WebSphere Extended Deployment for z/OS
Version 6.1.1

Customization Guide

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Customization Guide

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Customizing for WebSphere Extended Deployment for z/OS

Use this information to install and customize WebSphere® Extended Deployment for z/OS®, which includes WebSphere Virtual Enterprise for z/OS and WebSphere Extended Deployment Compute Grid for z/OS. Using the WebSphere Customization Tools, you can generate and run customized jobs. If you have z/OS servers that are running in 31–bit mode, you can run a script to convert all of your application servers to 64–bit mode.

Before you begin

- Install WebSphere Application Server Network Deployment for z/OS. Depending on which product version you are running, your system must meet one of the following minimum requirements:
  - WebSphere Application Server Network Deployment Version 6.1.0.27 or later
  - WebSphere Application Server Network Deployment Version 7.0.0.5 or later

  See the online Latest fix packs for WebSphere Application Server document for more information.
- Install WebSphere Extended Deployment for z/OS. See the Program Directory on the Library page for more information.
- For information on installing and customizing WebSphere eXtreme Scale for z/OS, see the WebSphere eXtreme Scale Information Center.
1. Install the WebSphere Customization Tools. See "Installing the WebSphere Customization Tools" for more information.
2. Augment profiles and create customized jobs for z/OS. See "Generating customization definitions" on page 3 for more information.
3. Upload and run customized jobs. See "Uploading and running customized jobs" on page 4 for more information.
4. Optional: Run a script to convert all of your z/OS servers from 31–bit mode to 64–bit mode. See "Enabling 64–bit mode on all z/OS servers" on page 4 for more information.

Installing the WebSphere Customization Tools

Install the WebSphere Customization Tools Version 7.0.0.x to customize WebSphere Extended Deployment for z/OS.

Before you begin

You must use the latest version of the WebSphere Customization Tools to successfully install the product extension files.

About this task

The WebSphere Customization Tools is a workstation based graphical tool you use to create customized jobs that build WebSphere Virtual Enterprise and WebSphere Extended Deployment Compute Grid runtime environments for z/OS.

1. Use FTP to copy the Virtual Enterprise and Compute Grid extension files, which are wve.wct and wcg.wct, from your z/OS system to the workstation on

which you are installing the WebSphere Customization Tools. The extension files are in the /usr/lpp/zWebSphere/V6R1M1/util/WCT directory on your z/OS system.

2. Download and install the latest version of the WebSphere Customization Tools from the appropriate Web site:
   - WebSphere Customization Tools for Windows®
   - WebSphere Customization Tools for Linux®

3. Install the wve.wct extension file for Virtual Enterprise into the WebSphere Customization Tools application.

   a. Start the WebSphere Customization Tools application on your workstation.
   b. Click **Help** → **Software Updates** → **Install Extension**.
   c. From the WebSphere Customization Tools Extension Locations panel, click **Install new extension location**.
   d. From the Source Archive File panel, click **Browse**, navigate to the directory in which you copied the wve.wct file in step 1, and click **Open**.
   e. Click **Next** on the Summary panel.

      Note: The Install Successful panel is displayed. Before you can click **Finish**, you must copy and save the data from the location field:

      ```
      C:\Documents and Settings\Administrator\WCT\workspace\configuration\
      com.ibm.ws.pmt.update\com.ibm.ws390.pmt.wve_6.1.1.0\eclipse
      ```

   f. From the Product Configuration panel, click **Add an extension location**. Paste the data you copied in the previous step into the Location field, and click **OK**.
   g. Click **Yes** to restart the WebSphere Customization Tools.

4. Install the wcg.wct extension file for Compute Grid into the WebSphere Customization Tools application.

   a. Click **Help** → **Software Updates** → **Install Extension**.
   b. From the WebSphere Customization Tools Extension Locations panel, click **Install new extension location**.
   c. From the Source Archive File panel, click **Browse**, navigate to the directory in which you copied the wcg.wct file in step 1, and click **Open**.
   d. Click **Next** on the Summary panel.

      Note: The Install Successful panel is displayed. Before you can click **Finish**, you must copy and save the data from the location field:

      ```
      C:\Documents and Settings\Administrator\WCT\workspace\configuration\
      com.ibm.ws.pmt.update\com.ibm.ws390.pmt.wcg_6.1.1.0\eclipse
      ```

   e. From the Product Configuration panel, click **Add an extension location**. Paste the data you copied in the previous step into the Location field, and click **OK**.
   f. Click **Yes** to restart the WebSphere Customization Tools.

