Introduction to PTC Windchill Service Information Manager 11.0

Overview

In this course, you will learn how to complete basic functions to navigate and view information within Windchill Service Information Manager. You will also learn how to access and navigate the Windchill Service Information Manager environment, view product information, manage assigned tasks, and perform basic work management functions. After completing this course, you will be able to complete basic Windchill Service Information Manager tasks and activities, as well as have a better understanding of how to use the Windchill Service Information Manager system.

At the end of each module, you will complete a set of review questions to reinforce critical topics from that module. At the end of the course, you will complete a course assessment in PTC University Proficiency intended to evaluate your understanding of the course as a whole.

This course has been developed using Windchill 11.0 F000.

Course Objectives

- Understand the Windchill Service Information Manager environment and terminology
- Locate product information
- View product information
- Use Windchill Service Information Manager tools to manage your work
- Participate in Windchill Service Information Manager processes

Welcome to this PTC Training Class

Prior to using the training materials in this course, please read the information in the following pages. This information explains how to:

- Use the training materials most effectively.
- Navigate within the training components.
- Use the simulation technology (where applicable).

Computer Settings

This training material has been designed for optimal viewing at a screen resolution of 1280 x 1024 pixels. Please contact your IT administrator if you are unsure of your resolution settings, or need help changing these settings.

Navigating within the Training Components

The information in this Web-based course is organized into modules, which are comprised of topics. Each topic is divided into one or more of the following sections:

- Concepts
- How To: Video
- How To: Steps
- Exercises
- Simulated Exercises

Concepts

Concepts contain both text and images, providing detailed information about the theory, purpose, and use of a software component.

How To: Videos

How To: Videos demonstrate the application of the concept within the software. Each video includes an audio track.

How To: Steps

How To: Steps provide step-by-step instructions on how to use the software. In many cases, How To: Steps document what is shown in the video.

Additional How To: Steps are also provided for practice.

How To Steps can also be used as a reference when applying what you have learned.

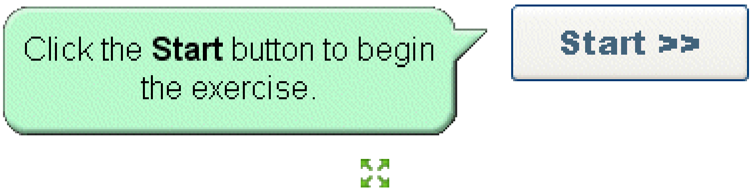
Exercises

Exercises do not have step-by-step instructions and require you to use the knowledge you have gained to complete the objectives.

Simulated Exercises

Simulated exercises are interactive, instructing you to perform an action that will advance you to the next step. If you are unable to proceed, help call-outs will appear.

Simulated exercises begin with the scenario and objectives for the exercise. To start the simulated exercise, you click the Start button, as shown below.



The navigation toolbar contains buttons that enable you to control the simulated exercise:

- The Rewind button enables you to restart the exercise from the beginning.
- The Pause/Play button enables you to pause and restart the exercise.
- The Back and Forward buttons advance or rewind the exercise by one step.
- The slider bar enables you to find a specific step in the exercise.
- The Exit button enables you to exit the exercise.
- The Information button provides information about the exercise.

For use with a PTC University training environment.

Introduction to the Windchill Environment

Module Overview:

In this module, you learn some of the concepts and terms used throughout this course. By the end of this module, you will have a clearer understanding regarding the features and capabilities of Windchill and how they are used in the environment.

The purpose of this module is to provide you with a high-level overview of all of these features and capabilities. You learn more about all of them, including how to use them, in the modules that follow.

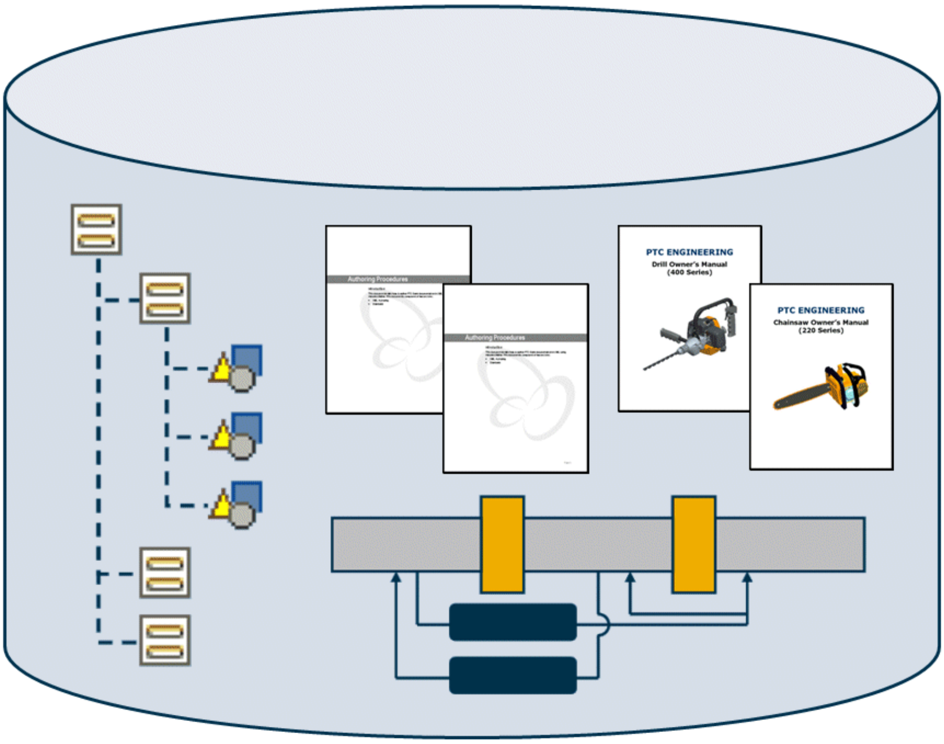
Objectives:

After completing this module, you will be able to:

- Identify and describe the capabilities of Windchill's primary object types.
- Identify Windchill storage locations, iteration and revision controls, process controls, access controls, and collaboration features.
- Access Windchill.
- Navigate within Windchill.
- Access Help.

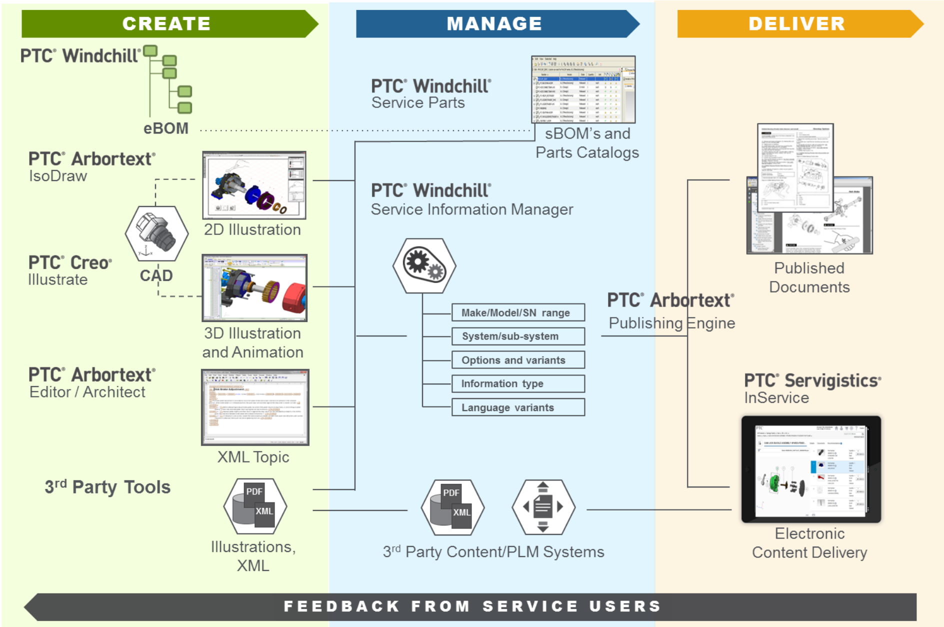
Introduction to the Windchill Environment

Windchill is a collaborative environment, enabled with today's latest Web technology, and has been designed to enable you to develop and manage data more effectively and efficiently. It provides your entire enterprise with a common information-sharing mechanism that stores and manages information, manages information evolution, controls access to information, and provides collaboration tools.



Your company's intellectual capital is often complex, multi-faceted, and can contain hundreds of relationships. Windchill is designed to manage this information and all of its required relationships. Consequently, to understand any specific feature of Windchill, you must also have an understanding of what its role is in the larger picture.

Introduction to Windchill Service Information Manager



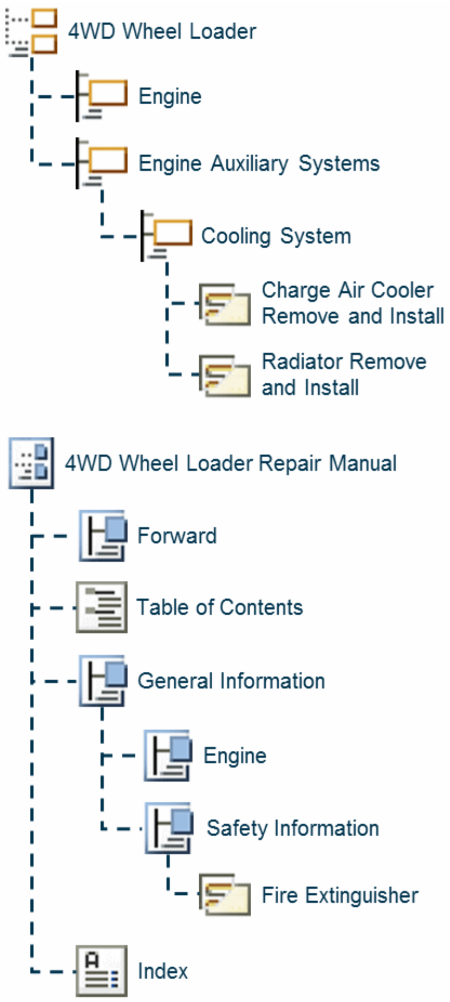
Service Information Manager

Windchill Service Information Manager (SIM) adds a product-centric information management layer to Windchill. SIM enables creation of an as-supported view of the product. This view is a breakdown of the product family's serviceable systems and components. SIM manages all product technical information and the relationships of this product technical information to product systems and product components. These may include the following:

- Disassembly and assembly procedures
- Test and adjust procedures
- Service bulletins
- Spare parts information
- Service effectivity

SIM enables creation of top-down information applicability rules, with inheritance. This identifies information variations and usage rules, which are applied at the system, component, content, and element level. SIM enables creation of publication layout structures which define the general organization of information within publications. Finally, SIM simplifies change impact analysis and management by identifying all information potentially impacted by an Engineering Change Notification, and enables management change processes.

Introduction to Windchill Objects



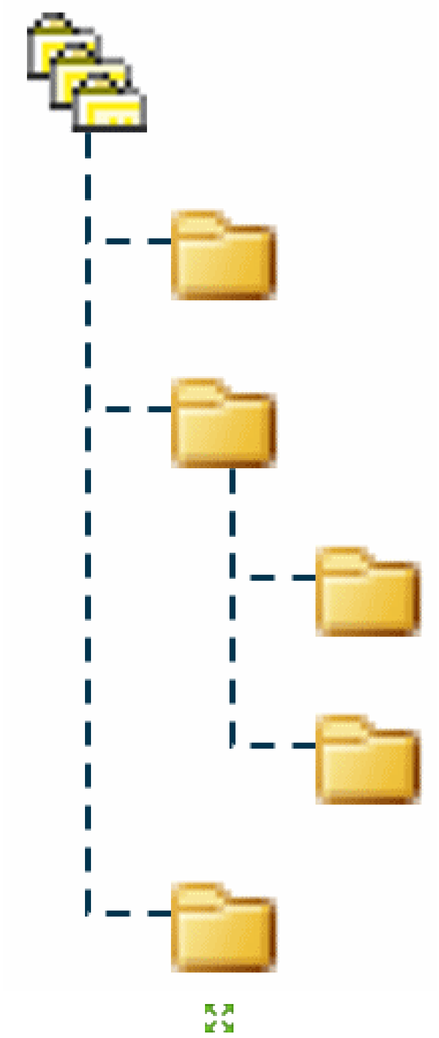
One of the main purposes of Windchill is to store and manage information and content. To accomplish this, Windchill uses business objects. Because data is often complex, you may need to store a number of different types of information. Windchill provides several types of objects to handle these different types of information and enables you to build relationships between them.

- Information Structure and Publication Structure root nodes are used to build Information and Publication Structures, respectively. These objects act as the starting point for each of these structures and contain other objects.
- Information groups are organizational nodes within Information Structures that contain other information groups or content holders.
- Publication sections are organizational nodes within Publication Structures that contain other publication sections or content holders.
- Content holders contain one of three different types of content: textual content, Parts List content, or Illustration content.
- Tables of contents (TOC) and Index objects are placeholders for automatically generating a TOC and an index during Publication Structure publishing.
- Dynamic document objects store files authored in Arbortext Editor. If the primary content is an XML file or fragment, Windchill displays the leaf icon. If the primary content is a graphic file used in an XML document, Windchill displays the graphic icon.
- Document objects store and manage content. While document objects typically store and manage documentation files, there is no limitation to the types of electronic files a document object can store as content.

- Links store URLs to Web pages both inside and outside of the Windchill system.

Storage Locations

When you create objects, you also decide where to store them.



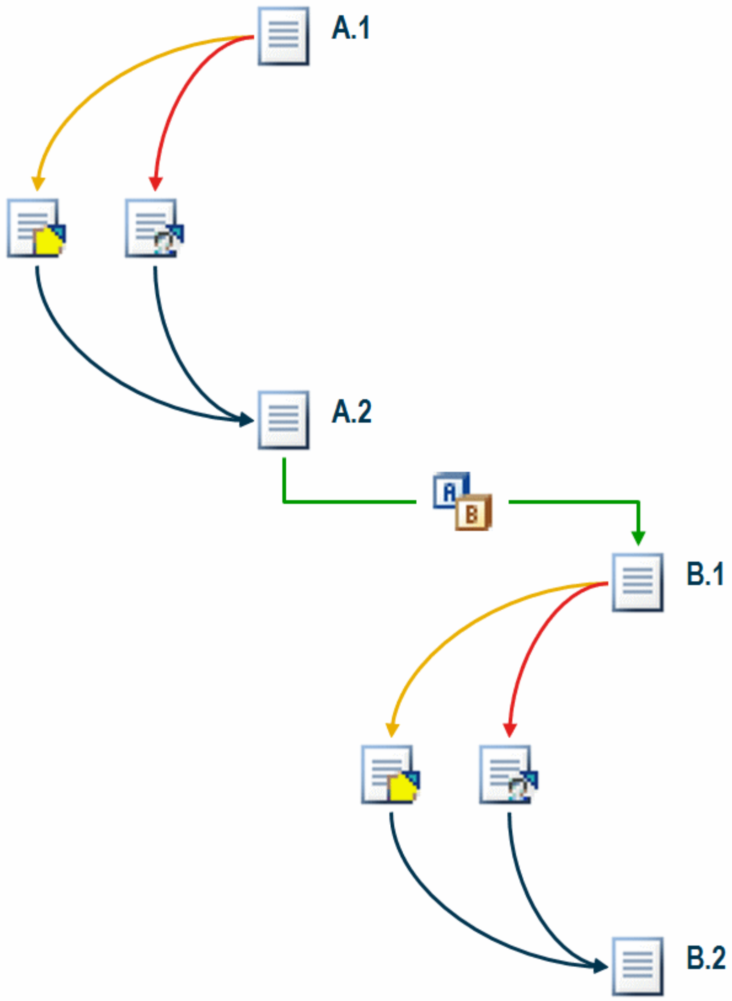
Typically, this is based on the context in which the object is used.

- Products represent storage for information related to a specific product or deliverable.
- Libraries are more general. A library is the logical storage location for objects that are related to one another but not to one specific product. Typically, libraries store information that must be shared across the organization.

Within a context, information can be further organized into a folder structure. However, in addition to just providing organized storage, contexts also provide the capability to apply administration to the objects they store. For example, rules can be established to specify which users can access and/or modify information within a context. Your administrator must develop a context strategy that balances administrative requirements with logical information storage.

Iteration and Revision Controls

Windchill uses an attribute called version to track and control object modification. An object version is composed of two elements: the character to the left of the decimal is the revision, and the character to the right of the decimal is the iteration.



The out-of-the-box versioning scheme configured for all Windchill data objects uses a letter for the revision and a number for the iteration. Your administrator may assign a unique versioning scheme for each data type based on the best practices for your company or industry.

To modify a data object, you must check it out. This locks the object from modification by any other user and signals to other users your intent to modify the object. The check out action creates two copies of the object:

- A working copy that you can modify.
- A checked out copy that others can still access.

Once you have made your changes, you check the object back in. The system uses the working copy to generate a new iteration of the object. The new iteration is now available to other users for modification.

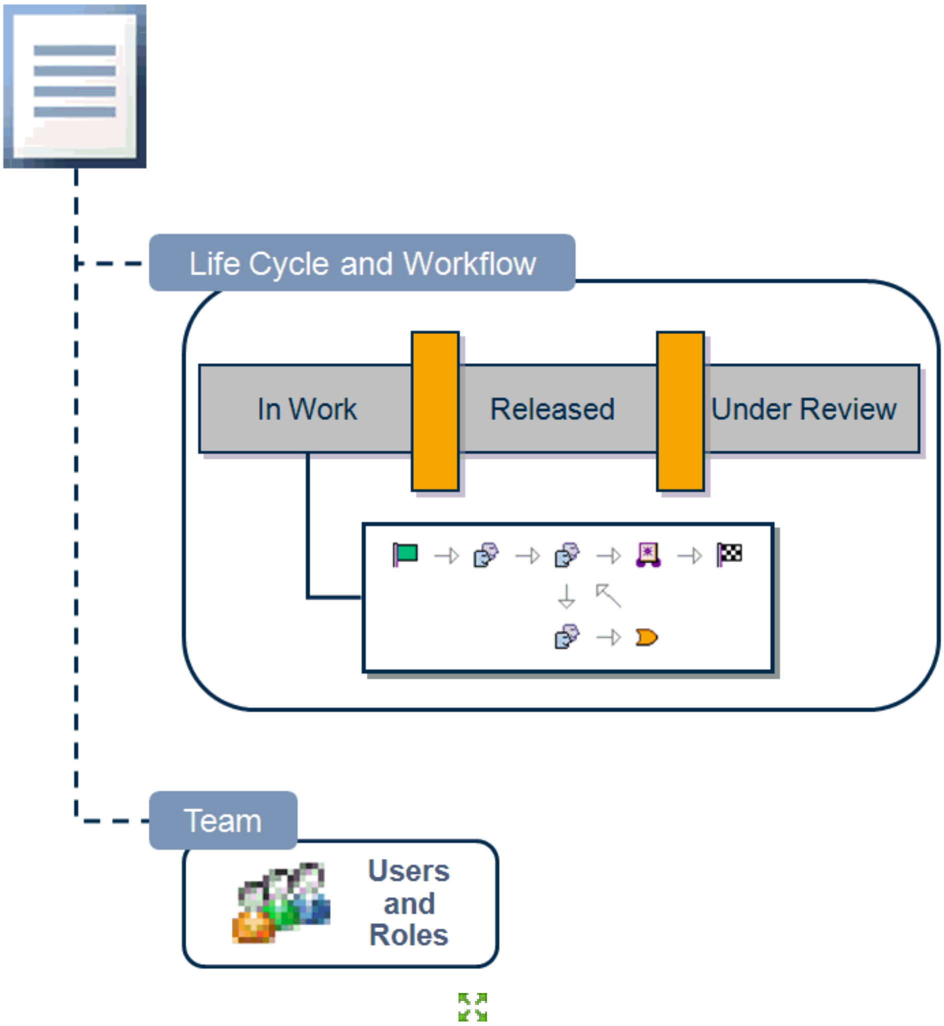
Your business rules may preclude you from altering information past a certain development state. In this situation, you must use a New Revision action to generate a new object version before making any changes. As part of the revision process, Windchill applies business rules and administrative settings in generating the new object version. These include, but are not limited to:

- Incrementing the Revision number or letter to the next value in the version sequence.

- Resetting the iteration number or letter to the beginning of its sequence.
- Setting the life cycle state. Typically, the administrative rules designate a state with access rules that enable modification using check out and check in operations.

Process Controls

Windchill can also automate many of your business processes. The process management tools are extremely flexible and can be configured to represent your company's best development practices.



Windchill uses a combination of objects to conduct process management:

- Life Cycles
- Workflows
- Teams

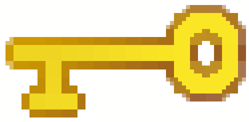
A life cycle establishes the stages or states that an object, such as a document, can exist in. For example, your company has decided that documents can only exist in one of these three states: In Work, Released, or Under Review. The gray boxes in the diagram represent these three states.

Each of these states (and the gates that follow them, shown above as yellow boxes) can use a workflow process to automatically route development and review tasks to the appropriate people. As major milestones in the development are completed, the workflows route the document to the appropriate state.

How does a workflow process know which user to send a task to? The final piece of the automated processes in Windchill is the team. Windchill can determine the appropriate individual to send a task to, based on the roles they fulfill within a team.

Your administrator is responsible for planning and developing the process elements for each of the data object types used by your company. As a user, you participate in the processes, accepting and completing tasks that are assigned to you.

Access Controls



The information that you create and store in Windchill is the valuable intellectual capital of your organization. Consequently, your administrators provide you with the appropriate access controls.

Access controls determine whether you can read, modify, create, delete, or revise each type of object in Windchill. If you determine that you are not able to access an object or perform an action, such as creating a document, your permissions are probably set to prevent that action.

You can be granted access through domains applied to storage contexts, through life cycles, or through security policies applied directly to folders or individual objects.

Collaboration Features

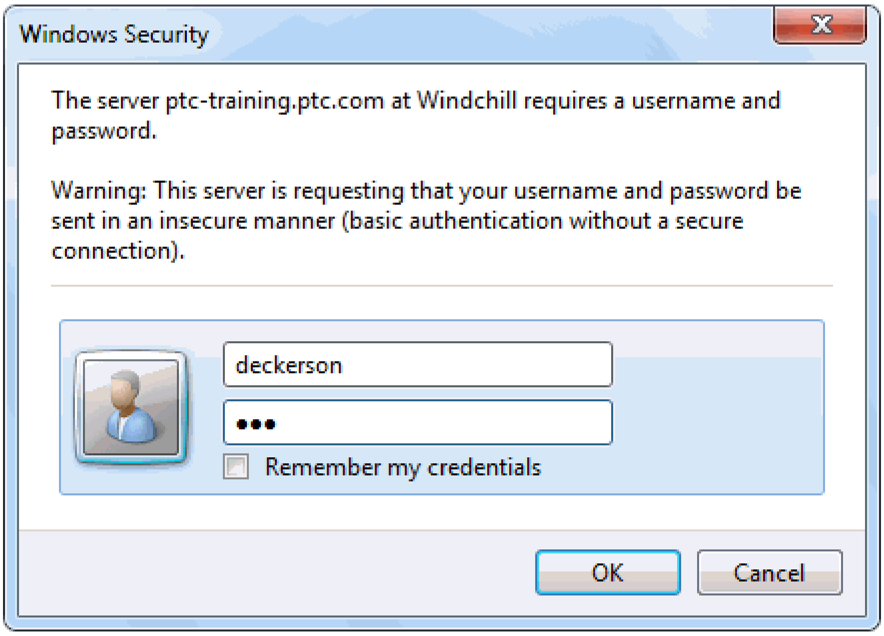
Almost every aspect of Windchill is designed with collaboration in mind. However, there are tools that specifically foster collaborative communication:

- You can use discussion forums to discuss design information. Discussion forums are message boards that you can subscribe to so you can be notified every time they are modified.
- Windchill's visualization tool, Creo View, enables you to view and mark up data even if you do not have the native application used to generate the content.
- You can also schedule and host Web-based meetings about Windchill objects.

Logging On to Windchill

You need a Web browser and the URL of the server to access the Windchill system.

To log on to Windchill, type the server URL into your Web browser. When the log on window opens, type your user name and password.



If Windchill recognizes your user name and password, you are logged on to the system.

Logging On

Objectives

- Access Windchill using a Web browser.

Scenario

In this exercise, you take the role of Keith Kraft, a document author at PTC Power Equipment, as he logs on to Windchill.

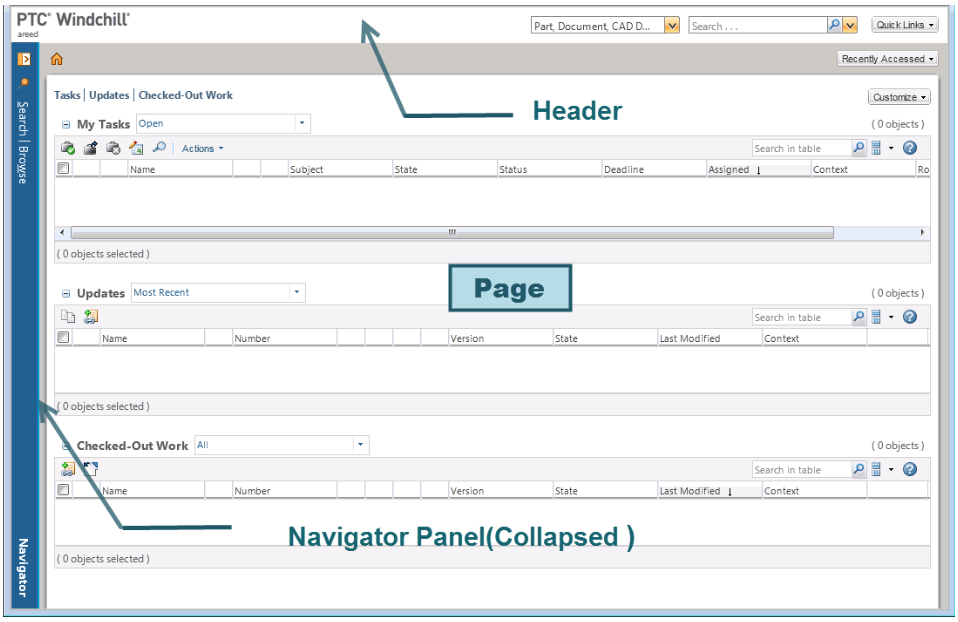
Task 1. Log on to Windchill.

1. Double-click the**Internet Explorer** icon on your desktop.
2. Click the **Windchill Server** link in the Internet Explorer Favorites bar to access Windchill.
3. Type **kkraft** in the User name field.
4. Type **ptc** in the Password field.
5. Click the **OK** button to log on to Windchill.

This completes the exercise.

Understanding the Windchill User Interface

The Windchill system has a simple and consistent layout, that enables you to quickly navigate and work with your enterprise information.

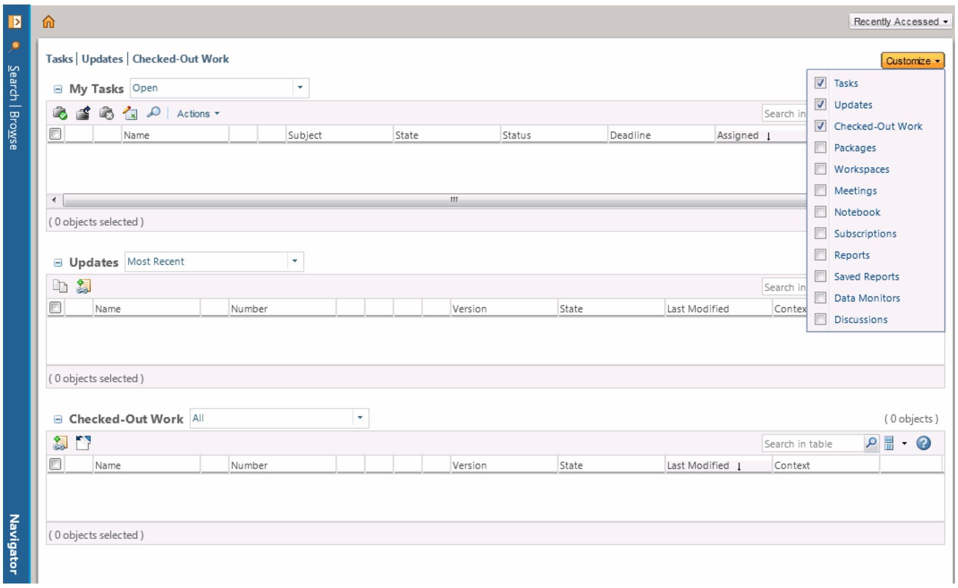


The Windchill interface is composed of three sections:

- The Header contains a welcome message, the ability to perform a simple search, and a series of useful tools available from the Quick Links drop-down menu.
- The Page displays information associated with your navigation. Your work consists of: reviewing data or performing actions on objects and information presented in the tables and forms available on the Windchill pages.
- The Navigator Panel provides access to advanced search utilities and the ability to browse contexts to which you have access.

Using the Home Page

You access your Home page by clicking the **Home** icon from the upper-left corner of the Windchill page or in the upper-right corner of the Navigator panel. The Home page displays a series of tables that provide information specific to you.



If the tables extend beyond the visible portion of the page, you can use the links at the top of the page to scroll to the desired information. The following tables can be displayed on the Home page:

- The My Tasks table displays and manages all items that are assigned to you.
- The Updates table displays all of the objects that you have recently created or modified.
- The Checked-Out Work table displays all of the objects that you currently have checked out.
- The Packages table displays all of the packages to which you have access.
- The Workspaces table displays all of your workspaces.
- The Meetings table displays your meetings.
- The Notebook table displays links and files related to your work.
- The Subscriptions table lists objects to which you subscribe for event notifications.
- The Reports table displays the reports available to run and the report results.
- The Saved Reports table lists all saved reports for the reports available in the Reports table for the current context.
- The Data Monitors table lists all data monitor objects created from the saved reports in the Saved Reports table.
- The Discussions table displays discussions which you are involved in.

The out-of-the-box default for the Home page is to have the Tasks, Updates, and Checked-out work tables displayed. The Customize menu in the upper-right corner of the Home page enables you to add or remove tables from the page. Some table options may be grayed out based on preferences set by your administrator. Once you have selected the tables that you want to display on the Home page, you can move the tables to change the order in which they display, by clicking and dragging the table link at the top of the page.

Using the Home Page

Objectives

- Describe the information you can access within the Home page.
- Personalize the Home page to add all available tables, while retaining the My Tasks, Updates, and Checked-Out Work tables at the top of the page.

Scenario

In this exercise, you explore the Windchill Home page.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Log on to Windchill as Keith Kraft (kkraft/ptc).

Task 1. Access and personalize the Home page.

1. Click the **Home** icon to access the Home page.
2. Click the **Customize** button to expand the Customize menu.
3. Select the **Data Monitors** option to add the Data Monitors table.
4. Select the **Saved Reports** option to add the Saved Reports table.
5. Select the **Reports** option to add the Reports table.
6. Select the **Discussions** option to add the My Discussions table.
7. Select the **Subscriptions** option to add the Subscriptions table.
8. Select the **Notebook** option to add the My Notebook table.
9. Select the **Meetings** option to add the My Meetings table.
10. Select the **Workspaces** option to add the My Workspaces table.
11. Select the **Packages** option to add the Packages table.
12. Move the Checked-Out Work table to the top of the Home page by clicking the **Checked-Out Work** link at the top of the page and dragging it from its current position to a position left of the Packages link.
13. Move the Updates table to the top of the Home page by clicking the **Updates** link at the top of the page and dragging it from its current position to a position left of the Checked-Out Work link.
14. Move the My Tasks table to the top of the Home page by clicking the **Tasks** link at the top of the page and dragging it from its current position to a position left of the Updates link.

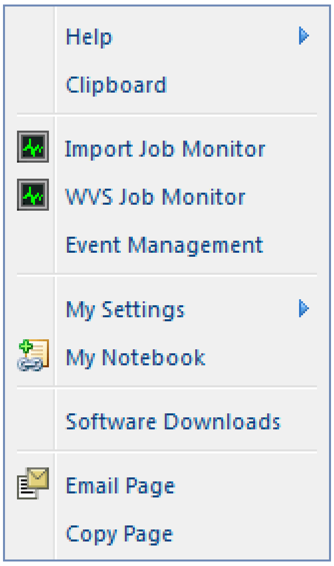
Task 2. Review information on the Home page.

1. Click the **Updates** link at the top of the page to view the Updates table.
2. Click the **Checked-Out Work** link at the top of the page to view the Checked-Out Work table.
3. Click the **Packages** link at the top of the page to view the Packages table.
4. Click the **Workspaces** link at the top of the page to view the My Workspaces table.
5. Click the **Meetings** link at the top of the page to view the My Meetings table.
6. Click the **Notebook** link at the top of the page to view the My Notebook table.
7. Click the **Subscriptions** link at the top of the page to view the Subscriptions and Reports tables.
8. Click the **Discussions** link at the top of the page to view the My Discussions table.
9. Click the **Reports** link at the top of the page to view the Reports table.
10. Click the **Saved Reports** link at the top of the page to view the Saved Reports table.

This completes the exercise.

Using Quick Links

The Quick Links menu enables you to access commonly used tools, preferences, and information. The Quick Links menu is located in the upper-right corner of the Windchill User Interface. The Quick Links Menu contains the following:

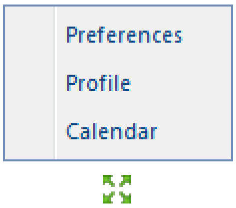


Quick Links Menu

- The Help option opens the Help menu, which provides access to a variety of Help tools and utilities.

Help Menu

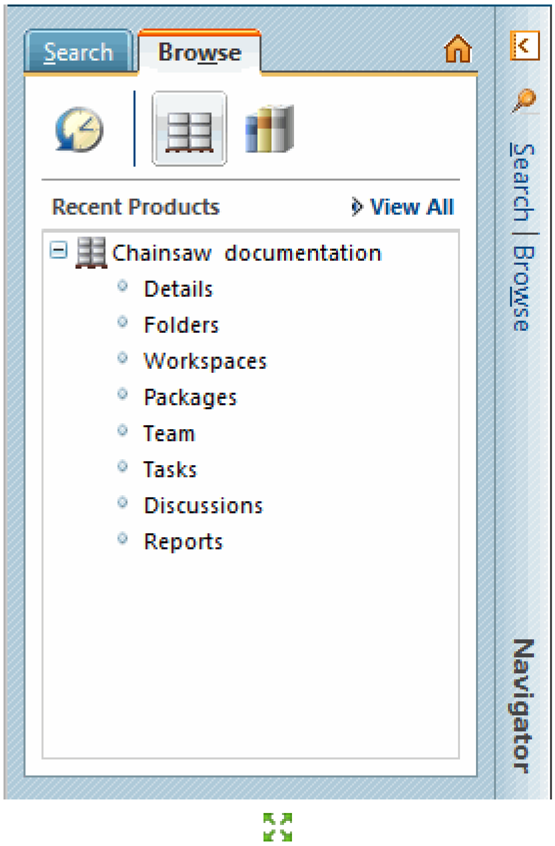
- The Clipboard option enables you to cut, copy, and paste objects and URLs in the Windchill system.
- The Import Job Monitor option enables you to track each imported Microsoft Excel spreadsheet that contains parts and product structures.
- The WVS Job Monitor option opens the WVS Job Monitor page from which you can view the status of Visualization Publish jobs.
- The Event Management option enables workspace users to view and manage system log messages generated from their authoring or modeling applications.
- The My Settings option opens the My Settings Menu, from which you can set your Preferences, view and update your Profile, and manage your Windchill calendar.



My Settings Menu

- The My Notebook option opens the My Notebook table, which displays links and files related to your work.
- The Software Downloads option opens the Software Downloads page, from which you can install supporting and integration software for your Windchill implementation.
- The Email Page option opens the E-mail Page utility, which enables you to send an e-mail referencing the currently viewed Windchill page.
- The Copy Page option enables you to copy the current Windchill page to the clipboard.

Using the Navigator



You use the Navigator to search for information and navigate the Windchill environment. The Navigator is composed of two tabs, Search and Browse. The Search tab provides access to a Search History list, a Saved Searches list, and the Advanced Search utility. The Browse tab provides a series of icons that enable you to navigate to all of the contexts to which you have access. A Recently visited option on the browse tab provides quick access to contexts you have recently accessed.

Initially, the Navigator is collapsed to enable maximum screen area for the Windchill pages. You can click the Expand icon to expose the Navigator, or you can use the Search or Browse links at the top of the Navigator to quickly access the desired Navigator tab. The navigator normally collapses when you make a selection that changes the main page. When you need to keep the Navigator open while working in the main page, you should pin it using the **Pin Navigator** icon. If you later need more space in the main page, collapse the navigator using the **Unpin Navigator** icon. A drag handle on the far-right border of the Navigator enables you to adjust the width of the Navigator. Finally, a **Home** icon in the upper-right corner enables you to quickly access your Home page.

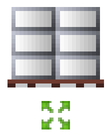
Using the Breadcrumb Trail

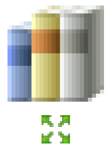
The breadcrumb trail, located to the right of the Home icon on the Windchill page, displays the navigation hierarchy of the table or object you are currently viewing.

This includes the object’s context and any folder directory structure or workspace used to store that object. You can view the full length of longer folder paths by cursoring over the breadcrumb trail. Folders and contexts displayed in the breadcrumb trail also serve as links to their respective information pages and lists in Windchill.

Navigating Products and Libraries

The Product and Library options on the Navigator display information about the products and libraries to which you have access.



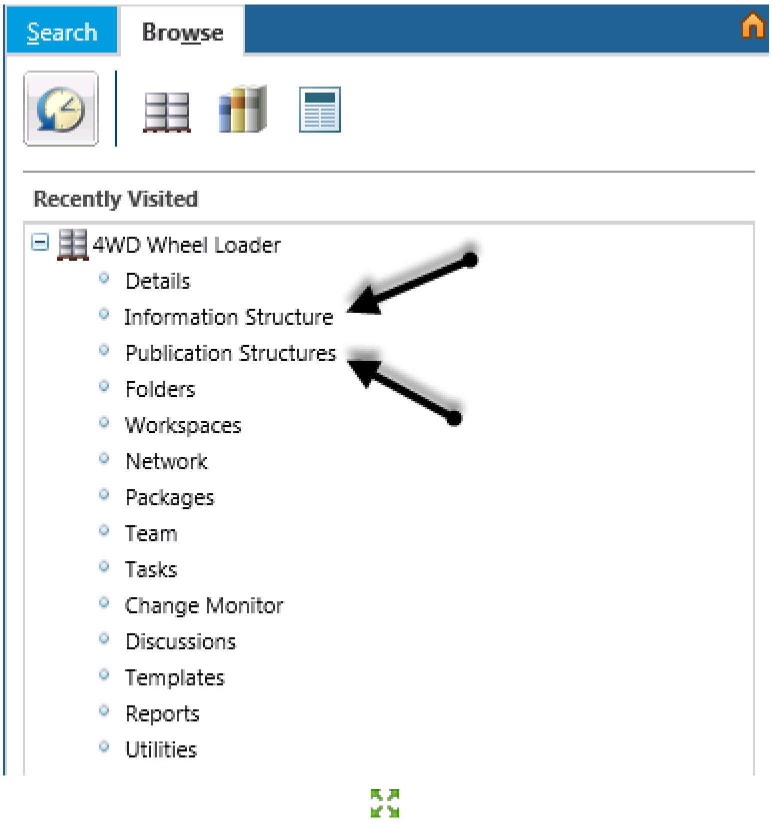


A Product represents storage for information related to a specific product or deliverable, where a library provides a place for storing and providing access to general business information that is not centered on a specific product or deliverable. The administrator for your implementation will set up products and libraries that correspond to your company's data, organization, and processes.

