

IBM PowerVM Workload Partitions Manager for AIX



Release Notes

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Note

Before using this information and the product it supports, read the information in “Notices,” on page 17.

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Chapter 1. Installation and Configuration Information

To use IBM® PowerVM™ Workload Partitions (WPAR) Manager for AIX®, you must install the following main components:

- WPAR Manager
Install the WPAR Manager software on a single AIX system that will be your management server.
- WPAR Agent
Install the WPAR Agent on every managed server or logical partition within your management environment.

Installing and configuring the WPAR Manager

You can install and configure the WPAR Manager on any IBM System p™ server that is running AIX 6.1 or later software and has a minimum of 1.5 GB of RAM.

Installing the WPAR Manager

To install the WPAR Manager, do the following:

1. Select a system to use for installing the WPAR Manager and mount the WPAR CD.
2. Install the WPAR Manager fileset by running the following command:

```
# installp -acXYgd <MOUNT_POINT>/installp/ppc wparmgt.mgr
```
3. If you choose to install and configure the optional DB2® database that is provided on the WPAR Manager CD, do the following:

Note: You can configure the WPAR Manager with the default Apache Derby database or the DB2 v9.5 database.

- a. To install the WPAR Manager DB2 database fileset, run the following command:

```
# installp -acXYgd <MOUNT_POINT>/installp/ppc wparmgt.db
```

- b. To install and configure the WPAR Manager database, run the following **DB2Install.sh** script:

```
# /opt/IBM/WPAR/manager/db/bin/DBInstall.sh -dbinstallerfile <MOUNT_POINT>\  
/db2-v9.5fp1_aix64_limited_use.tar.gz -dbpassword <db2wmgt_user_password>
```

where the default values are as follows: the DB2 user is db2wmgt, the DB2 home directory is **/home/db2wmgt**, and the DB2 port 50000.

Configuring the WPAR Manager

After you install the WPAR Manager, you must configure the database connection between the WPAR Manager and the database and define the WPAR Agent registration password.

Select one of the following supported modes to run the WPAR Manager configurator:

- Graphical mode
The graphical mode provides a graphical user interface.
- Console mode
The console mode provides a text-only user interface.
- Silent mode
The silent mode uses a property file that does not require user interaction.

Graphical mode

To configure the WPAR Manager by using the graphical mode, do the following:

1. Run the following command with the X11 DISPLAY variable set:

```
# /opt/IBM/WPAR/manager/bin/WPMConfig.sh
```

2. Enter information in the fields as you are prompted for it. The fields contain default values. If you use these default values, you will need to only provide a password for the WPAR Agent registration.

Console mode

To configure the WPAR Manager by using the console mode, do the following:

1. Run the following command:

```
# /opt/IBM/WPAR/manager/bin/WPMConfig.sh -i console
```

2. Enter information in the fields as you are prompted for it. The fields contain default values. If you use these default values, you will need to only provide a password for the WPAR Agent registration.

Silent mode

To configure the WPAR Manager by using the silent mode, do the following:

1. Save the original response file by running the following command:

```
# cp /opt/IBM/WPAR/manager/config/wpmInstall.properties\  
/opt/IBM/WPAR/manager/config/wpmInstall.properties.orig
```

2. Edit the **/opt/IBM/WPAR/manager/config/wpmInstall.properties** to match your environment. If you use the default installation, the following settings are required:

- **AM_REG_PASSWD**=<the password to be used for agent registration>
- **AM_REG_PASSWDV**=<verification of the password to be used for agent registration>

3. To complete the configuration, run the following command:

```
# /opt/IBM/WPAR/manager/bin/WPMConfig.sh -i silent -f/opt\  
/IBM/WPAR/manager/config/wpmInstall.properties
```

Installing and configuring the WPAR Agent

You can install and configure the WPAR Agent on any IBM System p server that is running AIX 6.1 or later software.

Installing the WPAR Agent

To install the WPAR Agent, do the following:

1. Mount the WPAR Manager CD on each managed server.
2. Install the WPAR Agent filesets by running the following command:

```
# installp -acqgYXd <MOUNT_POINT>/installp/ppc wparmgmt.agent
```

Configuring the WPAR Agent

After you install the WPAR Agent, you must configure it to register with the WPAR Manager and the Agent Manager. This step configures a secure transport between the WPAR Manager and the WPAR Agents, and allows a managed system running the WPAR Agent to be added to the WPAR Manager GUI. To configure the WPAR Agent, do the following:

1. If the WPAR Manager ports were not modified from the default values during the installation, run the following `configure-agent` script as root with the hostname of the WPAR Manager and the Agent Registration password provided in the WPAR Manager configuration.

```
# /opt/IBM/WPAR/agent/bin/configure-agent -amhost <wpar-manager.yourdomain.com>\  
-passwd <agent_registration_password>
```

2. Before you use the WPAR Agent, reboot the agent system by running the following command :

```
# shutdown -Fr
```

Using the WPAR Manager

Before you can use the WPAR Manager, JavaScript™ must be enabled in your browser.

