



# BEA AquaLogic Interaction Process™

## Administrator Guide for AquaLogic Interaction Process 1.5

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# Welcome to Plumtree Process

This book contains instructions for the administration of Plumtree Process. Portal administrators should read this guide before installing Process Execution Engine.

## Naming Conventions

BEA Systems closed its acquisition of Plumtree Software on October 20, 2005. As a result of the acquisition, the Plumtree product suite is now called BEA AquaLogic User Interaction. More specifically, the Plumtree Process (Server) product has been renamed AquaLogic Interaction Process. The 1.5 release of AquaLogic Interaction Process uses Plumtree-specific component names within the product's user interface and documentation.

# Glossary

**activity** - a single piece of work that forms a distinct step within a process. An activity may be a manual activity or an automated, computer-based activity. An activity may contain multiple tasks.

**Admin Center** – tool for managing the host process execution engine (including starting and stopping the host process execution engine) and installation-related settings (including logging settings). There is also a corresponding command line tool, which is recommended for production deployments.

**application** – a Web-based form or report

**Applications Portlet** – a portlet that launches applications (Web forms or reports)

**Archive Viewer** – application used to view archived process instances

**business end point** - an end point that contain the connection information for external resources such as archive databases, process data mart and BAM databases, as well as external components (including third-party applications and databases) that were catalogued in Process Designer and need to be catalogued in Process Administrator.

**directory service** – a software service that integrates with a user/group directory such as the Plumtree Foundation user/group repository (which can contain aggregated user/group definitions from disparate authentication sources, such as Active Directory and LDAP).

**external process** – processes that reside in an another host process execution engine. Typically external processes span multiple business functions, divisions, or organizations.

**group** – a set of related users defined in Plumtree Foundation

**host process execution engine** – a single process execution engine that communicates with the Plumtree Portal and acts as the process gateway for the process execution engines it hosts

**Log Viewer** – application used to view process instance logging information

**parallel role** - role that can be assigned to groups of participants who perform the same activity in a process but have different business functions

**participant** - a user defined in Plumtree Foundation. A participant performs the work represented by an activity. This work is normally manifested as one or more work items assigned to the participant via the Worklist Items Portlet.

**Process Administrator** – a Portal-based utility for enterprise process deployment and configuration. The Process Administrator is used to create and configure process execution engines. Processes that have been modeled within the Process Designer are deployed and published using the Process Administrator. Process roles are mapped to portal groups/users. The utility can be also be used to configure Business Activity Monitoring (BAM) and load balancing.

**process** - a set of activities which collectively realize a business objective. A typical process includes a logical flow with associated roles and systems. A process is modeled, tested, and simulated within the Process Designer, i.e., a Purchase Order Management Process.

**process definition** - the representation of a business process in a form which supports automated manipulation, such as modeling or enactment by a process execution engine or Web service. The process definition consists of a set of related activities and their relationships, as well as criteria to indicate the start and termination of the process, and information about the individual activities, such as roles, systems, and user interface forms.

**process definition file** – an XML file that contains the definition of a process. The process definition file uses an .xpd extension.

**Process Designer** - a modeling and design tool for business analysts and developers. Analysts can model, simulate and test any number of processes using the tool. Business Activity Monitoring (BAM) reports can be created using the tool.

**process execution engine** – a software service that provides a runtime execution environment for process instances. More specifically, a process execution engine provides operational functions to support the execution of (instances of) business processes (based on process definitions), including management of process execution, and creation of appropriate work items. Note: Two or more process execution engines may co-operate to share the execution of processes.

**process instance** – a specific instance of a particular process; more specifically, the representation of a single enactment of a process, or activity within a process, including its associated data. Each instance represents a separate thread of execution of the process or activity, and will have its own internal state and externally visible identity, which may be used, for example, to record or retrieve audit data relating to the individual enactment, i.e., the particular Purchase Order number, as opposed to the Purchase Order process.

**project** – a logical collection of related artifacts, including process definitions, business variables, parameters, and business end points. Typically, a project corresponds to a set of related business processes that collectively provide business value in a particular functional area. A project is created within the Process Designer and published and deployed using the Process Administrator.

**role** - a job function in a process that has associated activities to be performed by a user or group. Plumtree Foundation users and/or groups are associated with process roles in the Process Administrator utility.

**state** - a representation of the internal conditions defining the status of a process instance at a particular point in time.

**Unified Portlets** – a single, interactive portlet that is comprised of all the functionality of the other Worklist Portlets: Worklist Items, Work Item Details, Views, and Applications.

**user** – a Plumtree Foundation user distinguished by a unique identifier, with an associated display name

**Views Portlet** – a portlet with out of the box or customized views that contains work items and associated display columns. The Views Portlet includes a default inbox, historical views, and bookmarks. This portlet enables end users to create custom views and presentations.

**work item** - a representation of the work to be processed (by a participant) in the context of an activity within a process instance.

**Work Item Details Portlet** – a portlet that displays details about a particular work item. The detailed information can include custom, business-specific fields. Process diagrams are accessed via this portlet. Notes and attachments can be added to a work item from this portlet. Users can use this portlet to perform actions on the work item.

**worklist** - a list of work items associated with a role or participant

**Worklist Items Portlet** – a portlet that displays work items for a particular user/role. Columns can be custom/business-specific. Users can use this portlet to perform actions on one or more of the work items in the list and can also use the portlet to search for particular Work Items.

**Worklist Portlets** – a set of portlets for managing work items. These portlets include the Worklist Items, Work Item Details, Views, and Applications.

**WorkSpace** – the Process Designer's Web-based environment for testing process implementations (including process logic, roles, business parameters, and rules). The Web application enables business analysts and developers to test processes outside the context of the Plumtree Portal.

**Note:** Some of these glossary term definitions are taken from the Workflow Management Coalition:  
[http://www.wfmc.org/standards/docs/TC-1011\\_term\\_glossary\\_v3.pdf](http://www.wfmc.org/standards/docs/TC-1011_term_glossary_v3.pdf)



# Process Administrator Configuration QuickStart Guide

1. In the Admin Center:

- Start the Host Process Execution Engine
- In the Configuration utility, add a directory service configuration.

2. In Process Administrator:

- Add a Process Execution Engine to the Host Engine
- Start a Process Execution Engine
- Configure the Process Data Mart and BAM
- Add a Participant
- Assign Roles to Participants
- Publish and Deploy a Project

3. Launch Worklist Portlets to run the project.

# Launch the Process Administrator

To launch Process Administrator:

1. Log in to **Plumtree Foundation** as an administrative user.
2. Click **Administration**.
3. Under Admin Objects Directory, in the Select Utility drop-down list, choose **Process Administrator**.

**Note:** The Process Administrator utility will not be available in the Select Utility drop-down list until the PTE file has been imported. Refer to the *Installation and Upgrade Guide for Plumtree Process* for more information. Furthermore, the Process Administrator utility will be visible to all administrative users but accessible only to administrative users who are also members of the Process Administrators group.

# Participants

## Add a Participant

Participants are users who have been created in Plumtree Foundation.

To add a participant to Process Administrator:

1. Log in to **Plumtree Foundation**.
2. Click **Administration**.
3. Under Admin Objects Directory, select the **folder** which contains the Process Administrator participants or create a new administrative folder for storing participants.
4. In the administrative folder for participants, select **Create Object | User**.
5. On the Create User | Main Settings | Login pane, enter the new participant's **Login Name** and **Password**.

**Note:** The Disable Login setting on the Create User | Main Settings | Login pane does not affect a participant's ability to log in to the Worklist Portlets. The Disable Login setting prevents users from logging in to Plumtree Foundation. In order to disable participant login for the Worklist Portlets, the user must be deleted from Plumtree Foundation.

6. On the Create User | Main Settings | Group Memberships pane, use **Add Group** if the participant should be added to groups.
7. On the Create User | Main Settings | Edit Standard Settings pane, click **Properties and Names** to add optional participant properties such as e-mail address and telephone number.
8. Click **Finish**.
9. On the Save In dialog box, select the **folder** the participant should be saved in.
10. Click **Save**.
11. On the Object Saved dialog box, click **Close**. The participant is displayed as a user in Plumtree Foundation and appears in the participants list in Process Administrator.

**Note:** It may take up to 10 minutes before users created in Plumtree Foundation are accessible as participants in Process Administrator.

### Related Topics:

- [Add Participants To Groups](#)
- [Assign Roles to Participants](#)

## Add Participants To Groups

To add a Process Administrator participant to a Process Administrator group:

1. Log in to **Plumtree Foundation**.
2. Click **Administration**.
3. Under Admin Objects Directory, select the **folder** which contains the Process Administrator participants.
4. In the administrative folder for participants, click **User**.
5. Select the participant's **Name**.
6. On the Edit User | Main Settings | Group Memberships pane, use **Add Group** to add the participant to groups.
7. Click **Finish**.

## Change a Participant's Password

To edit a Process Administrator participant's properties:

1. Log in to **Plumtree Foundation**.
2. Click **Administration**.
3. Under Admin Objects Directory, select the **folder** which contains the Process Administrator participants.
4. In the administrative folder for participants, click **User**.
5. Select the participant's **Name**.
6. On the Edit User | Main Settings | Login pane, edit the participant's **Password**.

**Note:** The Disable Login setting on the Create User | Main Settings | Login pane does not affect a participant's ability to log in to the Worklist Portlets. The Disable Login setting prevents users from logging in to Plumtree Foundation. In order to disable participant login for the Worklist Portlets, the user must be deleted from Plumtree Foundation.

7. Click **Finish**.

## Define a Participant Absence Period

To set a participant absence period:

1. In the left pane of the Process Administrator, click **Participants**.
2. From the participant list, select a participant **User ID**.

3. On the Participants | Edit Participant page, click **Absence Periods**.
4. On the Participants | Edit Participant | Absence Periods page, click **Add**.
5. On the Participants | Edit Participant | Absence Periods | Add Absence Periods page, enter a **Start Date** and **Finish Date**.
6. Use **Search Replacements** to enter replacement participants who can substitute for the participant during the absence period.
7. Click **Save**.

**Note:** If participants try to log in to the Worklist Portlets during an absence period, they will not be able to view any of their work list items, applications, or views. Replacements will not be able to work on work list items that have been selected by or specifically assigned to the participant they are replacing.

## Delete a Participant

Participants cannot be deleted from Process Administrator. Participants can be deleted from Plumtree Foundation which makes them disabled participants in Process Administrator. Disabled participants cannot log in to the Worklist Portlets.

To delete a participant from Plumtree Foundation:

1. Log in to **Plumtree Foundation**.
2. Click **Administration**.
3. Under Admin Objects Directory, select the **folder** which contains the Process Administrator participants.
4. In the administrative folder for participants, click **User**.
5. On the user list, select the checkbox next to the participant's **Name**.
6. Click **Delete**.
7. On the Delete Object dialog box, click **OK**.

The participant no longer exists in the Plumtree Foundation user list. The participant is disabled in the participants list in Process Administrator.

## Delete a Participant Absence Period

To delete a participant absence period:

1. In the left pane of the Process Administrator, click **Participants**.
2. From the participant list, select a participant **User ID**.
3. On the Participants | Edit Participant page, click **Absence Periods**.

4. On the Participants | Edit Participant | Absence Periods page, select the checkbox next to a **Start Date**.
5. Click **Delete**.
6. To confirm the deletion, click **OK**.

## Delete Participant Role Assignments

To delete a participant's role assignment:

1. In the left pane of the Process Administrator, click **Participants**.
2. From the participant list, select a participant **User ID**.
3. On the Participants | Edit Participant page, click **Assigned Roles**.
4. On the Participants | Edit Participant | Assigned Roles page, select the checkbox next to the **Role ID**.
5. Click **Delete**.
6. To confirm the deletion, click **OK**.

## Disable a Participant

Participants must be deleted from Plumtree Foundation in order to be disabled in Process Administrator. Disabled Process Administrator participants cannot log in to the Worklist Portlets.

To disable a participant in Process Administrator:

1. Log in to **Plumtree Foundation**.
2. Click **Administration**.
3. Under Admin Objects Directory, select the **folder** which contains the Process Administrator participants.
4. In the administrative folder for participants, click **User**.
5. On the user list, select the checkbox next to the participant's **Name**.
6. Click **Delete**.
7. On the Delete Object dialog box, click **OK**.

The participant no longer exists in the Plumtree Foundation user list. The participant is disabled in the participants list in Process Administrator.

## Edit a Participant Absence Period

To edit a participant absence period:

1. In the left pane of the Process Administrator, click **Participants**.
2. From the participant list, select a participant **User ID**.
3. On the Participants | Edit Participant page, click **Absence Periods**.
4. On the Participants | Edit Participant | Absence Periods page, select a **Start Date**.
5. On the Participants | Edit Participant | Absence Periods | Edit Absence Period page, edit the **Start Date**, **Finish Date**, and **Replacements** list.
6. Click **Save**.

## Edit Participant Permissions

To edit a participant's role permissions:

1. In the left pane of the Process Administrator, click **Participants**.
2. From the participant list, select a participant **User ID**.
3. On the Participants | Edit Participant page, click **Assigned Roles**.
4. On the Participants | Edit Participant | Assigned Roles page, select the **Role ID**.
5. On the Participants | Edit Participant | Assigned Roles | Role Assignment page, edit the **Parameter** if necessary.