Navigating a product or library begins by adding the context to the Navigator. This can be accomplished by clicking the View All link to access the Products or Libraries tables. From the Products or Libraries tables, you select the desired context. Once a context is selected, additional information about the product or library is accessed by navigating a set of links below the context node on the Navigator:

- The Details link displays attributes and information about the context.
- The Folders link displays the contents of the current context in a folder structure.
- The Workspaces link displays all of your workspaces for the current context.
- The Packages link displays all of the packages for the context and delivery information for those packages.
- The Team link displays all team-related information and actions for the team members of the current context.
- The Tasks link displays and manages tasks that are assigned to the context team.
- The Discussions link displays all discussion topics for the current context.
- The Reports link displays the reports available to run for the current context and the report results.

Accessing the Information and Publication Structure Editors



Navigator Structure Links

Once Service Information Manager is installed, you can access the Information and Publication Structure Editors from Navigator context links. First, select the Browse tab on the Navigator pane. Next, select the proper context. Lastly, select either the Information Structure or Publication Structures link.

If there is more than one Information or Publication structure in a given context, you must click the relevant Information or Publication Structure link in the corresponding table. If you are accessing the Information Structure Editor, the editor appears when you click the link. If you are accessing the Publication Structure Editor, you can select the Structure tab to access the Publication Structure Editor.

Navigating the Environment

Objectives

- Use the Navigator to navigate within a Windchill environment.
- Describe the information you can access within the Product and Library contexts.
- Describe the information you can access within the Information and Publication Structure Editors.

Scenario

In this exercise, you explore a Windchill environment.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Log on to Windchill as Arden Reed (areed/ptc).

Task 1. Navigate a product context.

1. Click the **Expand** icon to expand the Navigator.
2. Select the **Browse** tab.
3. Click the **Recent Products** icon.
4. Click the **View All** link to access the Products table.
5. Click the **Chainsaw - 220 Series** link to access the product.
6. Click the Navigator **Browse** link.
7. Click the **Expand** icon to the left of the Chainsaw - 220 Series node to display the navigation options.
8. Click the **Details** link to view the product information page.
9. Click the **Pin Navigator** icon to expand the Navigator and pin it.
10. Click the **Workspaces** link to view the My Workspaces table.
11. Click the **Packages** link to view the Packages and Deliveries tables.
12. Click the **Team** link to view the Members table.
13. Click the **Tasks** link to view the Tasks table.
14. Click the **Discussions** link to view the Discussions table.
15. In the Discussions table, click the **Expand** icon to expand all nodes.
16. Click the **Reports** link to view the Reports table.
17. The Reports table displays the reports available to run for the current context and also displays report results.

Task 2. Navigate to the Information Structure and Publication Structure Editors.

1. Click the **View All** link to access the Products table.
2. Click the **4WD Wheel Loader** link.
3. Click the **Expand** icon to the left of the **4WD Wheel Loader** product icon.
4. Click the **Information Structure** link.
5. Click the **Publication Structures** Navigator link.
6. Click the **4WD Wheel Loader Repair Manual** link.
7. Select the **Structure** tab.
8. The Publication Structure Editor appears. Notice the Publication Structure on the left, the Information Structure and Attributes tabs on the right, and the toolbar at the top.

Task 3. Navigate a library context.

1. Click the **Recent Libraries** icon.
2. Click the **View All** link to access the Libraries table.
3. Click the **Standards and Templates** link to access the library.
4. Click the **Expand** icon to the left of the Standards and Templates node to display the navigation options.
5. Click the **Recently Visited** icon.
6. Click the **Unpin Navigator** icon to collapse the Navigator.

This completes the exercise.

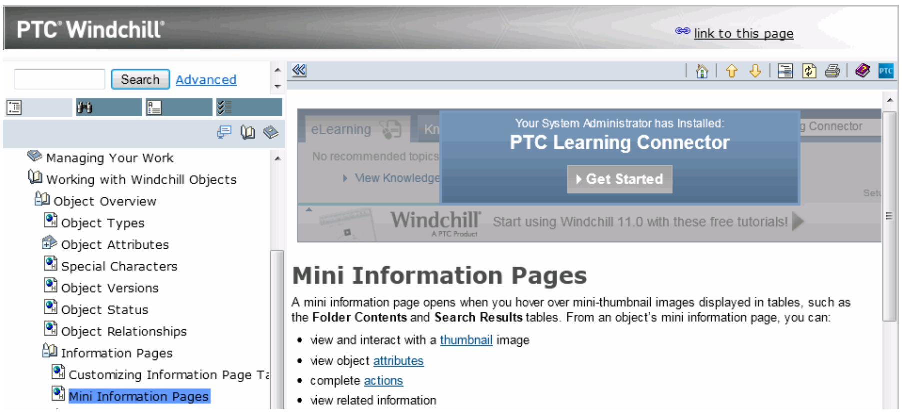
Accessing Help

From the Quick Links menu, the Help option opens the Help menu, which provides access to two types of help:

Quick Links Help Menu

Context Sensitive Help Icon

- The Windchill Help Center option opens the Windchill Help Center window, which provides an online directory of help information.



Windchill Help Center and Learning Connector

You can browse the help information by navigating the hierarchy of help topics in the left panel. When you select a topic in the left panel, information about that topic appears in the right panel. The right panel has two components:

- The bottom of the right panel contains online help information about the selected topic.
- The top of the right panel contains the PTC Learning Connector. If you have a PTC Precision Learning Management System account, the learning connector provides links to Web-based training about your topic from PTC University.

At the top of the Help Center window, a search utility enables you to search for help information.

> *The **Help** icon appears many places in the Windchill user interface. Click the icon to go to the Help Center topic relevant for the user interface element it is associated with. For example, if you click the **Help** icon for the tasks table, you are taken to the topic relevant to tasks tables.*

- The Windchill Support Center Web site option is a link to the Windchill Support Center Web page at PTC.com. On this page, you can access information in the Windchill Knowledge Base, Reference Documentation, and other Technical Support tools.

The Help menu has five other options. The About Windchill option opens a window that provides version and copyright information for your Windchill instance. The Windchill Communities option opens a window to the PlanetPTC Windchill community Web site, an online forum for PTC users, partners, and employees. The Contact Windchill Publications option opens your E-mail client and starts a draft E-mail addressed to the PTC Documentation Team. The Welcome to Windchill option opens a window that provides guidance on how to use the Windchill user interface. The Quick Start Guide option opens a window and downloads the Windchill Quick Start Guide from PTC.com. The What’s New In Windchill option opens a window to the Enhancement Details page of PTC.com, which provides information about the product enhancements available in the latest version of Windchill.

Accessing Help

Objectives

- Access Windchill's online help.

Scenario

In this exercise, you explore Windchill's help.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Log on to Windchill as Keith Kraft (kkraft/ptc).
- Start on the Home page.

Task 1. Explore the Windchill Help Center.

1. In the upper-right corner of the Windchill window, click the **Quick Links** button to expose the Quick Links menu.
2. Select **Help** from the Quick Links menu to open the Help menu.
3. Select **Windchill Help Center** from the Help menu to open the Windchill Help Center window.

   The classroom machines may not be configured with Internet access; therefore, you may not have access to the Windchill Support Center page, Quick Start Guide, and Enhancement Details page of PTC.com.

4. Click the Windchill Help Center **Maximize** icon.
5. In the left panel, click the **Book Expand** icon for the **PTC Windchill Fundamentals** topic to expand the topic.
6. In the left panel, click the **Working with Windchill Objects** topic to expand the topic.
7. In the left panel, click the **Book Expand** icon for the **Object Overview** topic to expand the topic.
8. In the left panel, click the **Book Expand** icon for the **Information Pages** topic to expand the topic.
9. Click the **Mini Information Pages** topic to open the help information in the right panel.
10. Click the **Close** button to close the Windchill Help Center window.

Task 2. Explore Context-Sensitive Help.

1. Click the **Help** icon in the upper-right corner of the My Tasks table to open the Tasks Tables help topic.

2. Click the **Close** button to close the Windchill Help Center window.

This completes the exercise.

1. Which Windchill user interface component is frequently used to access advanced search utilities and to browse contexts?

- A - The header
- B - The page
- C - The navigator panel
- D - None of the above

2. Which of the following is NOT a valid way to get help from within the Windchill application?

- A - Select Help from the Quick Links menu in the Windchill header.
- B - Press F1 on the keyboard for universal help.
- C - Click the context-sensitive help icon on a page or Windchill table.
- D - Any of the above will get Windchill help.

3. Which is a capability of Windchill?

- A - Stores information.
- B - Manages information in storage locations.
- C - Manages information evolution.
- D - Controls access to information.
- E - Provides collaboration tools.
- F - All of the above.

4. Which Windchill object type stores any type of electronic file as content?

- A - Baseline
- B - Document
- C - CAD document
- D - Link

5. True or False? Contexts provide more than just organized storage, they provide the capability to apply administration to the objects they store

- A - True
- B - False

Locating Information

Module Overview:

In this module, you explore the tools and methods available to locate information stored in Windchill. You learn how to search for information using one of the many search tools and how to browse a context's folder structure.

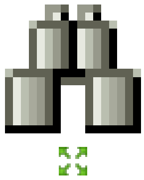
Objectives:

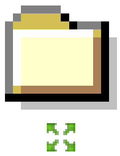
After completing this module, you will be able to:

- Execute simple and advanced searches.
- Save searches.
- Browse contexts.

Locating Information

There are two methods to locate information in the Windchill system. You can search for information using one of the search tools or you can browse a context's folder structure.





There are two search tools available in Windchill. Simple search enables you to search based on keyword criteria. Advanced searches enable you to narrow your search further by specifying object class and object attribute criteria. No matter which search you conduct, Windchill enables you to save the search so it may be accessed and reused later. Search capabilities are not limited to just Windchill. Many tools expose search utilities within their user interface once they are integrated with a Windchill server. This enables you to search for database information without having to leave the authoring or design application.

Sometimes, you are not certain what search criteria to apply, or you just want to know what information is available for a specific context. In these situations, you use the Folders page for a context to browse the context's storage structure.

Regardless of how you locate an object, you can view its attributes, contents, and relationships, by clicking its View information icon.

Using Simple Search

The simple search utility available in the Windchill header enables you to locate information using keyword criteria. Simple search capability is controlled by two factors; the scope and the Windchill system configuration.

Simple search scope is controlled by the object type selections in the left field and the keyword criteria specified in the right field. First, you must specify the appropriate object types by clicking the down arrow to expand the drop-down menu and selecting the desired object types. To complete your search, you specify your keyword criteria in the right field and click the search icon to the right of the field.

Simple search capability is also controlled by the configuration of your Windchill system. If your system is configured for standard search, the keyword criteria is explicitly applied to the object attributes of name and number only.

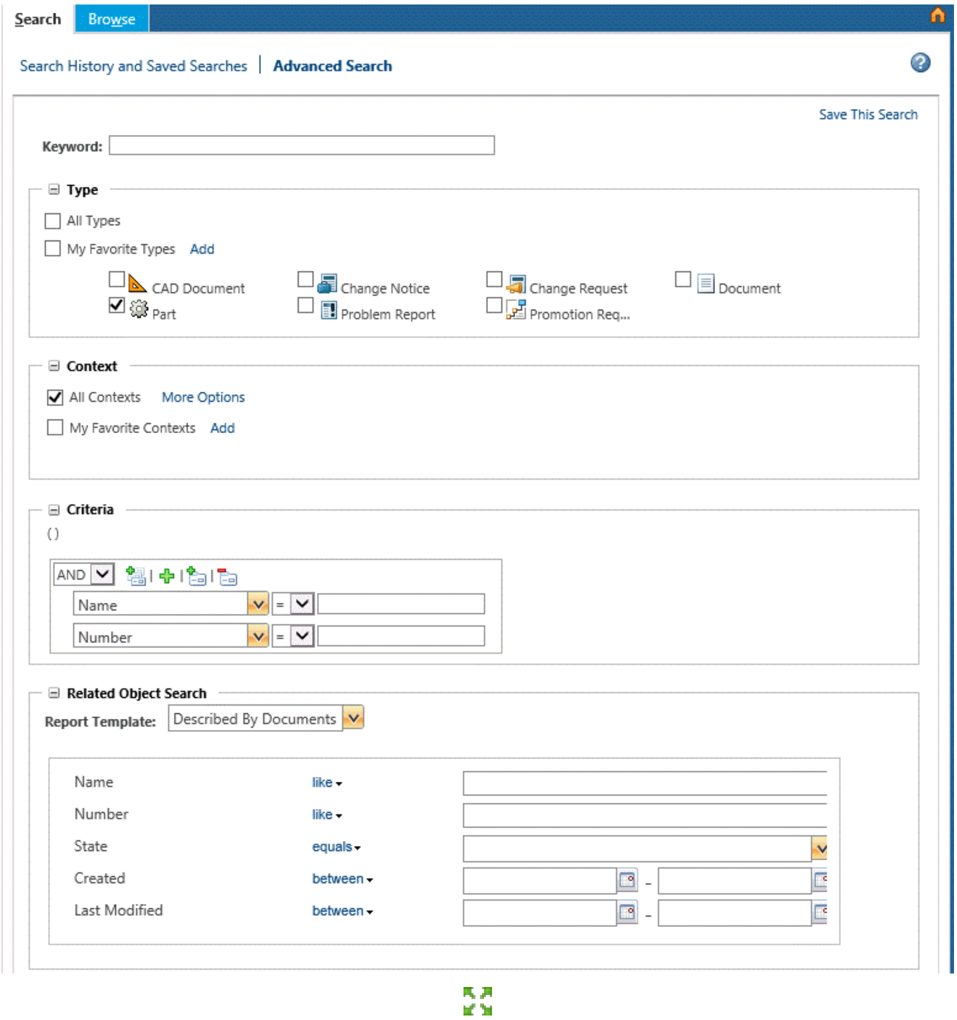
*Because standard search applies the criteria explicitly, it is beneficial to use wildcards to expand the search capability. For example, if you type 123 in the field, your search results will include objects exactly named or numbered 123. In contrast, if you type *123* in the field, your search results will include any object that contains 123 in the object name or number. You may also use the question mark (?) to replace a single character in the search. The question mark character works in keyword search fields only.*

If your system is configured for Index search, the search capability is expanded and the keyword criteria is applied to a search collection built from object attributes and content.

Some special characters are used as delimiters or characters that separate specific attribute fields. Dashes (-) are commonly used to separate the fields within a complex part number (for example 123-4567-890). These characters are interpreted literally when they appear in search strings. The special characters are period (.), dash (-), and underscore (_). All other characters are taken out of text strings when entered in search criteria. For example, the text string “123/ABC” is interpreted as “123 abc” (a space in place of the unrecognized special character). A search for “123/ABC” will return results including “123” or “abc”.

Using Advanced Search

Advanced search enables you to narrow your search scope by adding specific criteria based on context, object attributes, or object relationships.

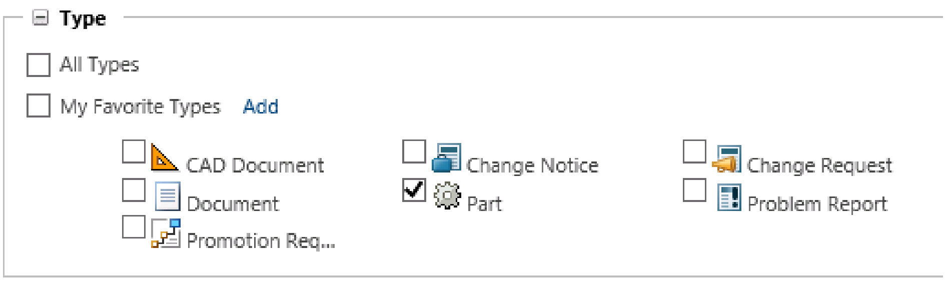


There are five criteria that can be applied for an advanced search:

- The Keyword field enables you to specify simple search criteria.
- The Type section enables you to select all or specific Object Types against which the search is applied.
- The Context section enables you to select all or a specific type of context.
- The Criteria section enables you to specify attribute criteria. The attributes of Name and Number are provided by default. You can narrow your search by adding attributes to criteria list from criteria action icons. Once added to the list, you can define each criteria with an operator and a value.
- The Related Object Search section enables you to perform searches based on object relationships. You can narrow your search by selecting report template associated to selected object type.

Using Advanced Search - Type Section

The Type section on the Advanced search page enables you to select one, multiple, or all object types in search. To search content from all object types, select the All Types check box. With this selection, all searchable objects are included in the search. You can predefine the selection list using the All Applicable Object Types Search preference. The list of types available can be viewed in the Find Type window.



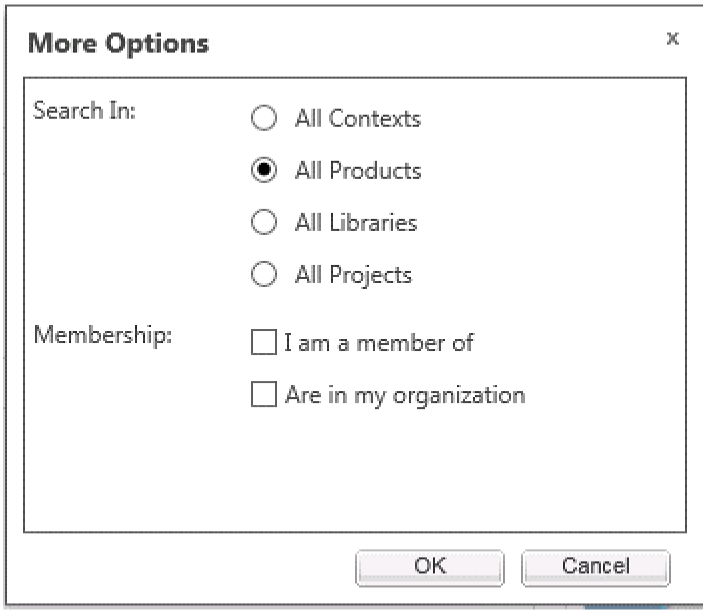
You can customize each search by including specific object types in the My Favorite Types list. The most common object types are available on the Advanced Search page.

- To include object types, click the Add link to the right of My Favorite Types to open the Find Type window.
- To exclude an individual object type from a search, de-select the check box next to the object name.
- To delete an object type from your favorites, cursor over the type name and click the **Delete** icon.

Using Advanced Search - Context Section

The Context section on the Advanced search page enables you to select one, multiple, or all contexts in search.

To search across multiple context types, click the More Options link. Select one of the context type options from More Options window.



The context type options might be different depending on the PTC Windchill solutions installed at your site.

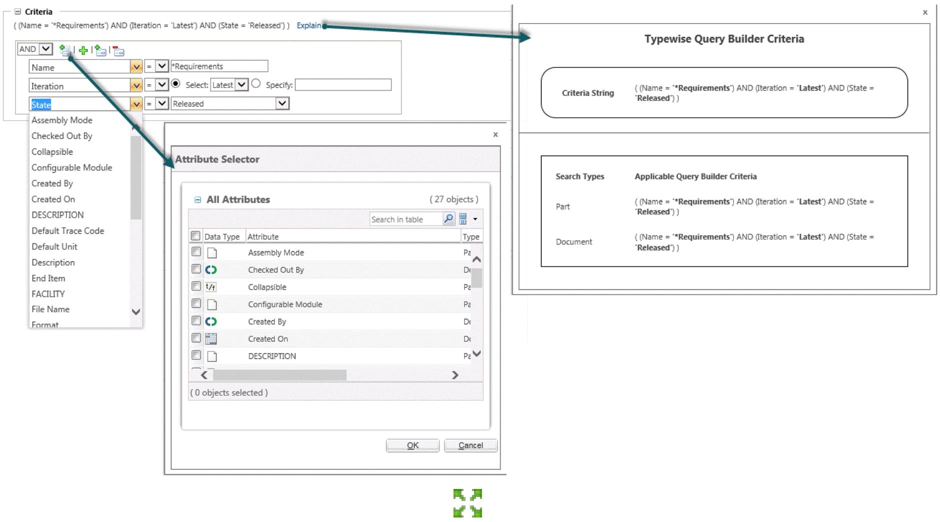
You can limit your search results depending on access controls set on context, by selecting one or both membership options. The I am a member of option searches only in contexts of which you are a team member. The Are in my organization option searches only in contexts that are within your organization.

You can customize each search by including specific context in the My Favorite Contexts list.

- To include contexts in the list, click the Add link next to My Favorite Contexts. From the Find Context window, use the search sections provided to select a context to include.
- To exclude an individual context, de-select the check box next to the context name.
- To delete a context from your favorites, cursor over the context name and click the **Delete** icon.

Using Advanced Search - Criteria Section

The Criteria section on the Advanced Search page has been redesigned to include several new actions and greater usability when adding, removing, and specifying attribute criteria.



Attribute selection for your search can be easily changed through actions. You can add multiple attribute fields at once. When selecting the **Add Attribute** icon, the Attribute Selector window opens. Select the attributes required for search criteria and click OK. This window also provides guidance as to which object types are applicable for an attribute. Prior to Windchill 11.0, users did not have an option of adding multiple attributes at once.

The Add Condition icon action adds a single attribute to your criteria selections. Click the **Add Condition** icon to add a single attribute. Once added, you can change your attribute selections using the drop-down menu. When specifying attributes criteria, you can use equal to and not equal to for applicable attributes type. The null and is not null operators can also be used, by default they are disabled.

*Use the **enableNullCriteria** property to control whether null and is not null appear. The null and is not null operators are not compatible when performing an indexed search or a classification search.*

You can perform nested search using the AND and OR operators. Nested attribute groups can be added by clicking the **Add Group** icon. The added group can be removed by clicking the **Remove Group** icon.

The Explain action is available when an advanced search criterion is applied to more than one specific object type. Click the Explain link to open a window providing a breakdown of how search criteria is applied based on object type.

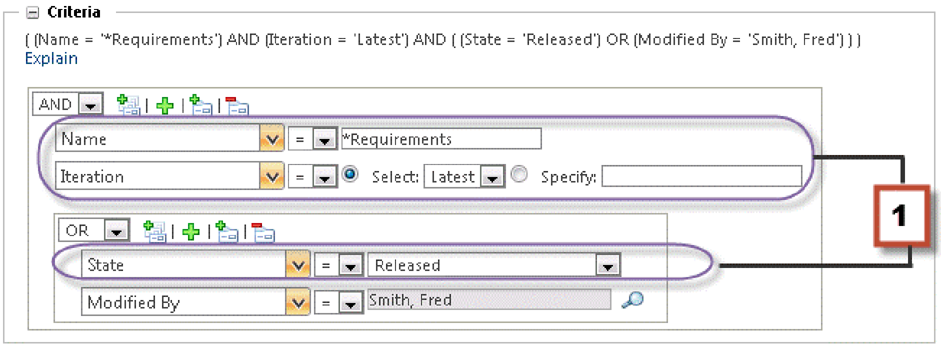
The Explain link feature is not available when All Types is selected under the Type Section.

Using Advanced Search - Nested Queries

The Criteria section on the Advanced search page has been redesigned including the ability to perform nested attribute searches. Nested groups provide greater flexibility using the AND and OR operators when specifying criteria attributes.

Users can perform nested search using the AND and OR operators. The AND operator search results must match all of the criteria. The OR operator search results can match one or more of the criteria.

The example shown in the image would provide two types of results:



- Object names end with requirement with the latest iteration and are in the Released state.
- Object names end with requirement with the latest iteration and are modified by Fred Smith.

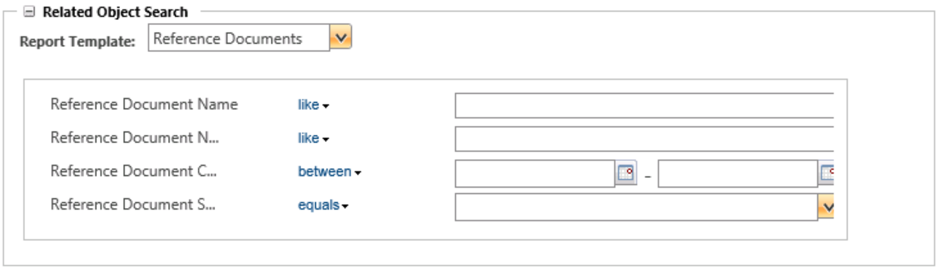
If you reverse the AND and OR operator values, the search would provide three types of results:

- All object names end with requirement.
- All objects with latest iteration.
- All objects in the released state that are modified by Fred Smith.

You only can benefit from using nested groups if you are using a combination of the AND and OR operators.

Using Advanced Search - Related Object Search

A new advanced search utility enables you to perform searches based on object relationships. You can narrow your search by selecting the Report Template associated to the selected object type. Once selected, attributes defined in report templates are available on the Advanced Search page. You can define each attribute with an operator and a value. Use the drop-down menu to select the appropriate operator for each attribute.



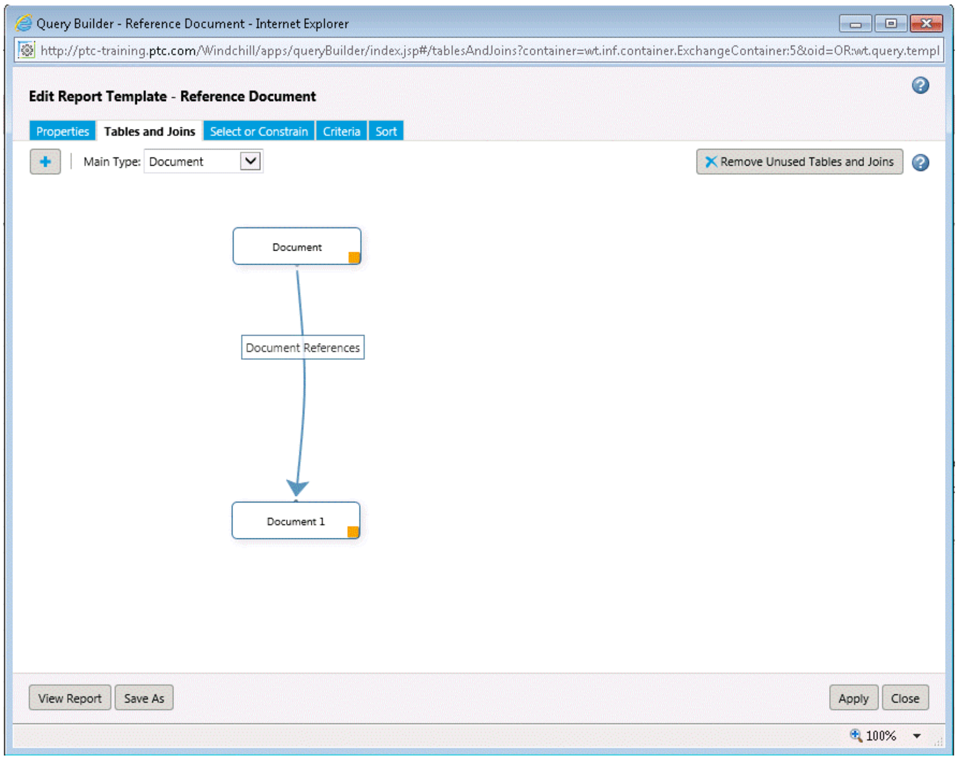
The Related Object Search section uses PTC Windchill report management to execute searches based on object relationships; for example, you can search all parts that have an associated document.

The Related Object Search section appears when the following conditions are true:

- The Enable Related Object Search preference is set to Yes. This preference is set at the site level.
- Only one object type is selected.
- The selected object type has at least one associated report template that is available for advanced searches.

Advanced Search Report Template

The Query Builder utility enables you to define the report template to use with advanced search. Report Template can be accessed by clicking the Report Management link on the Utilities page. The Report Template table displays all report templates available from that product, its parent organization context, and the site context.



To make the report template available from the Related Object Search drop-down menu, you must select the Available for use with Advanced Search option on the properties tab and designate the object type for the report template on the Table and Joins tab while creating or editing the report template. The Related Object Search field appears when the Main Type is selected on the Advanced Search page.

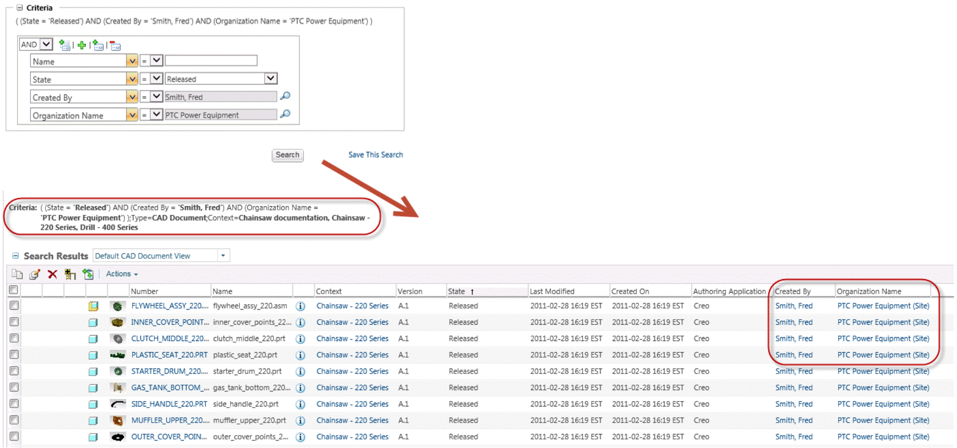
You can configure the attributes on the Select or Constraints tab for the report template that appears under the Related Object Search section.

The Criteria tab is where boolean conditions can be specified, or conditions that you want to be always set in the report, rather than the user needing to enter them each time the report is run.

The Sort tab enables you to specify the sort order of the data returned from the query.

Search Results Table

The Search Results table displays all objects returned for your search. You can configure the Search Results table columns to fit your needs. However, the options available depend on how many object types are included in the search criteria.



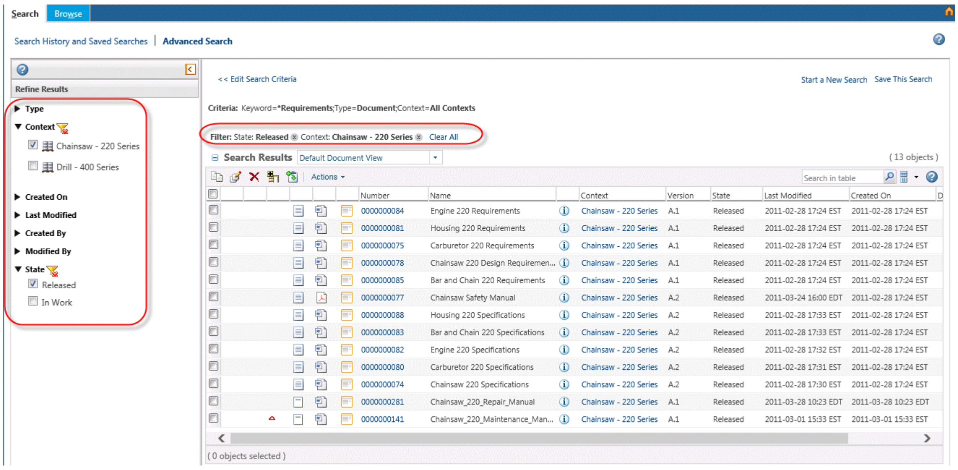
- If your search includes additional attribute values under Criteria, the default Search Results table view automatically includes a column for each additional attribute specified in the search criteria, even if a search includes more than one object type.
- You can create a customized table view to include additional attributes. When you search for a single type, all of the attributes related to that type are available to be added as columns to the search results table.
- If you select All Types or more than one object type, then the available columns for a custom table view only include attributes that are common among object types. You cannot add a column to display attributes that are specific to one or more types.

If your system is configured for indexed search, a new column named Text Preview is available from the search Results table to view the keyword as it appears in the text. This column is available when performing keyword searches against the document type. The Text Preview column does not appear in default view. You must create a custom table.

An administrator must enable this feature using the **wt.index.enableTextPreview** property. By default the Text Preview column is only available when searching for document objects. To include more content holder object types, use the **wt.index.supportedTypesForTextPreview** property.

Faceted Search Results

If your system is configured for Faceted Results, a Refine Results pane appears next to the Search Results table. This pane displays attribute groups that are relevant to the objects already returned by the search. Select the desired attributes to further narrow the search results. Your search selections appear above the Search Results table in the Filter field.



By default, the faceted results pane is disabled. Faceted results are only available when the following configurations are done:

- Windchill Index Search is installed and enabled.
- The Enable Search Facets preference is set to Yes.
- Search includes indexed object types.
- Search does not include the criteria specified under the Related Object Search field.
- The Iteration criterion is not set to All or to a unique iteration.

If you have Windchill PartsLink installed, facets can appear when performing a classification search regardless of whether Windchill Index Search is also enabled.

Searching for Objects

Objectives

- Execute simple searches.
- Execute advanced searches.

Scenario

In this exercise, you search for released Requirements documents. You use multiple search methods to locate the desired information.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Log on to Windchill as Keith Kraft (kkraft/ptc).

Task 1. Locate Requirements documents with a simple search.

1. In the Windchill header, click the **Down Arrow** to the right of the object type (left) field to expand the Object Type drop-down menu.
2. From the Object Type menu, select **All Types** to de-select all of the default options.
3. From the Object Type menu, select **Document** to select the Document type.
4. In the Windchill header, type ***Requirements** in the Search... field.
5. Press the ENTER key to execute the search.

> *You may have to expand the Navigator or scroll to the right in the Search Results table to view the State column.*

Task 2. Modify the search to search for released Requirements documents using an advanced search.

1. On the search results page, click the **Edit Search Criteria** link to access the Advanced Search page.
2. In the Criteria section, ensure Equals (=) is selected from the Operator drop-down list and type ***Requirements** in the Name criterion field.
3. In the Criteria section, cursor over the Number field.
4. Click the **Delete** icon to the right of the Number field to remove the Number criterion.
5. Click the **Add Condition** icon to add new criteria.
6. Click the **Down Arrow** to the right of the Checked Out By criteria field to expand the criteria drop-down menu.

7. Click the lower part of the Select drop-down list scroll bar to scroll down.
8. Select **State** to add State to the Criteria list.
9. In the Criteria section, ensure Equals (=) is selected from the operator drop-down list and click the **Select** drop-down list for the State criterion.
10. Click the lower part of the Select drop-down list scroll bar to scroll down.
11. Select **Released** from the Select drop-down list.
12. Remove the Keyword criterion by placing the cursor in the Keyword field and pressing CTRL+A to select all of the text.
13. Press the DELETE key to remove the text from the Keyword field.
14. Click the **Search** button to execute the search.

You may have to expand the Navigator or scroll to the right in the Search Results table to view the State column.

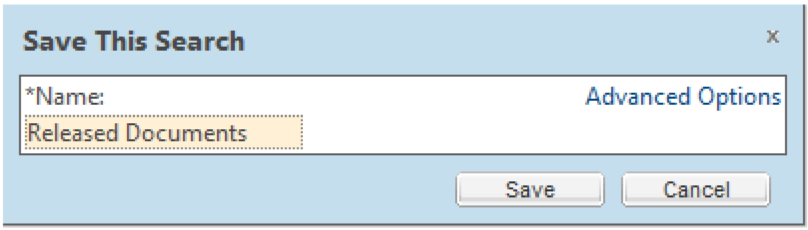
Task 3. Modify the search to search for a released Requirements document that has an associated reference, using an advanced search.

1. On the search results page, click the **Edit Search Criteria** link to access the Advanced Search page.
2. Click the **Report Template** drop-down list to select the report template.
3. Select the **Reference Documents** template.
4. In the Related Object Search section, ensure like is selected from the operator drop-down list and type ***ProofofConcept** in the Reference Document Name field.
5. Click the **Search** button to execute the search.
6. Observe in the search results table, the list of items which have an associated reference.

This completes the exercise.

Saving Searches

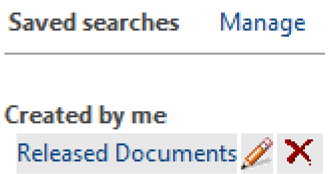
When using advanced search, you can save and name your search criteria so you can execute the search again in the future. To save a search, you click the Save This Search link once you have established your search criteria.



This opens the Save This Search window, which requires you to specify a Display Name.

An Advanced options link opens a three step wizard, which enables you to specify the table layout for your search results.

Saved Searches are stored in your Saved Searches table, which you access by clicking the Search History and Saved Searches link on the Search tab of the Navigator.



Saving Searches

Objectives

- Save a search.

Scenario

In this exercise, you save a search for Released documents within the system.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Log on to Windchill as Keith Kraft (kkraft/ptc).

Task 1. Create an advanced search for Released documents.

1. In the Windchill header, click the **Down Arrow** to the right of the Search... field to expand the Search drop-down menu.
2. Select **Advanced Search** from the Search drop-down menu.

> *In a live classroom environment, some of the following steps may not be necessary if the Searching for Objects exercise was completed.*

3. Select the **All Types** check box to de-select any other options.
4. Select the **Document** check box to select the Document type.
5. In the Criteria section, cursor over the Number field.
6. Click the **Delete** icon to the right of the Number field to remove the Number criterion.
7. Click the **Down Arrow** to the right of the Name criteria field to expand the criteria drop-down menu.
8. Click the lower part of the Select drop-down list scroll bar to scroll down.
9. Select **State** to add State to the Criteria list.
10. In the Criteria section, ensure Equals (=) is selected from the operator drop-down list and click the **Select** drop-down list for the State criterion.
11. Click the lower part of the Select drop-down list scroll bar to scroll down.
12. Select **Released** from the Select drop-down list.
13. Click the **Search** button to execute the search.

> *You may have to expand the Navigator or scroll to the right in the Search Results table to view the State column.*

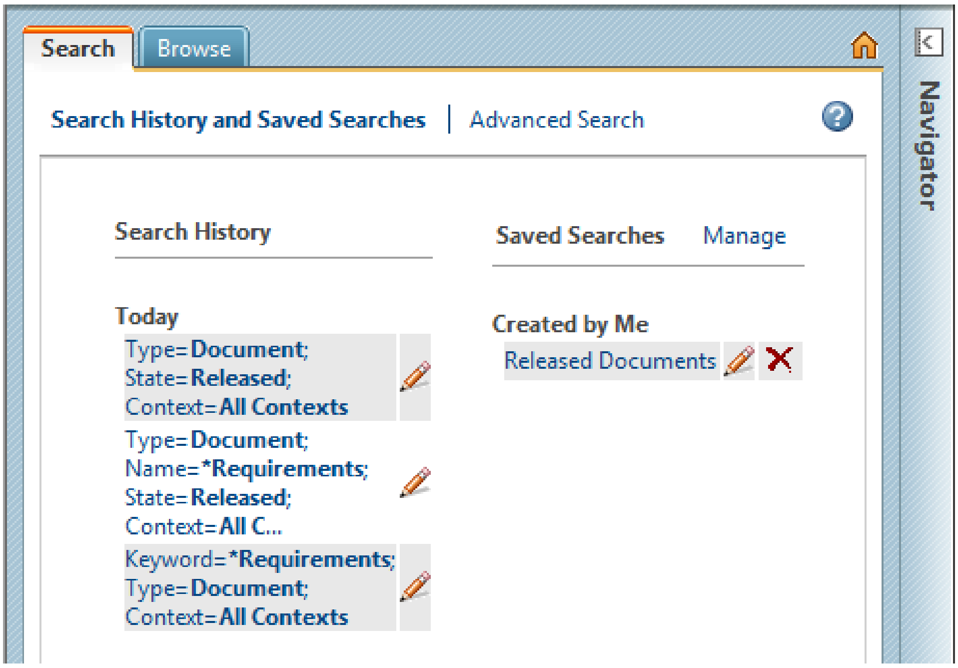
Task 2. Save the advanced search.

