JBoss Enterprise Application Platform 4.3

JDK6 Compatibility Notes CP03

for Use with JBoss Enterprise Application Platform 4.3 CP03

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JBoss Enterprise Application Platform 4.3 JDK6 Compatibility Notes CP03
for Use with JBoss Enterprise Application Platform 4.3 CP03 Edition 1.0

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This book is about EAP compatibility with JDK6

Preface

1. Document Conventions

This manual uses several conventions to highlight certain words and phrases and draw attention to specific pieces of information.

In PDF and paper editions, this manual uses typefaces drawn from the *Liberation Fonts*[1] set. The Liberation Fonts set is also used in HTML editions if the set is installed on your system. If not, alternative but equivalent typefaces are displayed. Note: Red Hat Enterprise Linux 5 and later includes the Liberation Fonts set by default.

1.1. Typographic Conventions

Four typographic conventions are used to call attention to specific words and phrases. These conventions, and the circumstances they apply to, are as follows.

`Mono-spaced Bold`

Used to highlight system input, including shell commands, file names and paths. Also used to highlight key caps and key-combinations. For example:

> To see the contents of the file `my_next_bestselling_novel` in your current working directory, enter the `cat my_next_bestselling_novel` command at the shell prompt and press `Enter` to execute the command.

> A useful shortcut for the above command (and many others) is `Tab` completion. Type `cat my_` and then press the `Tab` key. Assuming there are no other files in the current directory which begin with 'my_', the rest of the file name will be entered on the command line for you.

> (If other file names begin with 'my_', pressing the `Tab` key expands the file name to the point the names differ. Press `Tab` again to see all the files that match. Type enough of the file name you want to include on the command line to distinguish the file you want from the others and press `Tab` again.)

The above includes a file name, a shell command and two key caps, all presented in Mono-spaced Bold and all distinguishable thanks to context.

Key-combinations can be distinguished from key caps by the hyphen connecting each part of a key-combination. For example:

> Press `Enter` to execute the command.

> Press `Ctrl`-`Alt`-`F1` to switch to the first virtual terminal. Press `Ctrl`-`Alt`-`F7` to return to your X-Windows session.

The first sentence highlights the particular key cap to press. The second highlights two sets of three key caps, each set pressed simultaneously.

If source code is discussed, class names, methods, functions, variable names and returned values mentioned within a paragraph will be presented as above, in `Mono-spaced Bold`. For example:

---

[1] https://fedorahosted.org/liberation-fonts/

File-related classes include **`filesystem`** for file systems, **`file`** for files, and **`dir`** for directories. Each class has its own associated set of permissions.

Proportional Bold

This denotes words or phrases encountered on a system, including application names; dialogue box text; labelled buttons; check-box and radio button labels; menu titles and sub-menu titles. For example:

Choose **System > Preferences > Mouse** from the main menu bar to launch **Mouse Preferences**. In the **Buttons** tab, click the **Left-handed mouse** check box and click **Close** to switch the primary mouse button from the left to the right (making the mouse suitable for use in the left hand).

To insert a special character into a **gedit** file, choose **Applications > Accessories > Character Map** from the main menu bar. Next, choose **Search > Find…** from the **Character Map** menu bar, type the name of the character in the **Search** field and click **Next**. The character you sought will be highlighted in the **Character Table**. Double-click this highlighted character to place it in the **Text to copy** field and then click the **Copy** button. Now switch back to your document and choose **Edit > Paste** from the **gedit** menu bar.

The above text includes application names; system-wide menu names and items; application-specific menu names; and buttons and text found within a GUI interface, all presented in Proportional Bold and all distinguishable by context.

Note the **>** shorthand used to indicate traversal through a menu and its sub-menus. This is to avoid the difficult-to-follow 'Select **Mouse** from the **Preferences** sub-menu in the **System** menu of the main menu bar' approach.

Mono-spaced Bold Italic or **_Proportional Bold Italic_**

Whether Mono-spaced Bold or Proportional Bold, the addition of Italics indicates replaceable or variable text. Italics denotes text you do not input literally or displayed text that changes depending on circumstance. For example:

To connect to a remote machine using ssh, type **`ssh `_`username@domain.name`_** at a shell prompt. If the remote machine is **`example.com`** and your username on that machine is john, type **`ssh john@example.com`**.

The **`mount -o remount `_`file-system`_** command remounts the named file system. For example, to remount the **`/home`** file system, the command is **`mount -o remount /home`**.

To see the version of a currently installed package, use the **`rpm -q `_`package`_** command. It will return a result as follows: **_`package-version-release`_**.

Note the words in bold italics above — username, domain.name, file-system, package, version and release. Each word is a placeholder, either for text you enter when issuing a command or for text displayed by the system.