Parallel roles are roles that can be assigned to groups of participants who perform the same activity in a process but have different business functions. For example, in a supply chain process, an order might be processed as an individual order or as a commercial order. The order would be processed in exactly the same way but individual orders might be handled by the individual sales group and commercial orders might be handled by the commercial sales group. When parallel roles are created in Process Designer, the activity performed by the parallel role is designed with a variable that determines which group will perform the activity at runtime. This variable is the parameter selected in the drop-down list.

Parallel roles must be created in Process Administrator before they can be assigned to participants. Parallel roles can be created automatically when they are imported with a project file or they can be created manually in Process Administrator and then mapped to abstract project roles during project publication.

6. Edit the participant's role **Rank** if necessary.

The participant's role rank indicates the hierarchy of the participant in relation to other participants in the same role. Participants can be assigned to ranks 1 - 9, with 9 being the highest rank and 1 being the lowest rank. Participants can reassign work list items based on their ranking. Participants with higher rank can delegate work list items to participants with lower rank if they have been assigned the delegate permission. Participants with lower rank can escalate work list items to participants with higher rank if they have been assigned the escalate permission. Participants with the peer assignment permission can assign work list items to other participants who have the same rank.

7. Edit the participant's **Permissions** for the role.

Participant role permissions determine some of the options available to a participant in the **Select an Action** drop-down list on the Work List Items portlet of the Worklist Portlets. Participant permissions include:

Permission	Maps To This Action in Work List Items Portlet	Description	Design Dependency
Execute	Execute	Allows participants to process a work list item.	none
Route	Send, Send To, Back	Allows participants to send a work list item to the next activity in the process, send a work list item back to the previous activity in the process, and send a work list item to a specific participant assigned to the role for the next activity in the process.	The back action is only available to a participant if an exception handler was included in the process design and an exception occurred that invoked the exception handler while the participant was executing the work list item.
Suspend	Suspend/Resume	Allows participants to pause a process at the work list item activity and make process unavailable to other users until resumed.	The suspend property must be defined for the activity in the process design.
Abort	Abort	Allows participants to abort a process instance in their work list.	The activity must be defined as abortable in the process design.
Delegate	Reassign/Delegate	Allows participants to reassign a work list item to another participant with a lower rank.	none
Grab	Grab/Ungrab	Allows participants to grab a work list item from another activity in the process.	The grab activity must be included in the process design or the activity must be defined as grabbable.
Escalate	Reassign/Escalate	Allows participants to reassign a work list item to another participant with a higher rank.	none
Peer Assignment	Reassign/Peer Assign	Allows participants to reassign a work list item to another participant with the same rank.	none

8. Click **Save**.

**Note:** A participant will only be able to use assigned permissions if a process has been designed to include the activities that correspond to these permissions. In other words, a participant will be able to grab a work list item if they have the grab permission and their role has a grab activity in the process that was created in Process Designer.

#### Related Topics:



- [View a Participant's Assigned Roles](#)
- [Edit Participant Permissions](#)
- [Assign Roles to Groups](#)

## Edit Participant Properties

To edit a Process Administrator participant's properties:

1. Log in to **Plumtree Foundation**.
2. Click **Administration**.
3. Under Admin Objects Directory, select the **folder** which contains the Process Administrator participants.
4. In the administrative folder for participants, click **User**.
5. Select the participant's **Name**.
6. On the Edit User | Main Settings | Login pane, edit the participant's **Login Name** and **Password** if necessary.

**Note:** The Disable Login setting on the Create User | Main Settings | Login pane does not affect a participant's ability to log in to the Worklist Portlets. The Disable Login setting prevents users from logging in to Plumtree Foundation. In order to disable participant login for the Worklist Portlets, the user must be deleted from Plumtree Foundation.

6. On the Edit User | Main Settings | Group Memberships pane, use **Add Group** to add the participant to groups.
7. On the Edit User | Main Settings | Edit Standard Settings pane, click **Properties and Names** to edit optional participant properties such as e-mail address and telephone number.
8. Click **Finish**.

## Edit Participant Role Assignments

To edit a participant's role assignment:

1. In the left pane of the Process Administrator, click **Participants**.
2. From the participant list, select a participant **User ID**.
3. On the Participants | Edit Participant page, click **Assigned Roles**.
4. On the Participants | Edit Participant | Assigned Roles page, select a **Role ID**.

5. On the Participants | Edit Participant | Assigned Roles | Role Assignment page, edit the **Parameter**, **Rank**, and **Permissions** for the role.
6. Click **Save**.

**Note:** A participant will only be able to use assigned permissions if a process has been designed to include the activities that correspond to these permissions. In other words, a participant will be able to grab a work list item if they have the grab permission and their role has a grab activity in the process that was created in Process Designer.

**Related Topics:**

- [View a Participant's Assigned Roles](#)
- [Edit Participant Permissions](#)
- [Assign Roles to Groups](#)

## Remove a Participant from a Group

To remove a Process Administrator participant from a Process Administrator group:

1. Log in to **Plumtree Foundation**.
2. Click **Administration**.
3. Under Admin Objects Directory, select the **folder** which contains the Process Administrator participants.
4. In the administrative folder for participants, click **User**.
5. Select the participant's **Name**.
6. On the Edit User | Main Settings | Group Memberships pane, select the groups the participant should no longer belong to and click **Delete**.
7. Click **Finish**.

## View a Participant's Assigned Roles

To view a participant's assigned roles:

1. In the left pane of the Process Administrator, click **Participants**.
2. From the participant list, select a participant **User ID**.
3. On the Participants | Edit Participant page, click **Assigned Roles**.

To view the participant's permissions for an assigned role:

1. On the Participants | Edit Participant | Assigned Roles page, select a **Role ID**.

2. On the Participants | Edit Participant | Assigned Roles | Role Assignment page, view the participant's **Parameter**, **Rank**, and **Permissions** for the role.

- **Parameter**

Parallel roles are roles that can be assigned to groups of participants who perform the same activity in a process but have different business functions. For example, in a supply chain process, an order might be processed as an individual order or as a commercial order. The order would be processed in exactly the same way but individual orders might be handled by the individual sales group and commercial orders might be handled by the commercial sales group. When parallel roles are created in Process Designer, the activity performed by the parallel role is designed with a variable that determines which group will perform the activity at runtime. This variable is the parameter selected in the drop-down list.

Parallel roles must be created in Process Administrator before they can be assigned to participants. Parallel roles can be created automatically when they are imported with a project file or they can be created manually in Process Administrator and then mapped to abstract project roles during project publication.

- **Rank**

The participant's role rank indicates the hierarchy of the participant in relation to other participants in the same role. Participants can be assigned to ranks 1 - 9, with 9 being the highest rank and 1 being the lowest rank. Participants can reassign work list items based on their ranking. Participants with higher rank can delegate work list items to participants with lower rank if they have been assigned the delegate permission. Participants with lower rank can escalate work list items to participants with higher rank if they have been assigned the escalate permission. Participants with the peer assignment permission can assign work list items to other participants who have the same rank.

- **Permissions**

Participant role permissions determine some of the options available to a participant in the **Select an Action** drop-down list on the Work List Items portlet of the Worklist Portlets. Participant permissions include:

Permission	Maps To This Action in Work List Items Portlet	Description	Design Dependency
Execute	Execute	Allows participants to process a work list item.	none
Route	Send, Send To, Back	Allows participants to send a work list item to the next activity in the process, send a work list item back to the previous activity in the process, and send a work list item to a specific participant assigned to the role for the next activity in the process.	The back action is only available to a participant if an exception handler was included in the process design and an exception occurred that invoked the exception handler while the participant was executing the work list item.
Suspend	Suspend/Resume	Allows participants to pause a process at the work list item activity and make process unavailable to other users until resumed.	The suspend property must be defined for the activity in the process design.
Abort	Abort	Allows participants to abort a process instance in their	The activity must be defined as abortable in the process

		work list.	design.
Delegate	Reassign/Delegate	Allows participants to reassign a work list item to another participant with a lower rank.	none
Grab	Grab/Ungrab	Allows participants to grab a work list item from another activity in the process.	The grab activity must be included in the process design or the activity must be defined as grabbable.
Escalate	Reassign/Escalate	Allows participants to reassign a work list item to another participant with a higher rank.	none
Peer Assignment	Reassign/Peer Assign	Allows participants to reassign a work list item to another participant with the same rank.	none

- To exit, click **Cancel**.

**Note:** A participant will only be able to use assigned permissions if a process has been designed to include the activities that correspond to these permissions. In other words, a participant will be able to grab a work list item if they have the grab permission and their role has a grab activity in the process that was created in Process Designer.

## View a Participant's Groups

To view a participant's group assignments:

- In the left pane of the Process Administrator, click **Participants**.
- From the participant list, select a participant **User ID**.
- On the Participants | Edit Participant page, click **Assigned Groups**.

The Participants | Edit Participant | Assigned Groups page contains a list of the groups the participant is assigned to.

## View a Participant's Role Permissions

To view a participant's assigned role permissions:

- In the left pane of the Process Administrator, click **Participants**.
- From the participant list, select a participant **User ID**.
- On the Participants | Edit Participant page, click **Assigned Roles**.
- On the Participants | Edit Participant | Assigned Roles page, select a **Role ID**.

5. On the Participants | Edit Participant | Assigned Roles | Role Assignment page, view the participant's **Parameter**, **Rank**, and **Permissions** for the role.

- **Parameter**

Parallel roles are roles that can be assigned to groups of participants who perform the same activity in a process but have different business functions. For example, in a supply chain process, an order might be processed as an individual order or as a commercial order. The order would be processed in exactly the same way but individual orders might be handled by the individual sales group and commercial orders might be handled by the commercial sales group. When parallel roles are created in Process Designer, the activity performed by the parallel role is designed with a variable that determines which group will perform the activity at runtime. This variable is the parameter selected in the drop-down list.

Parallel roles must be created in Process Administrator before they can be assigned to participants. Parallel roles can be created automatically when they are imported with a project file or they can be created manually in Process Administrator and then mapped to abstract project roles during project publication.

- **Rank**

The participant's role rank indicates the hierarchy of the participant in relation to other participants in the same role. Participants can be assigned to ranks 1 - 9, with 9 being the highest rank and 1 being the lowest rank. Participants can reassign work list items based on their ranking. Participants with higher rank can delegate work list items to participants with lower rank if they have been assigned the delegate permission. Participants with lower rank can escalate work list items to participants with higher rank if they have been assigned the escalate permission. Participants with the peer assignment permission can assign work list items to other participants who have the same rank.

- **Permissions**

Participant role permissions determine some of the options available to a participant in the **Select an Action** drop-down list on the Work List Items portlet of the Worklist Portlets. Participant permissions include:

Permission	Maps To This Action in Work List Items Portlet	Description	Design Dependency
Execute	Execute	Allows participants to process a work list item.	none
Route	Send, Send To, Back	Allows participants to send a work list item to the next activity in the process, send a work list item back to the previous activity in the process, and send a work list item to a specific participant assigned to the role for the next activity in the process.	The back action is only available to a participant if an exception handler was included in the process design and an exception occurred that invoked the exception handler while the participant was executing the work list item.
Suspend	Suspend/Resume	Allows participants to pause a process at the work list item activity and make process unavailable to other users until resumed.	The suspend property must be defined for the activity in the process design.
Abort	Abort	Allows participants to abort a process instance in their	The activity must be defined as abortable in the process

		work list.	design.
Delegate	Reassign/Delegate	Allows participants to reassign a work list item to another participant with a lower rank.	none
Grab	Grab/Ungrab	Allows participants to grab a work list item from another activity in the process.	The grab activity must be included in the process design or the activity must be defined as grabbable.
Escalate	Reassign/Escalate	Allows participants to reassign a work list item to another participant with a higher rank.	none
Peer Assignment	Reassign/Peer Assign	Allows participants to reassign a work list item to another participant with the same rank.	none

6. To exit, click **Cancel**.

**Note:** A participant will only be able to use assigned permissions if a process has been designed to include the activities that correspond to these permissions. In other words, a participant will be able to grab a work list item if they have the grab permission and their role has a grab activity in the process that was created in Process Designer.

## View Detailed Participant Information

To view detailed participant information:

1. In the left pane of the Process Administrator, click **Participants**.
2. From the participant list, select a participant **User ID**.

The participant properties include:

Property	Description
Enable	Indicates whether or not the participant is enabled to log in to the Worklist Portlets. The Login Disabled option is selected in Plumtree Foundation on the User   Main Settings page. <b>Does not apply to Plumtree.</b>
Login	The Login Name assigned when the user is added to Plumtree Foundation. Participants use their Login Name to log in to the Worklist Portlets. The Login Name can be edited in Plumtree Foundation on the User   Main Settings page.
Telephone	The telephone number of the participant, as defined in Plumtree Foundation on the Properties and Names page.
Fax	<b>Does not apply to Plumtree.</b>
Receive E-mail	<b>Does not apply to Plumtree.</b>
Mail	The e-mail address of the participant, as defined in Plumtree Foundation on the Properties and Names page.

Photo	Does not apply to Plumtree.
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## View Participant Absence Periods

To view participant absence periods:

1. In the left pane of the Process Administrator, click **Participants**.
2. From the participant list, select a participant **User ID**.
3. On the Participants | Edit Participant page, click **Absence Periods**.
4. On the Participants | Edit Participant | Absence Periods page, view the absence periods listed for the participant.
5. To exit, click **Cancel**.