After you install and configure the WPAR Manager, you can access it on the following Web site:

`http://<wpar-manager.yourdomain.com>:<public_port>/ibm/console`

The default WPAR Manager public port is 14080. To log in to the console, use the root user name and password for the WPAR Manager system.

Chapter 2. Upgrading the WPAR Manager

The following notes apply to upgrading the WPAR Manager:

Notes:

1. You are not required to run the WPMConfig.sh script as part of the upgrade from WPAR Manager 1.1 to 1.2. All previously configured settings are preserved during the upgrade.
2. You are not required to run the DBInstall.sh script as part of the upgrade from WPAR Manager 1.1 to 1.2. WPAR Manager 1.2 can continue to use the existing DB2 database.
3. Do not upgrade an existing **wparmgmt.db.db2** fileset from 1.1.1.0 to 1.2.0.0. The newer fileset is used with the DB2 v9.5 database, while the older fileset is used with the DB2 v9.1 database. There is not an automatic upgrade path for updating the WPAR Manager embedded DB2 database from v9.1 to v9.5.

To upgrade from WPAR Manager 1.1 to WPAR Manager 1.2, do the following:

1. Upgrade the WPAR Manager and Agent Manager filesets by running the following command:

```
# installp -acXYgd <MOUNT_POINT>/installp/ppc tivoli.tivguid\  
wparmgmt.cas.agentmgr wparmgmt.mgr
```

2. Verify that the WPAR Manager is accessible by logging in to the WPAR Manager 1.2 Web site:
http://<wpar-manager-hostname>:<public_port>/ibm/console
3. WPAR Agent 1.2 can be installed on AIX 6.1 with Technology Level 6100-02 or later systems. On earlier levels of AIX 6.1, WPAR Agent 1.1 is the recommended agent. To upgrade to WPAR Agent 1.2, run the following command on each managed system:

```
# installp -acXYgd <MOUNT_POINT>/installp/ppc mcr.rte tivoli.tivguid wparmgmt.agent
```

4. To complete the upgrade, restart the system where the WPAR Agent is installed . To restart the system, run the following command:

```
# shutdown -Fr
```

5. As part of this migration, the credentials from the existing WPAR Agent 1.1 will be migrated to the WPAR Agent 1.2, however the port used to communicate with the WPAR Agent will change. The default port will change from 8211 for the WPAR Agent 1.1 to 9510 for the WPAR Agent 1.2 . When the agent port changes, the managed system will go offline in the WPAR Manager UI.

To restore connectivity with the WPAR Agent, click the Discover button in the Managed Systems view of the WPAR Manager UI.

Chapter 3. Migrating the WPAR Manager database

WPAR Manager 1.2 provides support for the Apache Derby and DB2 databases. You can use the DBMigrate script to migrate all of the data from one database type to another.

The usage of the DBMigrate script is as follows:

```
Usage: DBMigrate -dbtype {derby|db2} [...]
       -dbtype Database Type (Required)
       -dbhost Database Hostname (DB2 only)
       -dbport Database Port (DB2 only)
       -dbuser Database Username (DB2 only)
       -dbpass Database Password (DB2 only)
       -dbname Database Name (DB2 only)
```

Migrating from Apache Derby to DB2

To migrate from Apache Derby to DB2, do the following:

1. Install and configure the WPAR Manager DB2 database by installing the **wparmgt.db.db2** fileset and then running the DBInstall.sh script as described in Installing the WPAR Manager.
2. Stop the WPAR Manager by running the following command:

```
# wparmgr stop
```

3. Run the following **DBMigrate** command with the settings for the DB2 database:

```
# /opt/IBM/WPAR/manager/bin/DBMigrate \  
-dbtype db2 \  
-dbhost <hostname> \  
-dbport <port (default: 50000)> \  
-dbuser <username (default: db2wmgmt)> \  
-dbpass <password> \  
-dbname <database name (default: WPARMGT)>
```

4. Start the WPAR Manager by running the following command:

```
# wparmgr start
```

Migrating from DB2 to Apache Derby

To migrate from DB2 to Apache Derby, do the following:

1. Stop the WPAR Manager by running the following command:

```
# wparmgr stop
```

2. Run the following **DBMigrate** command:

```
# /opt/IBM/WPAR/manager/bin/DBMigrate -dbtype derby
```

3. Start the WPAR Manager by running the following command:

```
# wparmgr start
```

Chapter 4. Additional information

Additional information about the WPAR Manager is available on the following AIX Information Center Web site:

<http://publib.boulder.ibm.com/infocenter/systems/scope/aix/index.jsp?topic=/com.ibm.aix.wpar1pp/wpar...>

Chapter 5. Known Issues

If you are using Olson time zones (for example, America/Chicago) on the WPAR Manager system, apply the latest fixes for AIX 6.1 to prevent incorrect date issues.