1. Click the **Save This Search** link to open the Save this Search window.
2. Type **Released Documents** in the Name field.
3. Click the **Save** button to save the search.
4. Click the **Search History and Saved Searches** link to access the Saved Searches list.
5. Notice that the Released Documents search is displayed in the Saved Searches list.

This completes the exercise.

Managing Searches

The Search History and Saved Searches sections of the Search tab enable you to manage your searches. The Search History list provides access to searches that you have recently conducted.



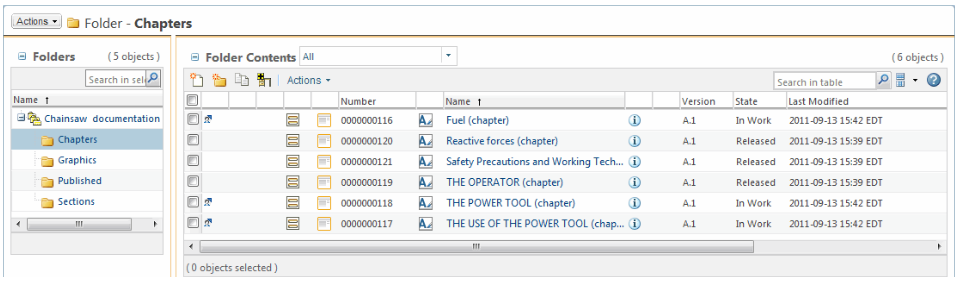
Each search is identified by a summary of the criteria used to conduct the search. The Saved Searches list provides access to searches that you have saved and any searches that your administrator has created for you. Both lists have similar tools for managing the searches:

- To execute a search again, click an entry in the Search History or Saved Search list.
- Use the cursor-over feature to access more details for a search. This will expose a small window that enables you to view all of the search criteria, to edit the search, and to run the search again.
- Use the Edit criteria icon to further refine the search criteria or to use the search as a template.
- Use the Delete this search icon to delete any saved searches you have created.

The Manage link at the top of the Saved Searches list enables you to further manage your Saved Searches. The Manage link exposes the Manage Saved Searches table, which enables you to delete, show, hide, export, or import searches, in your Saved Searches list.

Browsing for Objects

Even though information can appear in various places in Windchill, such as forums, notebooks, and workspaces, you can always find shared information and documentation within the Folders page of a context.



The Folders page is composed of two panels. The Folders table in the left panel displays the folder structure for the context. The Folder Contents table in the right panel displays the contents of the currently selected folder.

Within the Folder Contents table, you can limit the types of objects that are displayed by selecting an option from the View drop-down menu located to the right of the Folder Contents table label. You can filter the table:

- By object type, such as Documents, Promotion Requests, or Links.
- By storage format, such as Folders, All, or Contents.
- By user, such as By Owner, Created or Modified By Me.
- By state, such as In Work, Released, or Not Released.

The View filter includes other options including the capability to create your own custom view.

The Folders table also enables you to sort the table contents by any column heading. Simply click the column heading to sort the contents in ascending order, and again to sort them in descending order. You can specify secondary and tertiary sorting criteria by pressing the SHIFT key and selecting additional columns.

Browsing for Objects

Objectives

- Browse context folders.

Scenario

In this exercise, you want to locate the Reactive forces (chapter) dynamic document by browsing the Chainsaw documentation product.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Log on to Windchill as Keith Kraft (kkraft/ptc).
- Add the Chainsaw documentation product to the Recent Products section of the Navigator.

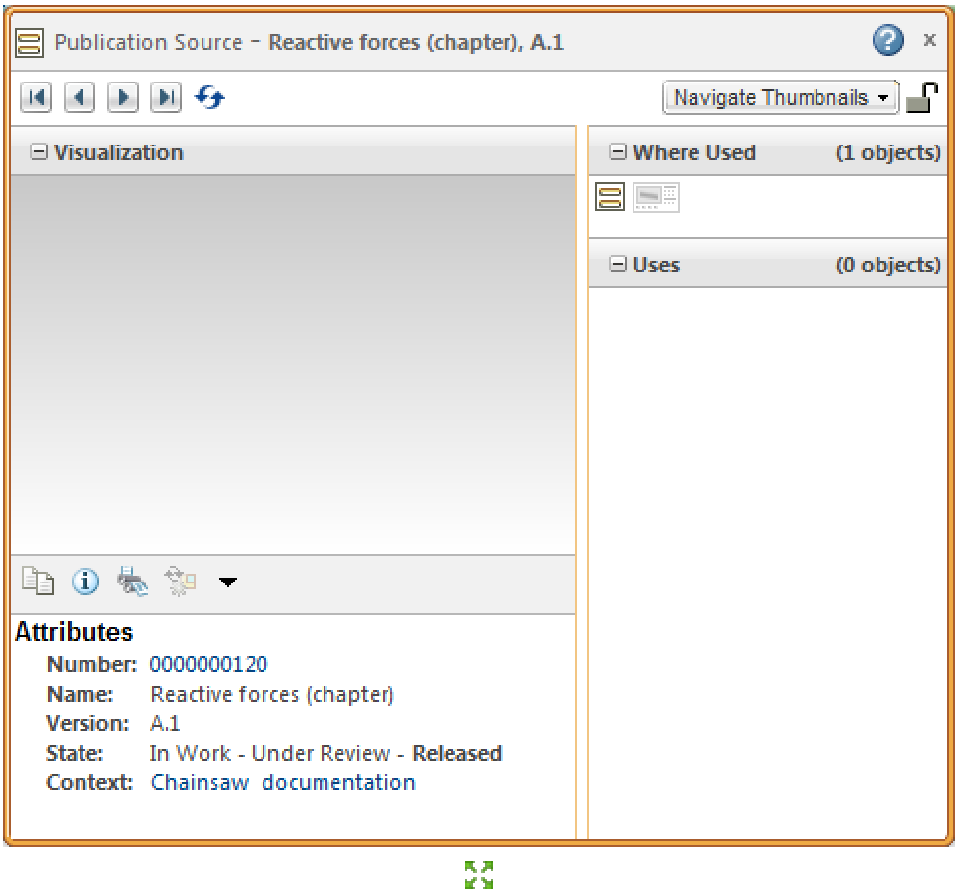
Task 1. Browse context folders.

1. Click the **Browse** link at the top of the Navigator.
2. Click the **Recent Products** icon.
3. Click the **Expand** icon to the left of the Chainsaw documentation node to expose the navigation options.
4. Click the **Folders** link to view the Folders page.
5. Observe the objects displayed in the Folder Contents table. In the Folders panel, click the **Chapters** folder link.
6. Observe the objects displayed in the Folder Contents table. Click the **Name** column heading to sort ascending by name.
7. Observe the Folder Contents table. Click the View drop-down menu to the right of the Folder Contents label.
8. Click the lower part of the View drop-down menu to scroll down.
9. Select **Released** from the View drop-down menu.
10. Observe the objects displayed in the Folder Contents table. Cursor over the **Thumbnail Navigator** icon for the Reactive forces (chapter) dynamic document to open the Thumbnail Navigator window.
11. Observe the information displayed in the Thumbnail Navigator window. Click the **Close** icon to close the Thumbnail Navigator window.
12. Click the View drop-down menu to the right of the Folder Contents table title.
13. Click the upper part of the View drop-down menu to scroll up.
14. Select **All** from the View drop-down menu.
15. Observe the objects displayed in the Folder Contents table.

This completes the exercise.

Using Mini Information Pages

When you cursor over mini-thumbnails in the Search Results or Folder Contents tables, a mini information page opens providing brief information about the object.

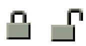


Mini Information Page

The left side of the mini information page provides a larger view of the object's default thumbnail and basic attribute information.

To perform additional actions, the mini information page provides several sets of tools:

- Navigation controls above the thumbnail enable you to navigate through the thumbnails you have displayed in the window.



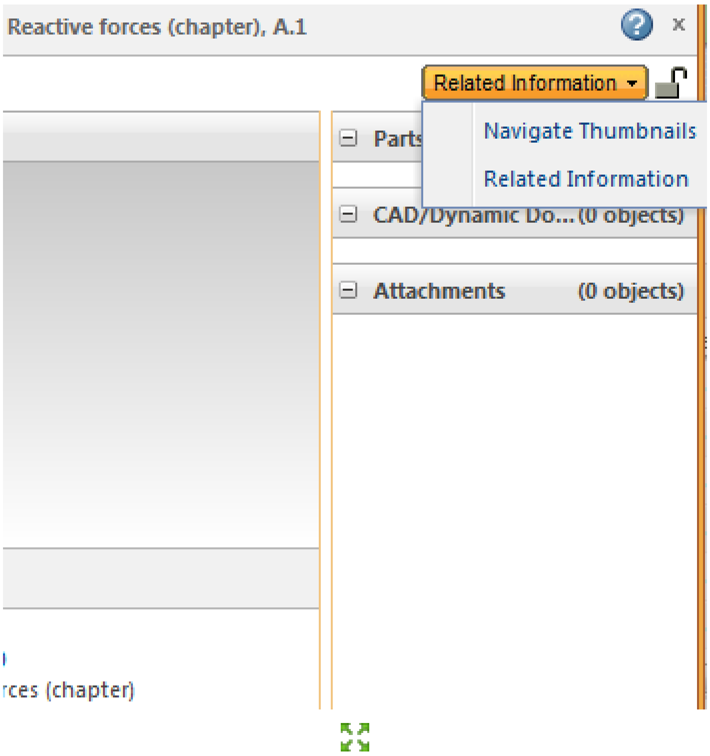
- A lock and unlock icon enables you to control whether the window changes for each thumbnail navigator icon you cursor over.

- Icons below the thumbnail enable you to perform actions on the object. The actions that are available depend on the type of object, but usually include copying the object to the clipboard, accessing the object's full information page, and opening the object in Creo View.

There is also a drop-down list next to these icons which provide additional actions for the object.

The right side of the mini information page is driven by a drop-down menu.

- If the default Navigate Thumbnails option is selected, Where Used and Uses reports appear in the right panel.
- If you select Related Information, a list of associated Dynamic Documents and Attachments appear.



Related Information

1. Regardless of how you locate an object, you can view its attributes, contents, and relationships by clicking its _________ icon.

- A - View information
- B - Attributes
- C - Open
- D - Explore

2. If your system is configured for standard search, the keyword criteria is explicitly applied to which object attributes?

- A - Number and filename
- B - Name and filename
- C - Name and number
- D - Name and state

3. Which of the following criteria can be specified in an advanced search?

- A - Keyword
- B - Object Type
- C - Context
- D - Attribute
- E - All the above

4. You can access your saved searches from which of the following?

- A - Search tab of the Navigator.
- B - Quick Links menu.
- C - Recently viewed option on the Navigator.
- D - Saved Searches table on your Home page.

5. Which context page is used to browse for information?

- A - Details
- B - Folders
- C - Team
- D - Workspaces

Viewing Information

Module Overview:

In this module, you learn about the tools and methods available to view information stored in Windchill. You learn how to use Windchill tables to view and manipulate information. Finally, you learn about various Windchill objects, their purposes, capabilities, and how to view information about and relating to the objects.

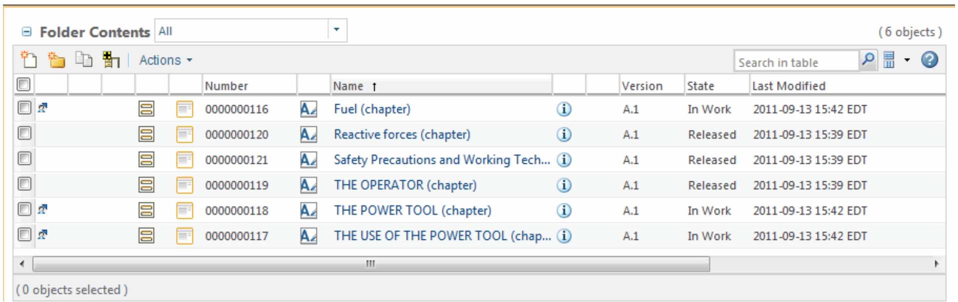
Objectives:

After completing this module, you will be able to:

- Use, manage, and create Windchill table views.
- View the attributes, content, and relationships of Windchill objects.

Using Windchill Tables

As you navigate and manage information in Windchill, you will find that many of your interactions involve working with tables. Windchill tables use a consistent layout, common set of functions, and often provide the capability to manage and build custom views. You can divide your interaction with Windchill tables into two categories; viewing information and performing actions on information.


Folder Contents All (6 objects)

Actions Search in table

Number	Name	Version	State	Last Modified
0000000116	Fuel (chapter)	A.1	In Work	2011-09-13 15:42 EDT
0000000120	Reactive forces (chapter)	A.1	Released	2011-09-13 15:39 EDT
0000000121	Safety Precautions and Working Tech...	A.1	Released	2011-09-13 15:39 EDT
0000000119	THE OPERATOR (chapter)	A.1	Released	2011-09-13 15:39 EDT
0000000118	THE POWER TOOL (chapter)	A.1	In Work	2011-09-13 15:42 EDT
0000000117	THE USE OF THE POWER TOOL (chap...	A.1	In Work	2011-09-13 15:42 EDT

(0 objects selected)

There is a common set of tools that enable you to generate new data or perform actions on existing data.

- Some tables provide actions in one or more drop-down menus. For some actions, you must identify the object or objects on which you are performing the action, by selecting the object(s) in the table.
- Some tables have a toolbar with icons that provide quick access to common functions.

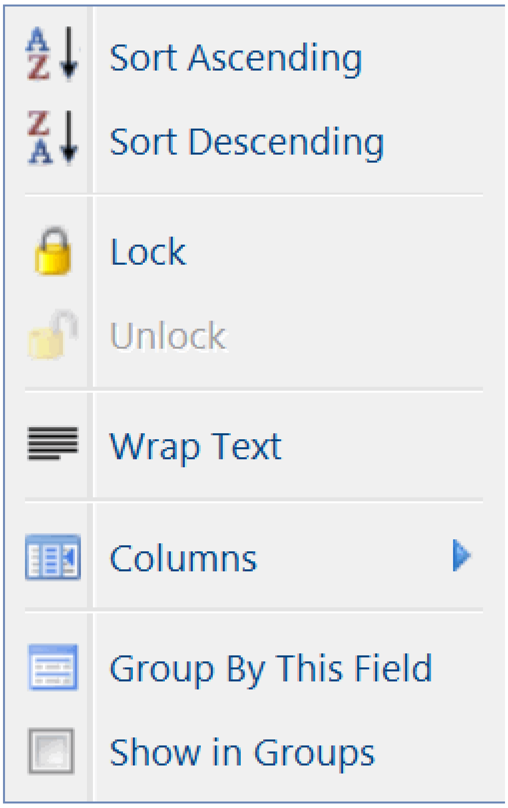
To improve your ability to view and access the information that you need, Windchill tables enable you to manipulate the table display.

- Most Windchill tables contain a View drop-down menu located to the right of the table label. Selections on the View menu enable you to filter objects displayed in the table or change the table layout. Windchill provides out-of-the-box views that are uniquely designed for each table and the type of information the table displays. Your administrator may build additional views that reflect common work practices or that focus on data specific to your industry. Finally, the Customize... option on the View menu enables you to manage existing views or build your own custom table views.
- Some tables provide the Table display options button. Clicking the button opens a menu that enables you to select the View selected object option, which enables you to filter the table to display only those objects that have been selected.
- Windchill tables offer several options for configuring table columns including the ability to sort data, group data, resize the columns, and change their display order.
- Drag handles at the bottom of the table enable you to increase or decrease the table height.
- If you are working with a large set of data, you can use the Find in table search utility to filter the table to display only the objects that contain the string you specify in the Find in table field.

Working with Table Columns

Windchill tables enable you to configure the columns to achieve a layout that better suits your work.

- You can sort a table by clicking its columns. On the first click, the column sort is ascending and on the second click, it toggles to descending. You can establish multiple sorting criteria by pressing the SHIFT key and selecting up to three columns. The sort prioritizes based on the order the columns were selected.
- You can adjust the column width by exposing a drag handle on the right side of a column.
- You can change the column display order by selecting a column and dragging it to its new position in the table.
- For each column, additional configuration options are available from a drop-down menu that is exposed when you cursor over the column header.



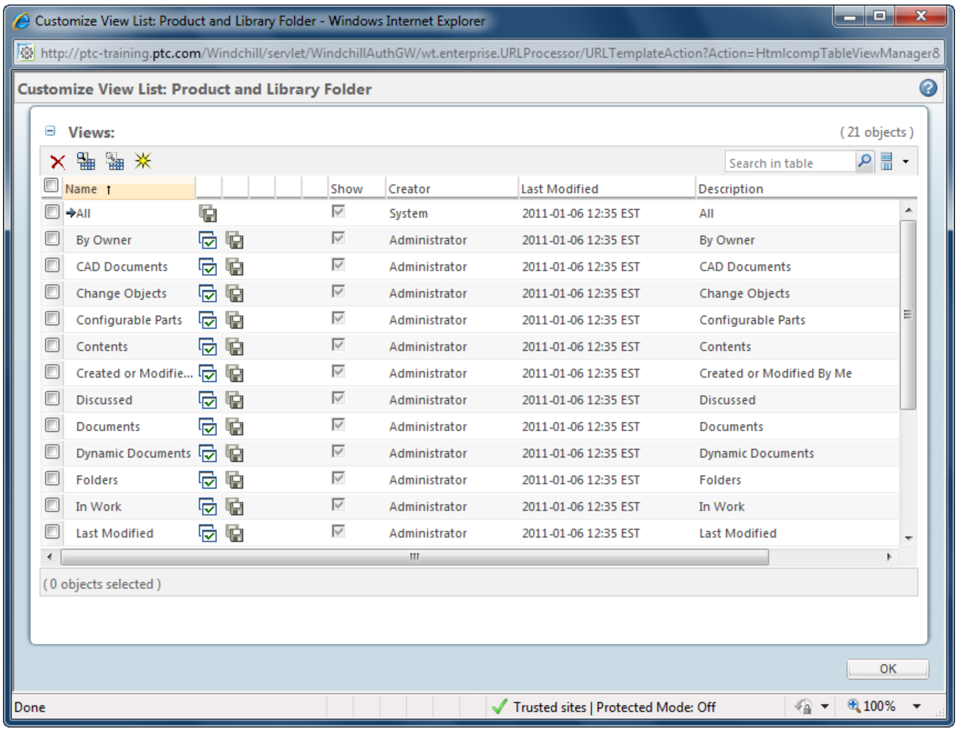
Column Menu

  - You can sort the table by selecting either the Sort Ascending or Sort Descending option.
  - You can lock the column, which enables the column to remain in view as you scroll to the right. When you lock a column, every column that appears before that column in the table will be locked as well. Select the Unlock option to unlock the column.
  - You can wrap text in a column so that it appears on multiple lines.
  - You can select the Columns option from the menu to open a list of columns available for the table. From the columns list, you can select or de-select columns to expose or hide them in the table.
  - When you click the column’s drop-down list and select Group By This Field, the table information is grouped by that column. The Show in Groups field is automatically selected when you group information in columns; however, you can clear the Show in Groups check box to remove the grouping.

Once you have configured your columns, you can quickly save your configuration by clicking the View drop-down menu in the upper left corner of the table and selecting Save As View. After typing a name for your view, you can return to your view by selecting it from the View drop-down list.

Managing Windchill Table Views

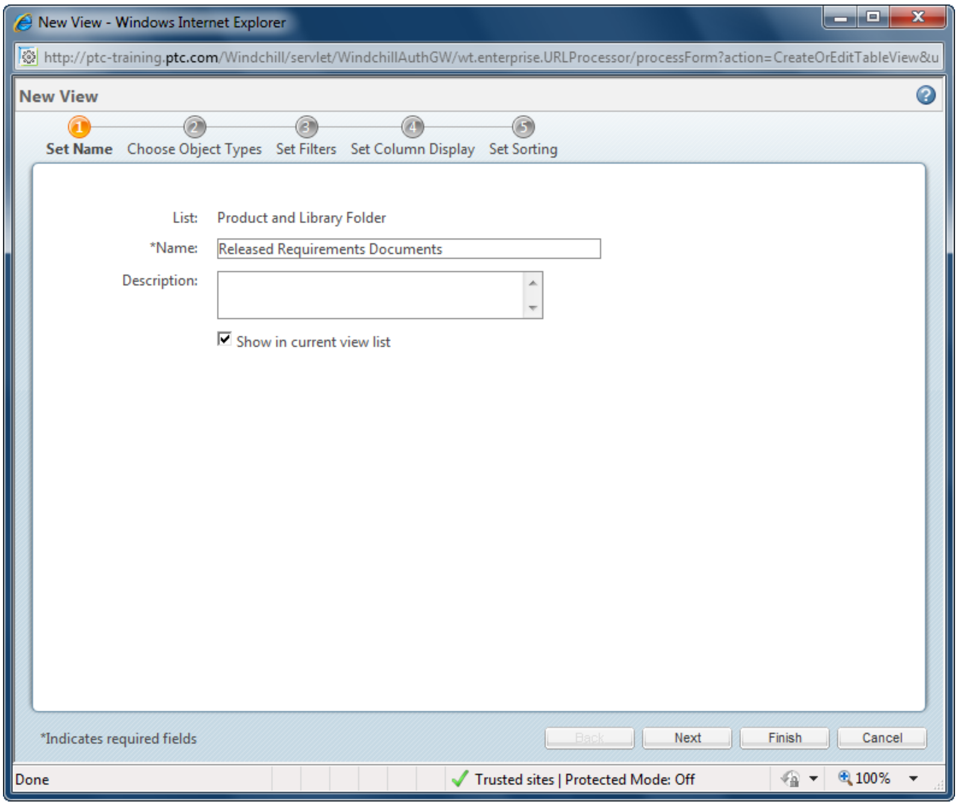
Windchill tables display objects in rows with information about each object listed in columns.



The number, content, and order of the columns and rows can help or hinder your ability to work with large data sets. For each data table, Windchill provides a default view and your administrator may have defined custom views for your organization. Some of those views are available in the View drop-down menu. If you select the Customize... option from the View drop-down menu, the Customize View List window appears. This window includes the Views table, which describes each of the available views. You can use the actions available on the Views table to delete table views you have created, show table views, hide table views, set an active table view, edit table views, and create new table views.

New View: Set Name

If you find that the out-of-the-box table views or the table views created by your administrator do not satisfy your needs, you can click the **New View** icon in the Customize View List window to create a custom table view using the New View Wizard.

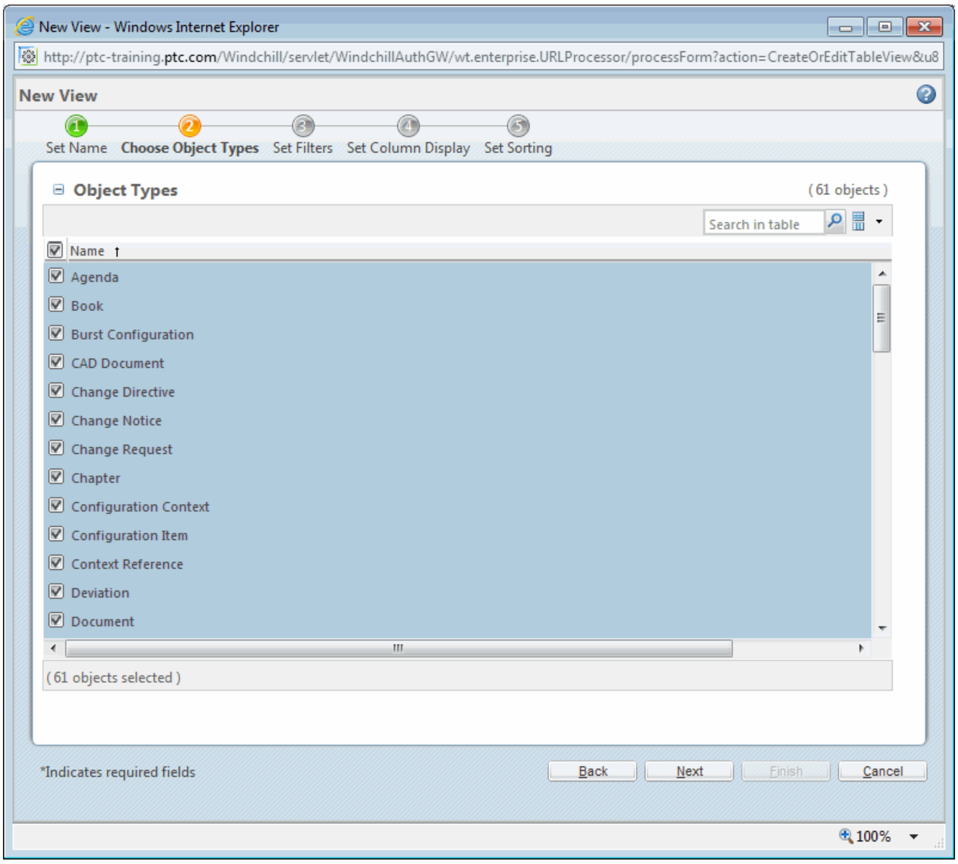


The New View Wizard divides the creation of a table view into five steps.

In the Set Name step window, you are required to provide a name for your view. You also have the option of providing a description and you can select to display the view in the View list.

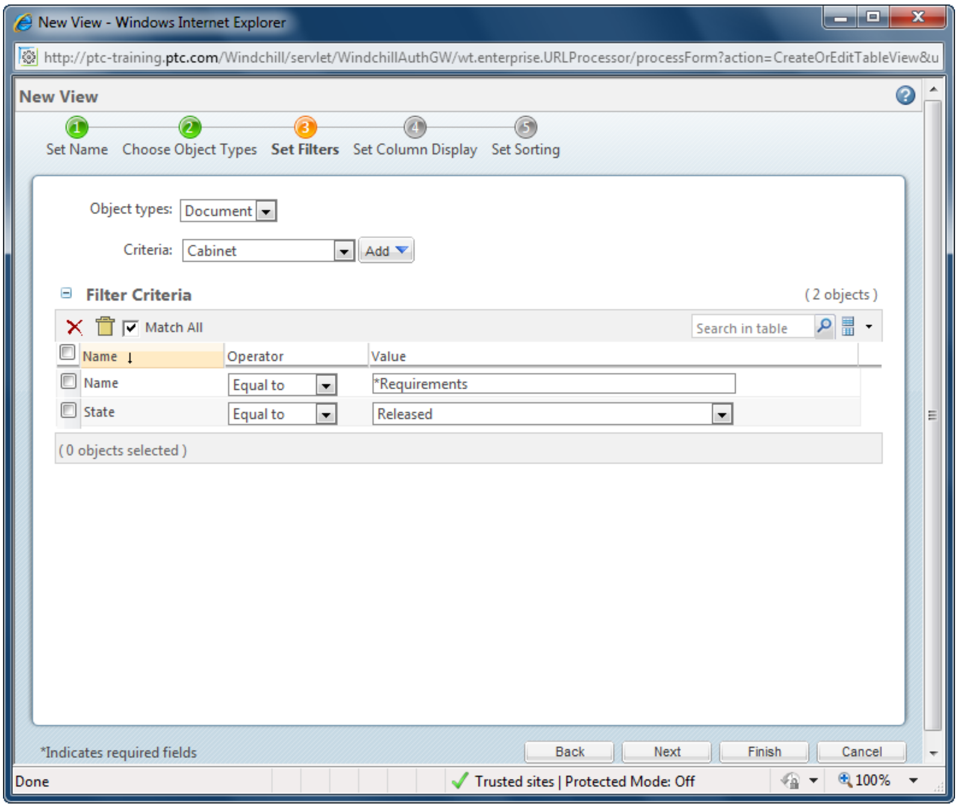
New View: Choose Object Types

In the Choose Object Types step window, you select which object types the view manages.



New View: Set Filters

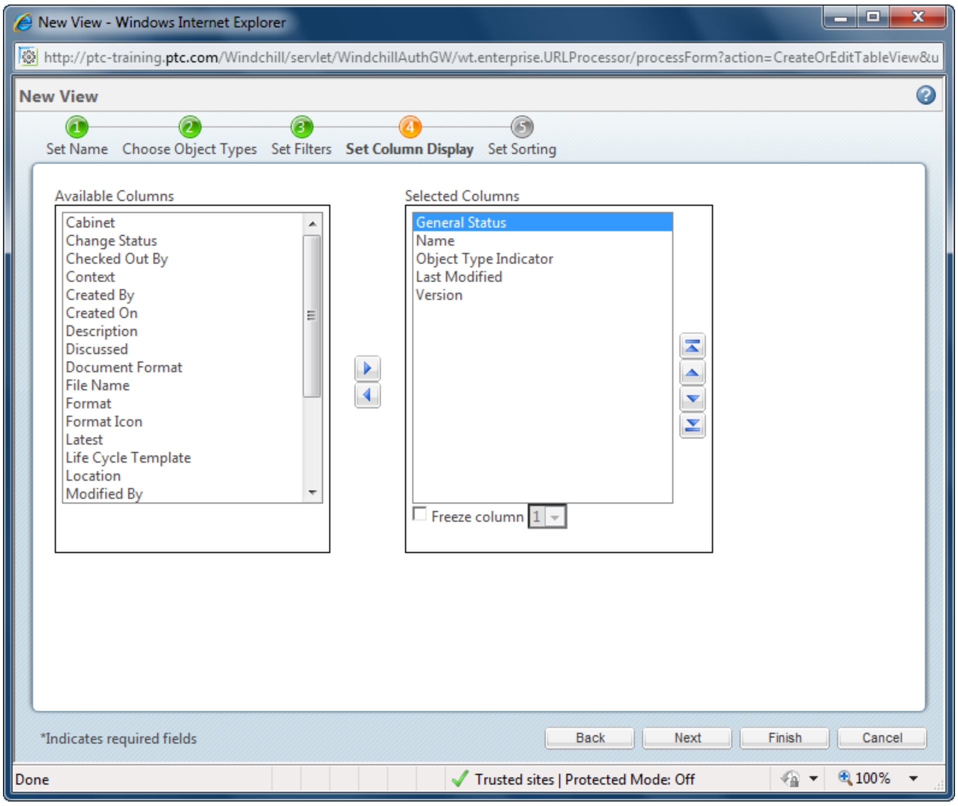
In the Set Filters step window, you specify the rules that govern which items are displayed in table rows. Attributes specific to the selected object type populate the Criteria drop-down list. You can filter your view by selecting criterion from the list and adding them to the Filter Criteria table.



Once added to the table, you can define each criterion with an operator and a value. A Match All option sets the filter to return only objects that match all criteria. If the Match All option is de-selected, the filter returns objects that match any of the specified criteria.

New View: Set Column Display

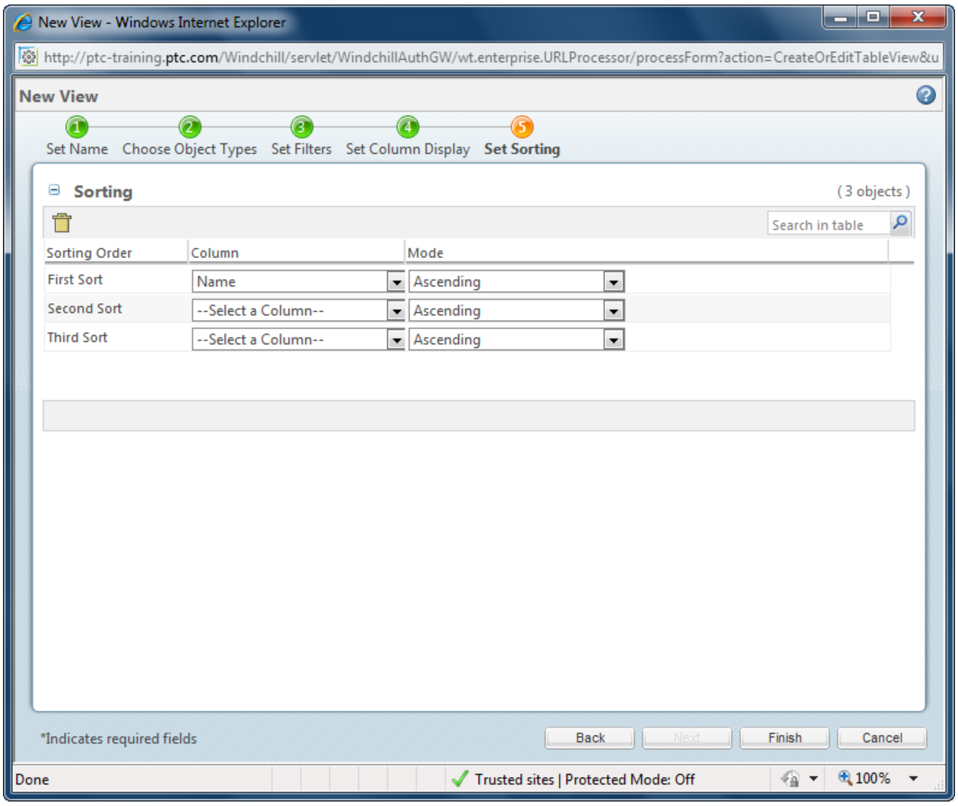
In the Set Column Display step window, you select the columns displayed in the table and the order in which those columns appear.



You select columns from the Available Columns field on the left and add them to the Selected Columns on the right. Most tables have required columns which automatically populate the Selected Columns field. Once you have added all of your columns to the Selected Columns field, you can click the Top, Up, Down, and Bottom buttons to adjust the display order.

New View: Set Sorting

In the Set Sorting step window, you define sorting criteria for the table objects.



You can establish multiple sorting criteria by selecting up to three columns and determining whether the objects are sorted in ascending or descending order within each column.

Building Custom Windchill Table Views

Objectives

- Create custom Windchill table views.

Scenario

You often work with Released Requirements documents. To make the Folder Contents table more usable, you would like to create a table view, which displays only Released Requirements documents. You would also like to simplify the view by only displaying the General Status, Name, Object Type Indicator, Last Modified, and Version columns in that order.

In this exercise, you create a Released Requirements Document view for the Folder Contents table. You build and test this new table view on the Documentation folder of the Chainsaw - 220 Series product.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Log on to Windchill as Keith Kraft (kkraft/ptc).
- Start on the Folders page of the Chainsaw - 220 Series product.
- Select the Documentation folder in the Folders table to display the folder contents in the Folder Contents table.

Task 1. Create a new table view.

1. To the right of the Folder Contents table label, click the **View** drop-down menu.
2. Click the lower part of the scroll bar to view the bottom of the View drop-down menu.
3. Select **Customize...** from the View drop-down menu.
4. In the Customize View List: Product and Library Folder window, click the **New View** icon to open the New View Wizard.
5. In the Set Name step window, type **Released Requirements Documents** in the Name field.
6. Click the **Next** button.
7. In the Choose Object Types step window, select the check box to left of the Name column title to de-select all of the object types in the Object Types table.
8. Select the check box for the **Document** type.
9. Click the **Next** button.
10. In the Set Filters step window, click the **Criteria** drop-down menu.
11. Select **State** from the Criteria drop-down menu.
12. Click the **Add** button to add State to the Filter Criteria table.
13. For the State criterion, ensure Equal to is selected for Operator and click the **Value** drop-down menu.
14. Select **Released** from the Value drop-down menu.

15. In the Set Filters step window, click the **Criteria** drop-down menu.
16. Select **Name** from the Criteria drop-down menu.
17. Click the **Add** button to add Name to the Filter Criteria table.
18. For the Name criteria, ensure Equal to is selected for Operator and type ***Requirements** in the Value field.

> *The Match All option, available from the toolbar, sets the filter to return only objects that match all criteria in the Filter Criteria table. If the option is de-selected, the filter will return objects that match any criteria in the Filter Criteria table.*

19. Click the **Next** button.
20. In the Set Column Display step window, select **General Status** from the Available Columns field.
21. In the Available Columns field, press the CTRL key and click **Last Modified**.
22. In the Available Columns field, click the lower part of the scroll bar to scroll down.
23. In the Available Columns field, press the CTRL key and click **Version**.
24. Click the **Add** button to add all three selections to the Selected Columns field.
25. In the Selected Columns field, select **General Status**.
26. Click the **Top** button to move the General Status column to the top of the list.
27. Click the **Next** button.
28. In the Set Sorting step window, click the **Column** drop-down menu for the First Sort entry.
29. Select **Name** from the Column drop-down menu.
30. Click the **Finish** button to create the new view.
31. In the Customize View List: Product and Library Folder window, click the lower part of the Views table scroll bar to view the bottom of the list.
32. Click the **OK** button to close the Customize View List: Product and Library Folder window.
33. In the Microsoft Internet Explorer confirm window, click the **OK** button to confirm the refresh operation.

Task 2. Switch the Folder Contents display to the new view.

1. To the right of the Folder Contents table label, click the **View** drop-down menu.
2. Click the lower part of the View drop-down menu scroll bar to scroll down.
3. Select **Released Requirements Documents** from the View drop-down menu.
4. Observe the change to the Folder Contents table. Click the **View** drop-down menu.

5. Click the upper part of the View drop-down menu scroll bar to scroll up.
6. Select **All** from the View drop-down menu.

This completes the exercise.

Understanding Information Pages

While working in Windchill, you may want to view more specific information about an object. To do so, you click the **View information** icon for that object or select View Information from an actions list. This opens the object's information page, which provides a central location for accessing details about and performing actions on the object. Regardless of the type of object, information pages have a consistent layout that can be divided into three areas:

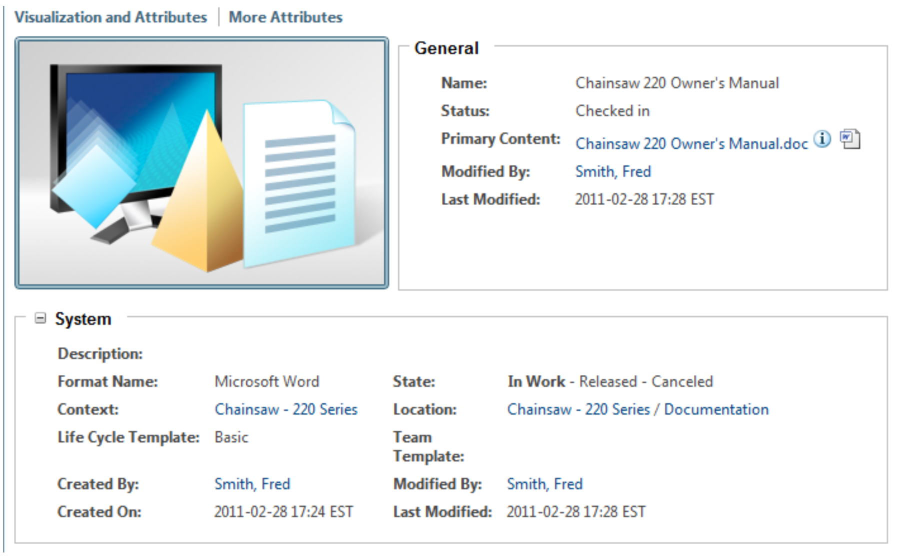
- At the top of the page is the object name and number. Additionally, other attribute information such as object type, version, and state may be displayed at the top of the information page. The Actions menu, located beside the object name, provides access to many additional operations related to the specific object. The options available in the Actions menu vary depending on what type of object you are viewing, the object's state, and your permissions.