## View Participants

To view available process participants:

In the left pane of the Process Administrator, select **Participants**.

The participant list includes all users who have been created in Plumtree Foundation. Participant information displayed in the participant list includes:

Column	Description
User ID	The Login Name assigned when the user is added to Plumtree Foundation. Participants use their Login Name to log in to the Worklist Portlets. The Login Name can be edited in Plumtree Foundation on the User   Main Settings page.
Display Name	The name displayed in the Worklist Portlets and the User list in Plumtree Foundation. By default, the Display Name is the same as the Login Name assigned when a user is added to Plumtree Foundation. The Display Name can be changed using the Properties and Names page in Plumtree Foundation.
Mail	The e-mail address of the participant, as defined in Plumtree Foundation on the Properties and Names page.
Enabled	Indicates whether or not the user is enabled to log in to the Worklist Portlets. Disabled participants are users that have been deleted from Plumtree Foundation.

# Roles

## Add Roles

Roles must be created in Process Administrator before they can be assigned to participants. Roles can be created automatically when they are imported with a project file or they can be created manually using these steps and then mapped to abstract project roles during project publication.

To add a role to the Process Administrator:

1. In the left pane of the Process Administrator, click **Roles**.
2. On the Roles page, click **Add**.
3. On the Roles | Add Role page, enter the role **Name**.
4. Enter the role **Description**.
5. Use the checkbox to indicate whether or not the role is **Parallel**.
6. If the role is parallel, add **Parallel Role Variable Values** using the data entry field and the **plus sign**.

Parallel roles are roles that can be assigned to groups of participants who perform the same activity in a process but have different business functions. For example, in a supply chain process, an order might be processed as an individual order or as a commercial order. The order would be processed in exactly the same way but individual orders might be handled by the individual sales group and commercial orders might be handled by the commercial sales group. When parallel roles are created in Process Designer, the activity performed by the parallel role is designed with a variable that determines which group will perform the activity at runtime. This variable is the parallel role variable value.

Parallel roles must be created in Process Administrator before they can be assigned to participants. Parallel roles can be created automatically when they are imported with a project file or they can be created manually in Process Administrator and then mapped to abstract project roles during project publication.

7. To verify the parallel setting, click **Save**.
8. Click **Save**.

## Assign Roles to Groups

To assign a role to a group:

1. In the left pane of the Process Administrator, click **Groups**.
2. From the group list, select a group **Name**.
3. On the Groups | Edit Group page, click **Assigned Roles**.
4. On the Groups | Edit Group | Assigned Roles page, click **Add**.
5. On the Groups | Edit Group | Assigned Roles | Role Assignment page, select a **Role ID**.



6. If the role being assigned is parallel and has more than one parameter, select a **Parameter**. If the assigned role is not parallel or only has one parameter, accept the default.

Parallel roles are roles that can be assigned to groups of participants who perform the same activity in a process but have different business functions. For example, in a supply chain process, an order might be processed as an individual order or as a commercial order. The order would be processed in exactly the same way but individual orders might be handled by the individual sales group and commercial orders might be handled by the commercial sales group. When parallel roles are created in Process Designer, the activity performed by the parallel role is designed with a variable that determines which group will perform the activity at runtime. This variable is the parameter selected in the drop-down list.

Parallel roles must be created in Process Administrator before they can be assigned to participants. Parallel roles can be created automatically when they are imported with a project file or they can be created manually in Process Administrator and then mapped to abstract project roles during project publication.

7. Select the group role **Rank**.

The group's role rank indicates the hierarchy of the group's participants in relation to other participants in the same role. Participants and groups can be assigned to ranks 1 - 9, with 9 being the highest rank and 1 being the lowest rank. Participants can reassign work list items based on their ranking. Participants with higher rank can delegate work list items to participants with lower rank if they have been assigned the delegate permission. Participants with lower rank can escalate work list items to participants with higher rank if they have been assigned the escalate permission. Participants with the peer assignment permission can assign work list items to other participants who have the same rank.

8. Set the group's **Permissions** for the role.

Group role permissions determine some of the options available to group participants in the **Select an Action** drop-down list on the Work List Items portlet of the Worklist Portlets. Participant and group permissions include:

Permission	Maps To This Action in Work List Items Portlet	Description	Design Dependency
Execute	Execute	Allows participants to process a work list item.	none
Route	Send, Send To, Back	Allows participants to send a work list item to the next activity in the process, send a work list item back to the previous activity in the process, and send a work list item to a specific participant assigned to the role for the next activity in the process.	The back action is only available to a participant if an exception handler was included in the process design and an exception occurred that invoked the exception handler while the participant was executing the work list item.
Suspend	Suspend/Resume	Allows participants to pause a process at the work list item activity and make process unavailable to other users until resumed.	The suspend property must be defined for the activity in the process design.
Abort	Abort	Allows participants to abort a process instance in their work list.	The activity must be defined as abortable in the process design.
Delegate	Reassign/Delegate	Allows participants to reassign a work list item to another participant with a	none

		lower rank.	
Grab	Grab/Ungrab	Allows participants to grab a work list item from another activity in the process.	The grab activity must be included in the process design or the activity must be defined as grabbable.
Escalate	Reassign/Escalate	Allows participants to reassign a work list item to another participant with a higher rank.	none
Peer Assignment	Reassign/Peer Assign	Allows participants to reassign a work list item to another participant with the same rank.	none

9. Click **Save**.

**Note:** A participant will only be able to use assigned permissions if a process has been designed to include the activities that correspond to these permissions. In other words, a participant will be able to grab a work list item if they have the grab permission and their role has a grab activity in the process that was created in Process Designer.

## Assign Roles to Participants

To assign a role to a participant:

1. In the left pane of the Process Administrator, click **Participants**.
2. From the participant list, select a participant **User ID**.
3. On the Participants | Edit Participant page, click **Assigned Roles**.
4. On the Participants | Edit Participant | Assigned Roles page, click **Add**.
5. On the Participants | Edit Participant | Assigned Roles | Role Assignment page, select a **Role ID**.
6. If the role being assigned is parallel and has more than one parameter, select a **Parameter**. If the assigned role is not parallel or only has one parameter, accept the default.

Parallel roles are roles that can be assigned to groups of participants who perform the same activity in a process but have different business functions. For example, in a supply chain process, an order might be processed as an individual order or as a commercial order. The order would be processed in exactly the same way but individual orders might be handled by the individual sales group and commercial orders might be handled by the commercial sales group. When parallel roles are created in Process Designer, the activity performed by the parallel role is designed with a variable that determines which group will perform the activity at runtime. This variable is the parameter selected in the drop-down list.

Parallel roles must be created in Process Administrator before they can be assigned to participants. Parallel roles can be created automatically when they are imported with a project file or they can be created manually in Process Administrator and then mapped to abstract project roles during project publication.

7. Select the participant's role **Rank**.

The participant's role rank indicates the hierarchy of the participant in relation to other participants in the same role. Participants can be assigned to ranks 1 - 9, with 9 being the highest rank and 1 being the lowest rank. Participants can reassign work list items based on their ranking. Participants with higher rank can delegate work list items to participants with lower rank if they have been assigned the delegate permission. Participants with lower rank can escalate work list items to participants with higher rank if they have been assigned the escalate permission. Participants with the peer assignment permission can assign work list items to other participants who have the same rank.

8. Set the participant's **Permissions** for the role.

Participant role permissions determine some of the options available to a participant in the **Select an Action** drop-down list on the Work List Items portlet of the Worklist Portlets. Participant permissions include:

Permission	Maps To This Action in Work List Items Portlet	Description	Design Dependency
Execute	Execute	Allows participants to process a work list item.	none
Route	Send, Send To, Back	Allows participants to send a work list item to the next activity in the process, send a work list item back to the previous activity in the process, and send a work list item to a specific participant assigned to the role for the next activity in the process.	The back action is only available to a participant if an exception handler was included in the process design and an exception occurred that invoked the exception handler while the participant was executing the work list item.
Suspend	Suspend/Resume	Allows participants to pause a process at the work list item activity and make process unavailable to other users until resumed.	The suspend property must be defined for the activity in the process design.
Abort	Abort	Allows participants to abort a process instance in their work list.	The activity must be defined as abortable in the process design.
Delegate	Reassign/Delegate	Allows participants to reassign a work list item to another participant with a lower rank.	none
Grab	Grab/Ungrab	Allows participants to grab a work list item from another activity in the process.	The grab activity must be included in the process design or the activity must be defined as grabbable.
Escalate	Reassign/Escalate	Allows participants to reassign a work list item to another participant with a higher rank.	none
Peer Assignment	Reassign/Peer Assign	Allows participants to reassign a work list item to another participant with the same rank.	none

9. Click **Save**.

**Note:** A participant will only be able to use assigned permissions if a process has been designed to include the activities that correspond to these permissions. In other words, a participant will be able to grab a work list item if they have the grab permission and their role has a grab activity in the process that was created in Process Designer.

## Delete Group Role Assignments

To delete a group role assignment:

1. In the left pane of the Process Administrator, click **Groups**.
2. From the group list, select a group **Name**.
3. On the Groups | Edit Group page, click **Assigned Roles**.
4. On the Groups | Edit Group | Assigned Roles page, select the checkbox next to the **Role ID**.
5. Click **Delete**.
6. To confirm the deletion, click **OK**.

## Delete Roles

To delete a role from Process Administrator:

1. In the left pane of the Process Administrator, click **Roles**.
2. On the Roles page, select a role **Name**.
3. Click **Delete**.
4. To confirm the deletion, click **OK**.

## Edit a Role

Role names and parallel role settings cannot be edited. To change the name of a role, create a new role with the new role name. To convert a role from non-parallel to parallel or vice versa, create a new role with the correct parallel setting. Role descriptions can be edited and parallel role variable values can be added to or deleted from roles.

To edit a role in Process Administrator:

1. In the left pane of the Process Administrator, click **Roles**.
2. On the Roles page, select a role **Name**.
3. On the Roles | Edit Role page, edit the role **Description** and add or delete **Parallel Role Variable Values** if appropriate.

4. Click **Save**.

## View Roles

To view the roles in Process Administrator:

1. In the left pane of Process Administrator, click **Roles**.
2. On the Roles page, each role contains a **Name**, **Description**, and **Parametric** setting.

Column	Description
Name	The name entered when the role was created.
Description	The description entered when the role was created.
Parallel	<p>Parallel roles are roles that can be assigned to groups of participants who perform the same activity in a process but have different business functions. For example, in a supply chain process, an order might be processed as an individual order or as a commercial order. The order would be processed in exactly the same way but individual orders might be handled by the individual sales group and commercial orders might be handled by the commercial sales group. When parallel roles are created in Process Designer, the activity performed by the parallel role is designed with a variable that determines which group will perform the activity at runtime.</p> <p>Parallel roles must be created in Process Administrator before they can be assigned to participants. Parallel roles can be created automatically when they are imported with a project file or they can be created manually in Process Administrator and then mapped to abstract project roles during project publication.</p>

## Groups

### Add Groups

Process Administrator groups are created in Plumtree Foundation.

To add a group to Process Administrator:

1. Log in to **Plumtree Foundation**.
2. Click **Administration**.
3. Under Admin Objects Directory, select the **folder** which contains the Process Administrator groups or create a new administrative folder for storing groups.
4. In the administrative folder for groups, select **Create Object | Group**.
5. On the Create Group | Properties and Names pane, enter the new group's **Name**, **Description**, and **Primary Language**.

6. On the Create Group | Edit Object Settings pane, Group Membership and Activity Rights can be used to configure additional optional group settings. Group Membership can be used to add participants this group or make this group a child of another group.
7. Click **Finish**.
8. On the Save In dialog box, select the **folder** the group should be saved in.
9. Click **Save**.
10. On the Object Saved dialog box, click **Close**. The group is displayed in Plumtree Foundation and appears in the Groups list in Process Administrator.

## Delete a Group

Groups cannot be deleted from Process Administrator. Groups can be deleted from Plumtree Foundation which makes them disabled groups in Process Administrator.

To delete a group from Plumtree Foundation:

1. Log in to **Plumtree Foundation**.
2. Click **Administration**.
3. Under Admin Objects Directory, select the **folder** which contains the Process Administrator groups.
4. In the administrative folder for groups, click **Group**.
5. On the group list, select the checkbox next to the group **Name**.
6. Click **Delete**.
7. On the Delete Object dialog box, click **OK**.

The group no longer exists in Plumtree Foundation. The group is disabled in Process Administrator.

## Edit Group Permissions

To edit a group's role permissions:

1. In the left pane of the Process Administrator, click **Groups**.
2. From the group list, select a group **Name**.
3. On the Groups | Edit Group page, click **Assigned Roles**.
4. On the Groups | Edit Group | Assigned Roles page, select a **Role ID**.

5. On the Groups | Edit Group | Assigned Roles | Role Assignment page, edit the **Parameter** if necessary.

Parallel roles are roles that can be assigned to groups of participants who perform the same activity in a process but have different business functions. For example, in a supply chain process, an order might be processed as an individual order or as a commercial order. The order would be processed in exactly the same way but individual orders might be handled by the individual sales group and commercial orders might be handled by the commercial sales group. When parallel roles are created in Process Designer, the activity performed by the parallel role is designed with a variable that determines which group will perform the activity at runtime. This variable is the parameter selected in the drop-down list.