Aside from standard usage for presenting the title of a work, italics denotes the first use of a new and important term. For example:

When the Apache HTTP Server accepts requests, it dispatches child processes or threads to handle them. This group of child processes or threads is known as a *server-pool*. Under Apache HTTP Server 2.0, the responsibility for creating and maintaining these server-pools has been abstracted to a group of modules called *Multi-Processing Modules* (*MPMs*). Unlike other modules, only one module from the MPM group can be loaded by the Apache HTTP Server.

1.2. Pull-quote Conventions

Two, commonly multi-line, data types are set off visually from the surrounding text.

Output sent to a terminal is set in `Mono-spaced Roman` and presented thus:

```
books         Desktop   documentation  drafts  mss    photos   stuff  svn
books_tests  Desktop1  downloads       images  notes  scripts  svgs
```

Source-code listings are also set in `Mono-spaced Roman` but are presented and highlighted as follows:

```java
package org.jboss.book.jca.ex1;

import javax.naming.InitialContext;

public class ExClient
{
   public static void main(String args[])
       throws Exception
   {
      InitialContext iniCtx = new InitialContext();
      Object         ref    = iniCtx.lookup("EchoBean");
      EchoHome       home   = (EchoHome) ref;
      Echo           echo   = home.create();

      System.out.println("Created Echo");

      System.out.println("Echo.echo('Hello') = " + echo.echo("Hello"));
   }

}
```

1.3. Notes and Warnings

Finally, we use three distinct visual styles to highlight certain information nuggets.

Note

A note is useful bit of information: a tip or shortcut or an alternative approach to the task at hand. Ignoring a note should have no negative consequences, but you might miss out on a trick that makes your life easier.

Important

The Important information box highlights details that are easily missed: such as configuration changes that only apply to the current session, or services that need restarting before an update will apply. Ignoring important information won't cause data loss but may cause irritation and frustration.

Warning

A Warning highlights vital information that must not be ignored. Ignoring warnings will most likely cause data loss.

2. We Need Feedback!

If you find a typographical error in this manual, or if you have thought of a way to make this manual better, we would love to hear from you! Please submit a report in Bugzilla: *http://bugzilla.redhat.com/bugzilla/* against the product **Documentation.**

When submitting a bug report, be sure to mention the manual's identifier: *JDK6_Compatibility_Notes*

If you have a suggestion for improving the documentation, try to be as specific as possible when describing it. If you have found an error, please include the section number and some of the surrounding text so we can find it easily.

Running JBoss Enterprise Application Platform 4.3 with JavaSE 6

We have successfully certified JBoss Enterprise Application Platform 4.3, Cumulative Patch release 01 and above to run on the following combinations:

- Java version: Sun JDK 1.6, Update 5

  Platforms: RHEL-4.5 x86, x86_64 and RHEL-5.2 x86, x86_64

We have successfully certified JBoss Enterprise Application Platform 4.3, Cumulative Patch release 02 and above to run on the following combinations:

- Java version: Sun JDK 1.6, Update 7

  Platforms: Solaris 9 SPARC, Solaris 10 SPARC, Solaris 10 x86, Windows 2003 x86, x86_64

- Java version: JRockit 1.6, Update 5

  Platforms: RHEL-4.5 x86, x86_64 and RHEL-5.2 x86, x86_64

- Java version: HP JDK 1.6

  Platform: HP UX RISC

Setup Required:
- JavaSE 6 includes includes support for JAX-WS, Version 2.1. Before starting your server, you need replace the APIs included in JDK 6 with the JBossWS jars by simply copying the following jars to ${JBOSS_HOME}/lib/endorsed from ${JBOSS_HOME}/server/production/lib:

  - `jboss-jaxrpc.jar`

  - `jboss-jaxws.jar`

  - `jboss-saaj.jar`

- In order to run testng tests in Jboss Developer Studio on EAP4.3 with JDK6 the user must add "-Dsun.lang.ClassLoader.allowArraySyntax=true" to the VM arguments for the testng runner/debugger

1.1. Known Issues

The issues listed below with hibernate are to be fixed in the third cumulative patch release of EAP 4.3
- JBPAPP-916[1]: Unimplemented methods in Hibernate for JDK 6 interfaces. NoSuchMethodError occurs when trying to use these methods with JDK 6.

- JBPAPP-906[2]: Bad usage of ClassLoader.loadClass() for Java6 in SerializationHelper $CustomObjectInputStream - deserialization bottleneck for arrays.

1.2. References

Other JavaSE 6 reference documentation:

- *Java SE 6 Release Notes - Compatibility*[3]:http://java.sun.com/javase/6/webnotes/compatibility.html

- *JDK 6 Adoption Guide*[4]:http://java.sun.com/javase/6/webnotes/adoption/adoptionguide.html

Appendix A. Revision History

Revision History

Revision 1.0	10th of October 2008	IsaacRooskov *irooskov@redhat.com*

Removed a fixed common issue and updated the certified platform information. Revision was undertaken reguarding JBPAPP-1272