



Getting Started

Connecting to Your First Server/Environment

This section contains instructions for connecting the console to your first Process Orchestrator server.

Before You Begin

There are several user groups assigned to Process Orchestrator's built-in security roles. Before attempting to access the console, you must be a member of one of these user groups or another group to which your administrator has assigned custom role privileges. If you do not have access or the appropriate rights, please contact your local IT administrator.

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| Step 1 | Choose Start > Programs > Cisco > Cisco Process Orchestrator > Cisco Process Orchestrator Console . |
| Step 2 | In the Select Server dialog, select a server name and click Connect to Server . |
| Step 3 | To configure the console server connection, choose Tools > Options , and update the parameters as necessary. |
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Understanding the User Interface

Process Orchestrator Console Components

The following topics describe the main components of the Process Orchestrator console:

- [Console Menus](#)
- [Toolbars](#)
- [Workspaces](#)
- [Results Pane](#)
- [Details Pane](#)
- [Process Viewer](#)
- [Process Editor Menus](#)

Console Overview

The Cisco Process Orchestrator Console is the interface used to access and operate the application. The Console displays after completing the license check or updating your license. The default view is the Operations workspace.

After the initial access, the view on the Console is determined by the last item accessed before exiting the Console.

The Console consists of the following areas:

- **Menu Bar**
Contains options used to access the tasks associated with the current item selected in the Navigation pane.
- **Toolbars**
Provides shortcuts to general tasks within Cisco Process Orchestrator as well as specific tasks associated with the item currently selected in the Navigation pane.
- **Navigation Pane**
The Navigation pane, located on the left side of the Console, displays several navigation workspaces, each containing a group of items that enable you to perform specific actions within the application. When a navigation view is selected, the available contents are displayed.
The following is a list of the available views in the Navigation pane.
 - Operations Workspace
 - Definitions Workspace
 - Administration Workspace
 - Favorites Workspace
- **Results Pane**
- **Details Pane**

Console Menus

The Process Orchestrator console menus provide general task items, such as feature customization options. These menus are displayed on the Console menu bar.

The following topics describe the contents of each of the Process Orchestrator Console menus.

Using the File Menu

The File menu contains general actions related to the configuration of Process Orchestrator. The File menu contains the following items:

Menu Option	Description
Connect to Server	Opens the Select Server dialog box where you can specify the server to which to connect. The Server drop-down list displays the list of previously connected servers to the Console. You can also enter the specific server address to be connected.
Recent Servers	Displays the most recent servers that have been connected to the Console.
Environment Properties	Displays the Environment Properties dialog box for the connected Process Orchestrator server.
Update License	Launches the Update License Wizard (see Updating the Product License) to enter your product license information.
Exit	Closes the Console

Using the Edit Menu

The Edit menu contains the following items for modifying the configuration.

**Note**

The items enabled under the Edit menu depend on the objects selected in the navigation and detail panes of the Console.

Menu Option	Description
Undo	Reverses the last action by the user
Redo	Reinstates the previously reversed action
Copy	Copies the selected text or object to the clipboard
Paste	Pastes the previously copied item from the clipboard
Delete	Deletes the selected item
Select All	Selects all items on the dialog box or text field
Find	Launches the Find dialog box to locate specific text on a dialog box.

Using the View Menu

The View menu contains items that determines how the information displays in the results pane. Select one of the following items to adjust the Console display:

Menu Option	Description
Large Icons	Displays large icons with the associated item
Small Icons	Displays small icons with the associated name
List	Displays icons with the associated name in list format
Details	Displays icons with the associated name and details in list format
Choose Columns	Opens the Choose Columns dialog box, which is used to customize the displayed columns and the order in which they display (see Configuring Columns).
Refresh	Updates the current view
Navigation Pane	Enables/disables the Navigation pane on the Console. When disabled, the Results pane and the detail pane, if selected, expand the width of the entire window
Detail Pane	Toggles the Details pane <i>On</i> or <i>Off</i>
Toolbars	Determines the toolbars (Standard Toolbar , Advanced Toolbar , Configuring the Appearance of the Console) to display on the Console. The check mark to the left of the toolbar name indicates the toolbar is selected.
Status Bar	Enables/disables the status bar that appears at the bottom of the Console

Using the Go Menu

The Go menu contains the following shortcuts that allow you to navigate from one view to another on the Console:

Menu Option	Description
Back	Returns to the previously selected view
Forward	Option is active if you have clicked Back to access a previous view. Use this option to navigate to the next navigation item in the list.
Go To	Displays all previously selected views to which you can return
Operations	Opens the Operations workspace
Definitions	Opens the Definitions workspace
Administration	Opens the Administration workspace
Folder List	Opens the Folder List workspace
Favorites	Opens the Favorites workspace

Using the Tools Menu

The Tools menu contains the following items that configure the appearance of the Console:

Menu Option	Description
Customize	Launches the Customize dialog box. Use this dialog to change the fonts and colors that display in the Console (see Customizing the Fonts and Colors).
Options	Displays the Options dialog box. Use this dialog to modify basic server interface functions.