Parallel roles must be created in Process Administrator before they can be assigned to participants. Parallel roles can be created automatically when they are imported with a project file or they can be created manually in Process Administrator and then mapped to abstract project roles during project publication.

6. Edit the group's role **Rank** if necessary.

The group's role rank indicates the hierarchy of the group's participants in relation to other participants in the same role. Participants and groups can be assigned to ranks 1 - 9, with 9 being the highest rank and 1 being the lowest rank. Participants can reassign work list items based on their ranking. Participants with higher rank can delegate work list items to participants with lower rank if they have been assigned the delegate permission. Participants with lower rank can escalate work list items to participants with higher rank if they have been assigned the escalate permission. Participants with the peer assignment permission can assign work list items to other participants who have the same rank.

7. Edit the group's **Permissions** for the role.

Group role permissions determine some of the options available to group participants in the **Select an Action** drop-down list on the Work List Items portlet of the Worklist Portlets. Participant and group permissions include:

Permission	Maps To This Action in Work List Items Portlet	Description	Design Dependency
Execute	Execute	Allows participants to process a work list item.	none
Route	Send, Send To, Back	Allows participants to send a work list item to the next activity in the process, send a work list item back to the previous activity in the process, and send a work list item to a specific participant assigned to the role for the next activity in the process.	The back action is only available to a participant if an exception handler was included in the process design and an exception occurred that invoked the exception handler while the participant was executing the work list item.
Suspend	Suspend/Resume	Allows participants to pause a process at the work list item activity and make process unavailable to other users until resumed.	The suspend property must be defined for the activity in the process design.
Abort	Abort	Allows participants to abort a process instance in their work list.	The activity must be defined as abortable in the process design.
Delegate	Reassign/Delegate	Allows participants to reassign a work list item to another participant with a	none

		lower rank.	
Grab	Grab/Ungrab	Allows participants to grab a work list item from another activity in the process.	The grab activity must be included in the process design or the activity must be defined as grabbable.
Escalate	Reassign/Escalate	Allows participants to reassign a work list item to another participant with a higher rank.	none
Peer Assignment	Reassign/Peer Assign	Allows participants to reassign a work list item to another participant with the same rank.	none

8. Click **Save**.

**Note:** A participant will only be able to use assigned permissions if a process has been designed to include the activities that correspond to these permissions. In other words, a participant will be able to grab a work list item if they have the grab permission and their role has a grab activity in the process that was created in Process Designer.

## Edit Group Role Assignments

To edit a group's role assignment:

1. In the left pane of the Process Administrator, click **Groups**.
2. From the group list, select a group **Name**.
3. On the Groups | Edit Group page, click **Assigned Roles**.
4. On the Groups | Edit Group | Assigned Roles page, select a **Role ID**.
5. On the Groups | Edit Group | Assigned Roles | Role Assignment page, edit the **Parameter**, **Rank**, and **Permissions** for the role.
6. Click **Save**.

**Note:** A participant will only be able to use assigned permissions if a process has been designed to include the activities that correspond to these permissions. In other words, a participant will be able to grab a work list item if they have the grab permission and their role has a grab activity in the process that was created in Process Designer.

## View a Group's Assigned Roles

To view a group's assigned roles:

1. In the left pane of the Process Administrator, click **Groups**.
2. From the group list, select a group **Name**.
3. On the Groups | Edit Group page, click **Assigned Roles**.



To view the group's permissions within an assigned role:

1. On the Groups | Edit Group | Assigned Roles page, select a **Role ID**.
2. On the Groups | Edit Group | Assigned Roles | Role Assignment page, view the group's **Parameter**, **Rank**, and **Permissions** for the role.

- **Parameter**

Parallel roles are roles that can be assigned to groups of participants who perform the same activity in a process but have different business functions. For example, in a supply chain process, an order might be processed as an individual order or as a commercial order. The order would be processed in exactly the same way but individual orders might be handled by the individual sales group and commercial orders might be handled by the commercial sales group. When parallel roles are created in Process Designer, the activity performed by the parallel role is designed with a variable that determines which group will perform the activity at runtime. This variable is the parameter selected in the drop-down list.

Parallel roles must be created in Process Administrator before they can be assigned to participants. Parallel roles can be created automatically when they are imported with a project file or they can be created manually in Process Administrator and then mapped to abstract project roles during project publication.

- **Rank**

The group's role rank indicates the hierarchy of the group's participants in relation to other participants in the same role. Participants and groups can be assigned to ranks 1 - 9, with 9 being the highest rank and 1 being the lowest rank. Participants can reassign work list items based on their ranking. Participants with higher rank can delegate work list items to participants with lower rank if they have been assigned the delegate permission. Participants with lower rank can escalate work list items to participants with higher rank if they have been assigned the escalate permission. Participants with the peer assignment permission can assign work list items to other participants who have the same rank.

- **Permissions**

Group role permissions determine some of the options available to group participants in the **Select an Action** drop-down list on the Work List Items portlet of the Worklist Portlets. Participant and group permissions include:

Permission	Maps To This Action in Work List Items Portlet	Description	Design Dependency
Execute	Execute	Allows participants to process a work list item.	none
Route	Send, Send To, Back	Allows participants to send a work list item to the next activity in the process, send a work list item back to the previous activity in the process, and send a work list item to a specific participant assigned to the role for the next activity in the process.	The back action is only available to a participant if an exception handler was included in the process design and an exception occurred that invoked the exception handler while the participant was executing the work list item.
Suspend	Suspend/Resume	Allows participants to pause a process at the work list item activity and make process unavailable to	The suspend property must be defined for the activity in the process design.

		other users until resumed.	
Abort	Abort	Allows participants to abort a process instance in their work list.	The activity must be defined as abortable in the process design.
Delegate	Reassign/Delegate	Allows participants to reassign a work list item to another participant with a lower rank.	none
Grab	Grab/Ungrab	Allows participants to grab a work list item from another activity in the process.	The grab activity must be included in the process design or the activity must be defined as grabbable.
Escalate	Reassign/Escalate	Allows participants to reassign a work list item to another participant with a higher rank.	none
Peer Assignment	Reassign/Peer Assign	Allows participants to reassign a work list item to another participant with the same rank.	none

3. To exit, click **Cancel**.

**Note:** A participant will only be able to use assigned permissions if a process has been designed to include the activities that correspond to these permissions. In other words, a participant will be able to grab a work list item if they have the grab permission and their role has a grab activity in the process that was created in Process Designer.

## View a Group's Participants

To view a group's assigned participants:

1. In the left pane of the Process Administrator, click **Groups**.
2. From the group list, select a group **Name**.
3. On the Groups | Edit Group page, click **Assigned Participants**.

The Groups | Edit Group | Assigned Participants page contains a list of the participants assigned to the group.

## View a Group's Role Permissions

To view a group's assigned roles:

1. In the left pane of the Process Administrator, click **Groups**.
2. From the group list, select a group **Name**.
3. On the Groups | Edit Group page, click **Assigned Roles**.
4. On the Groups | Edit Group | Assigned Roles page, select a **Role ID**.

5. On the Groups | Edit Group | Assigned Roles | Role Assignment page, view the group's **Parameter**, **Rank**, and **Permissions** for the role.

- **Parameter**

Parallel roles are roles that can be assigned to groups of participants who perform the same activity in a process but have different business functions. For example, in a supply chain process, an order might be processed as an individual order or as a commercial order. The order would be processed in exactly the same way but individual orders might be handled by the individual sales group and commercial orders might be handled by the commercial sales group. When parallel roles are created in Process Designer, the activity performed by the parallel role is designed with a variable that determines which group will perform the activity at runtime. This variable is the parameter selected in the drop-down list.

Parallel roles must be created in Process Administrator before they can be assigned to participants. Parallel roles can be created automatically when they are imported with a project file or they can be created manually in Process Administrator and then mapped to abstract project roles during project publication.

- **Rank**

The group's role rank indicates the hierarchy of the group's participants in relation to other participants in the same role. Participants and groups can be assigned to ranks 1 - 9, with 9 being the highest rank and 1 being the lowest rank. Participants can reassign work list items based on their ranking. Participants with higher rank can delegate work list items to participants with lower rank if they have been assigned the delegate permission. Participants with lower rank can escalate work list items to participants with higher rank if they have been assigned the escalate permission. Participants with the peer assignment permission can assign work list items to other participants who have the same rank.

- **Permissions**

Group role permissions determine some of the options available to group participants in the **Select an Action** drop-down list on the Work List Items portlet of the Worklist Portlets. Participant and group permissions include:

Permission	Maps To This Action in Work List Items Portlet	Description	Design Dependency
Execute	Execute	Allows participants to process a work list item.	none
Route	Send, Send To, Back	Allows participants to send a work list item to the next activity in the process, send a work list item back to the previous activity in the process, and send a work list item to a specific participant assigned to the role for the next activity in the process.	The back action is only available to a participant if an exception handler was included in the process design and an exception occurred that invoked the exception handler while the participant was executing the work list item.
Suspend	Suspend/Resume	Allows participants to pause a process at the work list item activity and make process unavailable to other users until resumed.	The suspend property must be defined for the activity in the process design.
Abort	Abort	Allows participants to abort a process instance in their	The activity must be defined as abortable in the process

		work list.	design.
Delegate	Reassign/Delegate	Allows participants to reassign a work list item to another participant with a lower rank.	none
Grab	Grab/Ungrab	Allows participants to grab a work list item from another activity in the process.	The grab activity must be included in the process design or the activity must be defined as grabbable.
Escalate	Reassign/Escalate	Allows participants to reassign a work list item to another participant with a higher rank.	none
Peer Assignment	Reassign/Peer Assign	Allows participants to reassign a work list item to another participant with the same rank.	none

- To exit, click **Cancel**.

**Note:** A participant will only be able to use assigned permissions if a process has been designed to include the activities that correspond to these permissions. In other words, a participant will be able to grab a work list item if they have the grab permission and their role has a grab activity in the process that was created in Process Designer.

## View Groups

To view groups:

In the left pane of the Process Administrator, select **Groups**.

The group list includes all groups that have been created in Plumtree Foundation. Group information displayed in the group list includes:

Column	Description
Name	The Name assigned when the group is added to Plumtree Foundation. The group Name can be changed using the Properties and Names page in Plumtree Foundation.
Description	The description entered when the group is added to Plumtree Foundation. The Description can be changed using the Properties and Names page in Plumtree Foundation.

## Calendar Rules

### Add a Calendar Rule

To add a calendar rule to the Process Administrator:

- In the left pane of the Process Administrator, click **Calendar Rules**.

2. On the Calendar Rules page, click **Add**.
3. On the Calendar Rules | Add Calendar Rule page, enter a **Name** for the calendar rule, such as Work Schedule or Standard Hours.
4. Select a **Time Zone**.
5. If a holiday rule should be applied to the calendar, select a **Holiday Rule**. All holiday rules created in the Process Administrator will be available in the drop down list.
6. Complete the **Work Schedule**, selecting at least one work day and adjusting the hours as necessary.
7. Click **Save**.

Multiple calendar rules can be stored in the Process Administrator but only one calendar rule can be applied at a time. Calendar rules apply to all participants across all projects.

## Apply a Calendar Rule

To apply a calendar rule:

1. In the left pane of the Process Administrator, click **Calendar Rules**.
2. On the Calendar Rules page, select a calendar rule from the **Apply Calendar Rule** drop-down list.
3. Click **Save**.

**Note:** Calendar rules must be added to the Process Administrator before they can be applied.

## Disable a Calendar Rule

To disable an applied calendar rule:

1. In the left pane of the Process Administrator, click **Calendar Rules**.
2. On the Calendar Rules page, de-select the calendar rule from the **Apply Calendar Rule** drop-down list.
3. Click **Save**.

## Delete a Calendar Rule

To delete a calendar rule:

1. In the left pane of the Process Administrator, click **Calendar Rules**.
2. On the Calendar Rules page, select a calendar rule **Name**.
3. Click **Delete**.

4. To confirm the deletion, click **OK**.

## Edit a Calendar Rule

To edit a calendar rule:

1. In the left pane of the Process Administrator, click **Calendar Rules**.
2. On the Calendar Rules page, click on a calendar rule **Name**.
3. On the Calendar Rules | Edit Calendar Rule page, adjust the **Time Zone**, **Holiday Rule**, and **Work Schedule** settings as necessary.
4. Click **Save**.

## Holiday Rules

### Add a Holiday Rule

Holiday rules are a collection of holidays that can be applied to a work schedule defined in a calendar rule. Participants will not be able to access their Work List Items on holidays defined in a holiday rule that is applied by a calendar rule.

To add a holiday rule to the Process Administrator:

1. In the left pane of the Process Administrator, click **Holiday Rules**.
2. On the Holiday Rules page, click **Add**.
3. On the Holiday Rules | Add Holiday Rule page, enter a **Name** for the holiday rule, such as Annual Holidays or Employee Holidays 2006.

Then add holidays to the holiday rule:

4. Click **Next**.
5. On the Holiday Rules | Add Holiday Rule | Add Holiday page, enter a name or **Description** for the holiday. Examples of holiday descriptions are Thanksgiving and New Year's Eve.
6. Select a **Type**.