Actions and Object Name

- Beneath the object name, a set of tabs provide access to additional information about the object. The tabs that are available depend on the type of object you are viewing. There is also the capability to customize the information page by building custom tabs.

Tabs

- Below the tabs, the information page displays the associated tables and attribute information based on the selected tab. If the tables extend beyond the visible portion of the page, you can use the links at the top of the page to scroll to the desired information.



Information Tables and Attributes

Customizing Information Pages

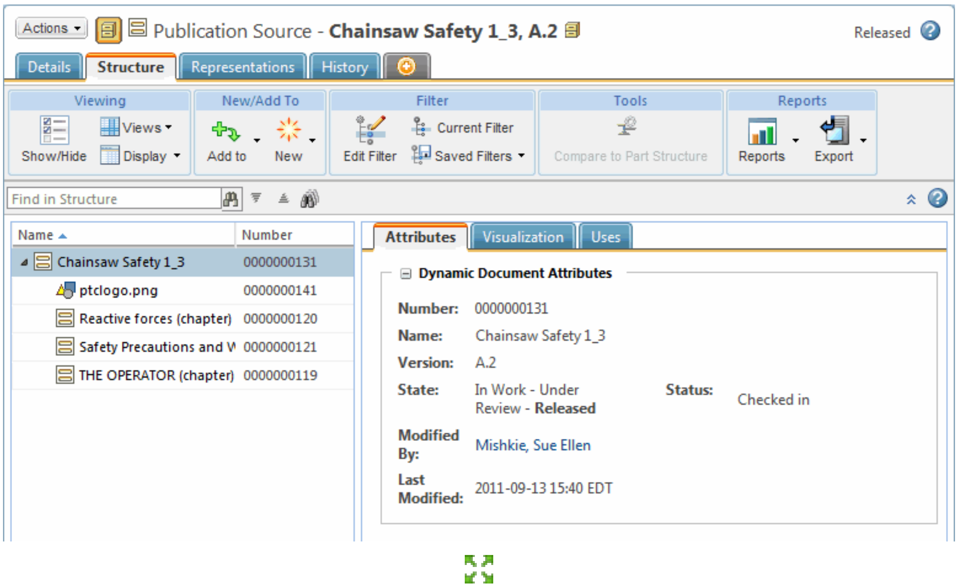
Object information pages can be customized to better suit your work and provide easier access to the information you most commonly use. You can specify a custom layout for each object type. Once you have established a customized layout, that layout is applied as your view for all information pages of that object type.

The level of customization depends on the type of tab . The default tabs that are provided out-of-the-box for an object are restricted in their level of customization; however, you can create custom tabs that are capable of more customization actions:

- The New Tab option enables you to create a custom tab. Once you have created the custom tab, you must use the other actions to specify the tab's name, move the tab to its proper location, and determine which tables are displayed on the information page when the tab is selected.
- To move both custom and default tabs, you select the tab and drag it to its new position in the tab order.
- To rename a custom tab, you right-click the tab to expose the Rename menu option. After you select the Rename option, the Rename Tab window opens, which enables you to type the new name for your custom tab.
- The close action enables you to delete a custom tab. You can close a tab by either clicking the close icon to the right of the tab name or by right-clicking the tab and selecting the Close menu option. You will be prompted to confirm the delete action.
- To add and/or remove tables from a custom tab, you use the Customize drop-down menu in the upper-right corner of the information page. The Customize drop-down menu provides a series of categorized options that enable you to select the tables you wish to display on your custom tab.
- Once you have selected the tables that you want to display on your custom tab, you can move the tables to change their display order by clicking and dragging the table link at the top of the page.

Viewing Structure

For objects with the capability to form structural relationships, a Structure tab is provided on the information page.



The Structure tab displays structural information in a three panel layout. In the upper-left panel, the structure table displays a hierarchical representation of the objects used by the current object. The table enables you to expand and collapse the structure and access information for any object within the structure. The panel to the right of the structure table contains the Attributes and Visualization tabs. These tabs display information for the currently selected object in the structure table. The Uses tab displays the Uses table, which displays all of the objects the currently selected object in the structure table uses. At the top of the page, a ribbon toolbar provides options that enable you to perform actions on the objects in the structure.

When viewing a structure, it is important for you to understand the Configuration you are viewing. Configuration is a filter applied to the structure that determines the versions that are displayed in the hierarchy. For example, the default configuration for all structure tables is Latest with no state filter. This displays the latest versions of all of the objects in the hierarchy regardless of whether they are released or in development. To change the configuration, you use the Edit Filter tool to select the type of configuration and further define the criteria applied with that configuration:

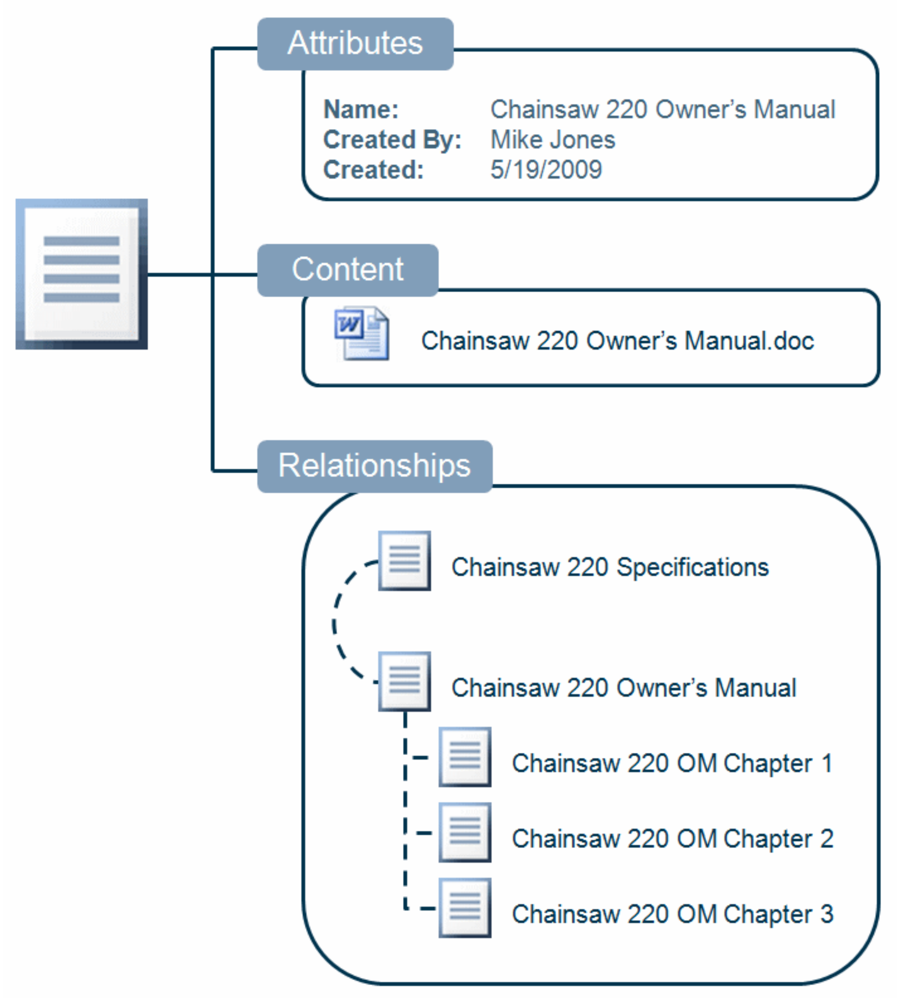
- The Latest configuration filters the structure to display the latest object versions that meet any additional criteria specified for the configuration, such as state.
- The Baseline configuration filters the structure to display the object versions managed by the specified baseline.
- The Promotion configuration filters dynamic document and CAD document structure to display the object versions managed by the specified promotion request.
- The As Stored configuration filters dynamic document and CAD document structure to display the object versions as they existed at the specified check in.

Additional structure information can be obtained from the Where Used table accessed from the Related Objects tab. The Where Used table displays all parent objects that use the current object as part of their structure.

Understanding Object Capabilities

Windchill objects have many features and capabilities, which enable your company to effectively manage and control product information. A thorough understanding of these capabilities, ensures that you are able to effectively understand and use the information presented on an object's information page.

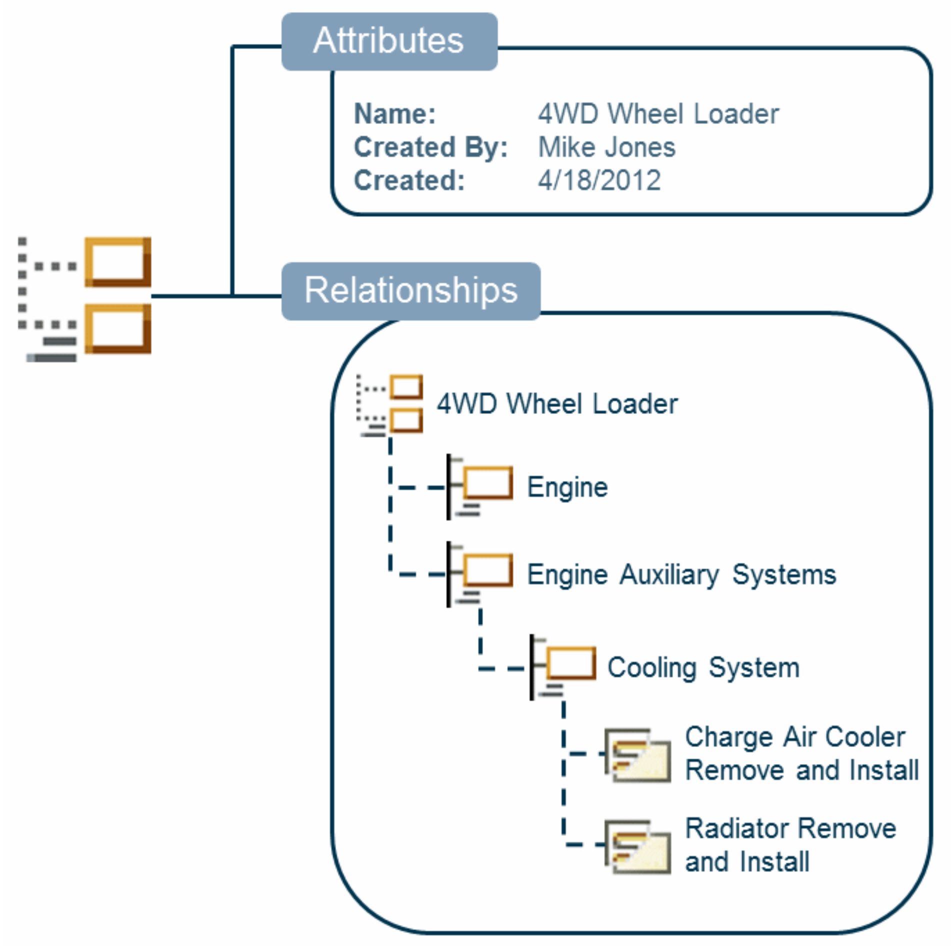
All Windchill objects typically have three primary purposes:



Understanding Object Example

- Storing attributes about the object, also called properties or metadata, such as who created it and when.
- Storing content or files that are uploaded and managed by Windchill.
- Managing relationships that reference other objects in the system.

Information Structures



Information Structure Example

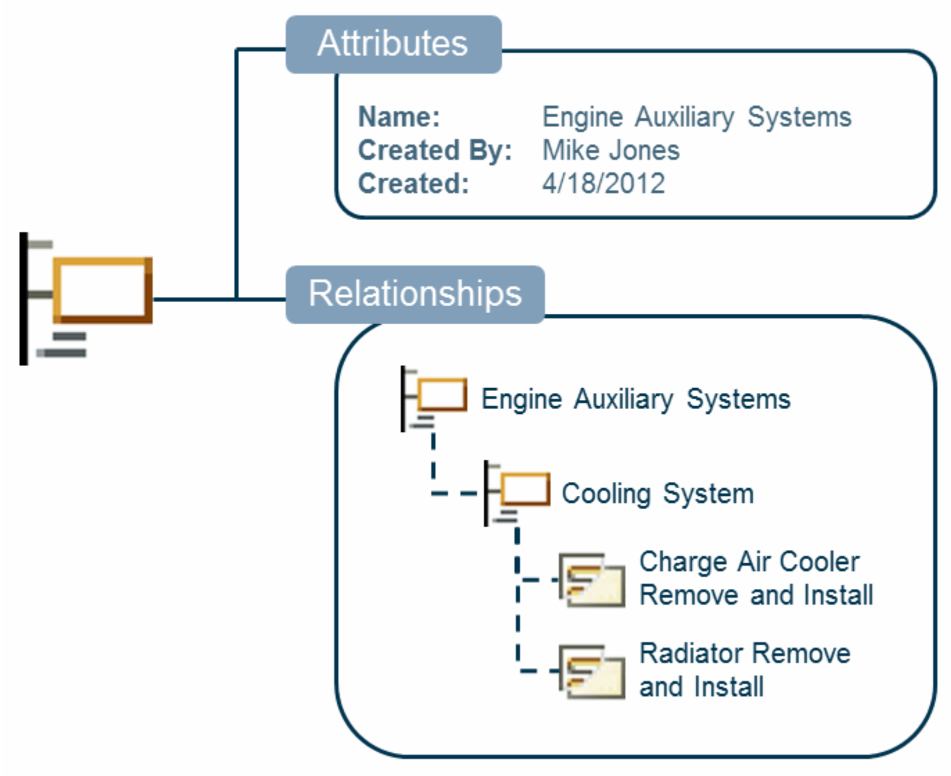
An information structure typically represents a standalone product. While the entire information structure is a hierarchical representation of a standalone product, the root information structure node represents the top level of the structure. This top-level object is itself a unique business object. Only one of these primary information structure root nodes per product context is supported. Information structures can be nested, enabling reuse across products.

A information structure object has attributes which can include information such as when the information structure was last modified and by whom. Your system administrator may also establish attributes that are unique to your implementation. They may also manage collaborative features such as subscriptions.

Finally, information structures can form relationships with other Windchill objects:

- They can form a structural relationship with other information structures, Information groups, and content holders based on the corresponding information structure.
- They can be a member of a baseline.
- They can be a member of a notebook.
- They can be part of a package.
- They can be part of a managed collection.
- They can be compared to other information structures or to part structures.

Information Groups



Information Group Example

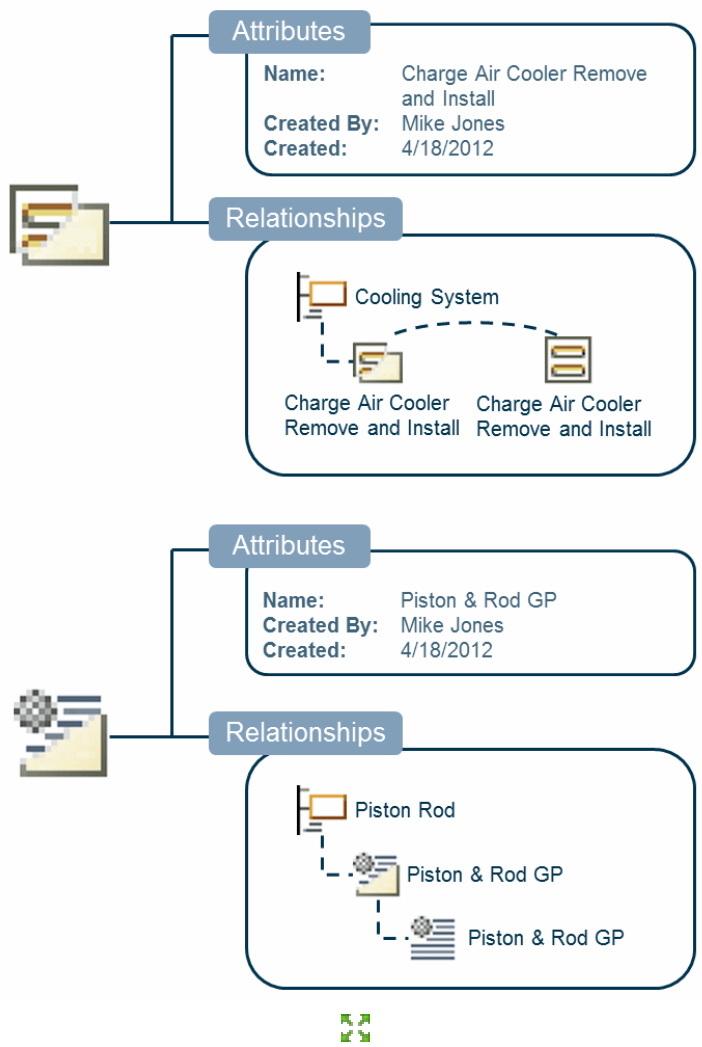
Information groups represent systems, sub-systems, and major components in a product's information structure. Information groups can be associated directly to service information, or they can contain other Information groups. Information groups can be soft-typed to create additional information organization and can include applicability information.

An Information group object has attributes which can include information such as when the Information group was last modified and by whom. Your system administrator may also establish attributes that are unique to your implementation. They may also manage collaborative features such as subscriptions.

Finally, Information groups can form relationships with other Windchill objects:

- They can form a structural relationship with other Information groups, information structures, and content holders based on the corresponding information structure.
- They can be a member of a baseline.
- They can be a member of a notebook.
- They can be part of a package.
- They can be part of a managed collection.
- They can be compared to another Information group or to a part structure.

Content Holders



Content Holder Examples

Content holders are business objects representing content in an information structure. Each content holder is linked to a single content object, such as a dynamic document, an illustration, or a parts list. Multiple content holders can link to a single content object.

- Out-of-the-box content holder types include:
    - Textual content holder
    - Illustration content holder
    - Parts List content holder

Textual and Illustration content holders are linked to dynamic documents. When adding an existing dynamic document to an information structure, a content holder is created and linked to the dynamic document, assuming there is no content holder currently linked to the dynamic document. While a content holder can be associated with only one dynamic document, a dynamic document can be associated with multiple content holders.

A content holder object has attributes which can include information such as when the content holder was last modified and by whom. Your system administrator may also establish attributes that are unique to your implementation. They may also manage collaborative features such as subscriptions.

Finally, content holders can form relationships with other Windchill objects:

- They can form a structural relationship with Information groups based on the corresponding information structure.
- They can be a member of a baseline.
- They can be a member of a notebook.
- They can be part of a package.
- They can be part of a managed collection.
- They can be compared to another content holder or a part structure.

Examining Content Holders

Objectives

- Describe the information you can access by exploring different content holder objects.

Scenario

In this exercise, you examine different content holder objects.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

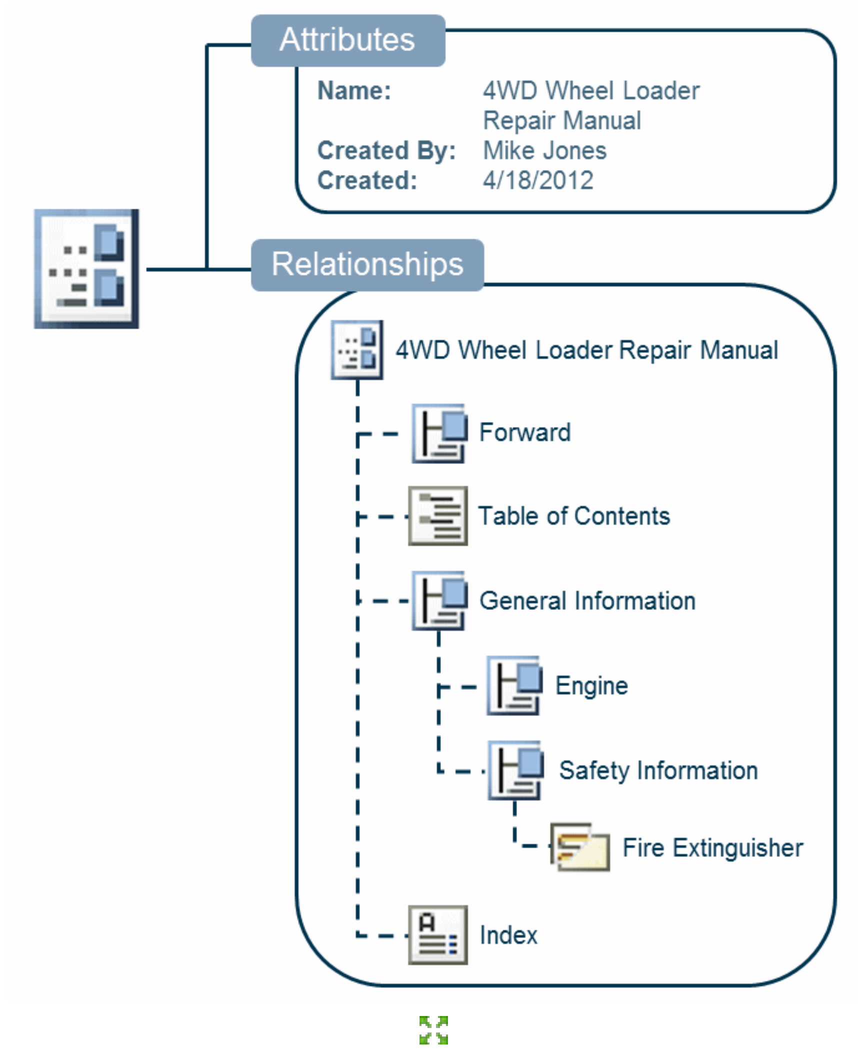
- Log on to Windchill as Arden Reed (areed/ptc).
- Start on the Windchill Home page.

Task 1. Access and explore information structure content holders.

1. Click the Navigator’s **Browse** link.
2. Click the **Expand** icon to the left of the 4WD Wheel Loader product icon.
3. Click the **Information Structure** link.
4. Click the **Expand** icon to the left of the OPERATOR STATION Information group.
5. Right-click the **Cab Remove and Install** content holder.
6. Select **View Information**.
7. Select the **Related Objects** tab.
8. Select the **Changes** tab.
9. Select the **History** tab.
10. Click the Navigator’s **Browse** link.
11. Click the **Information Structure** link.
12. Right-click the **ELECTRICAL SYSTEMS** Information group.
13. Select **View Information**.
14. Click the Navigator’s **Browse** link.
15. Click the **Information Structure** link.
16. Right-click the **4WD WHEEL LOADER** Information Structure root node.
17. Select **View Information**.
18. The information structure object’s Information Page includes three tabs: Details, Changes, and Structure. These tabs display similar information to the corresponding tabs found on the content holder Information page.

This completes the exercise.

Publication Structures



Publication Structure Example

A publication structure defines how information contained within a product's information structure, Windchill libraries, or external sources should be organized for publishing service information. Publication structures are used to publish service information to create end user service information.

The Publication Structure root node is itself a unique business object. The Publication Structure root node represents the top-level structure, and also typically represents a complete publication such as a manual or user guide.

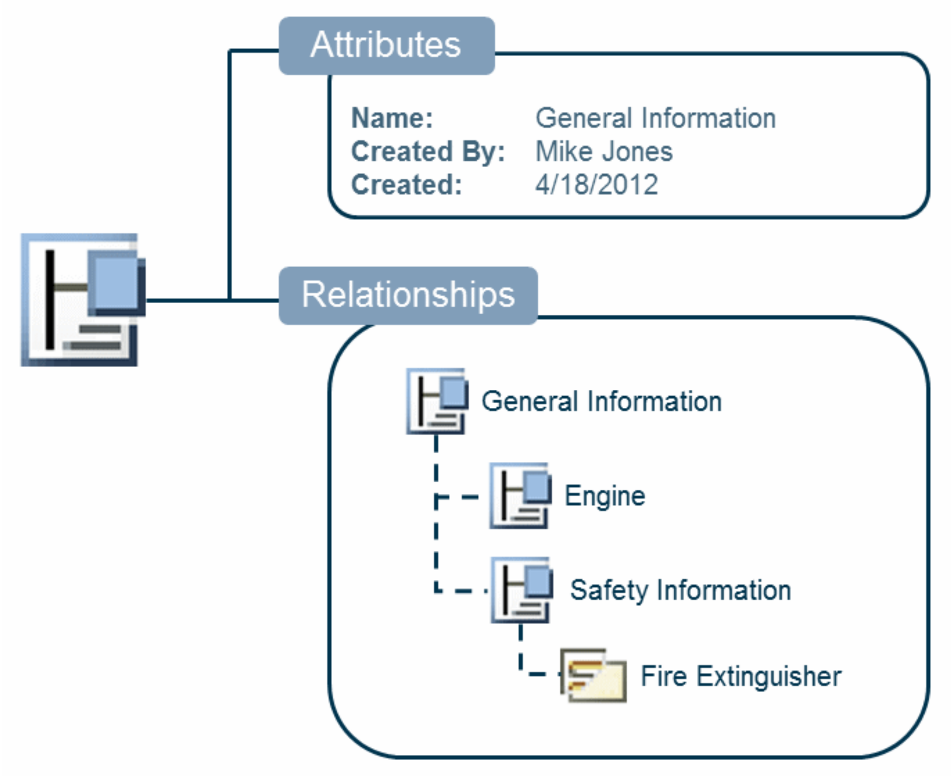
A publication structure object has attributes which can include information such as when the publication structure was last modified and by whom. Your system administrator may also establish attributes that are unique to your implementation. They may also manage collaborative features such as subscriptions.

Finally, publication structures can form relationships with other Windchill objects:

- They can form a structural relationship with other publication structures, publication sections, and content holders based on the corresponding publication structure.
- They can be a member of a baseline.
- They can be a member of a notebook.
- They can be part of a package.
- They can be part of a managed collection.

- They can be compared to other publication structures or to part structures.
- They can be published into a representation.

Publication Sections



Publication Section Example

Publication sections are used to organize content in the publication structure. Options and variants information, also known as item choices, are enabled for publication sections.

A publication section object has attributes which can include information such as when the publication section was last modified and by whom. Your system administrator may also establish attributes that are unique to your implementation. They may also manage collaborative features such as subscriptions.

Finally, publication sections can form relationships with other Windchill objects:

- They can form a structural relationship with other publication sections, publication structures, tables of contents (TOC), indices, and content holders based on the corresponding publication section.
- They can be a member of a baseline.
- They can be a member of a notebook.
- They can be part of a package.
- They can be part of a managed collection.
- They can be compared to other publication sections or to part structures.
- They can be published into a representation.

Table of Contents

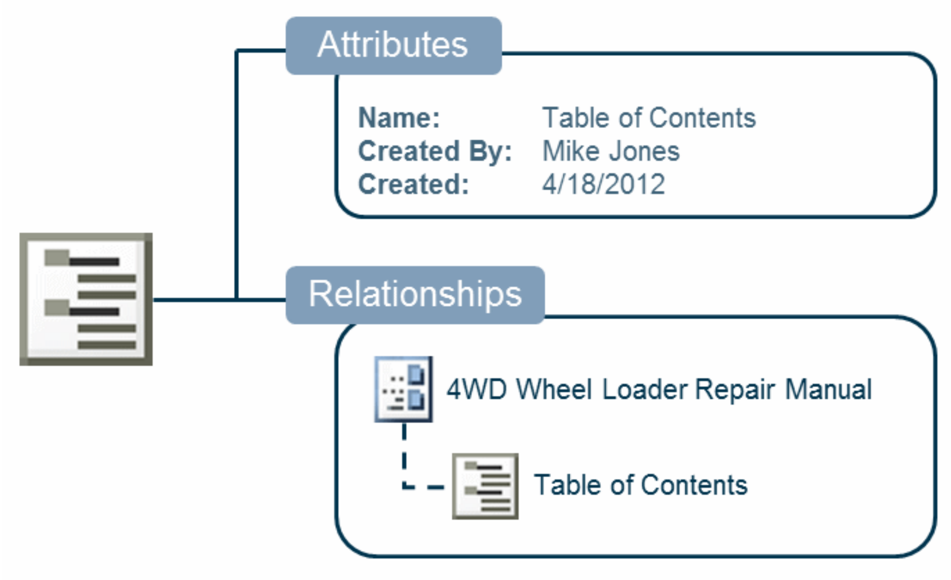


Table of Contents Example

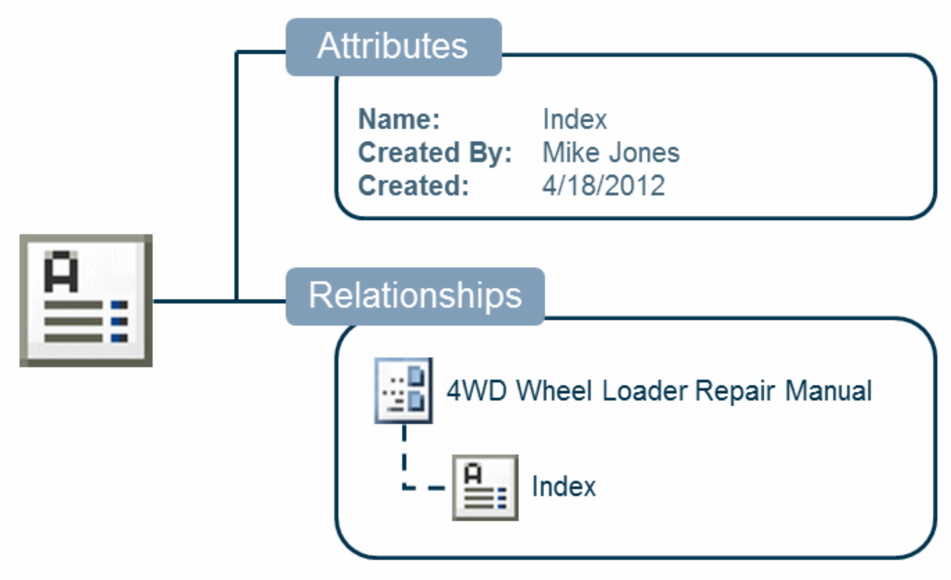
The Table of Contents object is a placeholder for an automatically generated publication table of contents. Options and variants information, also known as item choices, are enabled for Table of Contents objects.

A Table of Contents object has attributes which can include information such as when the table of contents was last modified and by whom. Your system administrator may also establish attributes that are unique to your implementation. They may also manage collaborative features such as subscriptions.

Finally, a table of contents can form relationships with other Windchill objects:

- They can form a structural relationship with other publication structures and publication sections, based on the corresponding publication structure or publication section.
- They can be a member of a baseline.
- They can be a member of a notebook.
- They can be part of a package.
- They can be part of a managed collection.
- They can be compared to other table of contents or to part structures.
- They can be published into a representation.

Indices



Index Example

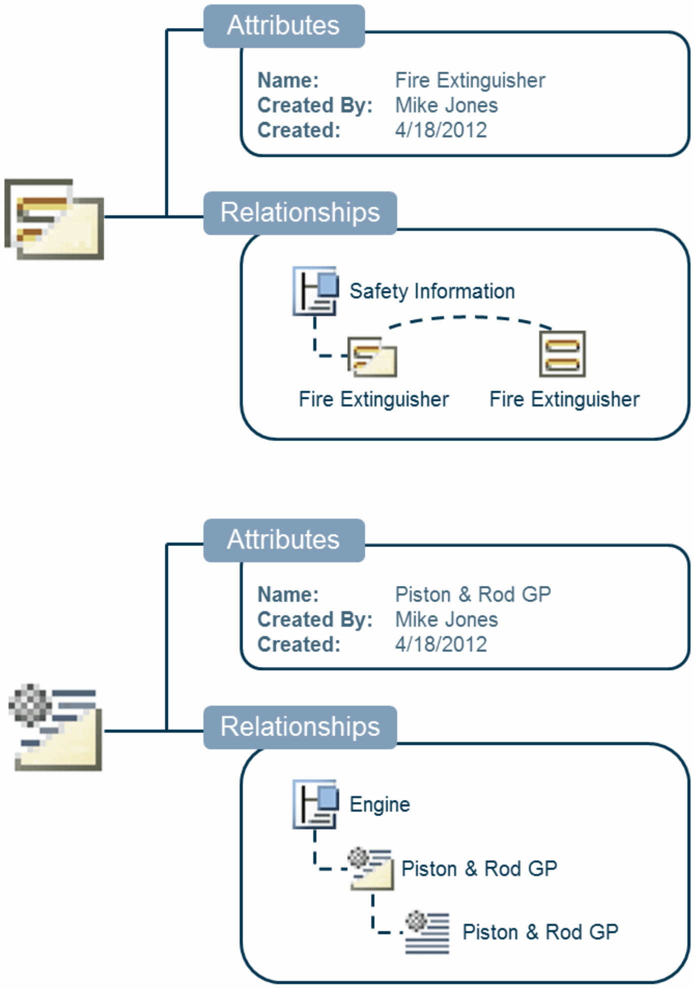
An Index object is a placeholder for an automatically generated publication index. Options and variants information, also known as item choices, are enabled for Index objects.

An Index object has attributes which can include information such as when the index was last modified and by whom. Your system administrator may also establish attributes that are unique to your implementation. They may also manage collaborative features such as subscriptions.

Finally, an index can form relationships with other Windchill objects:

- They can form a structural relationship with other publication structures and publication sections, based on the corresponding publication structure or publication section.
- They can be a member of a baseline.
- They can be a member of a notebook.
- They can be part of a package.
- They can be part of a managed collection.
- They can be compared to other indices or to part structures.
- They can be published into a representation.

Content Holders



Content Holder Examples

Content holders are business objects representing content in a publication structure. Each content holder is linked to a single content object, such as a dynamic document, an illustration, or a parts list. Multiple content holders can link to a single content object. Options and variants information, also known as item choices, are enabled for content holder objects.

- Out-of-the-box content holder types include:
  - Textual content holder
  - Illustration content holder
  - Parts List content holder

Textual and Illustration content holders are linked to dynamic documents. When adding an existing dynamic document to a publication structure, a content holder is created and linked to the dynamic document, assuming there is no content holder currently linked to the dynamic document. While a content holder can be associated with only one dynamic document, a dynamic document can be associated with multiple content holders.

A content holder object has attributes which can include information such as when the content holder was last modified and by whom. Your system administrator may also establish attributes that are unique to your implementation. They may also manage collaborative features such as subscriptions.

Finally, content holders can form relationships with other Windchill objects:

- They can form a structural relationship with both publication structures and publication sections based on the corresponding publication structure or publication section.
- They can be a member of a baseline.
- They can be a member of a notebook.
- They can be part of a package.
- They can be part of a managed collection.
- They can be compared to another content holder or a part structure.
- They can be published into a representation.

Examining Content Holders

Objectives

- Describe the information you can access by exploring different content holder objects.

Scenario

In this exercise, you examine different content holder objects.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Log on to Windchill as Arden Reed (areed/ptc).
- Start on the Windchill Home page.

Task 1. Access and explore publication structure content holders.

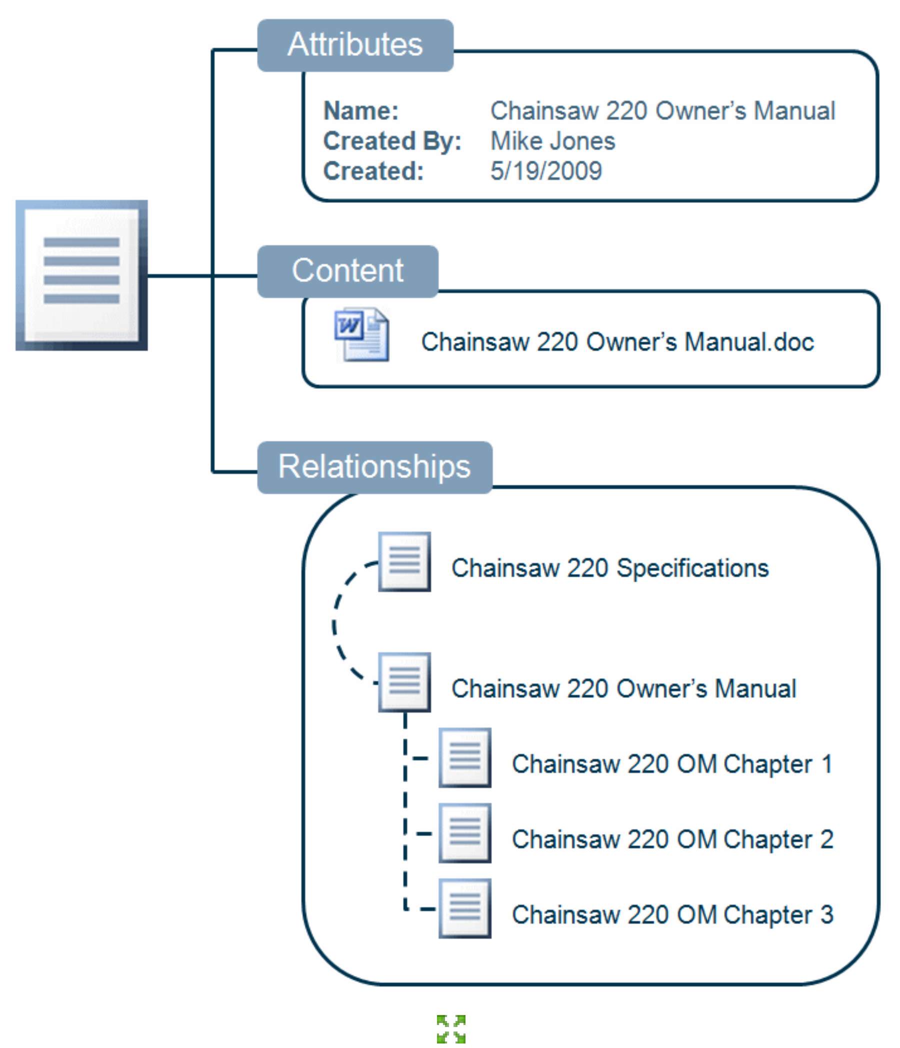
1. Click the Navigator's **Browse** link.
2. Click the **Expand** icon to the left of the 4WD Wheel Loader product icon.
3. Click the **Publication Structures** link.
4. Click the **4WD Wheel Loader Repair Manual** link in the Publication Structures table.
5. Select the **Structure** tab.
6. Click the **Expand** icon to the left of the General Information publication section.
7. Click the **Expand** icon to the left of the Wheels publication section.
8. Click the **Expand** icon to the left of the Powered Wheels and Fasteners publication section.
9. Right-click the **Wheel Remove and Install** content holder.
10. Select **View Information**.
11. Select the **Related Objects** tab.
12. Select the **Changes** tab.
13. Select the **History** tab.
14. Click the Navigator's **Browse** link.
15. Click the **Publication Structures** link.
16. Click the **4WD Wheel Loader Repair Manual** link in the Publication Structures table.
17. Right-click the **Foreward** publication section.
18. Select **View Information**.
19. Select the **Representations** tab.
20. Click the Navigator's **Browse** link.

