

Instruction Sheet

Feb 4, 2005

Installation and configuration of Macromedia JRun 4 on the CSE Solaris systems

MAKE SURE YOU REPLACE “cseXXX” IN ALL PATHS MENTIONED HERE BY THE RELEVANT DIRECTORY NAME FOR YOU (cse487 / cse587 / cse700 / cse799). ALSO, <username> MUST BE REPLACED BY YOUR ACTUAL USER ID.

Installation

1. Download into your project space on yeager/pollux server the packages:
 - **JRun 4 Developer Edition** (English | Solaris) from <http://www.macromedia.com/software/jrun/trial/>
You will need to register yourself with Macromedia before downloading. To save you that trouble I have the installer up at
`/projects/Spring_2004/cse487/mhvora/public/jrun4/jrun-40-solaris-en.bin`
 - **JRun 4 Updater 4** for Unix (Solaris) from http://www.macromedia.com/go/jrun_updater
This file is up at
`/projects/Spring_2004/cse487/mhvora/public/jrun4/jrun4-unix-en-updater.bin`
2. Edit the `.cshrc` file in your home directory. Add the following lines:
`setenv PROJECT_SPACE /projects/Spring_2005/cseXXX/<username>`
`setenv JRUN $PROJECT_SPACE/jrun4`

If you do not have the `JAVA_HOME` environment variable already in your `.cshrc` file, add the following line:
`setenv JAVA_HOME /usr/j2se`

Make sure the following two locations are in your `PATH` variable: `$JAVA_HOME/bin` and `$JRUN/bin`. Look up online on how to do this. If you can't figure it out, let me know.
3. Save the `.cshrc` file and do `'source .cshrc'` at the command prompt. Now your path variables are updated with JRun and Java directory details.
4. Set execute permission for the JRun installation packages, if you downloaded them from Macromedia. If you copied it from my directory then you can skip this step.
`chmod 700 <filename>`
5. Run the JRun installation script using the following command:
`./jrun-40-solaris-en.bin`
6. Installation scripts starts. Press Enter to view each page of the license agreement and enter `Y` to accept the agreement at the prompt.

7. Enter zero (for the Developer Version) when prompted for JRun product serial number. (A serial number is not required to install the JRun Developer Version)
8. JRun prompts you to choose an install folder. Enter the absolute path of your JRUN directory as: `/projects/Spring_2005/cseXXX/<username>/jrun4`
9. JRun prompts you to choose the product features to install. Select the **Complete** feature set.
10. Enter a user name and password for the JRun Management Console. (*Note:* You would need these to log in to the JMC. Try not to keep a confidential password here)
11. JRun prompts you to choose a Java Virtual Machine (JVM) version 1.3.0 or later giving a default choice. Enter the following JVM at the prompt:
`/usr/j2se/bin/java`
12. Review the Pre-Installation Summary. Verify that the information is acceptable, and press Enter. The JRun installer creates the appropriate directories and extracts the system files. The installation completes and the port numbers for the servers are listed on the screen. These port numbers have to be changed. (Covered in the Configuration section)
13. Run the JRun 4 Updater 4 installation script using the following command:
`./jrun4-unix-en-updater.bin`
14. Follow the procedure as described in the previous steps and enter the installation directory details for the updater to install the service pack.
(`/projects/Spring_2005/cseXXX/<username>/jrun4`)

Configuration

1. Web Port configuration: You would be choosing unique port numbers for your servers so that they would not compete for ports with others' servers running on same CSE machines.
 - Go to `$JRUN/servers/admin/SERVER-INF` directory. Edit `jrun.xml`.
 - Search for port number '8000'. It would typically be listed as:

```
<service class="jrun.servlet.http.WebService" name="WebService">
<attribute name="port">8000</attribute>
<attribute name="interface">*</attribute>
</service>
```
 - Choose a 5-digit port number **not greater than 65535** (*Hint:* last five digits of your person number would give you a unique port number) and replace 8000 with your port number (say `port="12345"`). Save and close the file. Remember admin server's web port for starting JMC.

- Similarly, choose unique port numbers for default (replacing 8100) and samples servers (replacing 8200) in `jrun.xml` files located in `$_JRUN/servers/default/SERVER-INF`, `$_JRUN/servers/samples/SERVER-INF` directories respectively. Save and close the files when done. (Choose three different port numbers for the three servers)
2. JNDI Port Configuration:
- Go to `$_JRUN/servers/admin/SERVER-INF` directory. Edit `jndi.properties`
 - Search for JNDI port number '2910'. It would typically be listed as:
`java.naming.provider.url=localhost:2910`
 - Choose a 5-digit unique port number not greater than 65535 (different from all the ports you had chosen in previous step) and replace 2910 with your port number. Save and close the file.
 - Similarly, choose unique port numbers for default (replacing 2908) and samples servers (replacing 2918) in `jndi.properties` files located in `$_JRUN/servers/default/SERVER-INF`, `$_JRUN/servers/samples/SERVER-INF` directories respectively. Save and close the files when done. (Choose three different JNDI port numbers for the three servers)

Verification:

1. Start your JRun admin server as follows:
`jrun -start admin &`
(Refer to the JRun Documentation at `$_JRUN/docs` directory for more options to start the `jrun` servers). Wait for the admin server to come up. A message saying "Server admin ready (startup time: xx seconds)" would be displayed.
2. Open a web browser and go to "`http://<machine>.cse.buffalo.edu:XXXXX`" (Replace 'XXXXX' with your port number and '<machine>' with the machine name (pollux or yeager) on which your JRun server is running, if different).
3. The JMC login page would be displayed. To login, enter your JMC username and password selected during JRun 4 installation.
4. Go to admin > Settings > Version link. JRun Version Information is displayed. Check if the **Build Number** is **84683**. If yes, then JRun4 with Updater 2 has been successfully installed.
5. Start the Samples server from the JMC. Once server is up open the address: "`http://machine.cse.buffalo.edu:23456`" where machine is pollux/yeager and 23456 is the web port of your samples server. Try running the sample applications to verify if the JRun installation is successful.
6. Shutdown the JRun servers as follows:

```
jrun -stop admin
```

7. If the verification works fine, then you are all done with the installation.