The holiday type is determined by the calendar occurrence of the holiday and impacts the way the date is entered in the date field. The type options include:

Type	Meaning
Same Date Every Year	The calendar date entered will be considered a holiday on the same calendar date each year.
A Date Applicable Only for the Given Year	The calendar date entered will only be considered a holiday for the year selected in the date field.

N-th Weekday of the Month	Instead of a calendar date, the date is entered as NUMBER DAY MONTH. For example, Thanksgiving would be entered as FOURTH THURSDAY NOVEMBER. The characters must be entered in capital letters.
Easter Relative	Instead of a calendar date, the number of days before or after Easter are entered in the date field. For a holiday that occurs three days before Easter, -3 would be entered in the date field.
Mobile to Closest Monday	Each year, the holiday will be celebrated on the Monday closest to the calendar date entered in the date field.

7. Enter the **Date** on which the holiday occurs. The information entered in the date field depends on the holiday type selected, as described in the Holiday Type Table.
8. Click **Save**.
9. To continue adding holidays to the holiday rule, on the Holiday Rules | Edit Holiday Rule page, click **Holidays**.
10. On the Holiday Rules | Edit Holiday Rule | Holidays page, click **Add**.
11. On the Holiday Rules | Edit Holiday Rule | Holidays | Add Holiday page, enter the **Description**, **Type**, and **Date** for the holiday.
12. Click **Save**.
13. Repeat steps 10 - 12 to create additional holidays for the holiday rule.

#### Related Topics:

- [Add a Holiday to a Holiday Rule](#)
- [Remove a Holiday from a Holiday Rule](#)
- [Apply a Holiday Rule to a Calendar Rule](#)
- [Delete a Holiday Rule](#)

## Add a Holiday to a Holiday Rule

These steps assume that a Holiday Rule has already been added to Process Administrator.

To add a holiday to a holiday rule:

1. In the left pane of the Process Administrator, click **Holiday Rules**.
2. On the Holiday Rules page, select the **Name** of the holiday rule which will contain the new holiday.
3. On the Holiday Rules | Edit Holiday Rule page, click **Holidays**.
4. On the Holiday Rules | Edit Holiday Rule | Holidays page, click **Add**.
4. On the Holiday Rules | Add Holiday Rule | Add Holiday page, enter a name or **Description** for the holiday. Examples of holiday descriptions are Thanksgiving and New Year's Eve.

5. Select a **Type**.

The holiday type is determined by the calendar occurrence of the holiday and impacts the way the date is entered in the date field. The type options include:

Type	Meaning
Same Date Every Year	The calendar date entered will be considered a holiday on the same calendar date each year.
Date Applicable Only for the Given Year	The calendar date entered will only be considered a holiday for the year selected in the date field.
N-th Weekday of the Month	Instead of a calendar date, the date is entered as NUMBER DAY MONTH. For example, Thanksgiving would be entered as FOURTH THURSDAY NOVEMBER. The characters must be entered in capital letters.
Closest Monday	Each year, the holiday will be celebrated on the Monday closest to the calendar date entered in the date field.

6. Enter the **Date** on which the holiday occurs. The information entered in the date field depends on the holiday type selected, as described in the Holiday Type Table.
7. Click **Save**.
8. Repeat steps 4 - 7 to create additional holidays for the holiday rule.

#### Related Topics:

- [Add a Holiday Rule](#)
- [Remove a Holiday from a Holiday Rule](#)
- [Apply a Holiday Rule to a Calendar Rule](#)
- [Delete a Holiday Rule](#)

## Apply a Holiday Rule to a Calendar Rule

To apply a holiday rule to a calendar rule:

1. In the left pane of the Process Administrator, click **Calendar Rules**.
2. On the Calendar Rules page, select the **Name** of the calendar rule that will use the holiday rule.
3. On the Calendar Rules | Edit Calendar Rule page, select a holiday rule from the **Holiday Rule** drop-down list.
4. Click **Save**.

**Note:** Holiday rules must be added to the Process Administrator before they can be applied to a calendar rule.

#### Related Topics:

- [Add a Calendar Rule](#)
- [Edit a Calendar Rule](#)



- [Disable a Calendar Rule](#)
- [Delete a Calendar Rule](#)
- [Add a Holiday Rule](#)

## View the Holidays in a Holiday Rule

To view the holidays in a holiday rule:

1. In the left pane of the Process Administrator, click **Holiday Rules**.
2. On the holiday rules page, select a holiday rule **Name**.
3. On the Holiday Rules | Edit Holiday Rule page, click **Holidays**.

### Related Topics:

- [Add a Holiday Rule](#)
- [Apply a Holiday Rule to a Calendar Rule](#)
- [Edit a Calendar Rule](#)

## Edit a Holiday Rule

Holiday rules can be edited by adding or deleting holidays.

To edit a holiday rule:

1. In the left pane of the Process Administrator, click **Holiday Rules**.
2. On the Holiday Rules page, select the holiday rule **Name**.
3. On the Holiday Rules | Edit Holiday Rule page, click **Holidays**.
4. On the Holiday Rules | Edit Holiday Rule | Holiday page, **Add** or **Delete** holidays for the holiday rule.

### Related Topics:

- [Add a Holiday Rule](#)
- [Apply a Holiday Rule to a Calendar Rule](#)
- [View the Holidays in a Holiday Rule](#)
- [Edit a Calendar Rule](#)

## Disable a Holiday Rule

To disable a holiday rule:

1. In the left pane of the Process Administrator, click **Calendar Rules**.
2. On the Calendar Rules page, select the **Name** of the calendar rule that uses the holiday rule.

3. On the Calendar Rules | Edit Calendar Rule page, de-select the holiday rule from the **Holiday Rule** drop-down list.
4. Click **Save**.

**Related Topics:**

- [Add a Holiday Rule](#)
- [Apply a Holiday Rule to a Calendar Rule](#)
- [Edit a Calendar Rule](#)

## Delete a Holiday Rule

To edit a holiday rule:

1. In the left pane of the Process Administrator, click **Holiday Rules**.
2. On the Holiday Rules page, select the checkbox next to the holiday rule **Name**.
3. Click **Delete**.
4. To confirm the deletion, click **OK**.

**Related Topics:**

- [Add a Holiday Rule](#)
- [Apply a Holiday Rule to a Calendar Rule](#)
- [View the Holidays in a Holiday Rule](#)
- [Edit a Calendar Rule](#)
- [Remove a Holiday from a Holiday Rule](#)

## Remove a Holiday from a Holiday Rule

To remove a holiday from a holiday rule:

1. In the left pane of the Process Administrator, click **Holiday Rules**.
2. On the Holiday Rules page, select the holiday rule **Name**.
3. On the Holiday Rules | Edit Holiday Rule page, click **Holidays**.
4. On the Holiday Rules | Edit Holiday Rule | Holidays page, select the checkbox next to the **Holiday**.
5. Click **Delete**.
6. To confirm the deletion, click **OK**.

**Related Topics:**

- [Add a Holiday Rule](#)
- [Apply a Holiday Rule to a Calendar Rule](#)
- [View the Holidays in a Holiday Rule](#)
- [Edit a Calendar Rule](#)

## Engines

### Add a Process Execution Engine to the Host Engine

To add a process execution engine to the host engine:

1. In the left pane of the Process Administrator, select **Engines**.
2. On the Engines page, click **Add**.
3. On the Engines | Choose Engine Type page, enter the **Engine Name** and Engine Database Type. Ignore the **Engine Type** option - it cannot be configured.
4. Click **Next**.
5. On the Engines | Choose Engine Type | Edit Business End Point Engine 'engine name' Database Configuration page, enter the **Properties** for the process execution engine database.

The SQL Server (Plumtree) engine database properties are:

- a. **Host** - The name of the host computer or server on which Microsoft SQL resides and on which the database will be created.
- b. **Port** - The database will use this port on the host.
- c. **Database** - The name of the engine database that will be created.
- d. **User** - A user name that will be created when the database is created.

**Note:** Once this user name has been defined in the Process Administrator, the name cannot be changed. If a new administrative user name is necessary, create a new process execution engine that uses the new user name.

- e. **Password** - A password that will be created for the user when the database is created.

The Oracle (Plumtree) engine database properties are:

- a. **Host** - The name of the host computer or server on which Oracle SQL resides and on which the database will be created.
- b. **Port** - The database will use this port on the host.
- c. **SID** - System identification for the database; also used to connect to the database. Sometimes called Oracle ID.

- d. **User** - A user name that will be created when the database is created.

**Note:** Once this user name has been defined in the Process Administrator, the name cannot be changed. If a new administrative user name is necessary, create a new process execution engine that uses the new user name.

- e. **Password** - A password that will be created for the user when the database is created.
- f. **Schema** - This is an optional property. If the name of a schema is entered, the configuration and introspection will only work on tables of that schema. If a schema name is not entered, the schema could be changed at runtime. For example, if a table named devel.invoice is referenced in a development environment and in production a different schema name is used, production references to devel.invoice would work only if the schema name was not entered in this field.
- g. **Database String** - If this option is selected, the database connection information can be entered in the form of a URL. Complete the host, port, SID, user, and schema (schema is optional) fields. Then select the database string checkbox. In the database string field, enter the URL in the format jdbc:datadirect://host name:port number;SID. Enter and confirm a password for the user that will be created when the database is created.

The Oracle (Plumtree) engine **Advanced** properties are optional:

- a. **Tablespace** - Some database administrators divide databases into tablespaces to control and maintain table sizes. Enter the appropriate tablespace name here. Leave the field blank if there are no tablespaces and a default tablespace will be created. When the user name is created, the user creation statement references the tablespace.
  - b. **Temporary Tablespace** - The name of the temporary tablespace used by the process execution engine's database to perform temporary indexing for some access: TEMP of type TEMPORARY.
  - c. **Profile** - A profile is a set of limits on database resources. If you assign the profile to the user being created, that user cannot exceed the established limits in the profile. This allows the administrator to limit the actions of a particular Oracle user. The Oracle administrator may have different profiles set for different groups of users so that there is control over what each group is authorized to use and over which resources from the database a particular group will have.
6. On the Engines | Choose Engine Type | Edit Business End Point Engine 'engine name' Database Configuration page, configure the following **Runtime** options for the process execution engine or accept the defaults:
- a. **Maximum Pool Size** - Enter the maximum number of connections that the pool can allocate. The pool will never create more connections than this limit imposes. The default is 10.

- b. **Connection Idle Time (Mins)** - Enter the amount of time the database connection can remain idle before the connection will be dropped. The default is 5 minutes.
  - c. **Maximum Opened Cursors** - Enter the maximum number of opened cursors allowed on the database. The default is 50. This value is related to the maximum pool size. The number of cursors is divided in between the number of maximum pool size and each connection will manage that number of cursors. For example, if you have 500 maximum opened cursors and the maximum pool size is 50, each connection can have a maximum of 10 opened cursors.
7. Click **Next**.
8. On the Engines | Choose Engine Type | Edit Business End Point Engine '*engine name*' Database Configuration | Add Engine page, on the Basic Configuration tab:
- Verify the **Name** of the process execution engine.
  - Ignore the **Type** - it cannot be configured.
  - Verify the **Host** location for the process execution engine.
  - Enter the **Home Directory** location or accept the default.
  - Enter the **Log Directory** location or accept the default.
9. Click **Save**.
10. In the left pane of Process Administrator, select **Engines**.
11. On the Engines page, **Stop** the process execution engine so that the process execution engine database can be created.
12. Click the engine **Name**.
13. On the Engines | Edit Engine *enginename* page, on the Basic Configuration tab, click **Manage Database**.
14. On the Engines | Edit Engine *enginename* | Manage Database page, under Database Creation, select **Create Database** and **Create Data Structure**.
15. Enter a **User Name** and **User Password** with administrative write privileges for the host engine.
16. Click **OK**.

At the top of the Engines | Edit Engine *enginename* page, the **Message(s)** section should contain the following confirmation messages:

- **The database has been created.**
- **The data structure has been created.**

17. To verify the creation of the database and data structure, check the host engine to see if the new database is there.

**Note:** Before starting the process execution engine, make sure the location port number is unique. Two process execution engines on the same host process execution engine cannot be running on the same port. To view and change the location port, on the Engines | Edit Engine *enginename* page, on the Basic Configuration tab, click Locations.

**Related Topics:**

- [Start a Process Execution Engine](#)
- [Stop a Process Execution Engine](#)

## Delete a Process Execution Engine from the Host Engine

To delete a process execution engine from the host engine:

1. In the left pane of the Process Administrator, select **Engines**.
2. On the Engines page, select the engine **Name**.
3. Click **Delete**.
4. To confirm the deletion, click **OK**.

**Note:** If the process execution engine database is not dropped before deleting the process execution engine, the process execution engine database will have to be removed manually. Once the process execution engine has been deleted, there is no way to remove the process execution engine database through the Process Administrator.

**Related Topics:**

- [Drop a Process Execution Engine Database](#)
- [Create a Process Execution Engine Database](#)
- [Add a Process Execution Engine to the Host Engine](#)

## Import a Process Execution Engine

Process execution engine configurations can be exported from Process Administrator and then imported for use at a later time.

To import a process execution engine that was previously exported:

1. In the left pane of the Process Administrator, select **Engines**.
2. On the Engines page, click **Import**.
3. Enter the **File Name** of the exported process execution engine configuration.

