



BEA WebLogic Platform™

**7.0 Supported
Configurations: Novell
SUSE LINUX Enterprise
Server 8 on IBM
zSeries/S390**

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Product Components Supported on this Configuration

	WebLogic Server	WebLogic Workshop	WebLogic Integration	WebLogic Portal
Run-time	✓	✗	✗	✗
Design/Dev Tools*	✓	✗	✗	✗

* For design and development tools support, see the "Configuration Requirements" section below.

✓ Supported
✗ Not supported

This section provides the following information:

- [Configuration Requirements](#)
- [Known Issues](#)
- [Download and Installation Instructions](#)

Related Information

- For information about supported database configurations, Web servers, and browsers, plus support for interoperability tools and WebLogic Platform product support information, see [WebLogic Platform 7.0 Supported Configurations](#).
- For general information about Novell SUSE LINUX Enterprise Server for S/390, see Enterprise Server 8 for IBM Mainframes Web site at:

<http://www.novell.com/products/linuxenterpriseserver8/>

Configuration Requirements

Table 1-1 Requirements for WebLogic Server 7.0 SP5 on Novell SUSE LINUX Enterprise Server 8 on IBM zSeries/S390

Operating System Version and Patches	Novell SUSE LINUX Enterprise Server 8.0 SP2	
Chip Architecture and Minimum Processor Speed	IBM zSeries S/390 G5 or later models	
SDK	IBM SDK 1.3.1 Service Refresh 7	For download instructions, see “Downloading and Installing the IBM SDK” on page 1-3.
Design and Development Tools	Supports WebLogic Server development tools.	
RAM	512 MB required; 1 GB recommended	
Disk Space	See Disk Space Requirements .	
Performance Pack	Available	lib/linux/s390/libmuxer.so
Node Manager	Included	Native
BEA jDrivers for Oracle	None	

Known Issues

Issue	Workaround
<code>getXAConnection()</code> is not supported by the DB2 8.1 Fixpack 3 JDBC 2.0 driver on Linux for S/390. Therefore XA connection pools cannot be created with this driver.	None.

For information about other known issues with this release, see the *Release Notes* for WebLogic Server and WebLogic Express 7.0:

<http://e-docs.bea.com/wls/docs70/notes/index.html>

Download and Installation Instructions

This section provides special installation instructions for the IBM SDK, WebLogic Server 7.0 SP5, and a patch required for WebLogic Server 7.0 SP5 on Novell SUSE LINUX for IBM zSeries/S390.

See the following procedures:

- [Downloading and Installing the IBM SDK](#)
- [Downloading and Installing WebLogic Server 7.0 SP5](#)
- [Installing the WebLogic Server 7.0 SP5 Patch](#)

Downloading and Installing the IBM SDK

WebLogic Server 7.0 SP5 supports Novell SUSE LINUX 8.0 SP2 for IBM zSeries (S/390) with the IBM SDK 1.3.1 Service Refresh 7 (SR7). The developer kit in which the IBM SDK for this operating system is delivered is not bundled with WebLogic Server. Therefore, you must download and install it separately before installing WebLogic Server. To do so, complete the following procedure:

1. Go to the IBM download site:

<https://www6.software.ibm.com/dl/lxdk/lxdk-p>

A list of developer's kits is displayed.

2. Select:
 - Offering: IBM SDK for 31-bit zSeries (S/390)
 - Version: 1.3.1 SR7
3. When prompted, register and accept the license agreement.
4. Download and install the Developer Kit. As part of the Kit, the IBM SDK 1.3.1 SR7 is installed.