21. Click the **Publication Structures** link.
22. Click the **4WD Wheel Loader Repair Manual** link in the Publication Structures table.
23. Select the **Structure** tab, if necessary.
24. Right-click the **Table of Contents** object.
25. Select **View Information**.
26. Click the Navigator’s **Browse** link.
27. Click the **Publication Structures** link.
28. Click the **4WD Wheel Loader Repair Manual** link in the Publication Structures table.
29. Click the **collapse** icon to the left of the General Information publication section.
30. Right-click the **Index** object.
31. Select **View Information**.
32. The Index object’s information page only includes one tab: Details. This tab displays similar information to the corresponding tab found on the content holder information page.

This completes the exercise.

Document Capabilities

The purpose of a Windchill document is to store and manage files, URLs, or externally stored content.



Document Example

A document object has attributes, which can include information such as when the document was created, and who created it. Your system administrator may also establish attributes that are unique to your implementation. A document object maintains historical information about its development and maturity. It also manages collaborative features such as subscriptions and discussion forums.

A document object can store an electronic file or URL as primary content and additional files as attachments. While document objects typically store and manage documentation files, there is no limitation to the types of electronic files a document object can store as primary or attached content. If document collaboration services are configured, documents can also manage published visualization files.

Finally, documents can form relationships with other Windchill objects:

- With other documents, a document can form a structural and/or references relationship.
- A document can be a member of a baseline.
- A document can be part of a package.
- A document can be part of a managed collection.

- When published from a dynamic document object, a document forms a published content relationship with the source dynamic document.

Examining Documents

Objectives

- View the attributes, content, relationships, and histories of documents.
- View and use the Document Structure table.
- View document Where Used and Used by relationships.

Scenario

In this exercise, you investigate the attributes, content, relationships, and histories associated with the Chainsaw 220 Owner's Manual document.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Log on to Windchill as Keith Kraft (kkraft/ptc).
- Start on the Folders page of the Chainsaw - 220 Series product.
- Select the Documentation folder in the Folders table to display the folder contents in the Folder Contents table.

Task 1. Access a document's information page.

1. In the Folder Contents table, click the **View information** icon for the Chainsaw 220 Owner's Manual document and observe the document attributes.

If you are in a live classroom environment and you are not taken to the Details tab of the information page, select the Details tab.

Task 2. View a document's attributes, relationships, and histories.

1. Select the **Related Objects** tab and observe the related objects tables.
2. Select the **History** tab and observe the Version History table and Timeline History graph.
3. Click the **Timeline** link at the top of the page to view the Timeline History graph.

Task 3. Explore document structure and view Where Used and Used By relationships for a document.

1. Select the **Structure** tab and observe the Document Structure.

The timeline appears nearly blank because this document has not had any activity since February of 2011. If you look closely at the bottom year line, you see a mark near the beginning of 2011. If you scroll to that time on the timeline, the changes that occurred appear in the main section of the timeline.

2. In the structure table, click the **Chainsaw 220 OM Chapter 1** document to display information for the document in the Attributes tab.
3. In the structure table, right-click the **Chainsaw 220 OM Chapter 1** document to open an actions menu for the document.
4. From the actions menu, select the **View Information** option to open the document's information page.
5. Select the **Related Objects** tab and observe the related objects tables.
6. Click the **A.1** link for the Chainsaw 220 Owner's Manual in the Where Used table to return to its information page.

Task 4. Explore object relationships.

1. Select the **Relationship Explorer** tab.
2. Click the **Open** button.

If you are in a live classroom environment and you first get a Welcome to Relationship Explorer page, click OK to proceed.

3. Click the **Maximize** button.
4. Click the **Expand** icon to the right of the Chainsaw 220 Owners Manual document to display the relationships.
5. Click the **References** link to display the referenced object.
6. Click **Close** to close the Relationship Explorer.

Task 5. View a document's content.

1. Select the **Content** tab and observe the Primary Content and Attachments tables.
2. In the Primary Content table, click the **Microsoft Word** icon to download the primary content.
3. Click the **Open** button to open the document in Microsoft Word.

If necessary, click Next and then click Close in Microsoft Office Activation Wizard.

4. Observe the Owner’s Manual document. Click the **Close** button to close the Chainsaw 220 Owner's Manual.doc - Microsoft Word window.

This completes the exercise.

1. Which customization action can be performed on the default tabs of an information page?

- ○ A - Move or change the display order of a tab
- ○ B - Rename a tab
- ○ C - Add/Remove Tables from a tab
- ○ D - Close (Delete) a tab

2. Which of the following is NOT a capability that is shared by many Windchill objects?

- ○ A - The object has attributes, such as a name and the date it was created.
- ○ B - The object has content files, such as MCAD documents, Arbortext XML, or Microsoft Word documents.
- ○ C - The object has relationships associating it to other objects.
- ○ D - All of the above are common Windchill object capabilities.

3. Which menu enables you to filter objects displayed in the table or change the table layout?

- ○ A - Layout
- ○ B - Actions
- ○ C - View
- ○ D - Display

4. Which action cannot be performed to manipulate columns in Windchill tables?

- ○ A - Clicking columns to sort the data ascending or descending
- ○ B - Dragging column borders to adjust column width
- ○ C - Dragging columns to change their display order
- ○ D - Renaming columns

5. To access the Customize View List window and manage table views, you must select _________ from a table's View drop-down menu.

- ○ A - Customize...
- ○ B - Manage...
- ○ C - Views...
- ○ D - Update...

Creating Documents and Links

Module Overview:

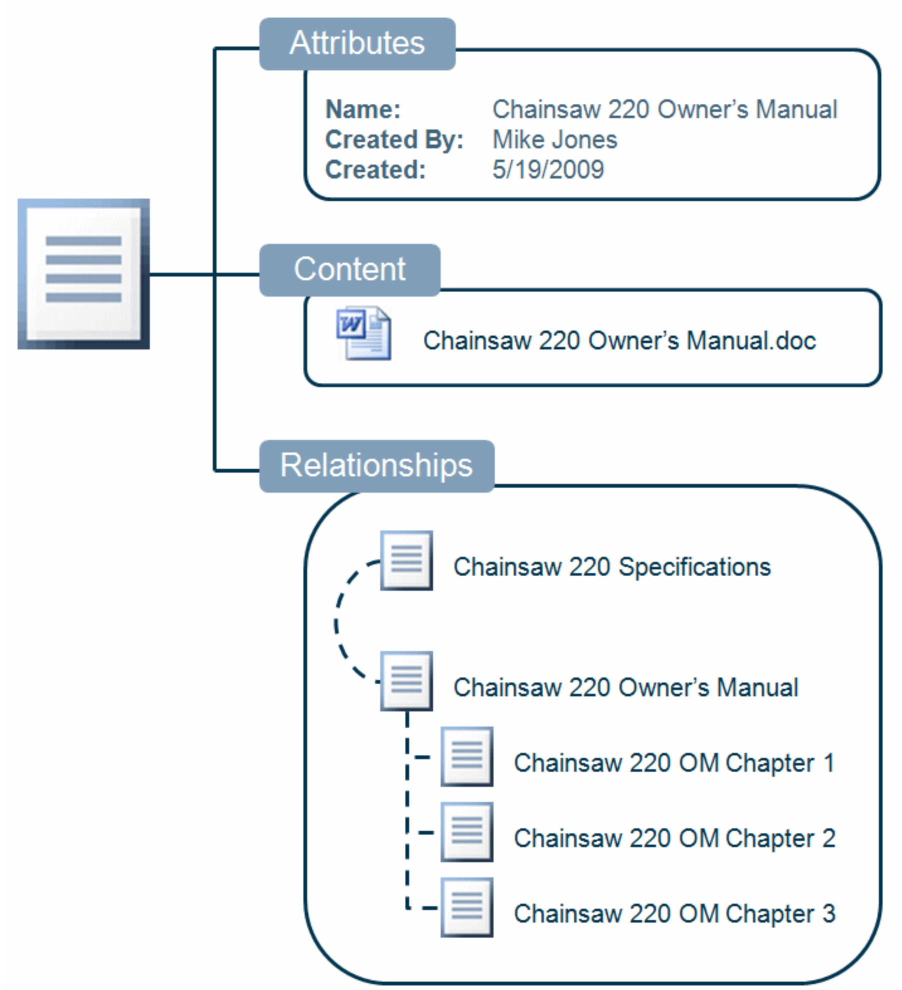
In this module, you create Windchill documents using Windchill's Web interface. You create single documents, multiple documents, links, and documents from templates. You also understand how to configure document preferences.

Objectives:

After completing this module, you will be able to:

- Create documents.
- Create multiple documents simultaneously.
- Create documents from templates.
- Create links.
- Configure document preferences.

Document Capabilities



Document Example

Windchill documents are used to store and manage files, URLs, or externally stored content.

- A document has attributes, including the document name and document creator.
- A document can have primary content, such as an electronic file or URL. You can also add additional files as attachments.
- A document can have relationships with other Windchill objects. Relationships can be created automatically as part of another activity. For example, when a document is checked out, a link is created between the working copy and the public copy. Relationships can also be created explicitly. For example, a document may be contained within a baseline configuration.

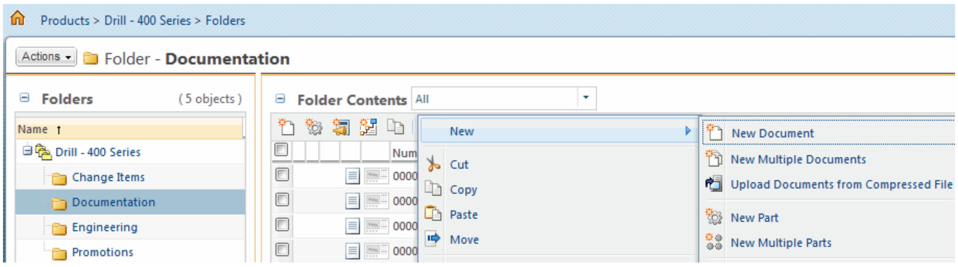
Creating Documents and Links

There are four methods for creating documents:

- Create a single document – This option provides the most flexibility in creation, as you have control over all attributes, attachments, and files. However, it is also the most labor-intensive option.
- Create documents from a template – This option is available when creating single documents. The template may provide default attributes and/or content files. For example, a specifications document template may automatically contain a Microsoft Word document with header and footer information as primary content.
- Create multiple documents – This option enables you to select several files and create a separate document for each. This can save significant time as opposed to creating several single documents, but some flexibility is lost. For example, you can only add primary content and cannot add attachments.
- Upload files in bulk – This option enables you to upload multiple documents within a zip or jar file. These documents are then extracted by Windchill into the folder location. Additionally, if you capture subfolders within the zip file, you can set Windchill to create these subfolders in the folder location.

If the document in a zip file already exists, you have the option to make no changes to the existing document or to iterate the existing document if you have the proper access permissions. This option is only available when you are uploading files in bulk.

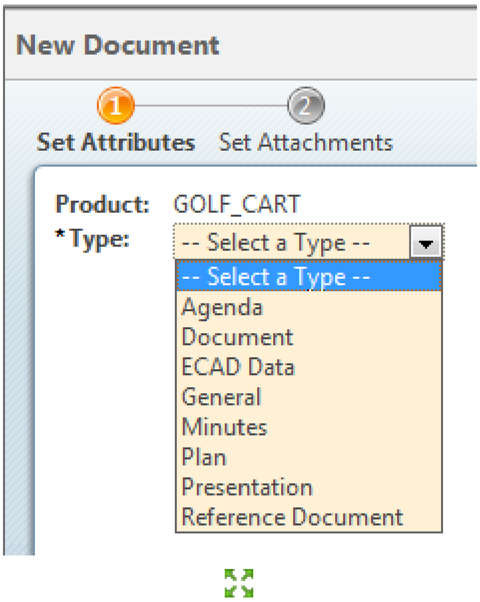
You can create documents by clicking the New Document icon at the top of the Folder Contents table. You can also create documents, multiple documents, and links from the Actions drop-down menu of a specific folder. When you create an object from the Actions drop-down menu, the folder is preselected for you in the Create Wizard and you do not have to set it manually.



Actions Drop-Down Menu

Lastly, some documents are created automatically. Arbortext dynamic documents automatically generate a standard document when published. Bulk loading processes also create documents automatically.

New Document: Set Attributes - Type



Select Document Type

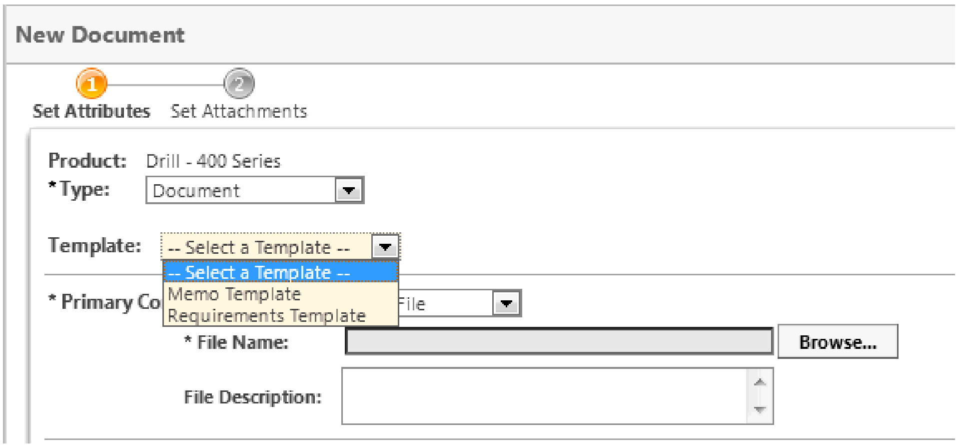
The first step of the New Document Wizard requires you to specify the type of document you are creating. The type you select may determine unique attributes and administration for the document object. Two common out-of-the-box document types are Document and Reference Document.

Selecting a different document type may affect:

- Attributes – For example, a plan document may have a due date attribute while a minutes document may not.
- Layouts – The pages used to view, edit, and create the document may differ. For example, the object information page may display the creator of a plan document more prominently than the creator of a reference document.
- Access Control – Layouts can affect access control. For example, a manager may be able to edit a plan document, but an engineer may be required for other types of documents that are directly product-related.
- Windchill Processes – Different document types may start different workflow processes and tasks, resulting in different items in the team's work list. For example, a presentation document may not start a workflow at all, but a plan document may start an approval process for the plan.
- Object Initialization – Selecting a different type may automatically populate or constrain attributes. For example, a minutes document may only permit the meeting date to be in the past while a plan document may require it to be in the future. Or, all plan documents could be pre-configured to be created in the same folder.
- Search functionality – In Windchill advanced search, you can search for a specific type of document.

The examples provided are hypothetical. Windchill does not create these differences in attributes and administration by default. Out-of-the-box, Windchill does not assign unique attributes to the default document types. Your administrator uses these types to generate the document types and corresponding administration specific to your implementation.

New Document: Set Attributes - Template



Set Attribute: Template

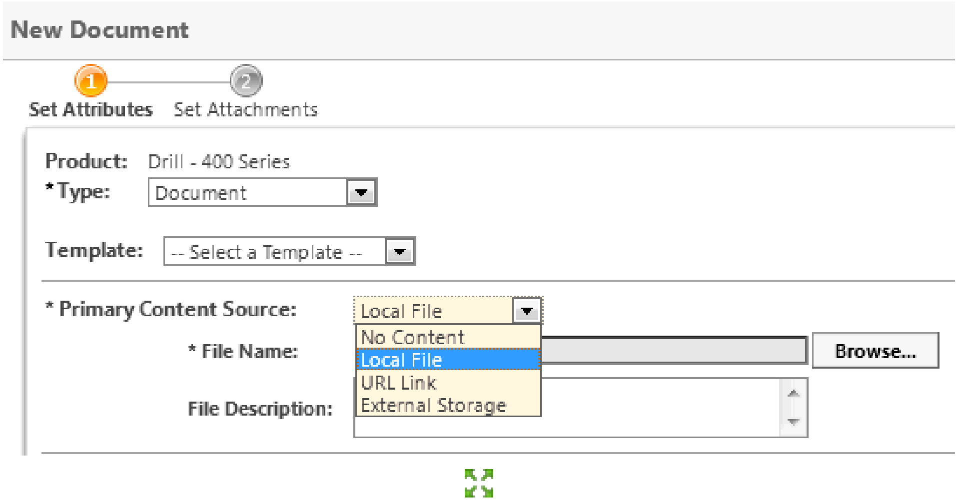
After you set the document type, the rest of the Set Attributes page appears in the wizard. The options available on this screen vary depending upon the document type and the document template.

You may optionally select a document template. A document template may pre-populate primary content files, attachments, and attribute values. For example, a presentation document may automatically insert a Microsoft PowerPoint presentation with the appropriate design template for your organization. Similarly, a memo template may include a blank Microsoft Word memo. If you do not select a template, you are able to add your own primary content.

Typically, the content file included with a template is not complete. At some point, a user must modify the document to complete the content file. However, this user does not need to be the same user that created the document. It is common for a manager to create a document from a template and then have another user complete the document.

New Document: Set Attributes (Primary Content)

The New Document Wizard enables you to specify the source of the primary content. A number of options are available from the Primary Content Source drop-down menu.



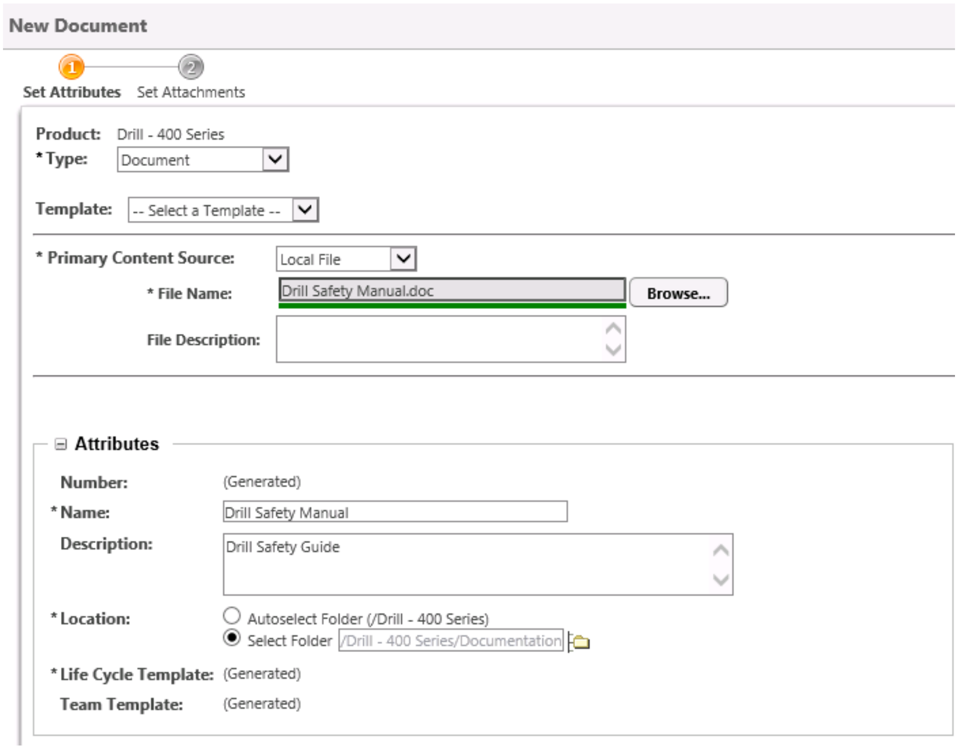
Set Primary Content

- The No Content selection enables you to create a document object without any primary content. Typically, a document object without content is used as a placeholder to which content is added at a later time.
- The Local File selection enables you to select and upload a file from your local system. You can populate the Local File Path field by clicking the Browse button to browse to the file on your computer.
- The URL Link selection enables you to define a URL as the document's content. This creates a document that is similar to an advanced link. It links to a URL but it can also have attachments, iterations, and attributes that link objects do not have.
- The External Storage selection enables you to designate a path to a file stored in another server. This is useful for managing large files, which can be maintained on a local server without requiring the file to be uploaded and stored in the PDMLink Oracle database.

If you create a document from a template, the primary content file is pre-populated and may not be changed at this time. However, you can modify the document later to change the primary content.

New Document: Set Attributes (Attributes)

The Name attribute may be pre-populated based on rules. If you select to store a local file, the Name field is automatically populated with the file's name. You can then change that name and type a description for the document. The asterisk identifies required fields. If your implementation does not employ autonumbering for documents, you must also type a document number.

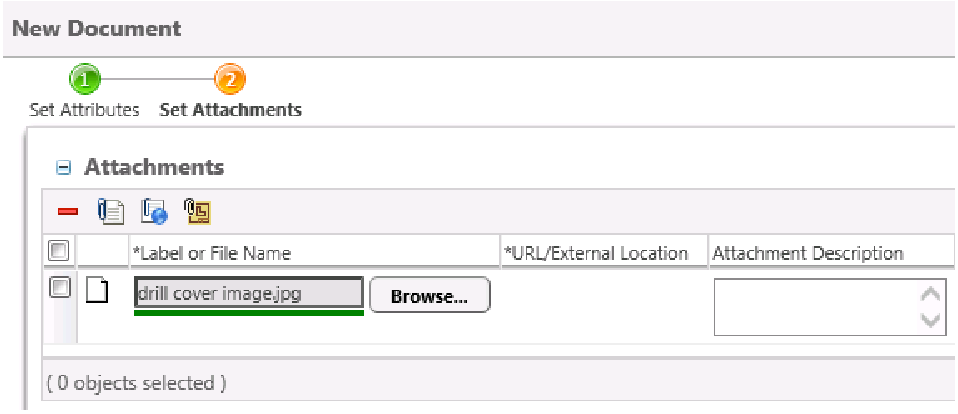


Set Attributes

If your site has defined additional attributes for the selected document type, fields and default values for those attributes display in the Attributes table below the Team Template attribute. For each attribute, you can accept the default value or specify a new value.

New Document: Set Attachments

The second page of the New Document Wizard enables you to specify the source of additional files that you want to store as attachments. Attachments can be any combination of three types:



Set Attachments

- A local file can be added as an attachment by clicking the New local file attachment icon and browsing to the file.
- A URL link can be added as an attachment by clicking the New URL link attachment icon.
- An external storage file can be added by clicking the New external storage attachment icon.

When you create a document from a template, you may add attachments. However, you may not add primary content.

Creating Documents

Objectives

- Create documents.

Scenario

Erica Hill has created a Microsoft Word document called Drill Safety Manual. To make her document available to other users, Erica wants to add her document to the Documentation folder of the Drill - 400 Series product.

In this exercise, you take the role of Erica Hill as she creates a document to store the drill safety manual file.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Log on to Windchill as Erica Hill (ehill/ptc).
- Start on the Folders page of the Drill – 400 Series product.
- Select the Documentation folder in the Folders table to display the folder contents in the Folder Contents table.

Task 1. Create the Drill Safety Manual document object.

1. In the Folder Contents table, click the **New Document** icon to open the New Document Wizard.
2. On the Set Attributes page, click the **Type** drop-down menu.
3. Select **Document** from the Type drop-down menu.
4. On the Set Attributes page, click the **Primary Content Source** drop-down menu to view available options.
5. Select **Local File** from the Primary Content Source drop-down menu to keep the default selection.
6. Click the **Browse...** button to the right of the File Name field.
7. In the Open window, browse to the D:\Student\User_Training\Documents folder and select the **Drill Safety Manual.doc** file.
8. Click the **Open** button to set the local file path.
9. Type **Drill Safety Guide** in the Description field.
10. Click the **Next** button to proceed to the Set Attachments step window.
11. In the Attachments table, click the **Attach new local file** icon.
12. In the Open window, browse to the D:\Student\User_Training\Documents folder and select the **drill cover image.jpg** file.
13. Click the **Open** button to add the file to the Attachments table.
14. Click the **Finish** button to create the document.

15. Observe that the Drill Safety Manual document was added to the Documentation folder.

This completes the exercise.

Creating Documents from Document Templates

Objectives

- Create documents from templates.

Scenario

Erica Hill needs to create a requirements document. Her administrator has informed her that there is a requirements template available in the Drill - 400 Series product.

In this exercise, you take the role of Erica Hill as she creates the requirements document from a document template.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Log on to Windchill as Erica Hill (ehill/ptc).
- Start on the Folders page of the Drill - 400 Series product.
- Select the Documentation folder in the Folders table to display the folder contents in the Folder Contents table.

Task 1. Create a requirements document from a document template in Windchill.

1. In the Folder Contents table, click the **New Document** icon to open the New Document Wizard.
2. Click the **Type** drop-down menu to expand it.
3. Select **Document** from the Type drop-down menu.
4. Click the **Template** drop-down menu.
5. Select **Requirements Template** from the Template drop-down menu.
6. In the Attributes section, type **Fuel Filter 400 Requirements** in the Name field.
7. Replace the default Description text and type **Fuel filter requirements** in the Description field.
8. Clear the **Check out and download** check box.
9. Click the **Finish** button to create the document.

Task 2. View the requirements document provided by the template.

1. In the Folder Contents table, click the **Download Microsoft Word** icon to the left of the Fuel Filter 400 Requirements document to download the primary content.
2. In the File Download window, click the **Open** button to open the document in Open Microsoft Word.

*If Microsoft Office Activation Wizard window appears, than ensure that **I want to activate the software over the internet. (recommended)** option is selected, and then click **Next > Close** to proceed.*

3. Observe the requirements document. Click the **Close** button to close the Microsoft Word window.

This completes the exercise.

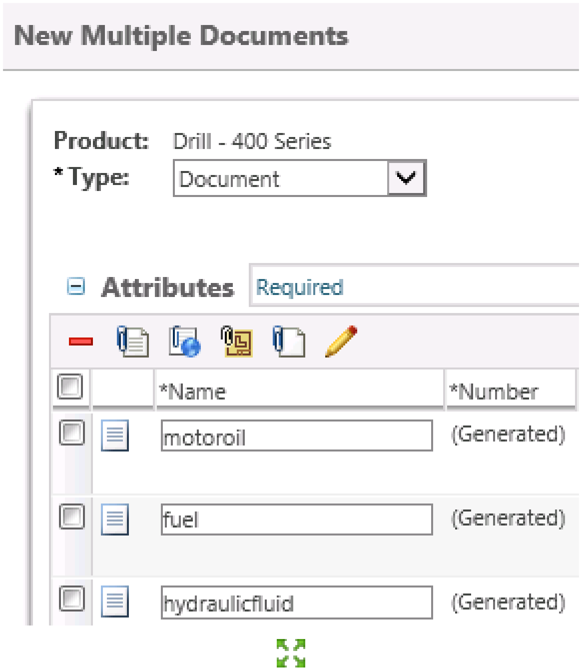
New Multiple Documents

You can create new multiple documents using the New Multiple Documents Wizard. This process is simpler and quicker than creating several single documents. However, the process is more limited.

- All of the documents must be of the same document type.
- You cannot create multiple documents from a template.
- You cannot add attachments when creating multiple documents, but you can add attachments by modifying the document after it is created.

When creating multiple documents, each document may:

- Be stored in a different folder.
- Have different primary content.
- Have different attribute values. The Attributes drop-down list controls which attributes are displayed in the table.



New Multiple Documents Wizard

Creating Multiple Documents

Objectives

- Create multiple documents simultaneously.

Scenario

The 400 series drill is shipped with several maintenance fluids, including motor oil, fuel, and hydraulic fluid. To be used in a work environment, Material Safety Data Sheets (MSDS) for these fluids must be supplied.

In this exercise, you take the role of Erica Hill as she creates multiple documents to store the MSDS.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Log on to PDMLink as Erica Hill (ehill/ptc).
- Start on the Folders page of the Drill - 400 Series product.
- Select the Documentation folder in the Folders table to display the folder contents in the Folder Contents table.

Task 1. Create multiple document objects to store and manage the Material Safety Data Sheets (MSDS).

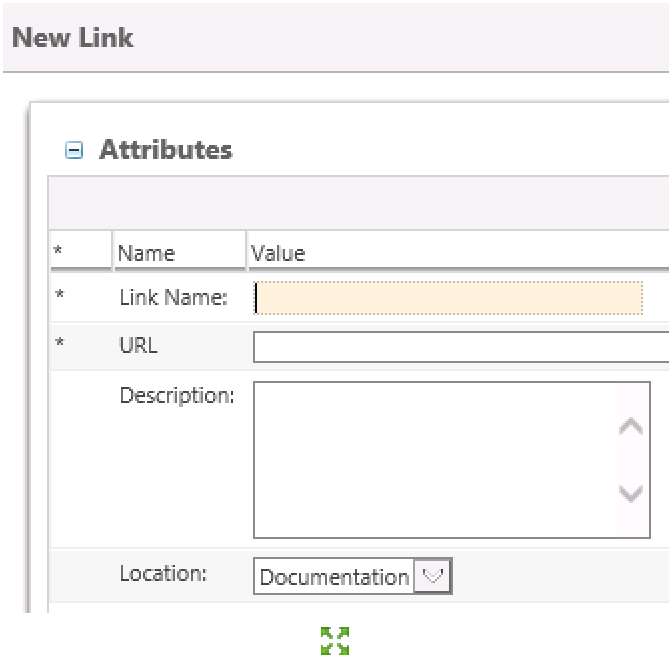
1. In the Folder Contents table, click the **Actions** drop-down menu.
2. From the Actions drop-down menu, select **New**.
3. From the New menu, select **New Multiple Documents** to open the New Multiple Documents Wizard.
4. In the New Multiple Documents window, click the **Type** drop-down menu.
5. Select **Document** from the Type drop-down menu.
6. Select the **Attach new local file** icon.
7. Browse to the **D:\Student\User_Training\Documents\MSDSs** folder from the Windows Explorer window.
8. Select the **fuel.pdf** file.
9. Press SHIFT and select the **motoroil.pdf** file to select all three MSDS files.
10. Click the **Open** button to add the file to the Attachments table.
11. Observe the Location selection. Click the **OK** button to create the documents.
12. Observe the three documents added to the Documentation folder.

This completes the exercise.

Creating Links

Links are simple objects. They are not revision controlled, do not contain advanced attributes, and only contain a name, URL, and description. As a result, creating a link may be accomplished in a single step of the New Link dialog box.

You may link to either external Web sites or to pages within the Windchill application. If you want to link to an object that exists in Windchill, you can click the Find button to search for the object and retrieve its URL. For external sites, simply type the URL.



Creating New Links

Creating Links

Objectives

- Create links.

Scenario

Erica Hill is head of product documentation for the Drill - 400 Series product. She wants quick access to the fasteners supplier, Universal Fasteners, from within the project.

In this exercise, you take the role of Erica Hill as she creates a link to Universal Fasteners in the Drill - 400 Series product.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Log on to Windchill as Erica Hill (ehill/ptc).
- Start on the Folders page of the Drill - 400 Series product.
- Select the Documentation folder in the Folders table to display the folder contents in the Folder Contents table.

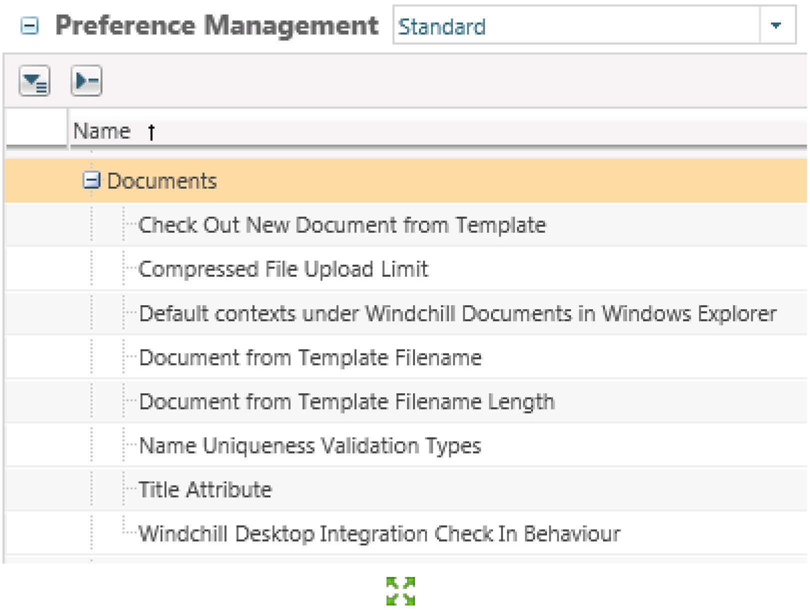
Task 1. Create a link to Universal Fasteners.

1. In the Folder Contents table, click the **Actions** drop-down menu.
2. From the Actions drop-down menu, select **New**.
3. From the New menu, select **New Link** to open the New Link window.
4. In the New Link window, type **Universal Fasteners Catalog** in the Link Name field.
5. Type **http://www.universalfasteners.com/catalog** in the URL field.
6. Click the **OK** button to create the link.
7. Observe that the Universal Fasteners Catalog link now appears in the Folder Contents table.

This completes the exercise.

Document Preferences

Several user preferences affect document behavior:



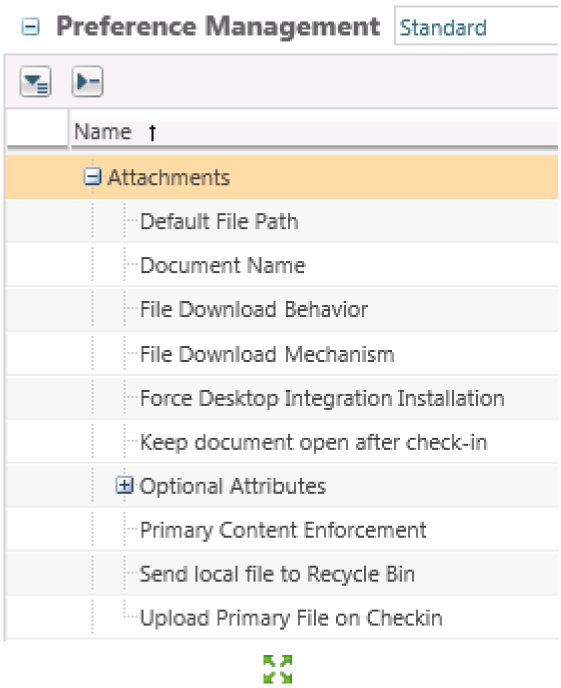
Document Preferences

- Check Out New Document from Template sets the default Check Out and Download check box when creating a document from a template. If set to yes, it is selected by default, enabling you to immediately edit the template upon creation.
- Document from Template Filename sets the default local file name for a new document from template. It may be set to include document attributes in the filename, such as document name and number.
- Document from Template Filename Length sets the maximum length of the file name for a new document from template. If the Document from Template Filename is longer than this maximum, it is truncated.
- Name Uniqueness Validation Types set the behavior that occurs when you attempt to create more than one document with the same document name. You may permit it, warn if an attempt is made, or not permit duplicate document names.
- If Title Attribute is set to Yes, the document has a title attribute which may be set. If it is set to No, the title attribute is not set in the Create wizards or displayed in the product information pages.

You may not see all of these preferences in your Preference Manager. Only preferences your administrator permits you to modify are listed.

Attachment Preferences

Several user preferences affect the behavior of primary content files and attachments:



Attachment Preferences

- The File Download Mechanism preference enables you to specify how files are transferred, by using a browser functionality.
- The Default File Path sets the default folder from where files are uploaded and also specifies where they download. However, this preference has no effect on basic browser uploads or downloads. You must use desktop integration.

> *When typing paths into this preference field, type a trailing backslash (\). For example, type C:\temp\ instead of C:\temp.*

- If the Document Name preference is set to Yes, the New Document Wizard sets the document name to the file name of the primary content by default. If it is set to No, you must type the document name manually.
- The File Download Behavior preference determines whether downloaded files are opened in the native applications or saved as a local file without opening them. It has three settings: Always save, Always open, or Always ask.

> *The File Download Behavior preference has no effect on basic browser downloads.*

- Primary Content Enforcement determines if documents are required to have content. It has three settings: Always optional, Always required, and Initially optional (but cannot be removed once added).
- The Optional Attributes preferences determine which content item attributes are displayed. If any of these are set to True, the attributes are listed in the Attachments table for attachments or the Product Information page for primary content. These attributes are file-specific, meaning that they do not exist for the document as a whole, but rather are distinct for each attachment or primary content. The following attributes may be revealed:
    - Attachment Comments – Separate from document comments.

- Authored By – Enables you to set the content author, even if it is not the same as the user uploading the content.
- Externally Distributable – A yes/no attribute that specifies if the file should be shared with outside organizations. One document may have some attachments that are distributable, and others that are not.
- File Version – Enables you to enter file version information.

> *If you want different files to have independent versions and iterations managed by Windchill, it is considered a best practice to store them in separate documents and use document references or document structure. The File Version attribute of a content file is a user-entered field, and is not automatically set or managed by Windchill in the way that document versions and iterations are specified.*

- Last Authored – Enables you to set the time the document was written. This time does not need to match the last modified date of the document.
- Sort Number – A user-specified field which may be used for sorting files in the Attachments table. For example, a multi-section document that has an attachment for each section may set the sort number so the attachments can be displayed in order.
- Tool Name – Enables you to indicate which authoring application was used to create and edit the file. This is useful for obscure file types that Windchill does not recognize, such as .rar archives or .iso CD images.
- Tool Version – Represents the version of the authoring application.

> *All of these preferences may not be available in your Preference Manager. Only preferences your administrator permits you to modify are listed.*

1. Which of the following methods can be used to create documents?

- ○ A - Create documents from a template
- ○ B - Create multiple documents
- ○ C - Upload files in bulk
- ○ D - All of the above

2. Which two document types can you create out-of-the-box?

- ○ A - Agenda and minutes
- ○ B - Document and presentation
- ○ C - Document and reference document
- ○ D - Document and template

3. A document may contain...

- ○ A - a Microsoft Word file.
- ○ B - a URL reference.
- ○ C - no content files.
- ○ D - all of the above.

4. True or False? When specifying document attributes, the Name field automatically populates with the file's name if you select to store a local file.

- ○ A - True
- ○ B - False

5. Which types of attachments can be specified?

- ○ A - A local file
- ○ B - An external storage file
- ○ C - A URL link
- ○ D - All of the above

Modifying and Managing Documents

Module Overview:

In this module, you modify documents and associate them to other Windchill objects. You check in, check out, edit, undo checkout, replace content, and revise documents. You also associate them to other documents using document references and document structure.

Objectives:

After completing this module, you will be able to:

- Modify documents.
- Revise documents.
- Identify document relationships.
- Create document relationships.

