details mail merge template assigned to the selected process type.

- 1. Access the Project Process page.
- 2. Filter for the process type you want to print.
- 3. Select the check box next to the desired process(es).
- 4. Click Print.

A Microsoft Word® document displays with the selected process information.

To print process logs

- 1. Go to the Project Processes page.
- 2. Filter for the process type you want to print.
- 3. Select the check box next to the desired process(es).
- 4. Click Log.

A Microsoft Word® document displays with the selected process information.

Import Processes

e-Builder's Import Process Wizard guides you through the process instance import steps, letting you easily map the data in the import file to the data fields in e-Builder and preview the results prior to finalizing the process import. This eliminates the need for duplicate data entry.

Import File Requirements

MS Excel files are supported while importing processes. To determine the fields or columns that need to be included in the import file, use either of the following methods:

- If you are a first time user who has Import Process permissions, you will need to upload any
 MS Excel file in Step 1 of the Import Wizard in order to advance to the next step. On Step 2, which is
 the Import Field Mappings step, all available fields that can be mapped using the Import Wizard will
 be displayed. Then you can map these fields in the MS Excel file.
- The other method for understanding what fields/ columns may be included in the Excel file, without
 actually uploading an Excel file, would be to run a Standard Report of type "Process Log" and then
 select the specific process you wish to import. That will then allow you to advance to the Select
 Columns step of the Standard Report wizard where a list of all process fields which may be mapped
 via the Process Import will be displayed.

Note: The MS Excel file being uploaded on Step 1 of the Import Process Wizard is not required to include the same exact column names. You will be able to map any header fields in the Import File to the available Process Data Fields. However, our best practice recommendation for the Import File is to copy and paste the exact Process Data Field names into the header row of the Excel file, so that when Step 2 of the Import Wizard loads, it will already have mapped the import file header names to the Process Data Fields on a one-to-one basis.

You can import processes and processes with Cost for different projects.

Import budget change rules

Note: If currency has been set for your project, the exchange rate locked in for the imported budget change will depend on several factors.

Budget has a locked in rate:

- Approving imported budget change with non-zero line items will lock in an exchange rate for the imported budget change. The exchange rate used will depend on the budget change approval setting.
- · Approving imported budget change with zero line items will not lock in an exchange rate.

Budget has no locked in rate:

The first non-zero imported budget change that you approve will lock in the rate for the budget as
well as the budget change. The exchange rate used will depend on the budget change approval
setting.

To import processes

- 1. Click the **Processes** tab located at the top of the page.
- 2. On the Processes page, click Import Processes. The Import Processes wizard is displayed.
- 3. On Step 1: Select Import File, select the file to use in the import. The fields visible in Select Process Type to Import section are:
 - Project Identifier: Select a project number custom field from this drop-down list. Project numbers offer an additional way for users to identify the project when your organization may use other project classifications. The options available in this drop-down list have been configured in the Project Settings page by Administrators.
 - Process Level: Select either of the following process levels:
 - Account: Select this option to choose an account level process.
 - Project: Select this option to choose a project level process.
 - Project: Select a project to filter process types and narrow down the process list. This dropdown list becomes active only when Project option is selected in the Process Level field.
 - Process Type: Select a process type. This drop-down list becomes active when either account
 or project options are selected in the Process Level field. Additional fields may be displayed
 depending on the type of process selected in this field.

- Create as Draft: Select this check box to create the imported process instance(s) as a draft without submitting it.
- Read-only Field Updates: Choose either of the following options to define the updates made when values differ from existing ones:
 - Results in exception and process data will not be imported: Select this option so that any results in exception and process data will not be imported.
 - Shows warning and all process data will be imported and/ or overwritten: Select this option so that all process data will be imported and/ or overwritten after displaying a warning message.
- o Import file: Click Choose File to browse for and select the file.
- 4. Click Next to move to the Step 2 of the Import Wizard.
- 5. On Step 2: Fields Mappings, the following Process Header fields can be mapped.
 - Process Built-In Fields: In this section, select the fields to be mapped to the process fields.
 Note that some fields may be required.
 - Process Data Fields: The Process Data Fields vary based on the process selected. Map the files as per your requirements.
- 6. Click Next to move to the Step 3 of the Import Wizard.
- 7. On Step 3: Review, go through the Import File Summary and preview the Process Built-In Fields and Process Data Fields. Any exceptions and warnings will also be displayed at this step and you can resolve them by re-importing the file if needed.
- Click Import.
 A confirmation message is displayed after the processes are imported successfully.