Downloading and Installing WebLogic Server 7.0 SP5

Complete the following procedure:

1. Go to the following BEA download site:
<http://commerce.bea.com/index.jsp>
2. Download the following:
 - BEA WebLogic Server 7.0 SP5 installer for Novell SUSE LINUX (SLES) 8 on IBM S/390 zSeries
 - Required patch for 7.0 SP5: `weblogic705_supplemental_zSeries.zip`

Note: The JAR file delivered in this package does not include 128-bit libraries. To obtain 128-bit libraries, contact BEA Customer Support.
3. Set up your environment as follows:
 - a. Set the `JAVA_HOME` environment variable to the directory in which the IBM SDK 1.3.1 SR7 is installed, and export `JAVA_HOME`. For example:

```
export JAVA_HOME=/opt/IBMJava2-s390-131
```
 - b. Add the `bin` directory of the newly installed SDK to the beginning of your `PATH` variable:

```
export PATH=$JAVA_HOME/bin:$PATH
```
4. Run the installer:

```
java -classpath installer_directory/pj_server705_generic.jar  
com.bea.installer.BEAInstallController
```

In this command line, replace *installer_directory* with the path of the directory in which you just downloaded the WebLogic Server 7.0 SP5 installer.

5. When prompted, follow the instructions to complete the installation of WebLogic Server 7.0 SP5.

Note: For detailed instructions, see *BEA WebLogic Server and WebLogic Express Installation Guide*.

Installing the WebLogic Server 7.0 SP5 Patch

1. Set the WL_HOME environment variable to the pathname for the weblogic700 directory in your 7.0 SP5 installation directory. For example:

```
export WL_HOME=/work/user/bea_zlinux/weblogic700
```

2. Copy the weblogic705_supplemental_zSeries.zip file to \$WL_HOME/server/lib.
3. Go to the \$WL_HOME/server/lib directory:

```
$ cd $WL_HOME/server/lib
```

4. Remove old plug-in objects from the \$WL_HOME/server/lib/linux/s390 library:

```
$ rm linux/s390/*
```

5. Extract the new shared zlinux70sp5 objects from the weblogic705_supplemental_zSeries.zip file to \$WL_HOME/server/lib:

```
$ jar -xvf weblogic705_supplemental_zSeries.zip
```

6. Make sure execute permission is provided to the new shared objects by executing the following command:

```
$ chmod 555 linux/s390/*
```


Novell SUSE LINUX Enterprise Server 8 on IBM zSeries/S390 with 7.0 SP4

Product Components Supported on this Configuration

	WebLogic Server	WebLogic Workshop	WebLogic Integration	WebLogic Portal
Run-time	✓	✗	✓	✓
Design/Dev Tools*	✓	✗	✗	✗

* For design and development tools support, see the “Configuration Requirements” section below.

✓ Supported
✗ Not supported

This section provides the following information:

- [Configuration Requirements](#)
- [Known Issues](#)
- [Download and Installation Instructions](#)

Related Information

- For information about supported database configurations, Web servers, and browsers, plus support for interoperability tools and WebLogic Platform product support information, see [WebLogic Platform 7.0 Supported Configurations](#).
- For general information about Novell SUSE LINUX Enterprise Server for S/390, see Enterprise Server 8 for IBM Mainframes Web site at:

<http://www.novell.com/products/linuxenterpriseserver8/>

Configuration Requirements

Table 2-1 Requirements for 7.0 SP4 on Novell SUSE LINUX Enterprise Server 8 on IBM zSeries/S390

Operating System Version and Patches	Novell SUSE LINUX Enterprise Server 8.0 SP2 for IBM zSeries (S/390) with Kernel 2.4.19 (dated 06/05/03 or higher)	
Chip Architecture and Minimum Processor Speed	IBM S/390 G5 or later models	
SDK	SDK 1.3.1 Service Refresh 6	For download instructions, see “Downloading and Installing the IBM SDK” on page 2-3.
Design and Development Tools	Supports WebLogic Server development tools. For more information about WebLogic Platform design and development tools support, see “Supported Configurations for Design and Development Tools in Version 7.0 SP4” in <i>Supported Configurations for WebLogic Platform 7.0</i> .	
RAM	512 MB required; 1 GB recommended	
Disk Space	For any components of WebLogic Platform or for the full WebLogic Platform product, see Disk Space Requirements .	
Performance Pack	Included	<code>lib/linux/s390/libmuxer.so</code>
Node Manager	Included	<code>lib/linux/s390/libNodeManager.so</code>
BEA jDrivers for Oracle	None	