Using the Actions Menu

The Actions menu contains items that perform specific actions associated with the selected item in the navigation pane.

The items that are available on the menu depend on the selected item on the Navigation pane. For example, the options available when the Processes view is selected are different from those that are available when Global Variables view is selected.

Understanding the Help Menu

The Help menu contains the following items:

Menu Option	Description
Help	Displays dialog box-specific information in a separate pane to the left. On the toolbar, click the Help  tool to display and remove the Help pane.
Contents	Displays the Table of Contents tab used to navigate and view the comprehensive help information.
Index	Displays the Index tab used to navigate and view the indexed help information.
Search	Displays the Search tab used to enter search criteria and locate specific information in the comprehensive help.
About Cisco Process Orchestrator	Displays the About Cisco Process Orchestrator dialog box, which contains the product version and license information.

Toolbars

The Console has three toolbars ([Standard Toolbar](#), [Advanced Toolbar](#), [Configuring the Appearance of the Console](#)), which can be used to configure the selected navigation view, provide quick navigation between views, and perform item-specific actions.

Figure 2-1 Console Toolbars












_____ **Action Toolbar**
 _____ **Advanced Toolbar**
 _____ **Standard Toolbar**

To enable or disable a toolbar, choose **View > Toolbars**, then click the appropriate toolbar.



Standard Toolbar





The Standard toolbar displays shortcuts to general actions and functions. The following icons appear on every view on the Console.

Icon	Name/Action
	Connect to Server—Connects to the server to which you were last connected
	Server Properties—Displays the properties for the connected server
	Refresh—Updates the current view with the latest information from the server
	Properties—Displays defined properties for the selected object. This icon is unavailable if the current selection does not support property pages.
	Cut—Cuts the selected text to the clipboard
	Copy—Copies the selected text to the clipboard
	Paste—Pastes the selected items to the location identified by the cursor
	Delete—Deletes the selected object
	Help—Displays or hides the Help pane

Advanced Toolbar

The Advanced toolbar displays shortcuts to general navigation and Console configuration icons.

Icon	Name/Task
	Back—Permits you to select the page to be displayed from a drop-down list of the most recent history pages.
	Forward—Permits you to select the page to be displayed from a drop-down list of the most recent forward-history pages.

Icon	Name/Task
	Navigation Pane—Displays or hides the Navigation pane.
	Detail Pane—Displays or hides the Details pane.
	Status Bar—Displays or hides the Status Bar.
	Options—Displays the Options dialog box.

Configuring the Appearance of the Console

You can configure options that modify the basic interface behavior of the console.

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- Step 1** From the Advanced toolbar, select **Options** to display the Options dialog box provides configuration options that modifies the basic interface behavior.
- Step 2** Click the **General** tab to configure the server connection startup behavior.
- Automatically select the group and item you most recently selected—At console startup, the group and item that are selected are the group and item that were last selected.
 - Always select the following group and item—Specify the starting group and item:
 - Group—The navigation group that is selected at console startup
 - Item—The navigation item that is selected at console startup
 - Remember the most recently used servers—Specify the number of recently accessed servers to display
- Step 3** Click the **Windows and Layout** tab to specify how the user is to be prompted when a process is launched and what is to be displayed after the process is launched.
- When starting a process—Select one of the following options to determine what action occurs when a process is launched:
 - Always Launch Immediately with Default Input Value—Launches the process immediately when the process has specified or default values without confirmation
 - Always Prompt to Confirm— Default option launches the Confirm Start Process dialog box to allow you to confirm whether the selected process should be launched or override the process start option
 - Only Prompt when Process has Inputs— Launches the Confirm Start Process dialog box if the process has input variables. If the process does not have input variables, starts the process immediately without confirmation.
 - After process is started—Choose one of the following options to determine what is displayed after a process begins:
 - None—Option does not display any process instances after the process has started
 - Show Instances—Displays the processes initiated in the Activities view on the Console
 - Reset User Preferences—Click this button to reset the saved settings (size and location of dialog boxes, selected property pages, visibility of toolbars and menu items, etc.) to the system default. Clicking this button automatically closes the Console and requires the application to restart.