For AIX 6.1, apply the following APARs:

- IZ20674
- IZ09601

For AIX 6.1 with the 6100-01 Technology Level, apply the following APARs:

- IZ12765
- IZ22206

Chapter 6. Limitations and restrictions

This section lists the restrictions and limitations that apply to the WPAR Manager.

- The WPAR Manager v1.2 is an English-only release.
- The application WPARs that are created from the command-line cannot be relocated by using the Workload Partition Manager, and application WPARs that are created from the Workload Partition Manager cannot be relocated from the command-line. This limitation does not exist for system WPARs.
- The processes that are launched from inside a system WPAR by using the **clogin** command are not relocatable.
- A process that is running in an unlinked working directory cannot be relocated.
- A checkpoint will fail if processes or threads are stopped in the WPAR.
- The relocation of applications with memory regions that are created by using the **mmap** (MAP_SHARED) subroutine for an unlinked file is not supported.
- The relocation of applications with deleted POSIX shm maps is not supported.
- Applications that use the AIX pollset feature are not currently supported for mobility.
- The performance state of a WPAR group that uses automatic relocation is not affected by the fixed resource controls of the WPARs in the WPAR group.
- Policy-based relocation results are summarized in the following log file: **/opt/IBM/WPAR/manager/logs/policy.log**.
- The WPAR Manager v1.2 relies on and incorporates Lightweight Infrastructure (LWI) v7.1. For LWI v7.1 licensing information, refer to the Program-Unique Terms section for WPAR Manager.

Chapter 7. Accessibility

This section lists the accessibility issues that apply to the WPAR Manager. The latest accessibility information is available on the following WPAR Manager Web site: <https://www14.software.ibm.com/webapp/set2/sas/f/wpar/home.html>

- IBM Workload Partitions Manager™ for AIX has been tested with JAWS for Windows® 9.0.515.
- To navigate to the main content frame of the WPAR Manager application, you must list the frames using JAWS, and then select the Content frame from the list.
- Several of the user interface components that are used by the WPAR Manager application must be configured to work properly with screen readers. You can configure these components in the User Preferences page by selecting Configure WPAR Manager>User Preferences>Enable accessibility for the tables. If you do not require the accessibility screen reader support, do not select the Accessibility option.
- Improvements in focus have been made in this release of the WPAR Manager. When a page is launched, the focus goes to the first subtitle link that is displayed at the top of the portlet in the page. Messages (informational, warning, or error) that are displayed by the application have focus attached to the message ID that is displayed in the message dialog.
- When you use keyboard navigation to select an action from an Actions menu in Internet Explorer, use the Tab key to highlight the Actions menu, click Enter to expand the menu, then continue to click the Tab key until the action is selected. For Firefox, use the arrow keys to reach the action after the menu has been expanded.
- When you use keyboard navigation to select an action from the Select Action menu, do the following:
 1. Navigate to the Select Action menu.
 2. Use the **Alt+down arrow** keys to open the menu list.
 3. Use the up or down arrow keys to highlight a menu option.
 4. Press the Enter key to select the highlighted option.
- Because of a space limitation in the GUI, the page tabs that are displayed in the task bar at top of a content frame might have truncated titles after you select a page from a navigation link or launch another page. The full titles of the tabs can be voiced in JAWS by pressing the **Tab+Insert** keys in the JAWS browser.
- The chart data is not voiced by JAWS in the Welcome page and the WPAR and System performance metrics pages.
- Some data tables have missing summary attributes.
- JAWS incorrectly identifies several layout tables as data tables. These layout tables are listed as data tables when you list tables.
- When you activate filtering in tables, JAWS might not read the row that is used for activating or deactivating the table filters. In these cases, use the Tab key to navigate through each of the filters in the filter row.
- If you list frames after you open a popup dialog, an additional frame might be listed. Ignore this additional frame.
- When you use Internet Explorer 7, the focus in the column configuration popup dialog does not always go to the first component in the dialog. Use the **Shift+Tab** keys to tab to the first component.
- The File Chooser popup dialog that is launched by selecting the Browse button in the Restore Workload Partition page does not allow keyboard-only selection. You must Specify the path to the backup file on the page by entering the path in the appropriate text entry field.

Appendix. Notices

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