4. Click **Import**.

The imported process execution engine will be displayed in the list of engines on the Engines page.

**Related Topics:**

- [Export a Process Execution Engine](#)

## Export a Process Execution Engine

Process execution engine configurations can be exported from Process Administrator and saved to be imported for use at a later time.

To export a process execution engine:

1. In the left pane of the Process Administrator, select **Engines**.
2. On the Engines page, select the engine **Name**.
3. On the Engines | Edit Engine page, under Advanced Properties, click **Export**.
4. Choose to **Save** the process execution engine file and enter the location in which the file should be saved.
5. When the download is complete, click **Close**.
6. Verify that the file has been saved in the correct location. The file name should be in the format: *enginename.exp*.

**Related Topics:**

- [Import a Process Execution Engine](#)

## Create a Process Execution Engine Database

To create a process execution engine database for an existing process execution engine:

1. In the left pane of the Process Administrator, click **Engines**.
2. From the Engines list, select the **Name** of the engine.
3. On the Engines | Edit Engine *enginename* page, on the **Basic Configuration** tab, click **Manage Database**.
4. On the Engines | Edit Engine *enginename* | Manage Database page, select **Create Database** and **Create Data Structure**.
5. Enter a **User Name** and **User Password** with administrative write privileges for the host engine.
6. Click **OK**.

7. At the top of the Engines | Edit Engine *enginename* page, the **Message(s)** section should contain the following confirmation messages:
  - **The database has been created.**
  - **The data structure has been created.**
8. To verify the creation of the database and data structure, check the host engine to see if the new database is there.

**Related Topics:**

- [Drop a Process Execution Engine Database](#)
- [Add a Process Execution Engine to the Host Engine](#)

## Drop a Process Execution Engine Database

To drop the process execution engine database for an existing process execution engine:

1. In the left pane of the Process Administrator, click **Engines**.
2. From the Engines list, select the **Name** of the engine.
3. On the Engines | Edit Engine *enginename* page, on the **Basic Configuration** tab, click **Manage Database**.
4. On the Engines | Edit Engine *enginename* | Manage Database page, select **Drop Database**.
5. Enter a **User Name** and **User Password** with administrative write privileges for the host engine.
6. Click **OK**.
7. At the top of the Engines | Edit Engine *enginename* page, the **Message(s)** section should contain the following confirmation message:
  - **The database has been dropped.**
8. To verify that the database has been dropped, check the host engine to make sure the database is no longer there.

**Related Topics:**

- [Create a Process Execution Engine Database](#)



## Configure an Engine to Use Activity Notification E-mail

To configure a process execution engine to use the activity notification e-mail feature:

1. From the Engines list, select the **Name** of the engine.
2. On the Engines | Edit Engine *enginename* page, on the **Networking** tab, enter the **Mail Server Name** and the **Administrator E-mail** address.

**Note:** In order for the activity notification e-mail to be sent to a participant, the participant must have entered an e-mail address in their personal preferences for the Worklist Portlets or an administrator must have entered an e-mail address for the participant in the Plumtree Foundation user properties.

## Configure a Process Execution Engine to Accept External Process Calls

Processes published on one host process execution engine can call processes or sub-processes published on a different host process execution engine. The called or remote processes are called external processes and the process execution engine on which they reside must be configured to receive calls from the originating or calling process.

To configure a process execution engine to accept external process calls:

1. In the left pane of Process Administrator, select **Engines**.
2. On the Engines page, click the **Name** of the process execution engine on which the called process resides.
3. On the Engines | Edit Engine *enginename* page, click the **Services** tab.
4. On the Services tab, under IPC (Inter-process Communication), select the checkbox to **Enable IPC Service**.
5. Enter an **IPC Service Port** number.
6. Specify the maximum number of **Incoming Connections** that should be allowed on the IPC port.
7. Click **Save**.
8. Stop and re-start the process execution engine to make sure the changes are implemented.

### Related Topics:

- [Add an External Process](#)
- [Edit an External Process](#)

## Obtain a Process Execution Engine Thread Dump

The thread dump displays a list of the latest transactions running on the engine. This feature should be used only when an engine appears to be frozen or locked. When a thread dump is requested, the virtual machine pauses the current job being processed. Therefore, this option should only be used in extreme situations to detect severe problems.

To obtain a process execution engine thread dump:

1. In the left pane of the Process Administrator, select **Engines**.
2. On the Engines page, to the right of the engine name, click **Thread Dump**.

## Start a Process Execution Engine

To start a process execution engine:

1. In the left pane of the Process Administrator, select **Engines**.
2. On the Engines page, click the Start button associated with the engine.

At the top of the Engines page, the **Message(s)** section should contain the following confirmation message:

- **The engine has been started.**

After starting the process execution engine, the engine **Status** should display as **Ready**. The status change may take a few seconds. If the change is still not visible after a few seconds and the **Message(s)** section does not contain error messages, use the **Refresh Status** option at the top of the page until the engine status displays as **Ready**.

## Stop a Process Execution Engine

To stop a process execution engine:

1. In the left pane of the Process Administrator, select **Engines**.
2. On the Engines page, click the Stop button associated with the engine.

After stopping the process execution engine, the engine **Status** should display as **Not running**. The status change may take a few seconds. If the change is still not visible after a few seconds and the **Message(s)** section does not contain error messages, use the **Refresh Status** option at the top of the page until the engine status displays as **Not running**.

### Related Topics:

- [Start a Process Execution Engine](#)

## View the Startup Log for a Process Execution Engine

To view the log for the most recent startup of a process execution engine:

1. In the left pane of the Process Administrator, select **Engines**.
2. On the Engines page, to the right of the engine name, click **Startup Log**.

### Related Topics:

- [Start a Process Execution Engine](#)

# Projects

## Publish and Deploy a Project

**Note:** These instructions are for publishing and deploying a process at the same time. It is possible to publish projects and then deploy them at a later time, in two separate procedures. These methods are described in separate help topics.

To publish and deploy a project on a process execution engine:

1. In the left pane of the Process Administrator, select **Projects**.
2. On the Projects page, click **Publish**.
3. On the Projects | Publication Source page, select the **Publication Source** for the project.
4. Select the **Publication Properties** for the project.

The **Publication Source** options are:

- a. **Remote Project** - Enter the name of the directory in which the project has been saved on the computer where the host process execution engine is installed. The project directory should contain multiple sub-directories and a .project file.
- b. **Exported Project** - Use the Browse button find the exported project. Exported project files are in the format *projectname.fpr.exp*.

**Note:** Before publishing a project, export the project from the Process Designer. While exporting the project, select the Include Versionable Libraries Only option. If the project includes non-versionable libraries, copy the non-versionable libraries to the following directories: plumtree\ptprocess\1.5\webapps\webconsole\WEB-INF\lib, plumtree\ptprocess\1.5\ext, and plumtree\ptprocess\1.5\webapps\portal\WEB-INF\lib

- c. **VCS** - Choose a VCS repository type. Connection information for the VCS repository will be required after clicking OK in Step.
5. Select the **Deployment Properties** for the project.
  6. Click **OK**.
  7. On the Projects | Publication Source | Publish Process page, make sure the mapping is complete and click **Publish**.
  8. On the Projects | Publication Source | Publish Process | Deploy page, configure the Deployment Topology.
  9. Click **OK**.

### Related Topics:

- [Publish a Project](#)
- [Deploy a Project](#)

## Deploy a Project

To deploy a project on a process execution engine:

1. In the left pane of the Process Administrator, select **Projects**.
2. On the Projects page, in the Deployment column for the project, click **Not Deployed**.
3. On the Projects | Deploy page, click **Deploy**.
4. Configure the **Deployment Topology** for the project.
5. Click **OK**.

## Publish a Project

To publish a project on a process execution engine:

1. In the left pane of the Process Administrator, select **Projects**.
2. On the Projects page, click **Publish**.
3. On the Projects | Publication Source page, select the **Publication Source** for the project.

The **Publication Source** options are:

- a. **Remote Project** - Enter the name of the directory in which the project has been saved on the computer where the host process execution engine is installed. The project directory should contain multiple sub-directories and a .project file.
- b. **Exported Project** - Use the Browse button find the exported project. Exported project files are in the format *projectname.fpr.exp*.

**Note:** Before publishing a project, export the project from the Process Designer. While exporting the project, select the Include Versionable Libraries Only option. If the project includes non-versionable libraries, copy the non-versionable libraries to the following directories:  
plumtree\ptprocess\1.5\webapps\webconsole\WEB-INF\lib, plumtree\ptprocess\1.5\ext, and  
plumtree\ptprocess\1.5\webapps\portal\WEB-INF\lib

- a. **VCS** - Choose a VCS repository type. Connection information for the VCS repository will be required after clicking OK in Step.
4. Select the **Publication Properties** for the project.
  5. Click **OK**.
  6. On the Projects | Publication Source | Publish Process page, make sure the mapping is complete and click **Publish**.

# Business End Points

## Create a Business End Point

### Create a Business End Point

To create a business end point:

1. In the left pane of Process Administrator, select **Business End Point**.
2. On the Business End Points page, click **Add**.
3. On the Business End Points | Add Business End Point page, enter a **Name** for the business end point.
4. Select a business end point **Type**.
5. Some business end point types have subtypes. If there are options available in the Subtype drop-down list, select a **Subtype**.
6. Click **Next**.
7. Continue to configure the business end point using the appropriate parameters for the type selected.
8. Click **Save**.

## Create a SQL Database Business End Point

### Required Parameters for Configuration of SQL Database Business End Points

Oracle (Plumtree) and SQL Server (Plumtree) are used to configure business end points for Process Administrator features such as archiving and process monitoring.

The parameters used to configure the database business end points of this type are explained in:

- [Oracle \(Plumtree\)](#)
- [SQL Server \(Plumtree\)](#)

In addition to Oracle (Plumtree) and SQL Server (Plumtree), Process Administrator supports the following SQL database types for use as business end points:

- Cloudscape
- DB2 Database for OS390
- DB2 Universal Database Driver
- Generic JDBC Version 1
- IBM DB2 AS/400 JDBC
- IBM DB2 JDBC (Type 2)
- IBM DB2 JDBC (Type 3)
- Informix Database
- Microsoft SQL Database

- MsSQL JDBC (DataDirect Connect for JDBC)
- MsSQL JDBC (i-net driver)
- MySQL Database
- Oracle (DataDirect Connect for JDBC)
- Oracle Database
- Remote JDBC
- Sybase Database
- Sybase Database (SA JDBC)

### Oracle (Plumtree)

Property	Description
Host	The name of the host computer or server on which Oracle SQL resides and on which the database will be created.
Port	The database will use this port on the host.
SID	System identification for the database; also used to connect to the database. Sometimes called Oracle ID.
User	A user name that will be created when the database is created.
Password	A password that will be created for the user created when the database is created.
Schema	This is an optional property. If the name of a schema is entered, the configuration and introspection will only work on tables of that schema. If a schema name is not entered, the schema could be changed at runtime. For example, if a table named devel.invoice is referenced in a development environment and in production a different schema name is used, production references to devel.invoice would work only if the schema name was not entered in this field.
Database String	If this option is selected, the database connection information can be entered in the form of a URL. Complete the host, port, SID, user, and schema (schema is optional) fields. Then select the database string checkbox. In the database string field, enter the URL in the format jdbc:datadirect://host name:port number;SID. Enter and confirm a password for the user that will be created when the database is created.

**Note:** Once this user name has been defined in the Process Administrator, the name cannot be changed. If a new administrative user name is necessary, create a new process execution engine that uses the new user name.

There are also optional advanced properties:

Property	Description
Tablespace	Some database administrators divide databases into tablespaces to control and maintain table sizes. Enter the appropriate tablespace name here. Leave the field blank if there are no tablespaces and a default tablespace will be created. When the user name is created, the user creation statement references the tablespace.

Temporary Tablespace	The name of the temporary tablespace used by the process execution engine's database to perform temporary indexing for some access: TEMP of type TEMPORARY.
Profile	A profile is a set of limits on database resources. If you assign the profile to the user being created, that user cannot exceed the established limits in the profile. This allows the administrator to limit the actions of a particular Oracle user. The Oracle administrator may have different profiles set for different groups of users so that there is control over what each group is authorized to use and over which resources from the database a particular group will have.

## SQL Server (Plumtree)

Property	Description
Host	The name of the host computer or server on which Microsoft SQL resides and on which the database will be created.
Port	The database will use this port on the host.
Database	The name of the engine database that will be created.
User	A user name that will be created when the database is created.
Password	A password that will be created for the user created when the database is created.

**Note:** Once the user name has been defined in the Process Administrator, the name cannot be changed. If a new administrative user name is necessary, create a new process execution engine that uses the new user name.

# Variables

## Add a Variable

Variables can be created automatically when they are imported with a project file or they can be created manually using these steps and then mapped to abstract project Variables during project publication. The variable and business parameter mapping from the Process Designer to Process Administrator is as follows:

- Process Designer Business Parameter -> Process Administrator Business Parameter
- Process Designer External Variable -> Process Administrator Variable
- Process Designer Business Variable -> Process Administrator Variable with Business Variable checkbox selected

- Process Designer Instance Variable -> No equivalent in Process Administrator because it is process specific. It is included in the project file on import and does not need to be configured.