Step 4 Click the **Security** tab to configure the default owner when creating objects in Cisco Process Orchestrator.



- The current user—Select this radio button to use the user account that is currently logged in to assign the owner on any new objects created.
- The specified user—Select this radio button and then click the browse button to launch the Select User or Group dialog box and specify the default user for objects.

Step 5 Click **OK**.

Actions Toolbar

The Actions toolbar displays options that are associated with the selected item in the Navigation pane or Results pane. The available items on the Action toolbar depend on the item selected.

For example, the options available when the Processes item is selected are different from those that are available when Global Variables is selected.

Menu Option	Description
Start Process	Click to manually start any enabled process displayed in the Process View.
Enable	If a process is manually disabled, click Enable before executing.
Disable	Click to disable a selected process instance on the process view from executing.
	Unlock—If a process is manually locked, click to unlock it.
	Lock—If a process is manually unlocked, click to lock it.
Advanced	Click this button and select Break Lock if a process is locked by another user and you have Break Lock permissions.

Workspaces

The Console contains the following workspaces. Each workspace contains a group of objects that perform specific actions within the application.

Workspace	Description
Operations	<p>The Operations workspace displays:</p> <ul style="list-style-type: none"> • The status of processes that are scheduled to execute, view processes that are currently running, and verify that processes have successfully completed. • Alerts, incidents, and approvals relating to system event history for actions that have occurred within Cisco Process Orchestrator. • System messages about status and errors within the Process Orchestrator server or adapters. <p>For more information, see Chapter 8, “Monitoring Operations.”</p>
Definitions	<p>The Definitions workspace displays all of the components that are used in defining and executing processes. The options provided by this workspace include:</p> <ul style="list-style-type: none"> • View Current Processes—Displays the Definitions > Processes view where you can view and manage defined processes. This view has two panes that display the execution progress of the process and activity instances. From this view, you can view process properties, execute a process ad hoc, edit existing processes, and define new processes. From the Processes View, you can also execute processes and view the status of the process as it in progress. For additional information about monitor and manage processes, see Chapter 8, “Monitoring Operations.” • Create a New Process—Launches the Process Editor, which you can use to view and define the properties for a new process as well as construct the process workflow. For additional information about the Process Editor, see Accessing the Process Editor • View Operations—Displays the Operations workspace that shows what processes are in progress, scheduled or have been completed. For additional information about managing operations, see Chapter 8, “Monitoring Operations.”
Administration	<p>The Administration workspace displays all of the components that are used to manage administrative activities (such as security or database administration tasks).</p> <p>For more information, see Performing Administrative Actions.</p>
Folder List	<p>The Folder List view displays a list of all the navigation items available from the Console. The items are sorted according to the view displayed on the Console. The Results pane displays the view associated with the selected item.</p>

Workspace	Description
Favorites	<p>The Favorites workspace displays shortcuts to user-selected navigation items. This view is used for quickly accessing navigation items that are frequently used. Any item in the Navigation pane can be added to the Favorites view.</p> <p>Click Set Favorites to display the Set Favorites dialog box. Check the appropriate items, then click OK.</p>

Results Pane

When a navigation item is selected on the Navigation pane, the information associated with that item displays in the Results pane. By default, the information is presented in a details list view format. The columns that display depend on the selected navigation item.

Details Pane

The Details pane provides additional information for a selected item in the Results pane. The links on each of the detail pages launch the property pages for the selected item.

Process Viewer

The Process Viewer displays a graphical view of the process workflow after a process has been launched. The information displayed on this viewer is read-only.

The Process Viewer contains this information:

Pane	Description
Status Pane	Displays a flat list of all activity instances that were executed by the process instance.
Workflow Pane	Displays the graphical workflow of the selected process and its activities.
Properties Pane	<p>Displays the properties for the process and activity instances.</p> <p>To view the activity instance properties, select the activity instance in the Workflow pane. To return to viewing the process instance properties, click in the white space or use the menu.</p>

Process Editor Menus

Process Editor File Menu

The File menu contains the following items:

Menu Option	Description
Save	Saves the process workflow
Save Copy As	Saves a copy of the process workflow under a different name
	Verifies that the process follows the best practices

Menu Option	Description
Revert	Returns the workflow to the previous saved version
Print	Prints the contents of the workflow pane
Process Properties	If an activity properties pane is displayed, the option toggles to the process properties pane
Exit	Closes the editor

Process Editor Edit Menu

The Edit menu contains items to be used for modifying the process in the workflow pane. For information about using this menu, refer to [Using the Edit Menu](#).