Known Issues

Issue	Workaround
BEA WebLogic Server uses its own JSSE implementation to handle SSL communication. However, the implementation does not work properly if you use IBM's JSSE implementation as the Java extension.	Make sure that you remove <code>ibmjssse.jar</code> from the <code>jre/lib/ext</code> directory of the SDK installation directory from which WebLogic Server is run.

For more information about known issues with any components of this release, see the appropriate *Release Notes* document. For a complete list of *Release Notes* supporting WebLogic Platform 7.0, see:

<http://e-docs.bea.com/platform/docs70/interm/relnotes.html>

Download and Installation Instructions

This section provides special installation instructions for the IBM SDK, WebLogic Platform 7.0 SP4, and a patch required for 7.0 SP4 on Novell SUSE LINUX for IBM zSeries/S390. In addition, if you are planning to use WebLogic Portal 7.0 SP4, you must also modify a setting for your environment on Novell SUSE LINUX for IBM zSeries. See the following procedures:

- [Downloading and Installing the IBM SDK](#)
- [Downloading and Installing 7.0 SP4](#)
- [Installing the 7.0 SP4 Patch](#)
- [Modifying Environment Settings for WebLogic Portal on Novell SUSE LINUX for IBM zSeries](#)

Downloading and Installing the IBM SDK

WebLogic Platform 7.0 SP4 supports Novell SUSE LINUX 8.0 SP2 for IBM zSeries (S/390) with the IBM SDK 1.3.1 Service Refresh 6 (SR6). The developer kit in which the IBM SDK for this operating system is delivered is not bundled with WebLogic Platform. Therefore, you must download and install it separately before installing WebLogic Platform. To do so, complete the following procedure:

1. Go to <https://www6.software.ibm.com/dl/lxdk/lxdk-p>

A list of available developer kits is displayed.

2. Select “IBM SDK for 31-bit zSeries (S/390) . . . 1.3.1 SR6.”

3. Register and accept the license agreement.

The Downloads page for the IBM Developer Kit for Linux, Java 2 Technology Edition is displayed.

4. Follow the instructions provided on the download page to download and install the Developer Kit.

Downloading and Installing 7.0 SP4

Complete the following procedure:

1. Go to the following BEA download site:

<http://commerce.bea.com>

2. Download the following:

- 7.0 SP4 installer for Novell SUSE LINUX on IBM zSeries platforms
- Required patch for 7.0 SP4: `platform704_supplemental_zSeries.zip`

Note: The JAR file delivered in this package does not include 128-bit libraries. To obtain 128-bit libraries, contact BEA Customer Support.

- Special installation instructions (`special_install.html`)

3. Set up your environment as follows:

- a. Set the `JAVA_HOME` environment variable to the directory in which the IBM SDK 1.3.1 SR6 is installed, and export `JAVA_HOME`. For example:

```
export JAVA_HOME=/opt/IBMJava2-s390-131
```

- b. Add the `bin` directory of the newly installed SDK to the beginning of your `PATH` variable:

```
export PATH=$JAVA_HOME/bin:$PATH
```

4. Run the installer:

```
java -classpath installer_directory/pj_platform704_generic.jar  
com.bea.installer.BEAInstallController
```

In this command line, replace *installer_directory* with the path of the directory in which you just downloaded the 7.0 SP4 installer.