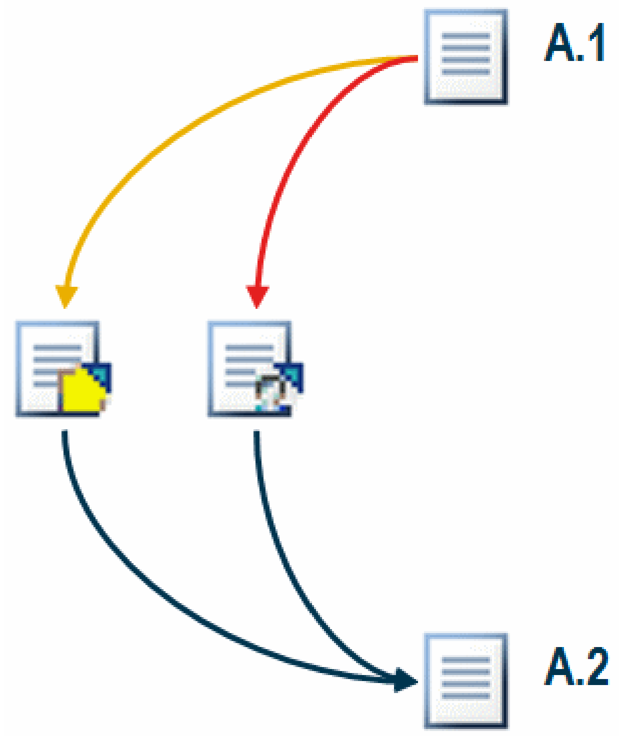
Overview of Modifying Documents

When you modify a document, you do not delete the original. Instead, you create a new copy, either a new version or a new iteration. Users may still access older versions and iterations so they can roll back changes and/or view how an object progressed.

Documents are given a numbering scheme set up by your administrator. The default is to use a letter for the revision and a number for the iteration.

In the figure, a new document was created. The document's revision is A and its iteration is 1, creating version A.1. After check out, modification, and check in, the revision is still A but the iteration is 2. This appears as version A.2.

Modifying a document typically means creating a new iteration, which is done by checking in and checking out the object. Alternatively, you can create a new version by revising the object.



Modifying Documents

Modifying Documents - Check Out

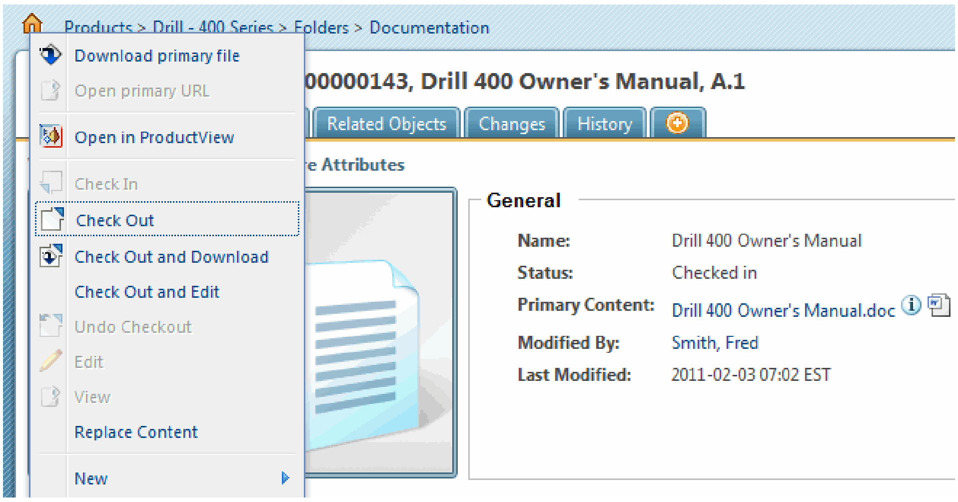
To modify a document, you must check it out. This signals to others that you are modifying the document. This process creates two copies, a working copy that you can modify and a checked out copy that others can view.

The public copy is:

- Viewable, but not editable by other Windchill users.
- Linked to the user who checked it out.
- Public copy has the icon addition next to it in Windchill tables.

The working copy is:

- Accessible only to the user who checked it out.
- Working copy may be edited.
- Edits may not be seen by other Windchill users until it is checked in.
- Working copy has the icon addition next to it in Windchill tables.



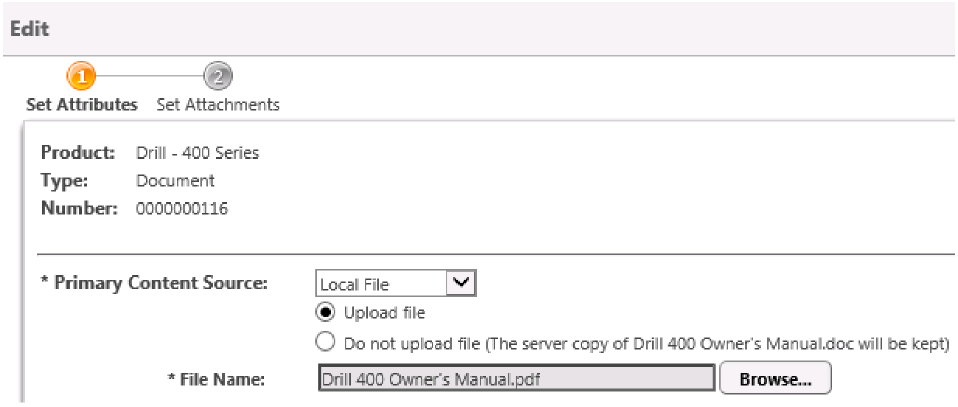
As long as you have an object checked out, others may view the checked out copy but they cannot modify it. This prevents others from making changes to the object before you have completed your work.

Although you cannot modify a document that is checked out by another user, you can determine who checked it out and ask him or her to make it available.

Modifying Documents - Edit

When you edit a document, you change the working copy. You may change its files or attributes. However, these changes do not affect the public copy. As a result, after an edit, the working copy and public copy are no longer identical.

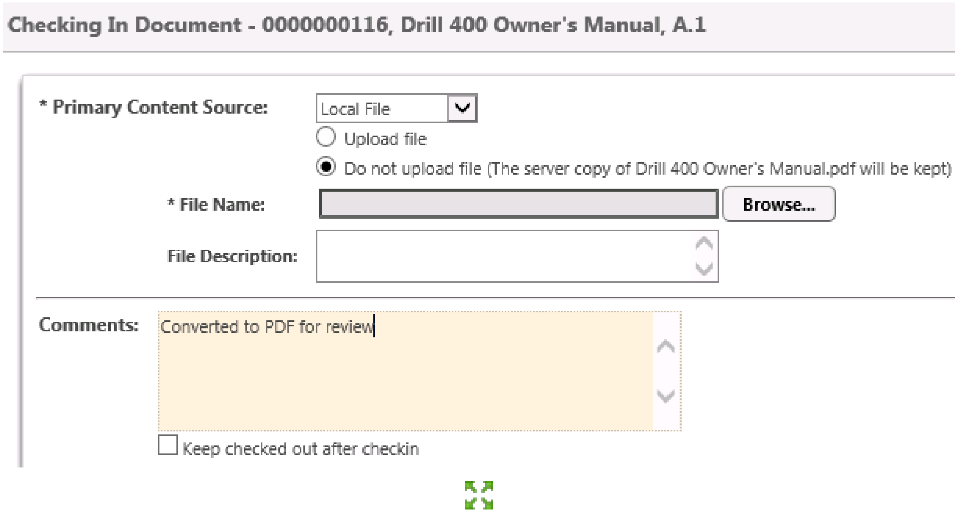
In addition, when you edit a document, the old working copy is overwritten and cannot be retrieved.



Edit Utility

Modifying Documents - Check In

Once you have made your changes, you can check the object back in.



When you check in an object, the following actions occur:

- The public copy remains the old iteration.
- You have the option to change attributes or files upon check in. This is a shortcut, functionally identical to editing the document and then checking in the working copy without changing its files or attributes.
- The working copy becomes public and it is the most recent iteration.
- The most recent iteration is available for other users to check out.
- The old iteration is locked. You may view it but cannot check it out or update it.

There are some advanced user preferences that enable you to modify an older iteration if permitted by your administrator, but they are not enabled by default.

Modifying Documents

Objectives

- Modify a document's details and content by checking it out, making changes, and checking it back in.

Scenario

Erica is preparing to release the Drill Owner’s Manual for review. When in the review stage, the company requires the document to be in PDF format instead of Word format.

In this exercise, you take the role of Erica Hill as she checks out the Drill Owner’s Manual and replaces the primary file with a PDF.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Log on to Windchill as Erica Hill (ehill/ptc).
- Start on the Folders page of the Drill – 400 Series product.
- Select the Documentation folder in the Folders table to display the folder contents in the Folder Contents table.
- Select the View Information icon of the Drill 400 Owner’s Manual document.
- Ensure the document information page of the Drill 400 Owner’s Manual document is displayed.
- If necessary, select the Details tab on the document information page.

Task 1. Check out the Drill 400 Owner's Manual document.

1. Click the **Actions** drop-down menu.
2. Select **Check Out** from the Actions drop-down menu.

Task 2. Edit the document.

1. Click the **Actions** drop-down menu.
2. Select **Edit** from the Actions drop-down menu.
3. Click the **Browse...** button.
4. In the Open window, browse to the D:\Student\User_Training\Documents folder and select the **Drill 400 Owner's Manual.pdf** file.
5. Click the **Open** button to change the contents of the Local File Path field in the Edit Wizard.
6. Type **Draft of Drill Owner’s Manual for review** in the Description field.

7. Click the **Save** button to alter the working copy.

Task 3. Check in the document.

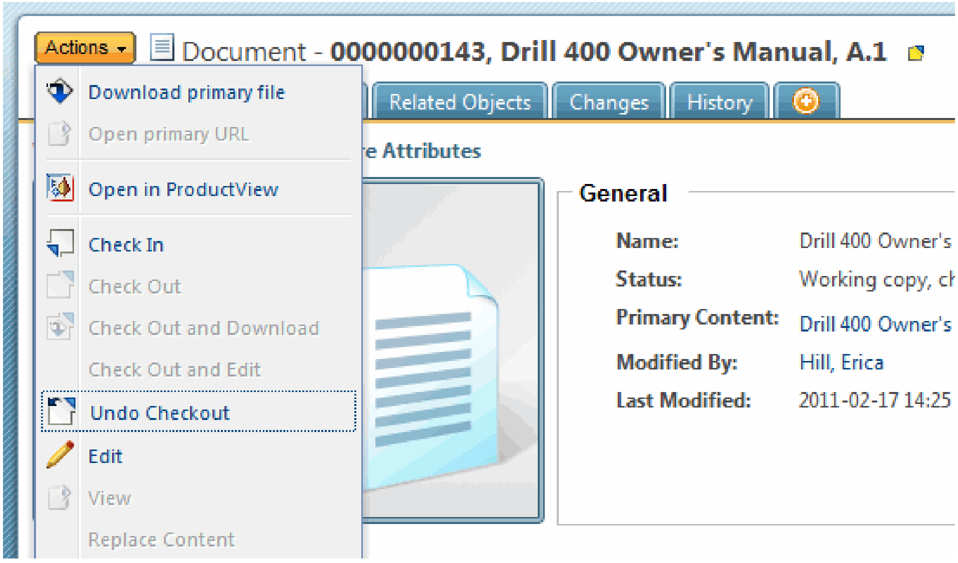
1. Click the **Actions** drop-down menu.
2. Select **Check In** from the Actions drop-down menu.
3. Type **Converted to PDF for review** in the Comments field.
4. Select the **Do not upload file** radio button.
5. Click the **OK** button to complete the check in and create iteration A.2.

This completes the exercise.

Modifying Documents - Undo Checkout

Undo checkout releases the lock on the public copy and deletes the working copy. This is useful in a few circumstances:

- You do not want to save the changes you made to the document.
- Another user asks you to unlock the file, but your work is not yet complete. You can release the file and perform your work later.



Undo Checkout

Although the working copy is not normally stored in Windchill, evidence that you checked it out and your changes may be available in auditing records and/or backups.

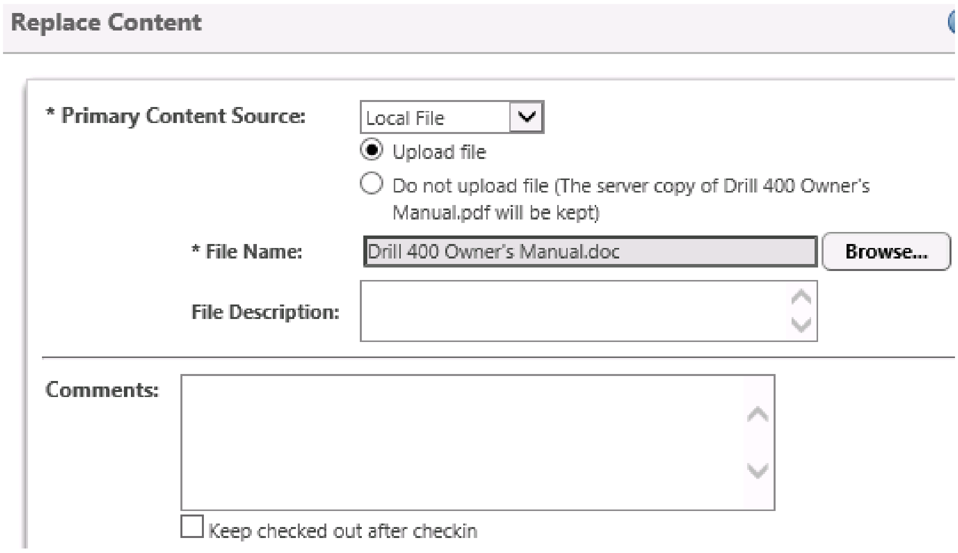
Modifying Documents - Replace Content

Replace Content is a convenient action that performs several subactions:

- It checks out the document.
- It edits the working copy, changing the primary content file. The working copy is not normally seen by the user, as it is checked back in quickly.

> *If you are uploading a large file and refresh the document details page before it is fully uploaded, you may see the working copy before it is checked back in.*

- It checks the document back in, creating a new iteration and removing the working copy.



Replace Content

> *As a best practice, you should not use Replace Content. You should check out a document manually, edit it, and check it back in. If you use Replace Content, it is easy for someone to modify the document while you are editing it. If this happens, you may upload the content without including their changes.*

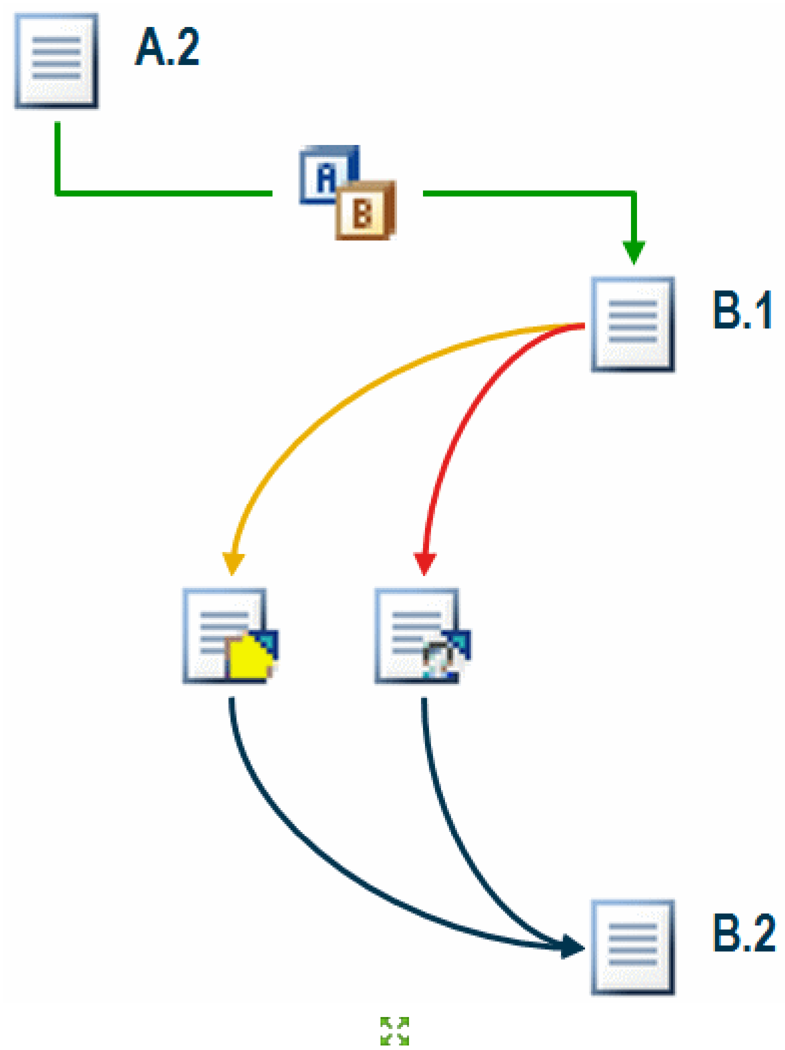
Modifying Documents - Revise

A new version creates a new document independent of the previous iteration history. This is generally done when taking a released document and working on an improvement. Objects can only be revised in product or library contexts.

Revising a document accomplishes the following:

- The old version remains unchanged.
- A copy is created and the version is changed. It may be altered and iterated independently.

In the example, the user checked out version B, creating B.2. However, doing so did not affect version A. A.2 may still be checked out .Checking out the copied version does not affect the old version.



Revision Process Summary

It is possible that a revised obsolete document may become an In Work document.

Your company's administrator specifies the iteration numbering scheme.

Revising Documents

Objectives

- Revise a document.

Scenario

While preparing for the release of the next version of the Drill product, Erica needs to update the Engine 400 Requirements document.

In this exercise, you take the role of Erica Hill as she revises the Engine 400 Requirements document to use for the next version of the Drill product.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Log on to Windchill as Erica Hill (ehill/ptc).
- Start on the Folders page of the Drill – 400 Series product.
- Select the Documentation folder in the Folders table to display the folder contents in the Folder Contents table.
- Select the View Information icon of the Engine 400 Requirements document.
- Ensure the document information page of the Engine 400 Requirements document is displayed.
- If necessary, select the Details tab on the document information page.

Task 1. Revise the document.

1. Click the **Actions** drop-down menu.
2. Select **Revise** from the Actions drop-down menu.
3. Click the **OK** button to revise the document, creating version B.1.

This completes the exercise.

Adding Documents to Baselines

A managed baseline is essentially a snapshot of a group of objects at a specific point in time. You can create a baseline in the context of a product or a library. Once you have created a baseline, you can add objects to and remove objects from the baseline. Business information associated with the objects is also recorded. A baseline can contain any number of objects, and an object can be in any number of baselines. A baseline can hold only one version and iteration of a part or document. One of these baselines, however, is designated by the system as the default baseline.

Typically, baselines are intended for objects that are checked in. If a previous iteration is in the baseline, you are prompted to replace the current (vaulted) iteration with the working copy if you are adding the object individually. If, for example, you are adding multiple documents, it is assumed that you want all of the documents replaced and you are not prompted to replace each document individually. The feedback screen does notify you, however, when a document is replaced.

You can add a Windchill object, such as a document, to a baseline using the object's Actions drop-down menu. To add an object to a baseline, use the following procedure:

- From the object's information page, click Actions > Add to > Add to Baseline. The Add to Baseline window appears.
- Specify the baseline name and click the Find icon, if the baseline to which you are adding the object exists. If not, click New Baseline to create a new baseline.
- Click the Actions drop-down menu or the Collect related objects icon to collect all related objects.
- Finally, click OK to complete the process.

1. When you modify a document, the old version is...

- ○ A - Deleted.
- ○ B - Overwritten.
- ○ C - Saved in the iteration history.
- ○ D - Archived to backup storage.

2. While a document is checked out, other users may NOT...

- ○ A - view it.
- ○ B - modify it.
- ○ C - download content files.
- ○ D - determine who has it checked out.

3. When you edit a document it changes...

- ○ A - the public copy.
- ○ B - the working copy.
- ○ C - the newest version.

4. When you check in, the working copy...

- ○ A - is deleted.
- ○ B - becomes the newest iteration.
- ○ C - is unchanged.

5. When you undo checkout, the working copy...

- ○ A - is deleted.
- ○ B - becomes the newest iteration.
- ○ C - is unchanged.

Managing Your Work

Module Overview:

In this module, you explore how tables on your home page help you manage the objects with which you are working. You learn how the notebook and subscription features can help you keep track of objects that you are interested in monitoring. Finally, you learn how to generate various types of reports in Windchill.

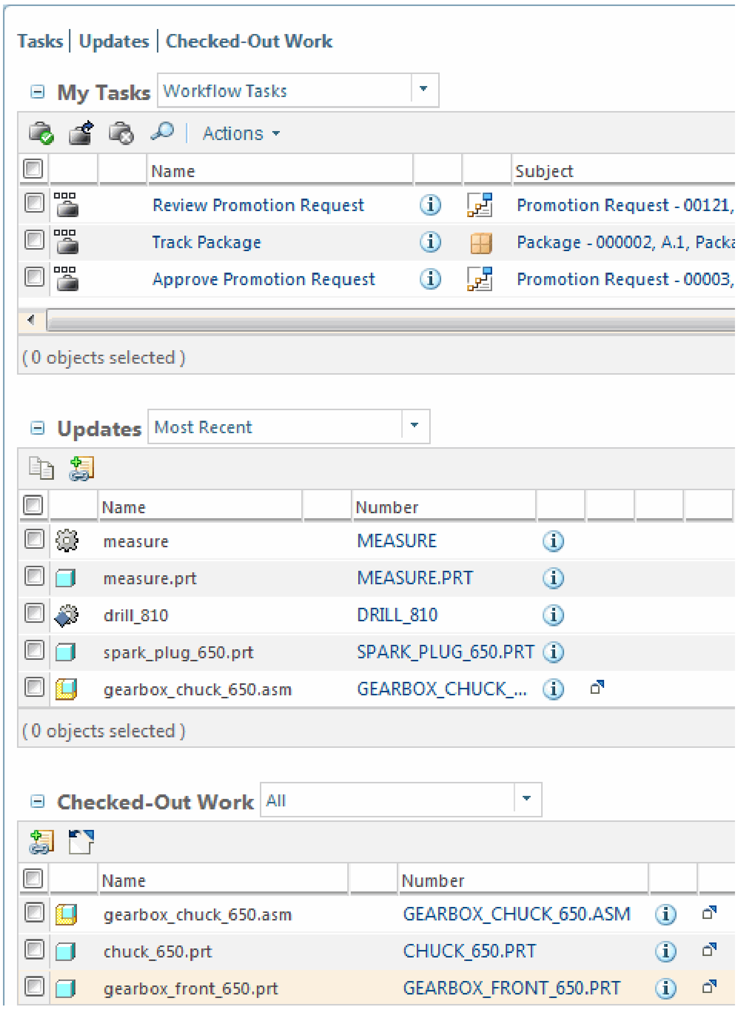
Objectives:

After completing this module, you will be able to:

- Manage your objects.
- Manage your notebook.
- Create and manage subscriptions.
- Generate reports.

Managing Your Work

Windchill provides tools that help you manage your work.



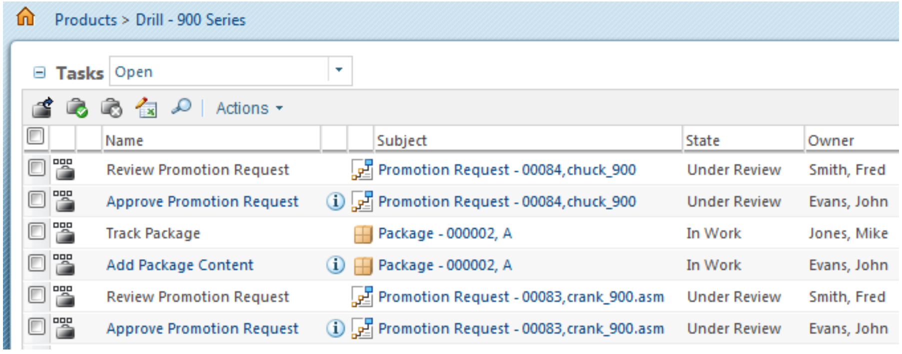
Windchill Home Page

For example, you can manage your tasks, access recently modified objects, and view checked-out items. Notebook enables you to store links to Web pages both within and outside of Windchill. You are able to subscribe to many types of objects within Windchill and receive an e-mail notification when updates have been made. Moreover, Windchill enables you to collect useful information in the form of reports.

Managing Tasks

The Tasks page provides tools to help you manage tasks for the context.

- The Tasks table enables you to view and sort the tasks for the context. To view the full list of your tasks from all contexts, you can also view the My Tasks table on the home page.

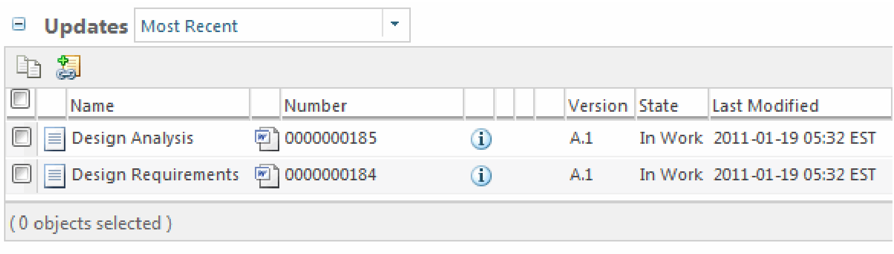


Managing Tasks

Managing Recently Modified Objects

The Windchill Home page provides tools to help you manage recently modified objects.

- The Updates table enables you to view and sort the objects you have recently created or modified. This functionality enables you to quickly access objects you frequently modify.

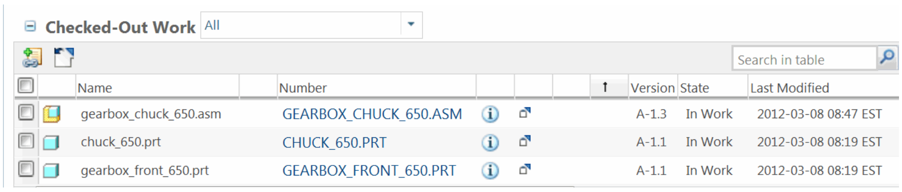


Managing Updates

Managing Checked-Out Objects

The Windchill home page provides tools to help you manage your checked-out work.

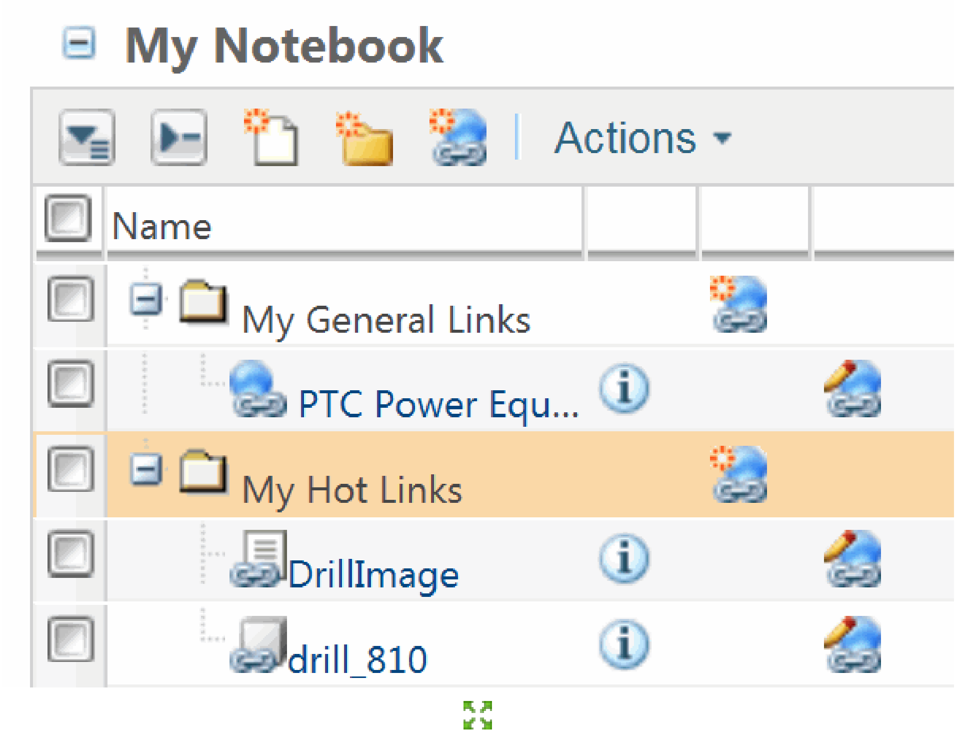
- The Checked-Out Work table provides you with a list of all the working copies of objects you have checked out. Note that objects checked out through your workspace, such as CAD documents, may appear only in your workspace.



Managing Your Checked-Out Work

Managing the Notebook

The Notebook tool in Windchill enables you to store links to Web pages both within and outside of Windchill. It also enables you to upload files, if you want to store access-restricted files in Windchill.



Windchill Notebook

From within the Notebook, you can add a link to a Web page by clicking the Create Link button. You can also upload a file by clicking the Upload File button.

To organize the information stored in your Notebook, you create folders. Your Notebook is essentially your own personal library.

You access the Notebook from your Home page by clicking the Notebook link, or by clicking the Hot Links link at the top of every page.

Both the Updates and Checked-Out Work tables provide an icon to Add to Hot Links. This enables you to store a link to the selected object in your Notebook and access it at any time, regardless of whether the object was modified recently or is currently checked out.

Managing Your Notebook

Objectives

- Manage your notebook by creating links and uploading files.

Scenario

In this exercise, you take the role of John Evans as he manages work. First, you examine the tools that enable you to access objects. Then you organize some of his work using the notebook.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Log on to Windchill as John Evans (jevans/ptc).
- Navigate to the Windchill home page.
- Verify that the browser is not displaying the My Workspaces table on the home page. If it is displaying, turn off the feature (Customize > Clear Workspaces).

Task 1. Add links and files to your notebook.

1. Select the check box for the first object in the Updates table on your home page.
2. Click the **Add to Hot Links** icon to add the object link to the notebook.
3. Click the **Customize** drop-down menu in the upper-right corner of the page.
4. Select the **Notebook** check box.

> *If necessary, in the My Notebook table, click the* ***Expand*** *icon to the left of the My Hot Links folder to view the newly created link.*

5. Click the **New Link** icon to the right of the My General Links folder to create a new link.
6. Type **PTC Power Equipment** in the Link Name field.
7. Type **http://www.ptcpe.com** in the URL field.
8. Type **PTC Power Equipment Website** in the Description field.
9. Click **OK** to create the link.

> *If necessary, click the* ***Expand*** *icon to the left of the My General Links folder to view the newly created link.*

10. Right-click next to the My Hot Links folder to expand a menu.
11. Select **Upload File** to upload a local file to the notebook.
12. Click the **Browse…** button next to the File field in the Upload File window to select a file.
13. Browse to the *D:\Student\User_Training\Documents* folder in the Choose File to Upload dialog box and select the **DrillImage.doc** file.

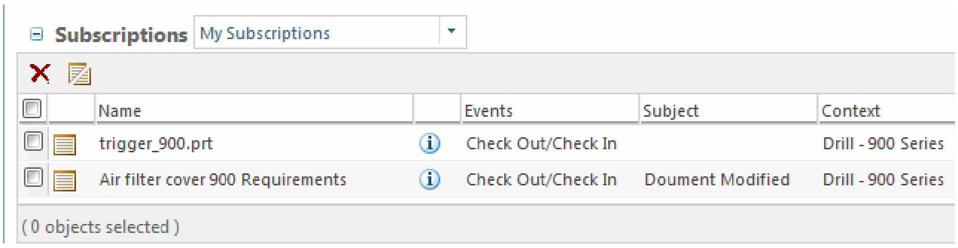
14. Click **Open** to select the file and return to the Upload File window.
15. Type **New Drill Cover Image** in the Description field.
16. Click **OK** in the Upload File window to save the information.

This completes the exercise.

Managing Subscriptions

Windchill notifies you of changes to an object, document, or part if you subscribe to events that occur to that object. You are able to subscribe to many types of objects within Windchill. You can also subscribe to postings and topics within discussions.

Though you create your subscriptions within the object you are working with, the Subscriptions page on your home page enables you to manage all of your subscriptions.

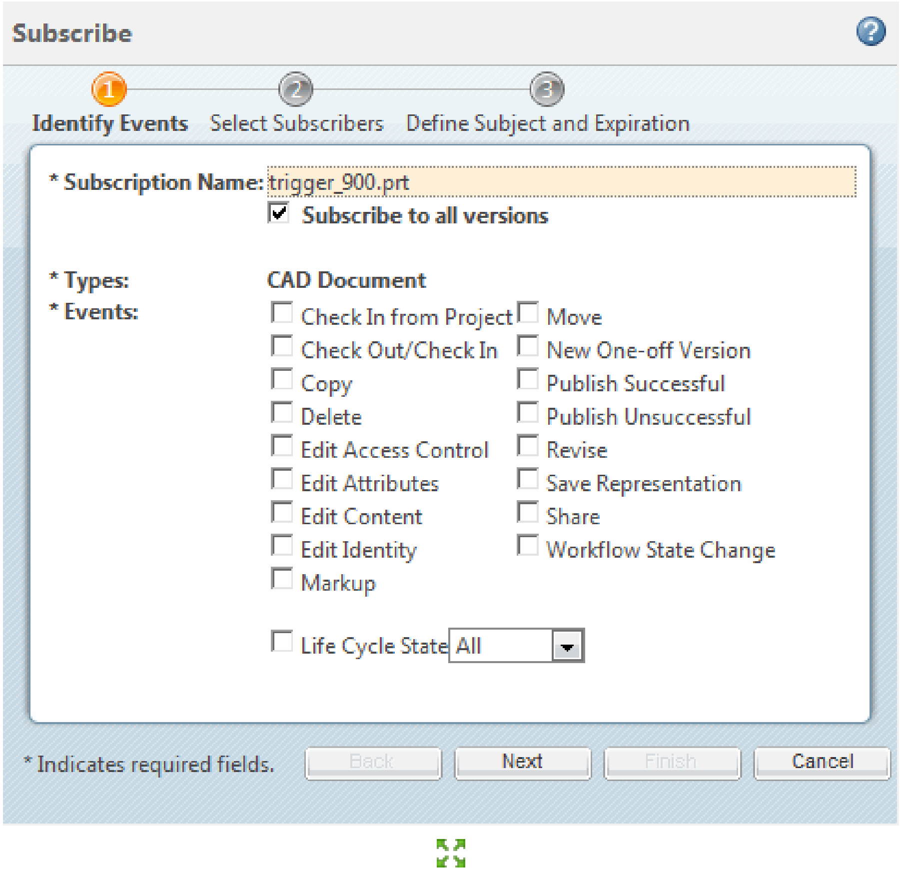


Subscriptions

Creating Subscriptions

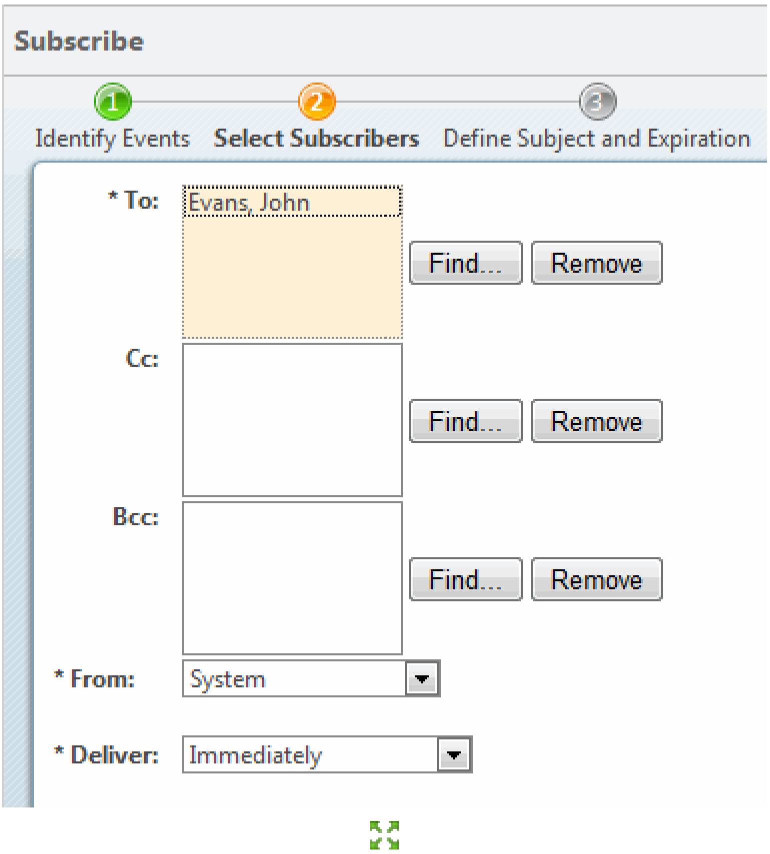
To create a subscription, you must complete a three-step process.

1. Specify the subscription name – You can accept the default name, which is also the object's name you are about to monitor. Next, select the events you want to send as notifications, such as a check in or a workflow state change. When the selected events occur, you are notified by an e-mail. Most events are self-explanatory, and for details of the events you can access Windchill Help.



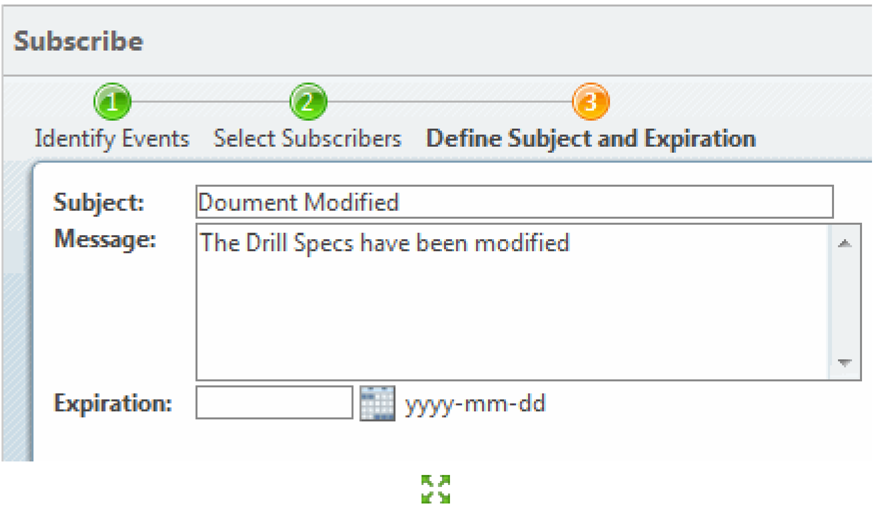
Identify Events

2. Select the subscribers – Subscribers are the people who receive the notifications. By default, your name is listed as the only subscriber. However, you can add other individuals or team members to the list. You can also indicate from whom the subscription will come and the delivery details.



Select Subscribers

3. Define the e-mail notification you receive – This includes defining the subject and body of the e-mail. If you leave the subject field blank, the subject is automatically completed by Windchill. You can type a Message that is the content of the e-mail. This informs the notification recipients why they are receiving the e-mail, and if there are any actions they are expected to take. You can then set the expiration date of the subscription, but you can also leave the expiration date field blank if you do not want it to expire.



Define Subject and Expiration

Subscribing to Objects

Objectives

- Subscribe to objects.
- Manage subscriptions.

Scenario

In this exercise, you take the role of John Evans and explore subscribing to objects and managing subscriptions.