Working with Lookup Processes

Lookup processes are configured by the account administrator. They link primary and dependent processes to one another. In many cases Trimble Unity Construct workflow processes are connected and flow from one to another through the project life cycle. Lookup processes allow you to see with ease if, for example, a change order is tied to a potential change order, and if that potential change order is linked to one or more RFIs so that it is clear what led to the change order. Trimble Unity Construct provides you with a way to view primary processes that are linked to dependent processes from both the Primary process page and the Dependent process pages. For every Primary process, there is a list of all its dependent process data-field combinations, along with functionality so that you can directly add a new dependent process or attach an existing dependent process.

The following are actions you take regarding lookup processes:

- · View Linked Processes
- Add New Dependent Process
- Attach Existing Dependent Process

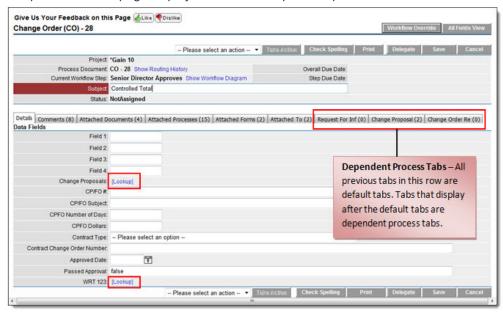
For account administrators who wish to configure lookup processes, see Set up Lookup Processes.

View Linked Processes

To view linked processes

- 1. Go to the Project Processes.
- 2. Filter for the primary process type you want to view.
- 3. Click the process number or subject of the process you want to view.

The process details page displays with tabs of dependent processes.



- 4. You have the option to take any of the following actions:
 - Click the **Lookup** links to attach a data field that supports the primary process, i.e. select from a list of proposed change orders.
 - Click any of the dependent process tabs to add a new dependent process or attach existing dependent processes.

Add New Dependent Processes

Only actors on the step can perform this action. Depending on the level of permissions a user has, you can add a new dependent process from any of the dependent process tabs. Dependent processes such as potential change orders might be added change orders as supporting evidence.

To add new dependent processes

- 1. Go to the Process instance page.
- 2. Click the dependent process tab.
- 3. Click Add New.

The Start Process page is displayed.

4. Enter all required fields.

Click Submit.

The dependent process you just added appears on the dependent process tab.

Note: After this task is complete, you can take any of the following actions to finalize the process step:

- Click Check Spelling to check the spelling of the selected tab.
- Click the Show Routing History link to view the routing history of this process step.
- Click the Show Workflow Diagram link to view the workflow diagram of this process.
- · Click **Print** to print the select tab.
- Click **Save** to save changes to the process step and return to the item later.
- Click Cancel to close this window and cancel this action. All unsaved data will be lost.
- · Take an Action
- Delegate Process Steps (Only actors are able to perform this action. This action may or may not be available, depending on the process settings)

Attach Existing Dependent Process

Only actors on the step can perform this action. Depending on the level of permissions a user has, you can add an existing dependent process from any of the dependent process tabs.

To add existing dependent processes

- 1. Go to the Process Details page.
- 2. Click the dependent process tab.
- 3. Click Attach Existing.

The Filter Process page is displayed.

- 4. Filter for the dependent process(es) you want to add.
- 5. Select the check box next to the process(es) you want to add.
- 6. Click Attach Existing. The dependent process you just added appears on the dependent process tab.

Note:

After this task is complete, you can take any of the following actions to finalize the process step:

- Click Check Spelling to check the spelling of the selected tab.
- Click the Show Routing History link to view the routing history of this process step.
- Click the Show Workflow Diagram link to view the workflow diagram of this process.
- Click Print to print the select tab.
- Click **Save** to save changes to the process step and return to the item later.
- Click Cancel to close this window and cancel this action. All unsaved data will be lost.
- Take an Action
- Delegate Process Steps (Only actors are able to perform this action. This action may or may not be available, depending on the process settings)