To add a variable:

1. In the left pane of Process Administrator, select **Variables**.
2. On the Variables page, click **Add**.
3. On the Variables | Add Variable page, enter a **Name**, **Type**, and **Value** for the variable. Some of the Type options will display secondary fields when selected. Enter the corresponding information for the variable in these fields.
4. If the variable is a business variable according to the process design, select the **Business Variable** checkbox. Some business variable types have secondary fields when the business variable checkbox is selected. Enter the appropriate variable information in these fields.
5. Click **Save**.
6. To localize the variable, under Display Names, click **Internationalization**.
7. On the Variables | Edit Variable *variablename* | Internationalization | Add Message page, select a **Language** and enter the translation or localization for the variable in that language in the **Message** field. Repeat to translate the variable into multiple languages for use in different locales.

#### Related Topics:

- [Add Business Parameters](#)
- [Publish a Project](#)

## Delete a Variable

To delete a variable:

1. In the left pane of Process Administrator, select **Variables**.
2. On the Variables page, select the checkbox next to the variable **Name**.
3. Click **Delete**.
4. When prompted, to confirm the deletion, click **OK**.

#### Related Topics:

- [Add a Variable](#)
- [Edit a Variable](#)

## Edit a Variable

To edit a variable:



1. In the left pane of Process Administrator, select **Variables**.
2. On the Variables page, click the variable **Name**.
3. On the Variables | Edit Variable *variablename* page, edit the **Type**, any corresponding type fields, and the **Value** for the variable as appropriate.
4. Modify the **Business Variable** checkbox selection and secondary fields if appropriate.
5. Click **Save**.
6. To change the variable localization, on the Variables page, click the variable **Name**.
7. On the Variables | Edit Variable *variablename* page, under Display Names, click **Internationalization**. To edit the localization of existing messages, click the **Language**. To add more languages, select a **Language** and enter the translation or localization for the variable in that language in the **Message** field. Repeat to translate the variable into more languages for use in different locales.

**Related Topics:**

- [Add a Variable](#)
- [Delete a Variable](#)

## Localize a Variable

To localize a variable:

1. In the left pane of Process Administrator, select **Variables**.
2. On the Variables page, click the variable **Name**.
3. On the Variables | Edit Variable *variablename* page, under Display Names, click **Internationalization**. To edit the localization of existing messages, click the **Language**. To add more languages, use Add to select a **Language** and enter the translation or localization for the variable in that language in the **Message** field. Repeat to translate the variable into more languages for use in different locales.

**Related Topics:**

- [Add a Variable](#)

# Business Parameters

## Add Business Parameters

Business parameters can be created automatically when they are imported with a project file or they can be created manually using these steps and then mapped to abstract project business parameters during project publication. The variable and business parameter mapping from the Process Designer to Process Administrator is as follows:

- Process Designer Business Parameter -> Process Administrator Business Parameter
- Process Designer External Variable -> Process Administrator Variable
- Process Designer Business Variable -> Process Administrator Variable with Business Variable checkbox selected
- Process Designer Instance Variable -> No equivalent in Process Administrator because it is process specific. It is included in the project file on import and does not need to be configured.

To add a business parameter:

1. In the left pane of Process Administrator, select **Business Parameters**.
2. On the Business Parameters page, click **Add**.
3. On the Business Parameters | Add Business Parameter page, enter a **Name**, **Type**, and **Value** for the business parameter.
4. Click **Save**.

### Related Topics:

- [Add a Variable](#)
- [Publish a Project](#)

## Delete a Business Parameter

To delete a business parameter:

1. In the left pane of Process Administrator, select **Business Parameters**.
2. On the Business Parameters page, select the checkbox next to the business parameter **Name**.
3. Click **Delete**.
4. When prompted, to confirm the deletion, click **OK**.

### Related Topics:

- [Add Business Parameters](#)

- [Edit a Business Parameter](#)

## Edit a Business Parameter

To edit a business parameter:

1. In the left pane of Process Administrator, select **Business Parameters**.
2. On the Business Parameters page, click the business parameter **Name**.
3. On the Business Parameters | Edit Business Parameter *businessparametername* page, edit the **Type** and **Value** for the business parameter as appropriate.
4. Click **Save**.

### Related Topics:

- [Add Business Parameters](#)
- [Delete a Business Parameter](#)

## External Processes

### Add an External Process

Processes published on one host process execution engine can call processes or sub-processes published on a different host process execution engine. The called or remote processes are called external processes.

For example, a warehouse company may have a process that calls a sub-process that resides in a shipping company. Both processes are published and deployed on different host process execution engines in different networks, which are typically behind firewalls. The warehouse process must be able to find the connection information for the shipping process in order to send the instance to the shipping process. An external process scenario could also include internal processes that are published and deployed on different host process execution engines.

When a process execution engine needs to communicate with a process located on a process execution engine other than the one where the process is deployed, it starts looking for an external process to establish the connection and reach the process. The external processes defined in the External Process List are evaluated in descending order until an external process matching the required process information is found.

To add a connection to an external process:

1. In the left pane of Process Administrator, select **External Processes**.
2. On the External Processes page, click **Add**.
3. On the Identify Location of External Processes page, enter the **Directory Service Name** for the host process execution engine on which the external processes reside. The external processes are the processes being called by processes published on this host process execution engine. The directory service name for a host process execution engine can be found in the that engine's fuegodb fuego\_schInfo table in the fuego\_orgName column. The directory service name is configured when setting up the directory service for a host process execution engine using the Admin Center Configuration Utility. The default directory service name is "company."
4. On the Identify Location of External Processes | Add External Processes page, click **Add**.

5. On the Identify Location of External Processes | Add External Processes | Edit External Process '*n*' page, where *n* represents the creation number of the external process, enter the **Properties** needed to establish the connection with the external process:
  - a. The **Process** field should contain the name of the external process.
  - b. The **URL** field should contain a URL in following format: http://host:IPCport#/fuego where host is the name of the computer on which the process execution engine for the external process resides, the IPC port # is the port configured on the Engines | Services tab of the process execution engine on which the external process is deployed, and /fuego is a mandatory element of the URL.
  - c. The **User** and **Password** fields should contain the case-sensitive administrator user name and password used to log onto Process Administrator. If there is not a password set, enter a few characters so that this field is not blank.
6. Click **Save**.
7. On the Identify Location of External Processes | Add External Processes page, click **Add** to continue adding external processes that reside on the same host process execution engine or click the external process **Number** to edit the connection information for an external process.
8. Re-start both process executions engines (the one calling the external process and the one on which the external process resides).

**Note:** In order for the process execution engine to be able to use the external process configurations, the IPC port must be configured and enabled on the Engines | Services tab of the process execution engine on which the external process is deployed.

**Note:** If the external process must reconnect to the calling process after it is finished processing, such as through Subflow, Termination Wait, or Process Notification activities, the process execution engine for the external process must have its own external process configured to reach the calling process.

#### Related Topics:

- [Configure a Process Execution Engine to Accept External Process Calls](#)
- [Edit an External Process](#)

## Edit an External Process

To edit the connection information for an external process:

1. In the left pane of Process Administrator, select **External Processes**.
2. On the External Processes page, under Directory Service Name, select the **Name** of the directory service for the process execution engine on which the external process resides.
3. On the External Processes | Edit External Process *processname* page, select the **Number** for that corresponds to the process for which the connection information needs to be changed.
4. On the External Processes | Edit External Process *processname* / Edit External Process '*n*' page, where *n* represents the creation number of the external process, edit the **Properties** needed to establish the connection with the external process:

- a. The **Process** field should contain the name of the external process.
  - b. The **URL** field should contain a URL in following format: http://host:IPCport#/fuego where host is the name of the computer on which the process execution engine for the external process resides, the IPC port # is the port configured on the Engines | Services tab of the process execution engine on which the external process is deployed, and /fuego is a mandatory element of the URL.
  - c. The **User** and **Password** fields should contain the case-sensitive administrator user name and password used to log onto Process Administrator. If there is not a password set, enter a few characters so that this field is not blank.
5. Click **Save**.
  6. Re-start both process executions engines (the one calling the external process and the one on which the external process resides).

**Note:** In order for the process execution engine to be able to use the external process configurations, the IPC port must be configured and enabled on the Engines | Services tab of the process execution engine on which the external process is deployed.

**Note:** If the external process must reconnect to the calling process after it is finished processing, such as through Subflow, Termination Wait, or Process Notification activities, the process execution engine for the external process must have its own external process configured to reach the calling process.

#### Related Topics:

- [Configure a Process Execution Engine to Accept External Process Calls](#)
- [Add an External Process](#)

## Process Monitoring

### Configure the Process Data Mart and BAM

Process monitoring allows administrators to:

- [Configure the Process Data Mart](#)
- [Configure BAM](#)

### Configure the Process Data Mart

To configure the process data mart, create a process data mart database business end point:

1. In the left pane of the Process Administrator, click **Business End Points**.
2. On the Business End Points page, click **Add**.
3. On the Business End Points | Add Business End Point page, enter a **Name** for the process data mart database, such as DataMartDB.

4. In the Type drop-down list, select **SQL Database**.
5. In the Subtype drop-down list, select the **JDBC connector type** for the process data mart database. The JDBC selected must be installed on the computer that hosts the SQL database where the process data mart database will be created.
6. Click **Next**.
7. On the Business End Points | Add Business End Point | Edit Business End Point page, enter the configuration **Properties** for the process data mart database. The configuration properties will vary based on the type of JDBC selected. For an explanation of the properties required for each type of JDBC, refer to the Required Parameters for Configuration of SQL Database Business End Points.
8. Configure the **Runtime** options or accept the default settings.
9. Click **Save**.

Then configure the process data mart settings:

1. In the left pane of Process Administrator, click **Process Monitoring**.
2. On the Process Data Mart page, Process Data Mart tab, configure the process data mart **Properties**:

Property	Description
Enable Automatic Update	Sets the data mart updater to run automatically at the time specified in the Daily Update Time field. If this option is not selected, a manual update can be performed from the ptprocess\1.5\bin folder using fuegowaarehouse.bat.
Runtime Database Configuration	Identifies the process data mart database. The process data mart database must be configured as a SQL Database business end point before it will appear in this drop-down list.
Data Detail Level	Specifies the granularity of the data that is transferred from the process execution engines to the data mart. If set to <b>Hourly</b> , data (instances) will be available to be retrieved for particular hours of a given day. If set to <b>Daily</b> , data can be retrieved for particular days.
Snapshot Time	The time at which the workload snapshots are taken. If the data detail level is set to hourly, only the minutes portion of the time is used and twenty-four snapshots will be taken, one for each hour of the day. If the data detail level is set to daily, only one snapshot is taken each day at the snapshot time.
Daily Update Time	The time at which the process data mart updater will run each day and migrate events from the process execution engines to the data mart database.
Log Directory	Log messages from the process data mart updater will be written to the dwupdater-service.log file in this directory. This directory must exist in order for the log file to be created by the process data mart updater. The verbosity level can be set by configuring the wrapper.logfile.loglevel property in \conf\WarehouseService.conf. Acceptable values are: NONE, INFO, and DEBUG.
Messages Logged from Data Mart Updater	The minimum severity level required for messages to be included in the process data mart updater log.
Language	The language used for descriptions of objects such as processes and

	activities.
Generate Performance Metrics	Updates the process performance data when the process data mart updater is run automatically.
Generate Workload Metrics	Updates the workload data when the process data mart updater is run automatically.

3. Click **Save**.
4. Click **Manage Database**.
5. On the Process Data Mart | Manage Database page, select the **Create Database** checkbox.
6. Select the **Create Data Structure** checkbox.
7. Enter a **User Name** and **User Password** with administrative write privileges for the host engine.
8. Click **OK**.
9. At the top of the Process Data Mart page, the **Message(s)** section should contain the following confirmation messages:
  - **The database has been created.**
  - **The data structure has been created.**
2. To verify the creation of the database and data structure, check the host engine to see if the new database is there.

Then install the data warehouse Process Monitoring service on the host computer for Process:

1. In the command prompt, change to the directory containing the fuegowarehouse.bat file that was included during installation. The default directory for this file is: C:\Program Files\Plumtree\ptprocess\1.5\bin.
2. In the correct directory, type:

```
fuegowarehouse.bat install
```

Note that the JAVA\_HOME environment variable must be set.

3. In the Windows Services utility, start the data warehouse Process Monitoring service.

**Note:** Changes to the Process Data Mart and BAM configurations will only take effect if you stop and re-start the data warehouse Process Monitoring service.

**Note:** Installation of this service is not required for Unix. Start the service to use the Process Data Mart and BAM configurations. The Unix parameters for this service are: ./fuegowarehouse.sh { start | stop | dump }

#### Related Topics:

- [Create a Business End Point](#)
- [Required Parameters for Configuration of SQL Database Business End Points](#)

- [Configure BAM](#)

## Configure BAM

To configure BAM, create a BAM database business end point:

1. In the left pane of the Process Administrator, click **Business End Points**.
2. On the Business End Points page, click **Add**.
3. On the Business End Points | Add Business End Point page, enter a **Name** for the BAM database, such as BAMdb.
4. In the Type drop-down list, select **SQL Database**.
5. In the Subtype drop-down list, select the **JDBC connector type** for the BAM database. The JDBC selected must be installed on the computer that hosts the SQL database where the BAM database will be created.
6. Click **Next**.
7. On the Business End Points | Add Business End Point | Edit Business End Point page, enter the configuration **Properties** for the BAM database. The configuration properties will vary based on the type of JDBC selected. For an explanation of the properties required for each type of JDBC, refer to the Required Parameters for SQL Database JDBC Configuration.
8. Configure the **Runtime** options or accept the default settings.
9. Click **Save**.