What to do next

You can use the Profile Management Tool to generate customization definitions for Virtual Enterprise and Compute Grid. See "Generating customization definitions" on page 3 for more information.

Generating customization definitions

Use the Profile Management Tool function provided in the WebSphere Customization Tools to generate customization definitions and create customized jobs for WebSphere Virtual Enterprise and WebSphere Extended Deployment Compute Grid.

Before you begin

- Download and install the latest version of the WebSphere Customization Tools, and install the wve.wct and wcg.wct extension files.
- Install and configure WebSphere Application Server Network Deployment for z/OS.

  Note: You must configure the deployment manager node and application server node separately. If you configure the deployment manager node and application server node at the same time, which is also known as a cell configuration, failures occur when you later customize the nodes for Virtual Enterprise and Compute Grid.

About this task

You can generate customization definitions using the Profile Management Tool. A *customization definition* is a set of files used to create customized jobs for the purpose of configuring Virtual Enterprise for z/OS and Compute Grid for z/OS.

1. Start the Profile Management Tool.
   - Click **Start** → **Programs** → **IBM WebSphere** → **WebSphere Customization Tools**. After the application starts, click the **Profile Management Tool** tab.
   - Click *operating_system_menus* → **IBM WebSphere** → **WebSphere Customization Tools**. After the application starts, click the **Profile Management Tool** tab.
2. Add an existing location or create a new location of the customization definition that you want to create. On the **Customization Locations** tab, click **Add**. If you create a new location, the Version box refers to the existing version of WebSphere Application Server Network Deployment installed on your z/OS system.

   Note: Do not use the same location you are using for other Virtual Enterprise and Compute Grid customization definitions.
3. Generate the customization definition. On the **Customization Definitions** tab, click **Augment**.
4. Select the type of definition environment to create:
   - Deployment manager
   - Application server
   - Managed (custom) node
5. Complete the fields on the panels. Specify the values for the parameters used to create your z/OS system.
6. Click **Augment** to generate the customization definition.

What to do next

Upload the customized jobs to your target z/OS system. See "Uploading and running customized jobs" on page 4 for more information.

Uploading and running customized jobs

After you generate the appropriate customization definitions, you can upload and run customized jobs associated with the definitions to your target z/OS systems.

Before you begin

Generate the customization definitions for the jobs that you want to upload to your z/OS systems.

About this task

Upload and run the customized jobs you created using the WebSphere Customization Tools to administer and monitor your WebSphere Virtual Enterprise for z/OS and WebSphere Extended Deployment Compute Grid for z/OS environments.

1. Upload the customized jobs. On the **Customization Definitions** tab, select the jobs that you want to upload and click **Process**.
2. Upload the jobs to the FTP server on your z/OS system. Specify the required information on the **Upload Customization Definition** panel.
3. Click **Finish**.
4. Run the customized jobs. Click the **Customization Instructions** tab, and follow the customization instructions for each job.

What to do next

Start the deployment manager first, and then start the node agents and servers. If you have z/OS servers that are running in 31–bit mode, you can convert all of your application servers to 64–bit mode. See "Enabling 64–bit mode on all z/OS servers" for more information.

Enabling 64–bit mode on all z/OS servers

If you have z/OS servers that are running in 31–bit mode, you can run a script to convert all of your application servers to 64–bit mode.

Before you begin
- You must be running Version 6.1.1 or later.
- You must have existing z/OS application servers that are running in 31–bit mode.

About this task

To convert your 31–bit mode servers to 64–bit mode, you can run the updatezOS31bitTo64bit.ant script on the deployment manager profile.

1. Run the script to convert all of your application servers to 64–bit mode.

```
/WebSphere/ND/DeploymentManager/bin/ws_ant.sh -file
/WebSphere/ND/DeploymentManager/profileTemplates/xd_augment/actions/updatezOS31bitTo64bit.ant
-DWAS_HOME/WebSphere/ND/DeploymentManager -DprofilePath/WebSphere/ND/DeploymentManager/profiles/default
```

2. Synchronize the changes to all of the nodes. For more information about synchronizing nodes, see Synchronizing nodes with the wsadmin tool and Managing nodes.
3. Restart your application servers. For more information about starting servers, see Starting an application server.

Results

Your z/OS application servers are running in 64–bit mode.

What to do next

For more information about running application servers in 64–bit mode, see
Running servers in 64-bit mode.

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