5. When prompted, follow the instructions to complete the installation of 7.0 SP4.

For more information about installation, see the appropriate document:

- For WebLogic Platform, see [Installing BEA WebLogic Platform](#)
- For WebLogic Server, see [BEA WebLogic Server and WebLogic Express Installation Guide](#)

Installing the 7.0 SP4 Patch

1. Set the WL_HOME environment variable to the pathname for the weblogic700 directory in your 7.0 SP4 installation directory. For example:

```
export WL_HOME=/work/user/bea_zlinux/weblogic700
```

2. Copy the platform704_supplemental_zSeries.zip file to \$WL_HOME/server/lib.

3. Go to the \$WL_HOME/server/lib directory:

```
$ cd $WL_HOME/server/lib
```

4. Remove old plug-in objects from the \$WL_HOME/server/lib/linux/s390 library:

```
$ rm linux/s390/*
```

5. Extract the CR130032_700sp4.jar file and the new shared objects from the platform704_supplemental_zSeries.zip file to \$WL_HOME/server/lib:

```
$ jar -xvf platform704_supplemental_zSeries.zip
```

6. In the \$WL_HOME/server/bin/setWLSenv.sh script, prepend the name of the CR130032_700sp4.jar file to the classpath. Replace:

```
CLASSPATH="${JAVA_HOME}/lib/tools.jar${CLASSPATHSEP}${WL_HOME}/server \
${CLASSPATHSEP}${WL_HOME}/server/lib/weblogic_sp.jar${CLASSPATHSEP} \
${WL_HOME}/server/lib/weblogic.jar${CLASSPATHSEP}${CLASSPATH}"
```

```
export CLASSPATH
```

with the following:

```
CLASSPATH="${JAVA_HOME}/lib/tools.jar${CLASSPATHSEP}${WL_HOME}/server \
${CLASSPATHSEP}${WL_HOME}/server/lib/CR130032_700sp4.jar${CLASSPATHSEP} \
${WL_HOME}/server/lib/weblogic_sp.jar${CLASSPATHSEP} \
${WL_HOME}/server/lib/weblogic.jar${CLASSPATHSEP}${CLASSPATH}"
```

```
export CLASSPATH
```

7. In the `$WL_HOME/server/bin/startWLS.sh` script, prepend the name of the `CR130032_700sp4.jar` file to the classpath. Replace:

```
CLASSPATH="${JAVA_HOME}/lib/tools.jar${CLASSPATHSEP}${WL_HOME}/server \
${CLASSPATHSEP}${WL_HOME}/server/lib/weblogic_sp.jar${CLASSPATHSEP} \
${WL_HOME}/server/lib/weblogic.jar${CLASSPATHSEP}${CLASSPATH}"
```

with the following:

```
CLASSPATH="${JAVA_HOME}/lib/tools.jar${CLASSPATHSEP}${WL_HOME}/server \
${CLASSPATHSEP}${WL_HOME}/server/lib/CR130032_700sp4.jar${CLASSPATHSEP} \
${WL_HOME}/server/lib/weblogic_sp.jar${CLASSPATHSEP} \
${WL_HOME}/server/lib/weblogic.jar${CLASSPATHSEP}${CLASSPATH}"
```

Modifying Environment Settings for WebLogic Portal on Novell SUSE LINUX for IBM zSeries

If you are running WebLogic Platform 7.0 SP4 on a Novell SUSE LINUX for IBM zSeries (S/390) configuration and you plan to use WebLogic Portal, you must now make one adjustment to your environment settings. To make this adjustment, you must edit the `set-environment.sh` file in your Weblogic Portal directory (`$WL_HOME/portal`). To do so, complete the following procedure:

1. Go to the `bin/unix` directory under your Weblogic Portal installation directory. For example:

```
$ cd /work/user/bea_zlinux/weblogic700/portal/bin/unix
```

2. In a text editor, open the `set-environment.sh` file.
3. Search for the string `linux/i686` and replace it with the `linux/`uname -m`` string. For example, suppose your search takes you to the following line:

```
BEA_OS_DIR_NAME=linux/i686
```

Change this line to:

```
BEA_OS_DIR_NAME=linux/`uname -m`
```

4. Save and close the file.