As John, you subscribe to a document that you recently uploaded.

You want to be notified if anyone intends to make a change or makes a change. You create a subscription, which sends a notification if the document is checked out or checked in.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Log on to Windchill as John Evans (jevans/ptc).
- Open the Navigator, and then select the Browse tab.
- Browse to Recent Products, and select View All .
- Select Drill – 900 Series to view the contents.

Task 1. Subscribe to a document.

1. In the left pane, select the **Documentation** folder to view the contents.
2. If needed, click in the scroll bar to scroll down to locate the Air filter cover 900 Requirements document.
3. Click the **View information** icon to the right of the Air filter cover 900 Requirements document.
4. Select the **New Tab** icon.
5. Click the **Customize** drop-down menu in the upper-right part of the page.
6. Cursor over Collaboration to expose the menu.
7. Select the **Subscriptions** check box.
8. Click the **Subscribe** icon in the Subscriptions table to create a new subscription.
9. Select the **Check Out/Check In** check box in the Subscribe window.
10. Click the **Next** button to proceed to the next step window.
11. Click the **Find…** button next to the Cc: field to add another recipient.
12. Click the **Search** button below the Participant Name field in the Find Participant window to search for all users.
13. Click the **OK** button in the Message from webpage dialog box.
14. Click the lower part of the scroll bar several times in the Search Results table to locate Bob Taylor.

15. Select **Taylor, Bob** in the Search Results field.
16. Click the **Add >>** button to move the user to the Participant List field.
17. Click **OK** in the Find Participant window to save the information and return to the Subscribe window.
18. Click the **Next** button in the Subscribe window to proceed to the next step window.
19. Type **Document Modified** in the Subject field.
20. Type **The Drill Specs have been modified** in the Message field.
21. Click the **Finish** button to create the subscription.

Task 2. Review and manage your subscriptions.

1. Select the **Home** icon from the top-left corner of the screen.
2. Click the **Customize** drop-down menu.
3. Select the **Subscriptions** check box.
4. Click the **View information** icon to the right of the Air filter cover 900 Requirements document in the Subscriptions table to view the Subscription Details page.
5. Click the **Recipients** tab.
6. Click the **Subscribed Objects** tab.

This completes the exercise.

Generating Reports

A report is the output of a predefined query that is run at a particular time against a set of business information, often using parameters that are defined at the time the report is run. As a user, you generally do not create new reports, but generate predefined reports that come with the Windchill product or are created by your administrator. The ability to create new reports requires knowledge of the Windchill object model, which is beyond the scope of this course.

Predefined reports are found in several locations:

- The Reports table of your home page contains reports that query data specific to you, such as your open tasks, or your overdue tasks. This table does not appear on your home page by default – you must configure your home page to add it.
- The Reports page of a context, such as a project or product, contains reports specific to the data in that context. If you ran an overdue tasks context report, it would show overdue tasks for all users of that context, rather than just your overdue tasks.
- The Structure tab of an object information page, such as a CAD Document, enables you to run reports about the structure, such as Bill Of Materials (BOM) reports.

Reports also appear differently, depending upon the report:

- Some reports, including many reports that come with Windchill, have custom input screens created by an application developer. The user interface for these reports is controlled by the application developer.
- Some reports require an additional Windchill module called Windchill Business Reporting. These reports appear different than other reports. Windchill Business Reporting gives the report author greater flexibility in graphing, report layout, and scheduling of reports.
- Some reports, such as BOM reports, have predefined criteria that you do not enter manually.
- Almost all reports may be exported to a file, such as a CSV, XML, PDF, or Excel spreadsheet. However, the mechanism for doing so may differ.
- Most reports enable you to save the report. A saved report may be executed from the Saved Reports table of your home page. Saved reports may also be scheduled to run at a standard interval, such as weekly.
- Many reports enable you to add charts to the report and filter the report by clicking the chart.

Generating Reports

Objectives

- Generate reports.
- Save reports.

Scenario

In this exercise, you take the role of Mike Jones as he generates reports.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Log on to Windchill as Mike Jones (mjones/ptc).
- Open the Navigator, and select the Browse tab.
- Browse to Recent Products.
- Select Reports for the Chainsaw - 220 Series product.

Task 1. Generate a report.

1. Click the **Expand** icon to the left of the Default folder.

   If necessary, resize the Report table to see the All Documents report.

2. Click the **View report** icon for the All Documents report.
3. Click the **Generate** button at the top or bottom of the page.
4. Click the **Maximize** button.

Task 2. Add a chart to the report.

1. Click the **Actions** menu in the upper-left corner of the table.
2. Select **New Chart**.
3. Click the **First Axis Value** drop-down menu to expand it.
4. Select **Context**.
5. Click the **Add Chart to Table** button to add the chart to the report.
6. Click the bar of the chart corresponding to the **Chainsaw - 220 Series** product.
7. Click the bar of the chart corresponding to the **Site** context.

Task 3. Save the report.

1. Click the **Expand Criteria Panel**  button on the left side of the page to expand the criteria panel.
2. Click the **Save** link at the top or bottom of the page.
3. Type **Documents by Context** in the Enter Saved Report Name... field.
4. Click the **Save New Report** button.
5. Click the **Saved Reports** drop-down menu.
6. Click **Show all reports** to see the saved reports
7. Click the Windows **Close**  icon to close the Report Builder.

This completes the exercise.

Generating Reports

Objectives

- Generate reports.
- Save reports.

Scenario

In this exercise, you take the role of Mike Jones as he generates reports.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Log on to Windchill as Mike Jones (mjones/ptc).
- Open the Navigator, and select the Browse tab.
- Browse to Recent Products.
- Select Reports for the Chainsaw - 220 Series product.

Task 1. Generate a report.

1. Click the **Expand** icon to the left of the Default folder.

   If necessary, resize the Report table to see the All Documents report.

2. Click the **View report** icon for the All Documents report.
3. Click the **Generate** button at the top or bottom of the page.
4. Click the **Maximize** button.

Task 2. Add a chart to the report.

1. Click the **Actions** menu in the upper-left corner of the table.
2. Select **New Chart**.
3. Click the **First Axis Value** drop-down menu to expand it.
4. Select **Context**.
5. Click the **Add Chart to Table** button to add the chart to the report.
6. Click the bar of the chart corresponding to the **Chainsaw - 220 Series** product.
7. Click the bar of the chart corresponding to the **Site** context.

Task 3. Save the report.

1. Click the **Expand Criteria Panel** button on the left side of the page to expand the criteria panel.
2. Click the **Save** link at the top or bottom of the page.
3. Type **Documents by Context** in the Enter Saved Report Name... field.
4. Click the **Save New Report** button.
5. Click the **Saved Reports** drop-down menu.
6. Click **Show all reports** to see the saved reports
7. Click the Windows **Close** icon to close the Report Builder.

This completes the exercise.

1. You can manage your work from the home page by...

- ○ A - accessing recently modified objects.
- ○ B - managing your tasks.
- ○ C - accessing your checked out objects.
- ○ D - all of the above.

2. On the home page, which table enables you to view your current assignments?

- ○ A - My Assignments
- ○ B - My Tasks
- ○ C - Updates
- ○ D - All of the above

3. Which table displays recently modified objects?

- ○ A - My Tasks
- ○ B - My Actions
- ○ C - My Updates
- ○ D - My Checked Out Work

4. Which page displays your checked out items?

- ○ A - Details
- ○ B - Home
- ○ C - Folders
- ○ D - Utilities

5. Which output formats are supported when generating reports in Windchill?

- ○ A - XML
- ○ B - PDF
- ○ C - CSV
- ○ D - HTML
- ○ E - All of the above

Communication and Collaboration

Module Overview:

In this module, you examine a few specific tools that facilitate communication and collaboration in Windchill.

Objectives:

After completing this module, you will be able to:

- Explain Windchill's communication and collaboration capabilities.
- Understand options for e-mailing from Windchill.
- Discuss objects in forums.

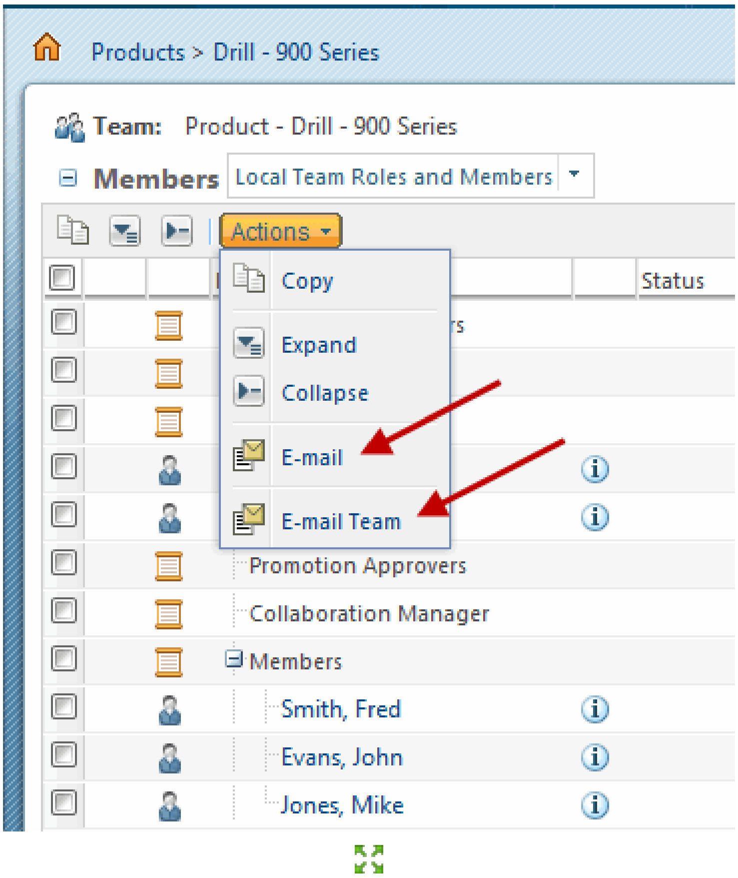
Introduction to Communication Mechanisms

Windchill is a communication and collaboration tool.

Almost every feature enables you to share information and communicate that information to others. The subscription and notification tools automatically notify users about events in Windchill. Other tools help you reach other team members through e-mail, and can even provide links to Windchill pages to facilitate discussion. The discussion forum feature is another tool that helps you communicate about a product or an object. Similar to bulletin boards, discussion forums enable you to post topics, enabling everyone on the team to reply.

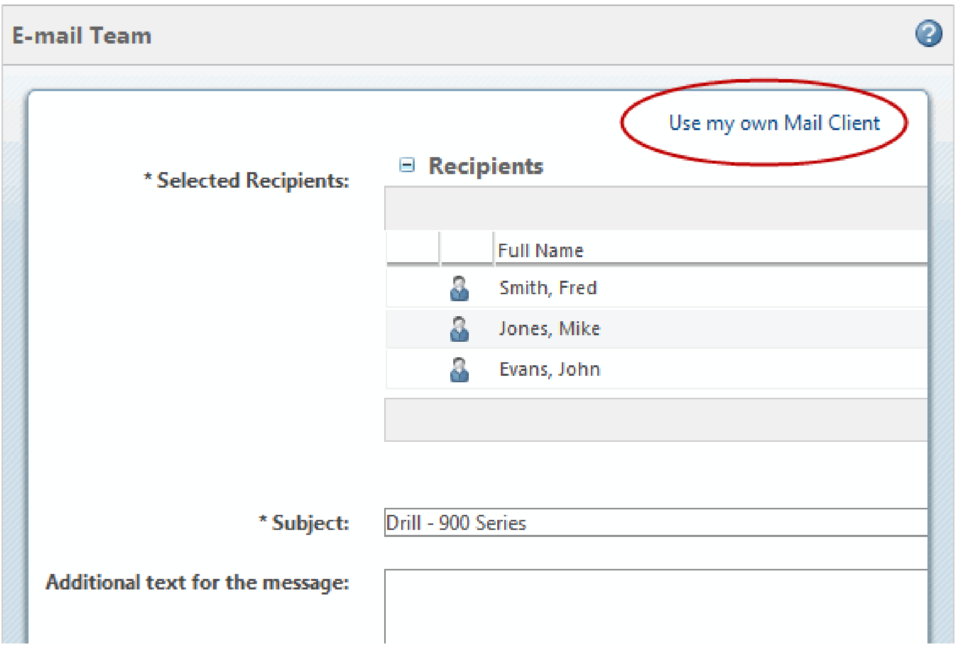
E-mailing Team Members

The E-mail and E-mail Team actions enable you to compose an e-mail to all or some of the context team.



E-mailing Team Members

To e-mail only certain members of the team, select your recipients in the Members table and use the E-mail action. In both cases, a window appears with the selected members or all members listed in the Recipients table. From the window, you can compose a message to the recipients and click OK to send the message. Clicking the Use my own Mail Client link opens a new e-mail in your installed mail client, such as Microsoft Outlook, and populates the subject of the message.

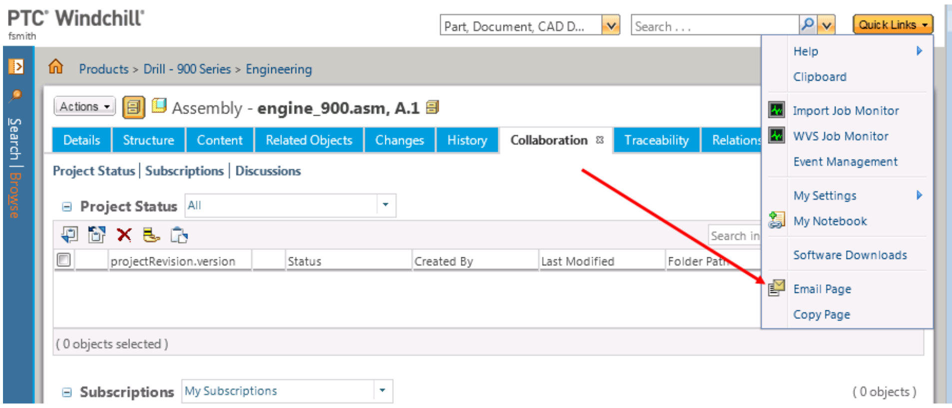


E-mailing Team

The E-mail Team action does not include users in the Guest role as recipients. To e-mail these users, select them in the Members table and use the E-mail action.

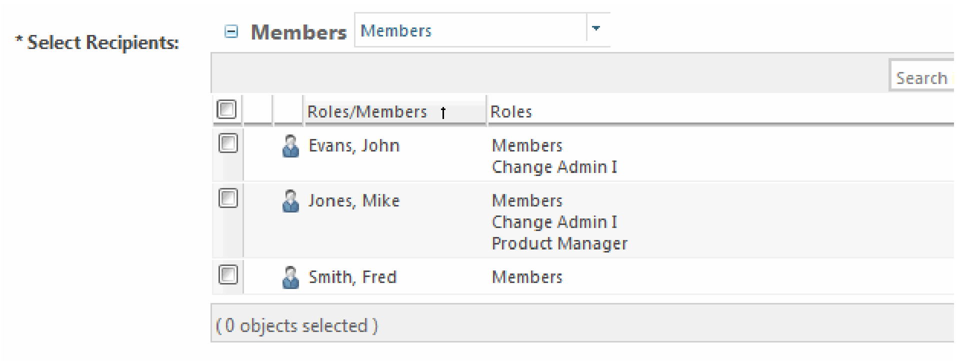
E-mailing a Page

A method for communicating information to other team members is to e-mail a Windchill page. To e-mail a page, click Quick Links, and then click the Email Page link that appears in the drop-down menu at the top of any page.



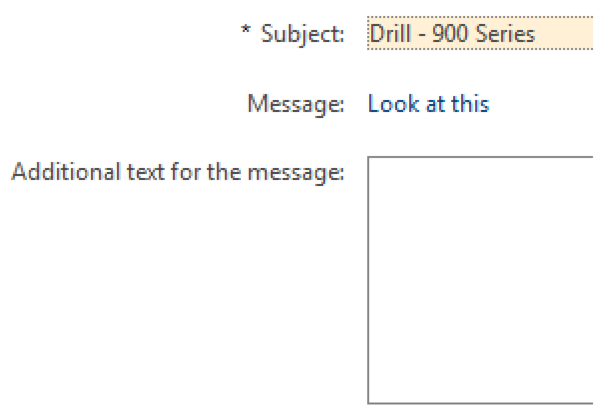
E-mailing Page

Clicking the link opens a window that enables you to select the groups or users to receive the currently active page.



Selecting Recipients

You can also add an e-mail subject and body text.



Message Details

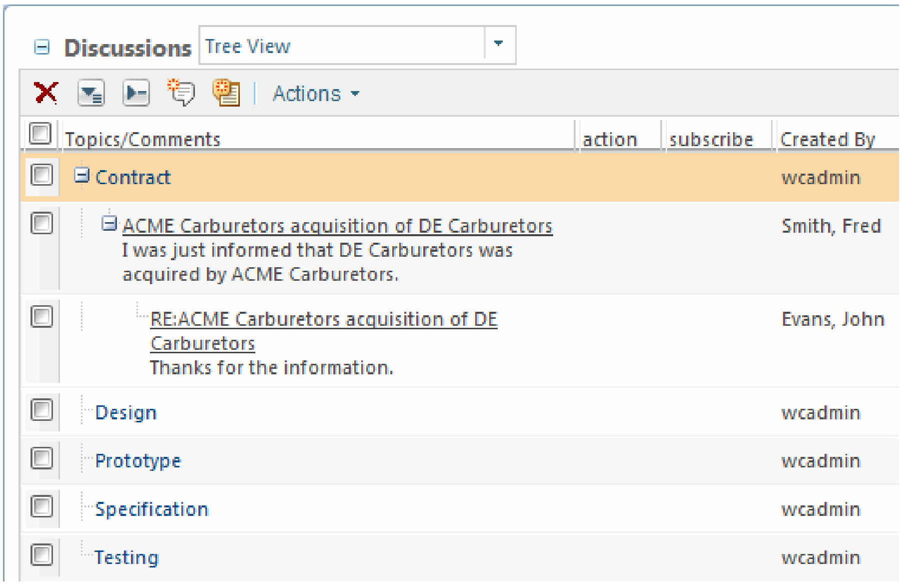
Once the notification is complete, an e-mail with a link to the Windchill page is sent to the recipients you selected.

You have the option to use your own e-mail client to configure the message.

Holding Discussions

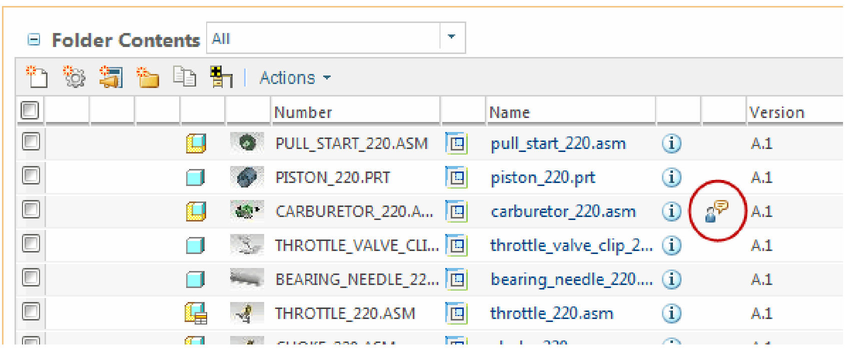
Discussion forums are message boards that enable you to collaborate with team members. There are two different types of discussion forums:

- A context forum is not specific to an object, but to a context, such as a product or project. The context forum is available from the Discussions page of the context.



Context Discussion Forum

- An object forum is associated with a specific Windchill object, such as a CAD document. You can access this discussion several ways:
  - Create a custom tab for the details page, by adding the Collaboration > Discussions table.
  - Access an existing discussion using the **Discussions** icon for that object on the Folders page.



Object Discussion Forum

  - If you are a participant in the discussion, you can access it from the Discussions table of your home page. You may need to add the Discussions table to your home page by clicking the Customize button.

A discussion forum has a specific structure.

The top-level structure is the forum. The forum is specific to a context or object, and may contain several discussion topics.

A discussion topic is meant for several users to discuss a single subject, such as a product issue. The discussion topic may have users as participants. A participant in the topic has the topic listed on the My Discussions table of their home page. Each topic may contain several discussion comments.

A discussion comment is where the bulk of the discussion information is. In a comment, you type the content of the discussion. In addition, you may attach files and links to a discussion comment.

You may subscribe to discussion topics or comments, and receive an e-mail notification when a reply is posted.

Discussing Objects

Objectives

- Create a discussion topic and posting.
- E-mail a page.

Scenario

Fred Smith, a reviewer, has just performed a design review. He is concerned about a specific design component chosen by John Evans, an engineer, for the design. In this exercise, you take the role of Fred Smith as he uses a discussion forum to post his concern.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Log on to Windchill as Fred Smith (fsmith/ptc).
- Open the Navigator, and then select the Browse tab.
- Browse to Recent Products and select View All.
- Select the Drill – 900 Series.
- Select the Engineering folder.

Task 1. Create a topic and posting in the engine CAD document's discussion forum and subscribe to the topic.

1. Type **engine_900.asm** in the Search in table field of the Folder Contents table.
2. Press ENTER to launch the search.
3. Click the **View information** icon for the engine_900.asm CAD document.
4. Select the **Collaboration** tab on the engine assembly details page.
5. Click the **New Topic** icon in the Discussions table to create a new discussion topic.
6. Type **Review Comments** in the Name field of the New Topic window.
7. Click the **Add Participants** icon.
8. Select **Evans, John**.
9. Press CTRL and click **Smith, Fred** to multi-select both users.
10. Click the **Add > >** button.
11. Click the **OK** button to add the two participants.
12. Click **Next**.
13. Type **Engine Specs** in the Subject field.
14. Type **I am concerned that the engine might not pass the required specs.** in the Message field.
15. Click the **Finish** button to create the topic and comment.

16. If necessary, click the **Expand** ⊞ icon to expand the Review Comments topic to view the posting.
17. Right-click **Engine Specs** to expand a context menu.
18. Select **Subscribe**.

Task 2. Check the home page and subscriptions list to verify that the discussion and comment were created properly.

1. Click the **Home** icon.
2. Click the **Customize** button.
3. Select the **Subscriptions** check box and note the Engine Specs subscription.
4. Select the **Discussions** check box and note the Review Comments discussion.

Task 3. Use the E-mail Page feature to notify John of a discussion forum posting.

1. Click the **Recently Accessed** button.
2. Select the **engine_900.asm, A.1** CAD document.
3. Click the **Quick Links** drop-down menu in the upper-right corner of the page.
4. Select **Email Page** to open the E-mail Page window.
5. Select the check box to the left of **Evans, John** under the Members section.
6. Type **I have added a comment concerning the engine design.** in the Additional text for the message field.
7. Click the **OK** button at the bottom to send the e-mail.

This completes the exercise.

1. Windchill communication and collaboration tools include...

- ○ A - subscriptions.
- ○ B - e-mails.
- ○ C - discussion forums.
- ○ D - All of the above.
- ○ E - None of the above.

2. True or False? You can E-mail a team member from a product or library's team page.

- ○ A - True
- ○ B - False

3. True or False? You can communicate with your team members by E-mailing them a Windchill page.

- ○ A - True
- ○ B - False

Participating in Processes

Module Overview:

In this module, you learn about the Windchill process automation capabilities and the life cycles and transitions that enable them. You learn how to use promotion requests to promote objects, and how to manage the tasks that they deliver to you.

Objectives:

After completing this module, you will be able to:

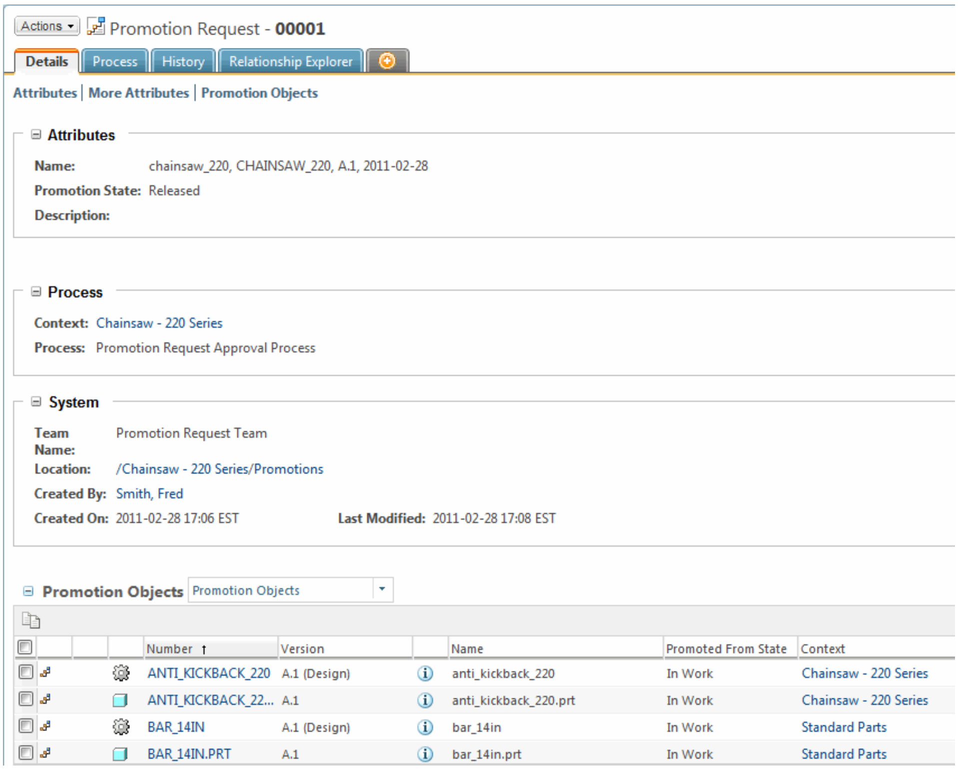
- Create a promotion request.
- Manage and complete workflow tasks.
- Reassign tasks to other team members.
- Manage the Windchill calendar.

Promotion Requests

The New Promotion Request action from the New action within an object's Actions menu enables you to set the state of one or more objects to a new life cycle state as part of a review process. The promotion action generates and uses the promotion request object as the vehicle for managing object promotion. A promotion request object organizes and manages objects for promotion, maintains a history of the promotion process and the users involved, and records discussions and comments made during the promotion process.

Viewing Promotion Requests

From the information page, you can perform actions on a promotion request, as well as view the object attributes and any related information.



Promotion Request Details

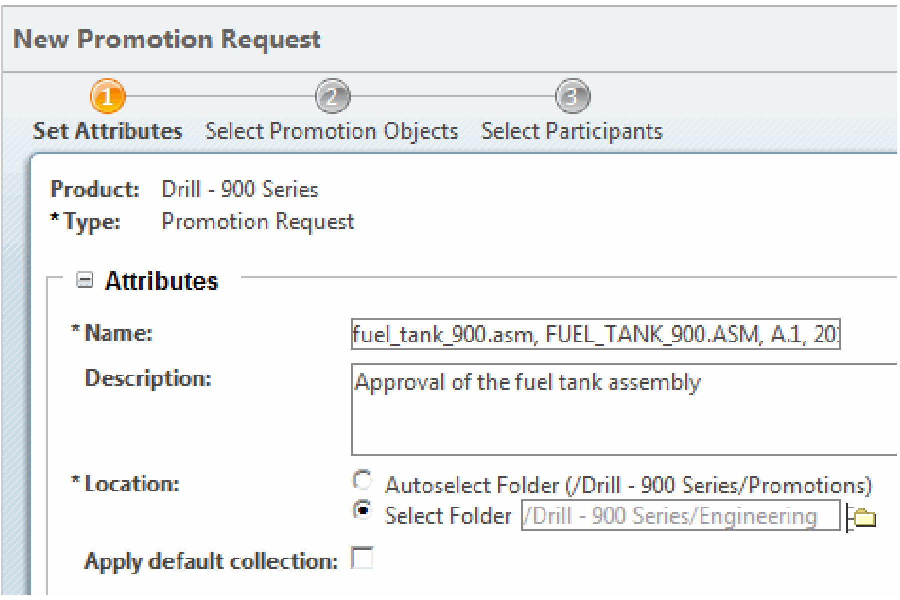
The following tabs are viewable on the promotion request information page. You can customize the tabs that appear on each object information page to display the information most useful to you:

- Details – The Details tab displays the attributes of the promotion request, as well as the Promotion Objects table. The table includes the object identified for a state change, as well as those objects referenced in the baseline. The Promotion State attribute reflects a state to which the objects are promoted on approval of the promotion request.
- Process – The Process tab displays the team and routing/process history information.
- History – The History tab displays the Maturity History table, providing the chronology of life cycle state changes over the life of the object.
- Relationship Explorer – The Relationship Explorer tab displays a graphical representation of the promotion request and all of its related objects.

Creating Promotion Requests

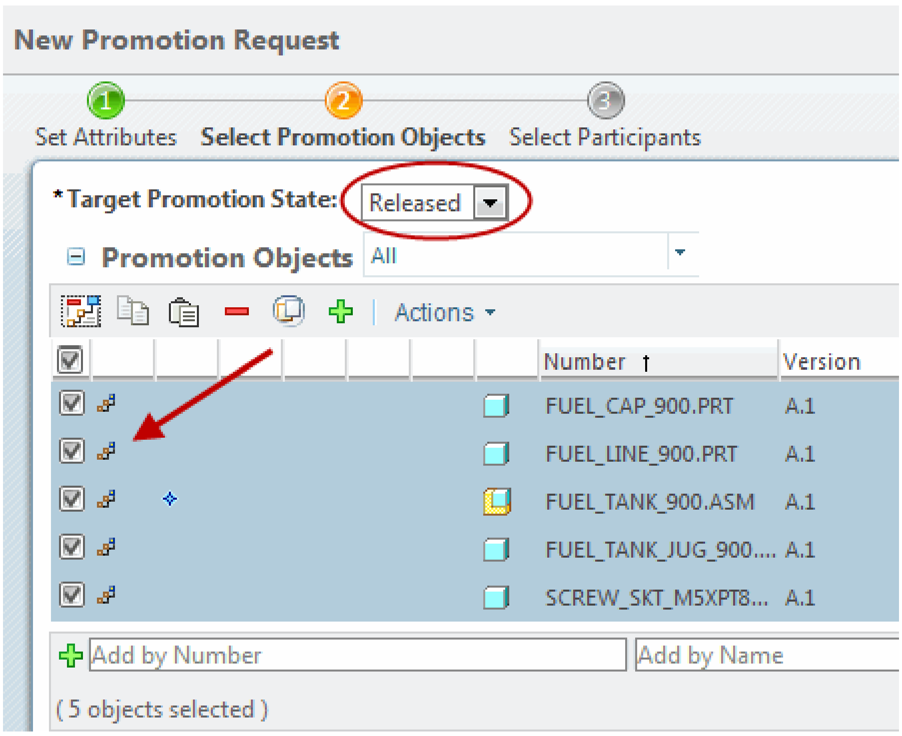
The New Promotion Request window, accessed from the Actions menu and New submenu, divides the creation of a promotion request into three steps:

- Set Attributes – For specifying the type, name, and description of the promotion request.



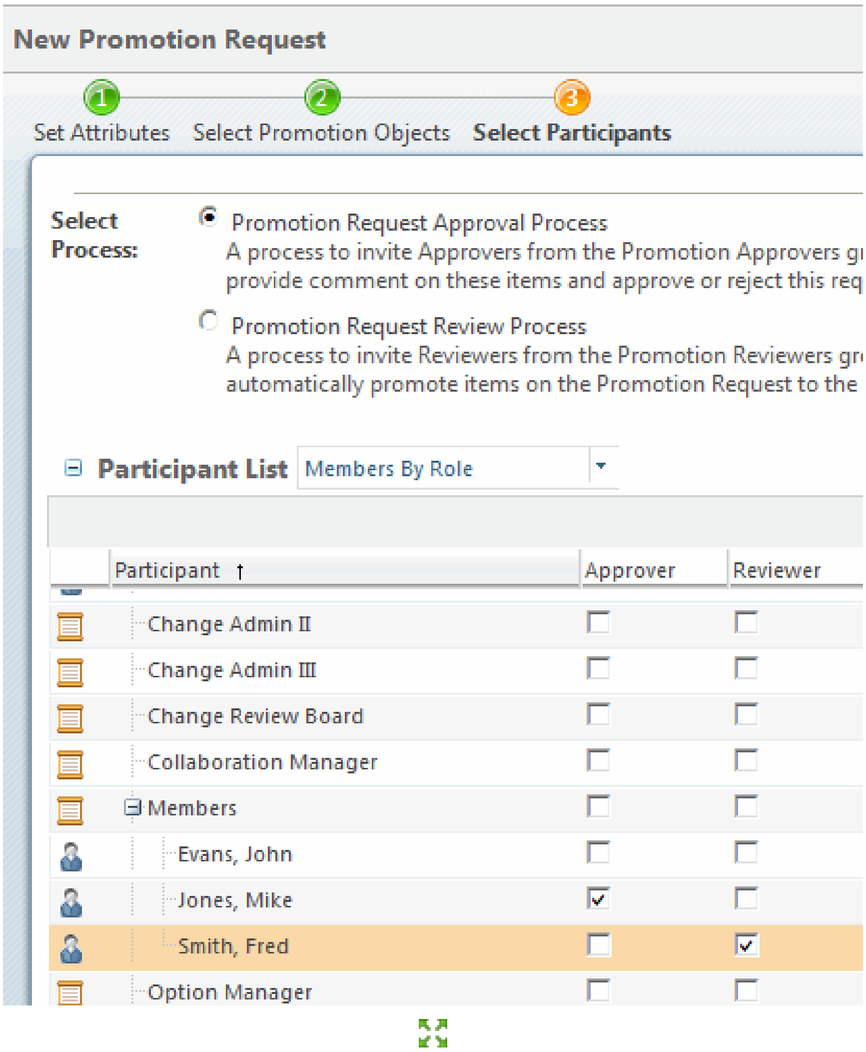
Set Attributes

- Select Promotion Objects – For gathering objects related to the initially selected objects and establishing the promotion request baseline.



Select Promotion Objects

- Select Participants – For specifying the process and creating a team of users to review the promotion request based on the process.



Select Participants

Windchill provides the following two workflow processes for promotion requests. Each process has a set of tasks and roles associated with it; you can choose the process and add team members to the roles when you create a promotion request.

- The Promotion Request Approval Process is designed to send the promotion request through for the promotion to succeed. Team members assigned to the role of Approver are required to review the promotion request and then choose to either approve or deny it.
- The Promotion Request Review Process is designed to change the state of the selected objects and notify specified team members that the promotion has occurred. Assigned team members have the option of reviewing and commenting on the changes, but no one is required to complete a task and the process does not depend on individual approval or rejection.

Creating Promotion Requests

Objectives

- Create promotion requests.

Scenario

In this exercise, you take the role of John Evans as he creates a new promotion request and routes the fuel tank assembly and all of its dependent parts through an approval process.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Log on to Windchill as John Evans (jevans/ptc).
- Start on the Windchill home page.

Task 1. Submit the fuel tank assembly for promotion.

1. Click the **Expand** icon to open the Navigator.
2. Click **Browse** to access the Browse tab.
3. Under Recently Visited, click the **Expand** icon to expand the **Drill – 900 Series** product.
4. Select **Folders**.
5. In the left pane, select the **Engineering** folder to view the contents.
6. Type **fuel_tank_900.asm** in the Search in table field.
7. Press ENTER to launch the search.
8. Click the **View information** icon next to the fuel tank assembly **FUEL_TANK_900.ASM**.

   *Ensure that you do not select the **fuel_tank_900** Windchill part.*

9. Click the **Actions** drop-down menu for the **fuel_tank_900.asm** CAD document.
10. Select **New** to expand the menu.
11. Select **New Promotion Request**.
12. Type **Approval of the fuel tank assembly** in the Description field.
13. Click the **Next** button to proceed to the next step window.
14. Select the **FUEL_TANK_900.ASM** check box in the Promotion Objects table.
15. Click the **Collect objects** icon to gather related components.
16. Click **OK** to return to the New Promotion Request window.
17. Select the **Select all rows** check box to select all objects from the table.

18. Click **Target Promotion State** to expand the list.
19. Select **Released**.
20. Click the **Set Object for Promotion** icon.
21. Click **Next** to proceed to the next step window.

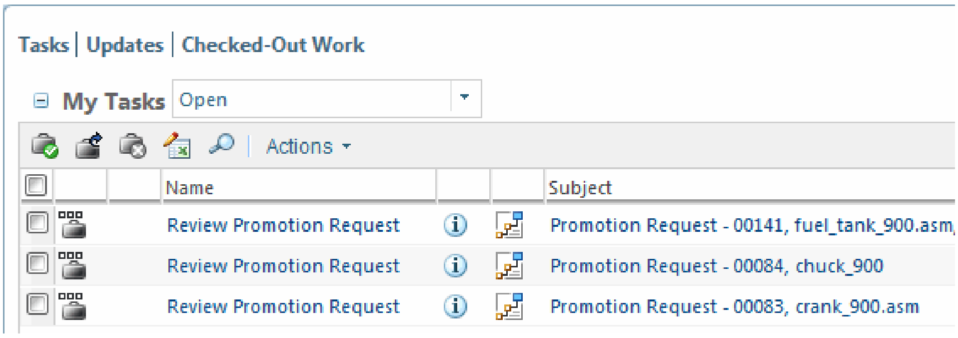
> *If necessary, resize the New Promotion Request window to see the Members list.*

22. Select the check box for **Smith, Fred** under the Reviewer column.
23. Select any check box for **Jones, Mike** under the Approver column.
24. Click the **Finish** button to create the promotion request.

This completes the exercise.

Participating in Processes

Windchill uses a business process system to manage object development, control object maturity, and assign tasking. When the system assigns you a task, the task is delivered to the My Tasks table. From the My Tasks table, you can complete a task, reassign it to another user, and accept or decline a task.

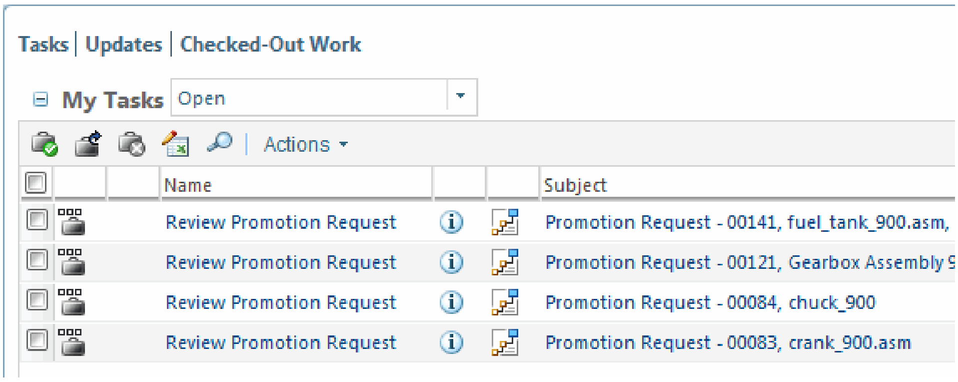


My Tasks Table

Windchill may also deliver tasks through your e-mail account.