Process Editor View Menu

The View menu contains the following items:

Menu Option	Description
Collapse All	Collapses all the activities in the workflow pane
Expand All	Expands all the activities in the workflow pane
Zoom In	Increases the size of the contents of the workflow pane
Zoom Out	Decreases the size of the contents of the workflow pane
Zoom Default	Resizes the contents of the workflow pane according to the default zoom value
Zoom Fit	Resizes the workflow to fit the size of the pane
Zoom Fit Selection	Resizes the selected item in the workflow pane to the size of the pane
Toolbar	Displays the Editor toolbar
Status Bar	Displays the status bar at the bottom of the Editor
Toolbox	Displays the toolbox pane
Properties	Displays the process properties pane

Process Editor Tools Menu

The Tools menu contains the following items that allow you to configure the appearance and behavior of the editor.

Menu Option	Description
Customize	Launches the Customize dialog box where users can change the fonts and colors that display in the editor. For information about using this dialog box, refer to Customizing the Fonts and Colors .

Menu Option	Description
Options	Launches the Options dialog box which is used to configure basic Process Orchestrator console behavior.
Regex Matcher	Launches the Match dialog box where users can match the specified source text against a specified regular expression.

Process Editor Actions Menu

The Actions menu contains the following items that apply to a selected item in the workflow pane:








Menu Option	Description
Move Back	Moves the position of an activity in the workflow back one position at a time.
Move Forward	Moves the position of an activity in the workflow forward one position at a time.
Add Result Handler	Inserts a Condition Branch into the workflow. A Condition Branch is executed only if the specified condition is met.
Expand	Expands the selected activity
Collapse	Collapses the selected activity








Process Editor Help Menu

The Help menu contains information that provides documentation assistance to work in Process Orchestrator. For information about using this menu, refer to [Understanding the Help Menu](#).



Process Editor Toolbar

The toolbar displays icons to be used as shortcuts for performing actions in the workflow pane. To display the toolbar, choose **Toolbar** from the View menu.

Icon	Description
	Saves the process
	Starts the process
	Prints the contents of the Workflow pane
	Copies the selected information to the clipboard
	Pastes the selected information to the location identified by the cursor
	Deletes the selected item
	Collapses the contents of the workflow pane

Icon	Description
	Expands the contents of the workflow pane
	Resizes the contents of the workflow pane according to the default zoom value
	Increases the size of the contents of the workflow pane
	Decreases the size of the contents of the workflow pane
	Resizes the workflow to fit the size of the pane
	Resizes the selected item in the workflow pane to the size of the pane
	Displays or hides the Help pane

Field Reference Icons

Icon	Description
	The Reference icon displayed next to a text field indicates that you can select a defined variable or reference an object within the process from the Insert Variable Reference dialog box.
	The Required Value icon displayed on a tab or page indicates that the field is required and is either missing a value or contains an invalid value.

Defining a Target

Targets specify where certain processes, activities, or triggers will run. You can define a target once and then reuse it in multiple processes.



Note

Not all targets can be created manually. Some targets are discovered automatically based on the information specified by other targets.

The Definitions > Targets view displays all the existing defined targets. You can also use this view to create new targets, modify the properties of a target, and delete targets.

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- Step 1** Choose **Definitions**, right-click **Targets**, choose **New > [Target]**, and select a target type from the drop-down list.
- Step 2** Run through the wizard, then click **Finish**.
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Defining Runtime Users

Runtime users hold the security credentials that are assigned to processes and activities. For more information about runtime users.

Use the Definitions > Runtime Users view to display the configured runtime users, add new runtime users to define new connection credentials, update runtime users such as to update a password, or delete runtime users.

