

UrbanCode Deploy plug-in for WebSphere Business Process Manager (BPM) v2.0 User Guide

Introduction

The WebSphere BPM plug-in enables you to do the following on the WebSphere BPM cells

1. Deploy process application snapshot to an online (connected) Process Server.
2. Deploy process application snapshot to an offline (disconnected) Process Server.
3. Import and Export process application into/from a Process Center.

Process service modules as an EAR file can also be deployed to a Process Server using the Application Deployment for WebSphere plug-in for UrbanCode Deploy (available separately).

The UrbanCode Deploy plug-in for WebSphere Business Process Manager v1.0 works with WebSphere BPM versions 8.5.0, 8.0.1, 8.0.0, 7.5.1. All BPM editions which includes Express, Standard and Advanced are supported.

The plug-in provides steps that enables you to automate deployment of process applications

- Deploy process application snapshot
- Generate offline package
- Deploy offline package
- Export a process application from a Process Center and Import it into another Process Center

The following steps provide an overview of the process you follow

1. Create resources. For the deployment of process application snapshots to an online or offline process server, you have to populate resources manually. You can view the resources you create in the **Resources** view. Each resource corresponds either to the Process Center or to an offline Process Server.
2. Define properties for the resources you created manually.
3. Define components, applications, and environments to automate deployment.
4. Deploy.

Configuring and deploying WebSphere BPM artifacts

This section elaborates on the procedure to be followed to install the plug-in, creating resources and defining deployment process.

Before you begin

The UrbanCode Deploy Agent (henceforth referred to as the Agent) must be installed on the system that hosts the Process Center. The Agent must also be installed on the system that hosts the offline Process Server, if any. The Agent need not be installed on the system that hosts the online Process Server (as applications for the online process servers are deployed from the Process Center).

Installing the plug-in

- In UrbanCode Deploy, go to **Settings > Automation Plugins**.
- Click **Load Plugin**.
- In the dialog, click **Choose File**, then choose the **WebSphereBPM-<version>.zip file**.
- Click **Submit**

Configuring the plug-in for deployments on an online process server

1. For the deployment of a process application snapshot to an online process server, create a resource representing the Process Center and define the following properties for it.
 - **profile.root.directory**: The profile root directory of the managed node running the Process Center application. For example, /opt/IBM/BPM/profiles/processCenterNode01

- **websphere.user**: The WAS administrator user
 - **websphere.password**: The WAS administrator password
 - **websphere.connType**: The connection protocol for WebSphere. One of SOAP, RMI and NONE
 - **websphere.port**: The port to use with the specified connection type for the application server running the Process Center application
2. Add the agent (installed on the system hosting the Process Center) to this resource group.
 1. Hover over the row for the resource group, click **Actions**, and select **Add agent**.
 3. Create components for the resources. You need one component for each resource to deploy. The components process should be of type **Deployment** and make use of the plug-in step **Deploy process application snapshot**.
 4. Add the components to the resources.
 1. Go to the resource.
 2. Choose **Actions > Add Component**
 3. Select the component to use.
 5. Create the application.
 1. Go to **Applications**.
 2. Click **Create New Application** (if one does not exist). You can also use an existing application that is attached to the cell to manage.
 3. Enter an application name, then click **Save**.
 4. Click the **Components** tab, then add the component that was created in step 3 above.
 6. Create an application environment.
 1. In the **Resources** tab, click **Create New Environment**.
 2. Enter an environment name, then click **Save**.
 3. Go to the environment editing page.
 4. Click on the environment name, then click **Add Base Resource**. Choose the group for your Process Center environment.
 7. Create an application process of type **Deployment**
 1. Click the **Processes** tab.
 2. Add a deploy step.
 3. Drag and drop the Install Component step onto the process editor.
 1. Select the component to use. You created this component for the resource. For example, you created a component to contain the process application to be deployed.
 2. Choose the process for the component. For example, you would choose **Online snapshot deployment process**.
 4. Click **Save**.
 5. Save the process.
 8. Run the process to test the newly created component.

Configuring the plug-in for deployments on an offline process server

1. For the deployment of a process application snapshot to an offline process server, create a resource representing the Process Server and define the following properties for it.
 - **profile.root.directory**: The profile root directory of the managed node running the Process Server application. For example, /opt/IBM/BPM/profiles/processServerNode01
 - **websphere.user**: The WAS administrator user
 - **websphere.password**: The WAS administrator password
 - **websphere.connType**: The connection protocol for WebSphere. One of SOAP, RMI and NONE
 - **websphere.port**: The port to use with the specified connection type for the application server running the Process Server application
 - **offline.server.name**: The name of this Process Server (offline) set in the Process Center console

2. Add the agent (installed on the system hosting the Process Server) to this resource group.
 1. Hover over the row for the resource group, click **Actions**, and select **Add agent**.
3. Create a resource representing the Process Center if not already created and define the following properties for it.
 - **profile.root.directory**: The profile root directory of the managed node running the Process Center application. For example, /opt/IBM/BPM/profiles/processCenterNode01
 - **websphere.user**: The WAS administrator user
 - **websphere.password**: The WAS administrator password
 - **websphere.connType**: The connection protocol for WebSphere. One of SOAP, RMI and NONE
 - **websphere.port**: The port to use with the specified connection type for the application server running the Process Center application
4. Add the agent (installed on the system hosting the Process Center) to this resource group.
 1. Hover over the row for the resource group, click **Actions**, and select **Add agent**.
5. Create components for the resources. You need one component for each resource to deploy. Thus you would create two separate components (one each for the Process Center resource and the Process Server resource).
6. Create the deployment process for each of the components. The process created for the Process Center component should be of type **Operational (without version)** while the process created for the Process Server component should be of type **Deployment**.
7. The process created for the Process Center component should make use of the plug-in step **Generate offline package** and the **IBM UrbanCode Deploy – Versions – Create Version** step. The **Create Version** step uploads the generated offline process package to the component created for the Process Server as a new version.
8. The process created for the Process Server component should make use of the plug-in step **Deploy offline package**.
9. Add the components to the respective resources.
 1. Go to the resource.
 2. Choose **Actions > Add Component**
 3. Select the component to use.
10. Create the application.
 1. Go to **Applications**.
 2. Click **Create New Application** (if one does not exist). You can also use an existing application that is attached to the cell to manage.
 3. Enter an application name, then click **Save**.
 4. Click the **Components** tab, then add the two components created in step 5
11. Create an application environment.
 1. In the **Resources** tab, click **Create New Environment**.
 2. Enter an environment name, then click **Save**.
 3. Go to the environment editing page.
 4. Click on the environment name, then click **Add Base Resource**. Choose the group for your Process Center environment as well as your Process Server environment.
12. Create an application process of type **Deployment**
 1. Click the **Processes** tab.
 2. Add a deploy step.
 3. Drag and drop the operational process defined for the Process Center component
 4. Drag and drop the Install Component step onto the process editor.
 1. Select the Process Server component to use

2. Choose the process for the component.
 5. Click Save.
 6. Save the process.
13. Run the process to test the newly created component.