

# Configuration Guide

## Configuring JBoss Application Server 4.x and 5.x to Use Nondefault Ports

This document describes how to change an instance of the JBoss application server that runs SAS Web applications so that it uses nondefault ports. Changing the port for JBoss can be necessary in order to avoid port conflicts with other applications, including another instance of JBoss. If you want to run JBoss on nondefault ports without running a second instance of JBoss on the server, then you simply specify the ports that you want to use when you run the SAS<sup>®</sup> Deployment Wizard. In this case, you do not need to read this document.

However, if you want to run an additional instance of JBoss on the server, you need to read this document and then specify the nondefault ports when you run the SAS Deployment Wizard. Instructions in this document follow a best practice that JBoss identifies in its article [Configuring Multiple JBoss Instances On One Machine](#) to increment port numbers in steps of 100 to create the following groups of well-known alternative ports.

Protocol port	Default Setting (First JBoss Instance)	ports-01 Setting (Second JBoss Instance)	ports-02 Setting (Third JBoss Instance)
HTTP port	8080	8180	8280
HTTPS port	8443	8543	8643
RMI port	1099	1199	1299

When you run SAS Deployment Wizard, the **Web Application Server: Managed Server and Ports** page prompts you for port numbers. Provide a set of these alternative ports on that page. After software installation and configuration, follow the instructions in this document.

Examples throughout this document show the `ports-01` group of ports.

**Note:** You cannot run a second instance of JBoss with SAS Web applications on the same machine without configuring a cluster. This document does not discuss or describe how to configure a JBoss cluster that runs SAS Web applications.

### Prerequisites

Before using the following procedure, your site must meet these prerequisites:

- You have an unzipped (but not running) default installation of JBoss.
- You have run the SAS Deployment Wizard and accepted the automatic deployment option for SAS Web applications.
- You are using a set of well-known alternative ports from the previous table.

### Configuration for JBoss Application Server 4.x

Follow these steps to change SASServer1 so that it runs on port 8180, which is defined and included in the second set of HTTP ports for JBoss 4.x:

1. In `JBOSS_HOME\server\SASServer1\jboss.port.bindings.xml`, make the following changes:

- a. Replace the `SASServer1` definition with `ports-default`:

```
<!-- ***** -->
<!-- * SASServer1 * -->
<!-- ***** -->
<server name="ports-default">
```

- b. Locate and replace the `ports-01` definition with `SASServer1`:

```
<!-- ***** -->
<!-- * ports-01 * -->
<!-- ***** -->
<server name="SASServer1">
```

2. In the `JBOSS_HOME\server\SASServer1` directory, change the value of the following Java option to `8180`:

```
-Dsas.auto.publish.port=8180
```

**Note:** For UNIX operating environments, make the change to Java option `-Dsas.auto.publish.port` in `SASServer1.sh`. In addition, change the value of the RMI port number for the shutdown command. Based on the default RMI setting, the correct value to use in this case is `1199`:

```
stop) # add args for username/password as in "SASServer1.sh stop -u
username -p password" JAVA_OPTS="-d64 -Xms512M -Xmx512M" "/.../jboss-
4.2.0.GA/bin/shutdown.sh" -s localhost:1199 $* -S ;;
```

## Configuration for JBoss Application Server 5.x

Follow these steps to change `SASServer1` so that it runs on port `8180`, which is defined and included in the second set of HTTP ports for JBoss 5.x:

1. In `JBOSS_HOME\server\SASServer1\conf\bindingservice.beans\META-INF\bindings-jboss-beans.xml`, make the following changes:

- a. Delete or comment out the following line:

```
<inject bean="SASServer1Bindings"/>
```

### Example

```
<!--<inject bean="SASServer1Bindings"/>-->
```

- b. Locate the line `<inject bean="Ports01Bindings"/>` and change it, as follows:

```
<inject bean="SASServer1Bindings"/>
```

- c. Change `<parameter>0</parameter>` to a value of `100`, as shown in the following example:

```
<bean class="org.jboss.services.binding.impl.ServiceBindingSet "
name="SASServer1Bindings">
```

*(code continued)*

```

        <constructor>
            <parameter>SASServer1</parameter>
            <parameter>${jboss.bind.address}</parameter>
            <parameter>100</parameter>
            <parameter>
                <null/>
            </parameter>
        </constructor>
    </bean>

```

2. In `JBOSS_HOME\server\SASServer1\wrapper.conf`, change the value of the following Java options to **8180**, as follows:

```

-Dsas.auto.publish.port=8180
-Dsas.scs.port=8180

```

**Note:** For UNIX operating environments, make the changes to the Java options `-Dsas.auto.publish.port` and `-Dsas.scs.port` in `SASServer1.sh`. In addition, change the value of the RMI port number for the `shutdown` command. Based on the default RMI setting, the correct value to use in this case is **1199**:

```

stop) # add args for username/password as in "SASServer1.sh stop -u
username -p password" JAVA_OPTS="-d64 -Xms512M -Xmx512M" "/.../jboss-
4.2.0.GA/bin/shutdown.sh" -s localhost:1199 $* -S ;;

```

3. Delete the `JBOSS_HOME\server\SASServer1\tmp` and `JBOSS_HOME\server\SASServer1\work` directories before you restart the server.

## Recommended Reading

Ross, Elias, 2004. "Configuring Multiple JBoss Instances On One Machine." Available at [www.jboss.org/community/docs/DOC-9384](http://www.jboss.org/community/docs/DOC-9384). Accessed in December, 2008.

*SAS and all other SAS Institute product or service names are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries. Other brand and product names are registered trademarks or trademarks of their respective companies.*

® indicates USA registration.

Copyright © 2012 SAS Institute Inc., Cary, NC, USA. All rights reserved.