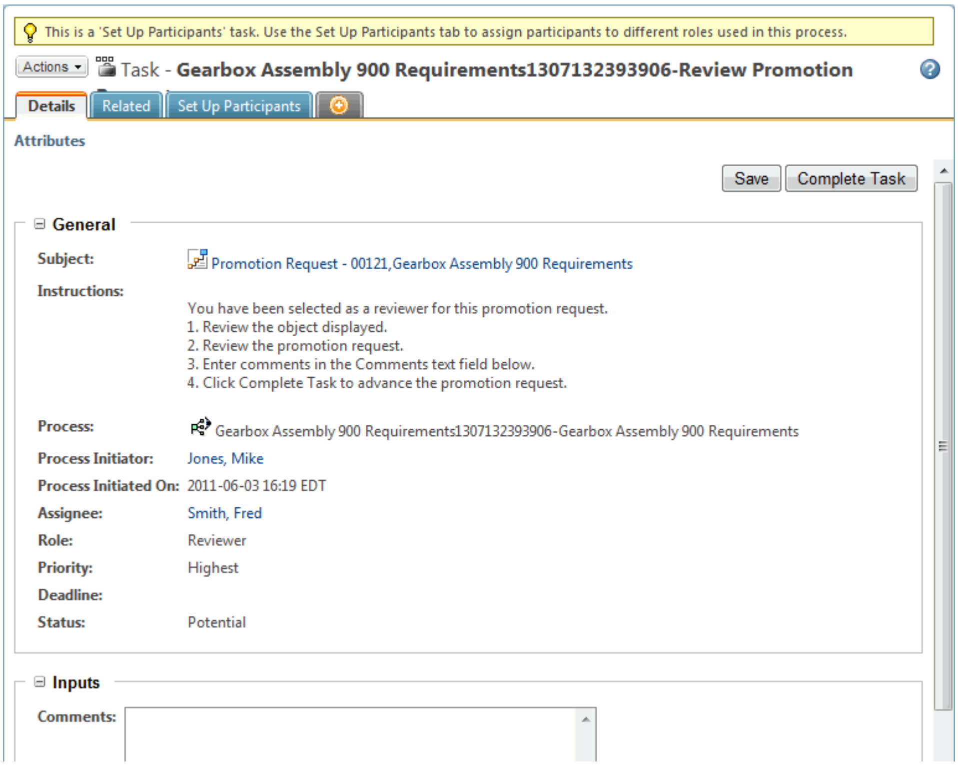
Completing Tasks

If you are identified as a participant in a promotion process, you receive a task in your My Tasks table.



My Tasks Table

The basic steps for completing any task involve viewing the task, following the instructions, and then clicking the Complete Task button.



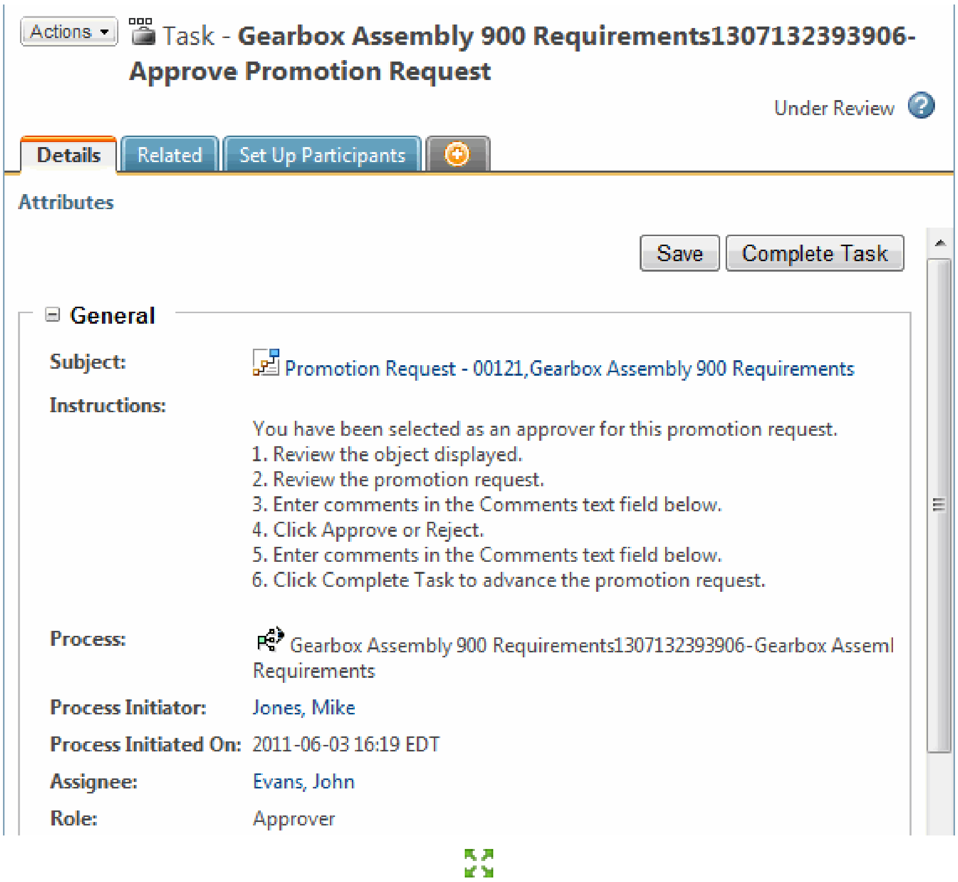
Task Details Page

Once the task is complete, it is removed from your assignments list and the process automatically routes the object to the next user or users in the process. Completing some tasks changes the state of the subject object or objects.

Completing Promotion Tasks

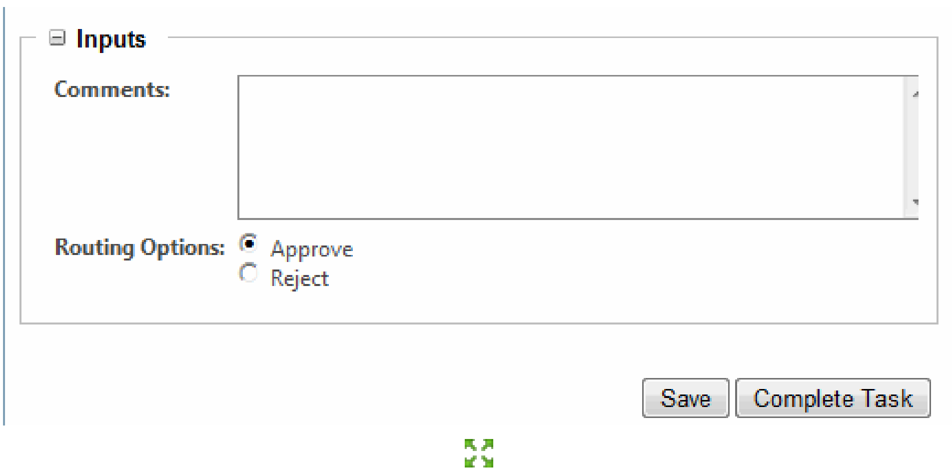
To complete a promotion task, you must first access the task by clicking its name in your My Tasks table. On the task page, you read the instructions to gain a full understanding of what is required to complete the task.

Next, review the promotion objects in the Promotion Objects table. This may include viewing the details and content of the promotion objects. Also, review the promotion process information located under the Process tab.



Task Details Page

Finally, you complete the task by typing in comments, selecting a disposition such as Approve or Reject, and clicking the Complete Task button.



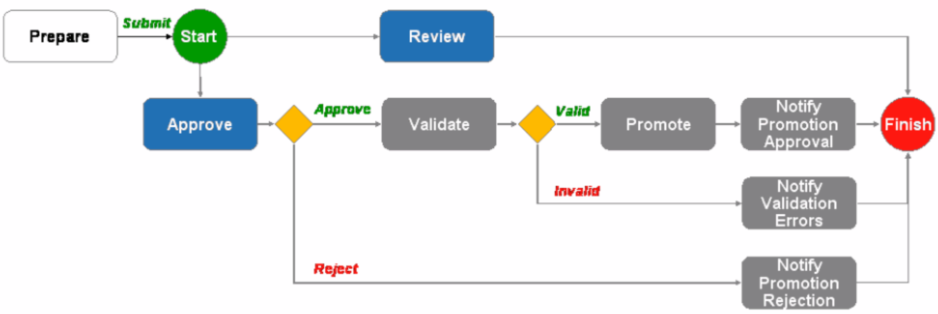
Disposition

Viewing Processes

From the task details page, you access the workflow diagram by clicking the View Lightweight Process Image icon. The icon is located to the right of the Process label.

Accessing Process Information

This diagram provides details such as life cycle name and the related workflow activities.



Sample Process Diagram

Participating in Workflow Processes

Objectives

- Participate in workflow processes.

Scenario

In this exercise, you take the roles of multiple users as they work with the fuel tank assembly promotion request that John Evans, an engineer, recently created. You perform the following tasks:

- As Fred Smith, you review the promotion request for fuel tank.
- As Mike Jones, you approve the promotion request.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Complete the exercise *Creating Promotion Requests*.
- Open two Internet browser sessions; log on as Fred Smith (fsmith/ptc) and Mike Jones (mjones/ptc).
- Start both sessions on the home page.
- Arrange browser windows in such a way that Fred's session is on the top and Mike's session below Fred's.

Task 1. Complete the task of reviewing the promotion request for the fuel tank assembly.

1. Click the **Review Promotion Request** link for the fuel tank assembly in the My Tasks table to open the task page.
2. Type **Good job** in the Comments field of the Review Promotion Request task.
3. Click **Complete Task** to complete the Review Promotion Request task.
4. Click the **Close**  button to close Fred's browser window.

Task 2. Complete the approve task for the fuel tank assembly, thereby promoting it.

1. Click the **Approve Promotion Request** link for the fuel tank assembly in the My Tasks table to open the task page.
2. Type **Approved for release** in the Comments field.
3. Ensure that the Approve routing option is selected and then click **Complete Task** to complete the Approve Promotion Request task.

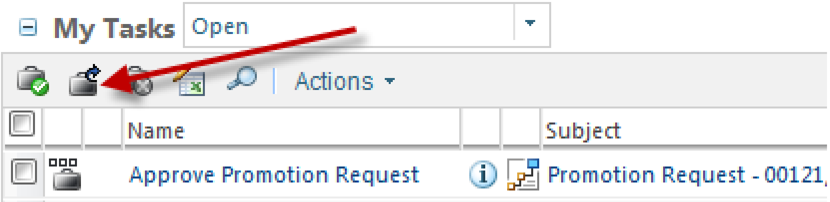
Task 3. Review the promotion request’s history.

1. Click the View drop-down list to the right of the My Tasks table.
2. Select **Closed** to view the completed tasks.
3. Click the promotion request link related to the fuel tank under the Subject column.
4. Select the **Process** tab.
5. Click the **Routing/Process History** link at the top of the page to bring the table to the top and view details.

This completes the exercise.

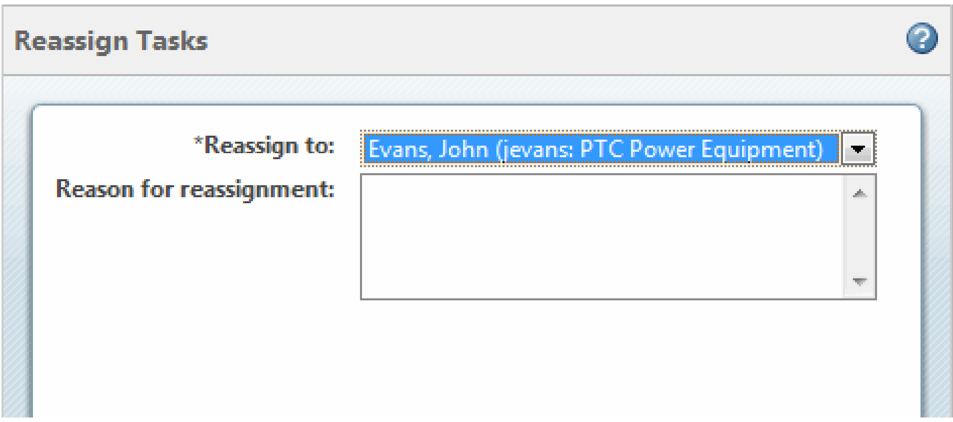
Reassigning Workflow Tasks

Windchill enables you to reassign workflow tasks to other users by using the task's Actions menu or the icon.



My Tasks Table and Reassign Selected Tasks Button

In the Reassign Tasks window, you select a person to whom you want the task reassigned and a reason for the reassignment.



Reassigning Tasks

Reassigning Tasks

Objectives

- Reassign tasks.

Scenario

Fred Smith is attending the PTC Power Equipment Customer Conference and does not have time to review and approve the crank assembly.

In this exercise, you take the role of Fred as he reassigns the review task for the crank assembly.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Log on to Windchill as Fred Smith (fsmith/ptc).
- Browse to the Windchill home page.

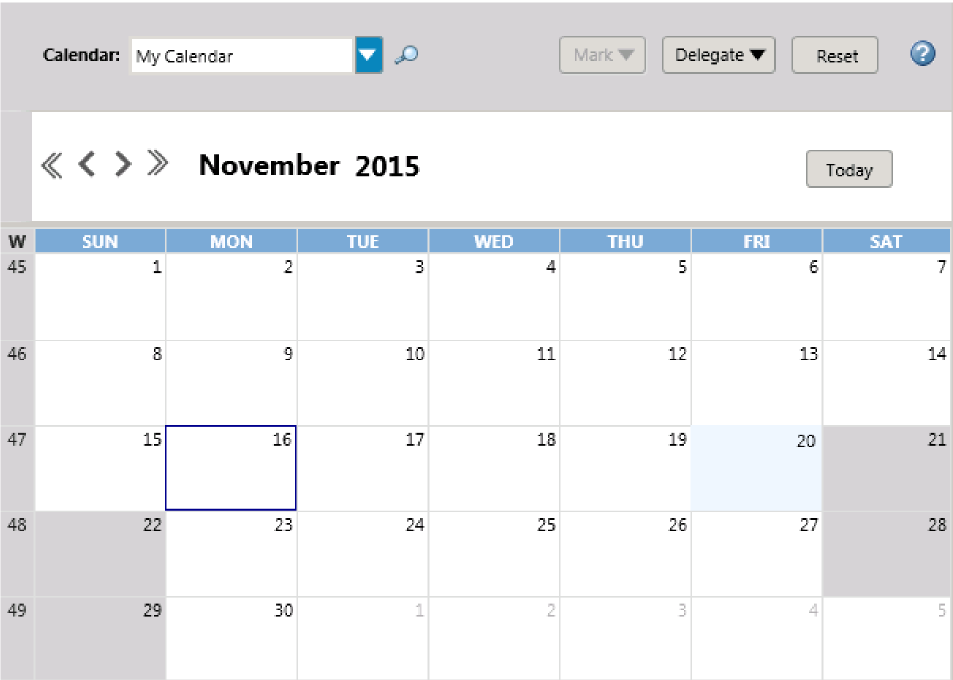
Task 1. Reassign the review task to John Evans.

1. Select the check box for the **Review Promotion Request** task in the My Tasks table for the crank_900.asm object.
2. Click the **Actions** drop-down menu.
3. Select **Reassign Tasks** from the Actions drop-down menu.
4. Click the **Reassign to** drop-down menu.
5. Select **Jones, Mike** from the Reassign to drop-down menu.
6. Type **I'm leaving for the PTC Customer Conference tomorrow. Could you review this assembly for me?** in the Reason for reassignment field.
7. Click the **OK** button to reassign the task.

This completes the exercise.

Managing Your Calendar

You can use the Windchill calendar to view your own calendar, other users' calendars, or the System calendar. Each calendar displays a work schedule indicating workdays and non-work days. This schedule is used for assigning tasks that have deadlines. Workdays are displayed in white and non-work days are shaded.



Windchill Calendar

Calendar functionality depends on which calendar you are viewing. When viewing your calendar, you can highlight a day or consecutive days and click Reset to cancel any of your changes or delegations.

You can mark days as non-working, or automatically delegate tasks that are received on certain days.

- To mark a day as non-working, select the day or days and then select Mark as Nonworking from the Mark drop-down menu. Tasks can have deadlines that are relative. If you mark a day non-working, the task does not count days that are marked as non-working against your allotted time.
- To delegate tasks, select the day or days that you wish to delegate tasks, and then select the Delegate selected days... or Delegate indefinitely... from the Delegate drop-down menu. You can then search for and select the user that receives tasks delivered to you during those days.

1. Once a task is completed...

- ○ A - it is removed from the user's My Tasks table immediately.
- ○ B - it stays in the user's My Tasks table until the workflow process is complete.
- ○ C - the same user always gets the next task.
- ○ D - the life cycle state always changes.

2. What is the purpose of a promotion request?

- ○ A - To organize and manage objects for promotion.
- ○ B - To maintain a history of the promotion process and the users involved.
- ○ C - To record discussions and comments made during the promotion process.
- ○ D - All of the above.

3. Out-of-the-box, Windchill provides two promotion processes. Which process is NOT a valid process?

- ○ A - Promotion Request Submit process
- ○ B - Promotion Request Approval process
- ○ C - Promotion Request Review process

4. Which page/menu enables you to view workflow process diagram?

- ○ A - Object's Action menu
- ○ B - Task details page
- ○ C - Overview page
- ○ D - Process tab

5. True or False? You can use Windchill calendar to delegate future tasks to others.

- ○ A - True
- ○ B - False

Performing Common Tasks

Module Overview:

In this module, you learn how to perform common Windchill tasks. You learn how to manage user preferences using the Preference Manager. You learn how to display an object structure graphically using Relationship Explorer. You also learn how to perform basic operations such as Move, Save As, Rename, Set State, and so on.

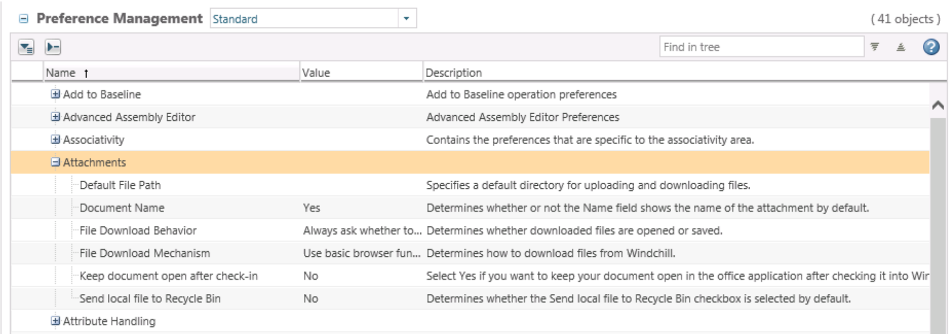
Objectives:

After completing this module, you will be able to:

- Use Preference Manager to set user preferences.
- Use Relationship Explorer.
- Move objects between contexts.
- Perform other common Windchill operations.

Preference Manager

The Preference Manager enables you to view and set preferences, such as display and search options, to enhance your Windchill experience. It also enables administrators to view and set preferences for various application contexts, such as projects, products, or organizations.



Preference Manager

The Context field at the top of the Manage Preferences window identifies the user or context from which the window was opened; only the preferences for that user or context are displayed.

Preferences in the Preference Manager table are grouped by category and subcategory according to the type of functionality they impact, such as Display or Search.

The Preference Manager is accessed from the Quick Links menu by selecting My Settings and then Preferences.

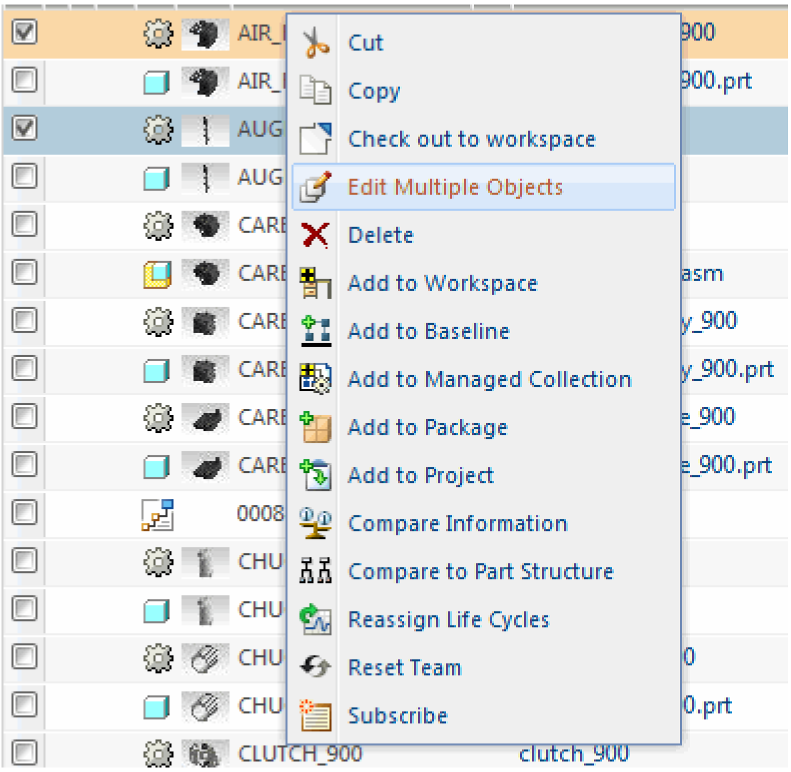
Some preferences must be set at the context, organization, or site level by an administrator. In such cases, you access the Preference Manager via the Utilities option in the Navigator.

Editing Multiple Objects

Windchill enables you to edit multiple objects; however, you must select objects of the same type. For example, you must select all parts or all documents. You may not select a combination of parts and documents.

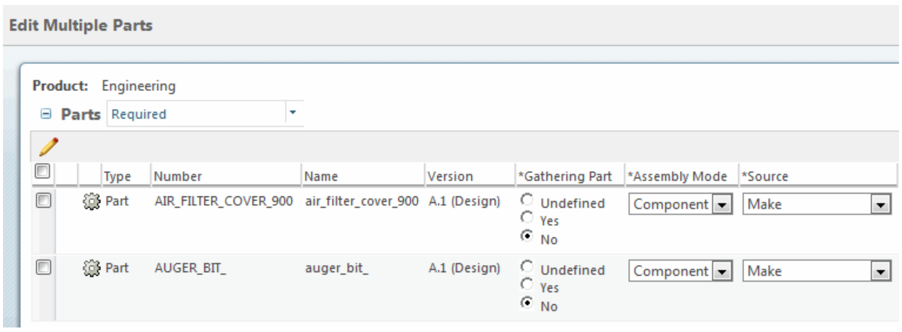
You can edit multiple objects at once using the following procedure:

1. From the Folder Contents table, select the check boxes for the objects you want to edit.
2. Right-click one of the files, then select Edit Multiple Objects.



Edit Multiple Objects

3. You can then edit fields, such as Path, Description, and Comments.



Edit Multiple Parts

Not all object types support multiple edit, although most of the common ones such as parts, documents, activities, and specifications do. If the type is not supported for multiple editing, the Edit Multiple Objects option is not available in the context menu.

Moving Objects

The Move action enables you to move specific objects between contexts and specify different locations for each specified object.

You can move objects in the following ways:

- From a product to a library.
- From a library to a product.
- Between libraries.
- Between products.
- Between folders in a single context.

Move is similar to cut and paste. However, while the cut and paste actions are useful for moving one version of an object within a context, the Move action moves all versions of the selected objects to and from a location. Move also provides dependency processing, enabling you to gather other related objects to include in the Move action. Related change objects maintain their associations with the object when it is moved.

When an object is moved from one context to another, its name and number do not change. Any running processes associated with the object version that you are moving are also moved with the version, as long as the templates used to create these processes are managed at an organization or site level.

Objects cannot be moved if they are checked out.

You can move selected versions of an object within the same product or library.

Moving Objects

Objectives

- Move objects from one context to another.

Scenario

In this exercise, you take the role of John Evans as he moves a document from one product context to another.

Initial Conditions

To successfully complete this exercise, you must establish the following initial conditions:

- Log on to Windchill as John Evans (jevans/ptc).
- Open the Navigator and select the Browse tab.
- Click Recent Products.
- Select View All.
- Click the Drill – 900 Series link to open the product.
- Select the Documentation folder to view the contents.

Task 1. Move a document from one product to another.

1. Select the check box to the left of **Coil 900 Requirements** document.
2. Click the **Actions** drop-down menu in the Folder Contents table.
3. Select **Move**.
4. Select the **Coil 900 Requirements** check box.
5. Click the **Set the new context and folder location for the selected objects** icon from the toolbar.
6. Click the **Context** drop-down menu to view other options.
7. Select the **Drill – 800 Series** product.
8. Double-click the **Documentation** folder.
9. Click **OK** in the Set Location window to set the new location and return to the Move window.
10. Click **OK** in the Move window to move the object to the new location.

Task 2. Find the document in the new product location.

1. Click the **Expand** icon to open the Navigator.
2. If needed, click **Browse** to access the Browse tab.
3. Click **Recent Products**.

4. Select **View All**.
5. Click the **Drill – 800 Series** link to open the product.
6. Select the **Documentation** folder to view the contents.
7. Observe the Coil 900 Requirements document in the Folder Contents table.

This completes the exercise.

Deleting Objects

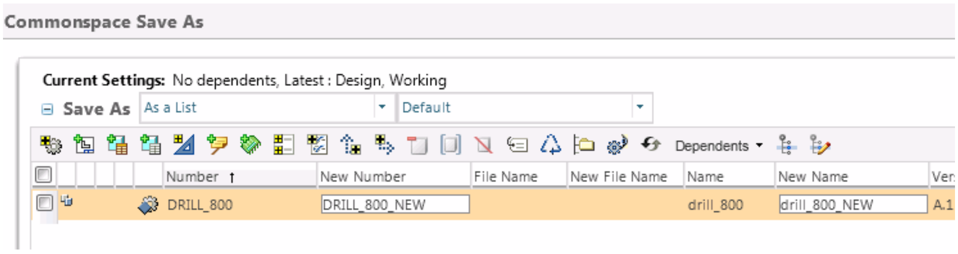
The Delete action enables you to remove objects from Windchill. This can be especially useful if errors are made at the time of object creation. When an object is deleted, all associated object-to-object and object-to-version links are also deleted. You must have the proper access control permissions to delete the object. Messages appear when errors are encountered.

For some objects, you can specify which versions are deleted from the database if performing the deletion from the object's Information page:

- Individual iterations cannot be deleted, except for the last iteration.
- You can delete all revisions.
- You can delete all iterations of a selected revision.

The Save As Feature

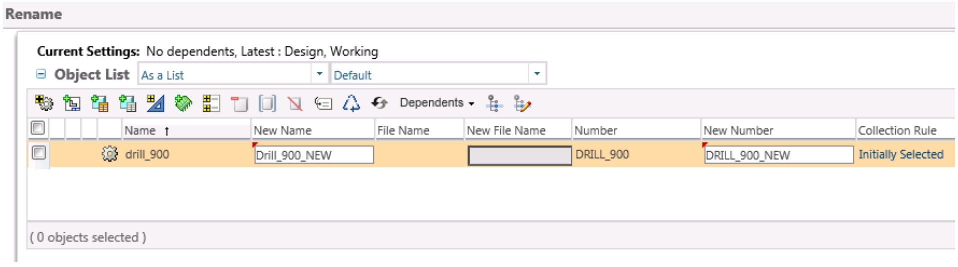
The Save As feature enables you to copy checked-in objects and store them as new objects. This functionality applies to models, drawings, and family table objects in the commonspace, and is capable of preserving CAD document/part associations (the saved as CAD documents and parts are associated in the same way that their originals were). A similar action, Workspace Save As, can be initiated only from the workspace. In the workspace version, newly created objects remain outside the commonspace until they are checked in.



Save As Wizard

You can use Save As to copy an entire or partial family table. If you copy an instance without its generic, the new instance copy becomes a new member of the family table. If you copy a drawing without copying its referenced model, the new drawing refers to the original model.

The Rename Feature



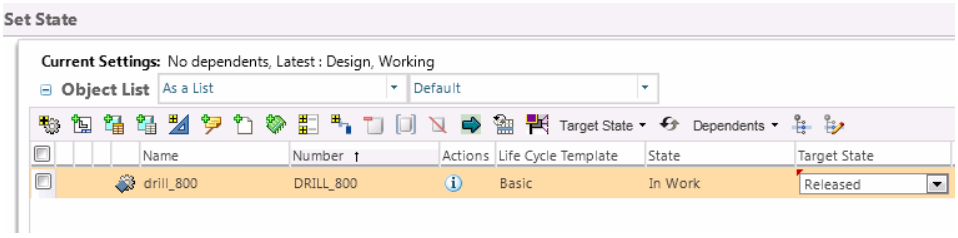
Rename

If you have Modify Identity access permission, you can rename an object by using the object's Actions menu to change the values of the Name and/or Number attributes. Depending upon how your administrators have implemented naming/numbering, even if you have the Modify Identity permission, you may not have the ability to change one or more of the attributes.

When renaming a container, you must use the Edit option from the container’s Details page Actions menu. When renaming a folder, you must use the Edit option from the folder’s Actions menu.

The Set State Feature

Windchill enables you to manually set the life cycle state.



Set State

You can only set the state of an object if you are an administrator or if you have modify permission for the object. The Set State action is available from the object's Actions menu, or from within the workspace. You can also terminate running related processes while setting a new life cycle state.

The Target State menu only populates with available states when all selected objects share the same life cycle template.

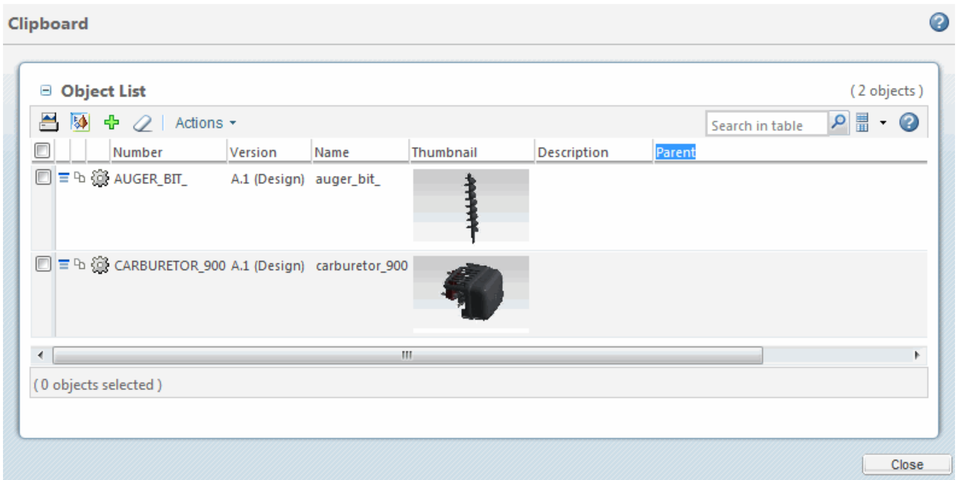
Using the Windchill Clipboard

The Windchill clipboard enables you to cut, copy, and paste objects and URLs in the Windchill system. The clipboard must contain either objects, such as parts and documents, or URLs (not both). Once a URL is placed on the clipboard, you can paste a link of the page. Once an object is placed on the clipboard with a cut or copy action, you can paste the object, either moving it to a different location entirely (with the cut action) or creating a copy in a new location (with the copy action).

When pasting a cut object, the object is removed from the original folder and pasted into the folder you select. The object is not removed from the original folder until the paste action is complete.

When pasting a copied object, a new object is created from the current object. You can copy objects from project to project and to and from products and libraries. Copies are created for each of the Windchill objects on the clipboard and are placed in the paste location. The copies may be renamed to perform the save as style operation.

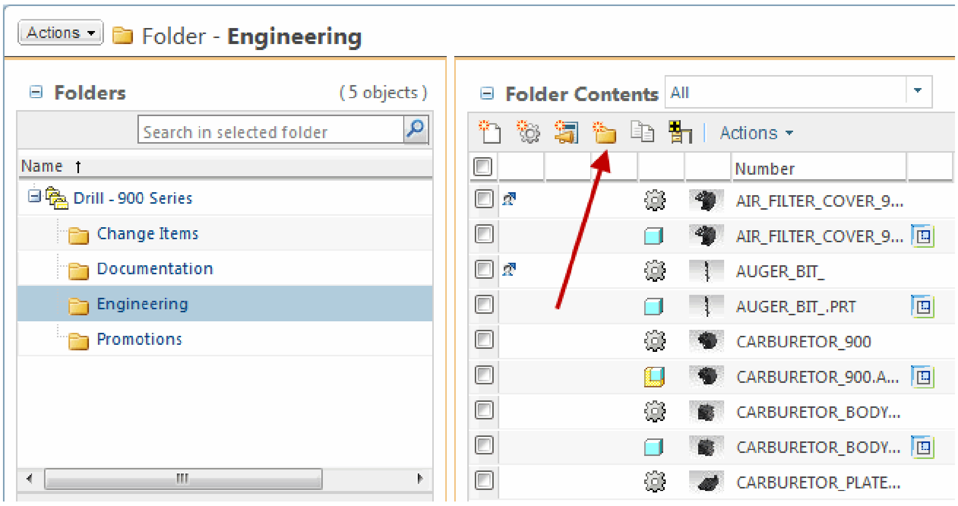
You can manipulate the clipboard contents by accessing the Quick Links drop-down menu and then selecting the Clipboard option.



The Clipboard Table

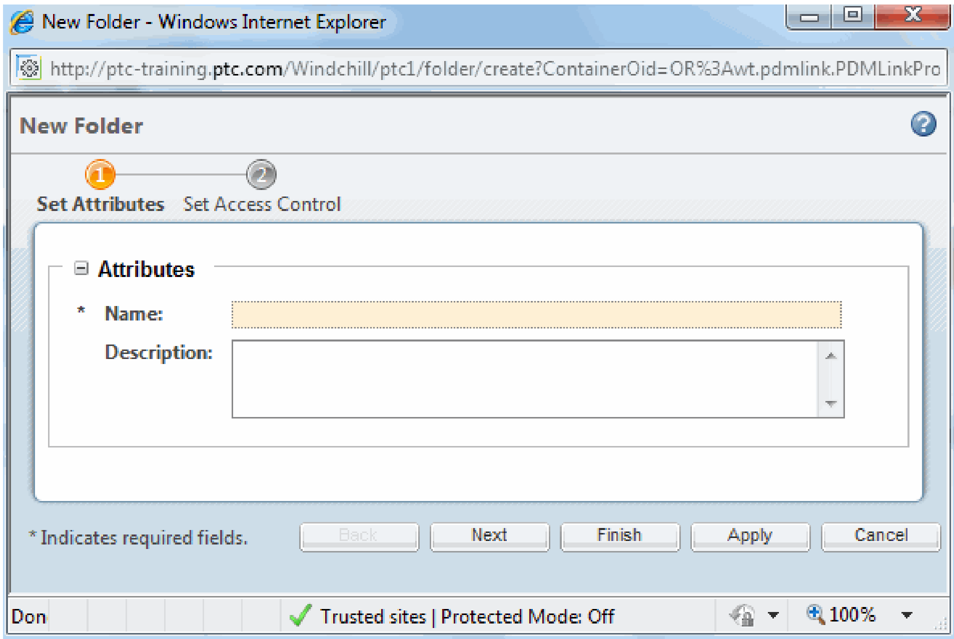
Managing Folders

Folders enable you to organize objects in a way that is meaningful and useful for your work.



Folders and Folder Contents

When creating a new folder, you can set folder attributes, such as location and domain. Individual folders can also have access control permissions set by an administrator.

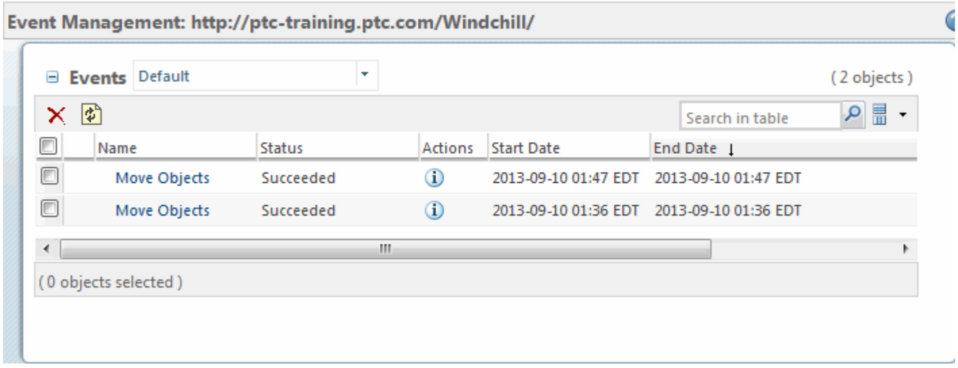


Creating Folders

A Folders page is available for each context, enabling you to easily find and manage objects. Additionally, the Folder Contents table provides a number of actions that you can perform on folder objects.

Event Manager

The Event Manager enables you to monitor and act on log messages generated in your authoring application or Windchill sessions. In a standalone browser, the Event Manager launches automatically in the case of a failed transaction attempt.



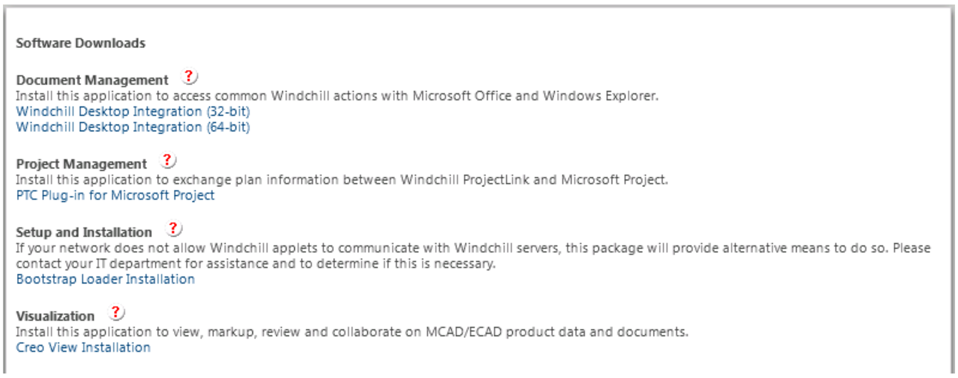
Event Management

To access the Event Manager:

- Click the Quick links at the top of any page, then select Event Management from the drop-down menu.

Software Downloads

The Software Downloads page enables you to install additional optional software components, such as the Windchill Desktop Integration and Creo View client, on your client machines.



Software Downloads

This page can be accessed from the Windchill home page by clicking the Quick Links drop-down menu.

1. The Windchill Clipboard enables you to...

- A - copy/paste objects.
- B - cut/paste objects.
- C - attach files with objects.
- D - A and B.

2. Which utility is used to set personal preferences.

- A - Windchill Explorer
- B - Event Manager
- C - Preference Manager
- D - Attributes Manager

3. True or False? You can only set the state of an object if you are an administrator or if you have modify permission for the object.

- A - True
- B - False

4. True or False? Folders enable you to organize objects in a way that is meaningful and useful for your work.

- A - True
- B - False

5. Which tool enables you to monitor and act on log messages generated in your authoring application or Windchill sessions?

- A - Product Structure Explorer
- B - Event Manager
- C - Log Writer
- D - Queue Manager