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- Step 1** Choose **Definitions > Runtime Users**, right-click and choose **New > [Runtime User]** for the appropriate runtime user account.
- Step 2** Click the **General** tab and enter the appropriate runtime user-specific information. The property pages displayed depend on the type of runtime user selected.
- In the Owner field, you can click the browse button to display the Select Identity dialog box.
- From the **User Identity** tab, click **Add** to display the Select Identity dialog box.
- **Type**—From this list, select either User or Group to define the user assignments.
 - **Location**—Specify the user or group location. Click the browse button to display the Select Location dialog box.
 - **Filter**—Filter on the search results
 - **Search**—Click to search for the identity
 - **Results**—Displays search results
- Step 3** Search for the identity, select it, then click **OK**.
- The **Used By** tab displays objects that reference the runtime user. This tab will remain blank until the runtime user is used by an object.
- The **History** tab displays the history of actions taken against the runtime user. This tab remains blank until after the initial creation.
- Step 4** To view information about an object, highlight the object, right-click and choose **Properties**.
- Step 5** Click **OK** to close the property sheet.
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Defining a Repository User

Use the following instructions define the user credentials required to access a repository. Use the Repository User dialog box to specify the credentials for a runtime user record to be used for configuring the repository.

Use the Definitions > Runtime Users view to display the configured runtime users, add new runtime users to define new connection credentials, update runtime users such as to update a password, or delete runtime users.

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- Step 1** Choose **Definitions > Runtime Users**, right-click and choose **New > [Repository User]** for the appropriate runtime user account.
- Step 2** Click the **General** tab and enter the appropriate runtime user-specific information, includes:
- **Display Name**—Enter the display name for the repository user.

- **Owner**—The owner of the object. This is typically the creator of the object.
- **User name**—The user name assigned to the user account.
- **Password**—Check the check box and then enter the password to be assigned to the user account.
- **Email**—Enter the valid email Id for the repository user.

In the **Owner** field, you can click the browse button to display the Select Identity dialog box.

- **Type**—From this list, select either User or Group or All to define the user assignments.
- **Location**—Specify the user or group location. Click the browse button to display the Select Location dialog box.
- **Filter**—Filter on the search results
- **Search**—Click to search for the identity
- **Results**—Displays search results

Step 3 Search for the identity, select it, then click **OK**.

The **Used By** tab displays objects that reference the runtime user. This tab will remain blank until the runtime user is used by an object.

The **History** tab displays the history of actions taken against the runtime user. This tab remains blank until after the initial creation.

Step 4 To view information about an object, highlight the object, right-click and choose **Properties**.

Step 5 Click **OK** to close the property sheet.

Selecting a Client Certificate

Use the Select Client Certificate dialog box to select certificate you want to assign to a runtime user.

To select a certificate:

Step 1 On the Certificate property page, click **Browse**.

The Select Client Certificate dialog box displays.

Step 2 Click the Certificate tab and specify the following properties about the selected Certificate.

- **Issued to**—User name or the owner of the certificate
- **Issued by**—User name of the certificate issuer
- **Start date**—The date and time the certificate became valid.
- **Expiration date**—The date and time the certificate will expire.
- **Thumbprint**—Specified parameters containing the client certificate thumbprint
- **Has private key**—Select to indicate the certificate is assigned a private key.

Step 3 Browse to the appropriate certificate.

Step 4 Enter the password for the certificate.

Step 5 Click **OK** to close the dialog box.

Configuring Security

Creating a New Security Role

A security role is a list of permissions that enhances product use through logical groupings of powers and objects for reuse in multiple places. A security permission is a pairing of a scope that defines the objects and powers over those objects.

After a security role has been defined, it is available in a list of available security roles on the Administration > Security view.

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- Step 1** Choose **Administration > Security**, right-click and choose **New > Role**.
- Step 2** On the **New Role** property pages, define the properties.
- Step 3** Click the **Permissions** tab and add permissions as necessary.
- Step 4** On the Permissions tab, click **Add** to display the Permission "All" Over "All" Properties dialog box.
- Operations—Select the appropriate operations
 - Objects—Give permissions to act upon a specific object
- The property pages included in the Power are determined by the specific permission to be created.
- Step 5** Click the **User Assignments** tab and add user assignments as necessary.
- Step 6** Click **OK**. The new security role is displayed on the Administration > Security view.
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Assigning Users Or Groups to Security Roles

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- Step 1** Choose **Administration > Security**, highlight the appropriate security role (see [Predefined Security Roles](#)), right-click and choose **Assign**.
- Step 2** On the Select User or Group dialog box, in the Enter the object name to select text field, enter the user name (domain\user name) or group, then click **Check Names**.



Note If there is a matching user name or group, it is displayed in the field. If there is not a match, an error message displays.

- Step 3** On the Search Results pane, choose the appropriate user or group, then click **OK**.
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