Then configure the BAM settings:

1. In the left pane of Process Administrator, select **Process Monitoring**.
2. On the Process Data Mart page, BAM tab, configure the BAM **Properties**:

Property	Description
Enable Automatic Update	Sets the BAM updater to run automatically based on the Update Frequency time setting. If this option is not selected, a manual update can be performed from the ptprocess\1.5\bin folder using fuegowarehouse.bat.
Runtime Database Configuration	Identifies the BAM database. The BAM database must be configured as a SQL Database business end point before it will appear in this drop-down list.
Update Frequency (in minutes)	The frequency with which the BAM updater will run and migrate events from the process execution engines to the BAM database.
Data Availability Time (in hours)	The length of time the BAM data will remain in the BAM database. The data will be disposed of after the number of hours set in this field and will then only be accessible from the data mart database.



**Note:** The BAM log is created in the same directory as the process data mart log and cannot be configured separately. The process data mart Log Directory configuration setting must be saved before the BAM updater log file can be created. Log messages from the BAM updater will be written to the bam-dwupdater-service.log file in this directory. This directory must exist in order for the log file to be created by the BAM updater. The verbosity level can be set by configuring the wrapper.logfile.loglevel property in \conf\WarehouseService.conf. Acceptable values are: NONE, INFO, and DEBUG.

3. Click **Save**.
4. Click the **BAM** tab.
5. Click **Manage Database**.
6. On the BAM | Manage Database page, select the **Create Database** checkbox.
7. Select the **Create Data Structure** checkbox.
8. Enter a **User Name** and **User Password** with administrative write privileges for the host engine. Tip: The administrative user name/password for SQL is often sa/plumtree.
9. Click **OK**.
10. At the top of the Process Data Mart page, the **Message(s)** section should contain the following confirmation messages:
  - **The database has been created.**
  - **The data structure has been created.**
11. To verify the creation of the database and data structure, check the host engine to see if the new database is there.

Then install the data warehouse Process Monitoring service on the host computer for Process:

1. In the command prompt, change to the directory containing the fuegowarehouse.bat file that was included during installation. The default directory for this file is: C:\Program Files\Plumtree\ptprocess\1.5\bin.
2. In the correct directory, type:

```
fuegowarehouse.bat install
```

Note that the JAVA\_HOME environment variable must be set.
3. In the Windows Services utility, start the data warehouse Process Monitoring service.

**Note:** Changes to the Process Data Mart and BAM configurations will only take effect if you stop and re-start the data warehouse Process Monitoring service.

**Note:** Installation of this service is not required for Unix. Start the service to use the Process Data Mart and BAM configurations. The Unix parameters for this service are: ./fuegowarehouse.sh { start | stop | dump }

#### Related Topics:

- [Create a Business End Point](#)

- [Required Parameters for Configuration of SQL Database Business End Points](#)
- [Configure the Process Data Mart](#)

## Attachments

### Decide How To Store Attachments

Process attachments can be stored in Plumtree Process or in Plumtree Collaboration. Plumtree Process has a 10MB per attachment file size limit. In order to choose to store attachments in Plumtree Collaboration, Plumtree Collaboration must be installed.

To decide how to store attachments:

1. In the left pane of Process Administrator, select **Attachments**.
2. On the Attachments page, choose **Plumtree Process** or **Plumtree Collaboration**.
3. Click **Submit**. If Plumtree Process was selected, the configuration is complete. If Plumtree Collaboration was selected, configure the Plumtree Collaboration options as described in Configure Collaboration Attachment Storage Options.

#### Related Topics:

- [Configure Collaboration Attachment Storage Options](#)

### Configure Collaboration Attachment Storage Options

To configure the Plumtree Collaboration storage options:

1. In the left pane of Process Administrator, select **Attachments**.
2. On the Attachments page, choose **Plumtree Collaboration**.
3. On the Attachments | Folder Storage Options page, choose to **store attachments in individual folders that will be created automatically for each process instance** or to **store all attachments in the Collaboration project's (root) folder**.
4. If choosing the option to store attachments in individual folders that will be created for each process instance, enter the administrative **Username** and **Password** for Collaboration.
5. Click **Next**.
6. On the Attachments | Folder Storage Options | Map Processes to Projects and Folders page, in the Collaboration Server Project column, next to a process name, click **None Selected**.
7. In the Select a Collaboration Project and Folder dialog box, browse to select a **Project** and **Folder**.
8. Click **Submit**.
9. On the Attachments | Folder Storage Options | Map Processes to Projects and Folders page, click **Validate**.

The Validate button checks to see if each published project has a project and folder selected for storing attachments and if the **store attachments in individual folders that will be created for each process instance** option was selected, check to see if the Username entered on the Attachments | Folder Storage Options page has permissions to create folders. Generally, a user must be a member of the Process Users group to have the appropriate permissions to create folders.

After clicking Validate, the About Plumtree Process page will display if the validation is successful. If the validation is not successful, error messages will display at the top of the Attachments | Folder Storage Options | Map Processes to Projects and Folders page.

**Related Topics:**

- [Decide How To Store Attachments](#)

## Launch the Process Administrator Log Viewer

To launch the Process Log Viewer from Process Administrator:

- In the top-left-hand corner of the Process Administrator, click **Launch Process Log Viewer**.

## Configure Process Archiving

### Configure Process Archiving

To configure process archiving:

1. [Create an archive database business end point](#).
2. [Set the process execution engine to archive processes](#).

## Create an Archive Database Business End Point

To create an archive database business end point:

1. In the left pane of Process Administrator, select **Business End Points**.
2. On the Business End Points page, click **Add**.
3. On the Business End Points | Add Business End Point page, enter a **Name** for the archive database, such as *ArchiveDB*.
4. For the Type, select **SQL Database**.
5. For the Subtype, select **Oracle (Plumtree)** or **SQL Server (Plumtree)**.
6. Click **Next**.
7. On the Business End Points | Add Business End Point | Edit Business End Point '*business end point name*' page, enter the **Properties** for the archive database business end point.

The **SQL Server (Plumtree)** archive database properties are:

- a. **Host** - The name of the host computer or server on which Microsoft SQL resides and on which the database will be created.
- b. **Port** - The database will use this port on the host.
- c. **Database** - The name of the engine database that will be created.
- d. **User** - A user name that will be created when the database is created.
- e. **Password** - A password that will be created for the user when the database is created.

The **Oracle (Plumtree)** archive database properties are:

- a. **Host** - The name of the host computer or server on which Oracle SQL resides and on which the database will be created.
- b. **Port** - The database will use this port on the host.
- c. **SID** - System identification for the database; also used to connect to the database. Sometimes called Oracle ID.
- d. **User** - A user name that will be created when the database is created.
- e. **Password** - A password that will be created for the user when the database is created.
- f. **Schema** - This is an optional property. If the name of a schema is entered, the configuration and introspection will only work on tables of that schema. If a schema name is not entered, the schema could be changed at runtime. For example, if a table named devel.invoice is referenced in a development environment and in production a different schema name is used, production references to devel.invoice would work only if the schema name was not entered in this field.
- g. **Database String** - If this option is selected, the database connection information can be entered in the form of a URL. Complete the host, port, SID, user, and schema (schema is optional) fields. Then select the database string checkbox. In the database string field, enter the URL in the format `jdbc:datadirect://host name:port number;SID`. Enter and confirm a password for the user that will be created when the database is created.

The **Oracle (Plumtree)** engine **Advanced** properties are optional:

- a. **Tablespace** - Some database administrators divide databases into tablespaces to control and maintain table sizes. Enter the appropriate tablespace name here.
- b. **Temporary Tablespace** - The name of the temporary tablespace used by the process execution engine's database to perform temporary indexing for some access: TEMP of type TEMPORARY.
- c. **Profile** - A profile is a set of limits on database resources. If you assign the profile to the user being created, that user cannot exceed the established limits in the profile. This allows the administrator to limit the actions of a particular Oracle user. The Oracle administrator may have different profiles set for different groups of users so that there is control over what each group is authorized to use and over which resources from the database a particular group will have.

8. On the Business End Points | Add Business End Point | Edit Business End Point '*business end point name*' page, configure the following **Runtime** options for the process execution engine or accept the defaults:
  - a. **Maximum Pool Size** - Enter the maximum number of connections that the pool can allocate. The pool will never create more connections than this limit imposes. The default is 10.
  - b. **Connection Idle Time (Mins)** - Enter the amount of time the database connection can remain idle before the connection will be dropped. The default is 5 minutes.
  - c. **Maximum Opened Cursors** - Enter the maximum number of opened cursors allowed on the database. The default is 50. This value is related to the maximum pool size. The number of cursors is divided in between the number of maximum pool size and each connection will manage that number of cursors. For example, if you have 500 maximum opened cursors and the maximum pool size is 50, each connection can have a maximum of 10 opened cursors.
9. Click **Save**.

**Related Topics:**

- [Configure Process Archiving](#)
- [Set the Process Execution Engine to Archive Processes](#)

## Set the Process Execution Engine to Archive Processes

**Note:** These steps assume that an archive database business end point has already been created.

To configure a process execution engine to archive processes:

1. In the left pane of Process Administrator, select **Engines**.
2. On the **Engines** page, click the engine **Name**.
3. On the **Engines | Edit Engine *enginename*** page, on the **Services** tab, configure the **Disposer** settings:
  - a. **Disposer Latency** - Enter the frequency (in number of days) at which processes should be archived. If one day is entered, processes will be moved to the archive database once per day starting one day after the time set in the Disposer Start Time field.
  - b. **Instance Expiration** - Time (in number of days) after which completed or aborted processes will be available for archiving. If one day is entered, processes will be available to be picked up for archiving one day after they have been completed or aborted.

**Note:** If the Disposer Latency is set to one day and the Instance Expiration is set to one day, it will be two days before the archive database is populated.

  - c. **Disposer Starting Time** - Time from which the initial Disposer Latency is calculated.
4. Select the **Enable Archiving** checkbox.

5. Choose an available business end point from the **Archive Database Selection** drop-down list. If there is not an available business end point, click **Create a new archive database business end point** and follow the steps in the related help topic.
6. On the Engines | Edit Engine *enginename* page, on the Others tab, under Events, select a **Store Events** option:
  - a. **Depends on Process** - If this option is selected, the only processes that will be archived are those that were set up to be archived when the project was designed in Process Designer.
  - b. **Never** - This option will override a Process Designer project's settings and not archive any processes, even those that were set up to be archived when the project was designed in Process Designer.
  - c. **Always** - This option will override a Process Designer project's settings and archive all processes, even those that were not set up to be archived when the project was designed in Process Designer.
2. Click **Save**.
3. In the left pane of Process Administrator, select **Engines**.
4. On the Engines page, **Stop** the process execution engine so that the changes can be implemented and the archive database can be created.
5. Click the engine **Name**.
6. On the Engines | Edit Engine *enginename* page, on the Basic Configuration tab, click **Manage Database**.
7. On the Engines | Edit Engine *enginename* | Manage Database page, under Archiving Database Creation, select **Create Database** and **Create Data Structure**.
8. Enter a **User Name** and **User Password** with administrative write privileges for the host engine.
9. Click **OK**.
10. At the top of the Engines | Edit Engine *enginename* page, the **Message(s)** section should contain the following confirmation messages:
  - **The database has been created.**
  - **The data structure has been created.**
11. To verify the creation of the database and data structure, check the database host machine to see if the new database has been created.
12. On the Engines page, **Start** the process execution engine.

**Related Topics:**

- [Create an Archive Database Business End Point](#)

- [Start a Process Execution Engine](#)
- [Stop a Process Execution Engine](#)

## Interact with Other Process Components

### Start the Host Process Execution Engine

To start the host process execution engine:

1. From the Start menu, launch the **Admin Center**.
2. Click **Start Host Process Execution Engine**.

The startup may take a few minutes. When the host process execution engine is fully started, the Stop Host Process Execution Engine option will be available.

#### Related Topics:

- [Stop the Host Process Execution Engine](#)

### Stop the Host Process Execution Engine

To stop the host process execution engine:

1. From the Start menu, launch the **Admin Center**.
2. Click **Stop Host Process Execution Engine**.

When the host process execution engine is fully stopped, the Start Host Process Execution Engine option will be available. This may take a few minutes.

#### Related Topics:

- [Start the Host Process Execution Engine](#)

### Access the Admin Center Configuration Utility

To access the Admin Center Configuration Utility:

1. Open the **Admin Center**.
2. On the Admin Center main page, select **Configuration**.

## Launch Worklist Portlets

To log in to the Worklist Portlets:

1. Use a Web Browser to open the Worklist Portlets URL. The URL will be in the following format:  
`http://hostname:portnumber/portal/server.pt.`
2. On the Portal login page, enter the **Username**, **Password**, and **Authentication Source**.
3. On the Home Page, add the Worklist Portlets in one of three ways:
  - Click **Add Portlets here**.
  - Use the My Communities drop-down menu to join the **Process Community**.
  - Use the My Pages drop-down menu to **Add Portlets**.