
JRE Upgrade for Sybase® Avaki® EII 6.2, 7.0, and 7.1 (Data Federation)

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Note Sybase® is changing the name of its EII offering from *Avaki* to *Data Federation*. In some releases, both names appear in the user interfaces and in the documentation, but they refer to the same product.

About the JRE upgrade

Sybase recommends an upgrade to version 1.4.2_xx of the Java Runtime Environment (JRE) used by Sybase Avaki® EII/Data Federation software. The specific JRE version you upgrade to depends on the platform on which you are running Avaki/Data Federation; see the table beginning on [page 4](#) for details.

This upgrade is recommended on all platforms except as noted in the table below for the JSSE denial of service vulnerability.

Subject to the platform exceptions noted in the table, this upgrade is recommended for all servers (including grid domain controllers), command line clients, and instances of Avaki Studio or Workspace Data Federation.

Why to upgrade

The JRE upgrade addresses several issues, including the following:

| Issue | Platforms with a JRE available to address the issue | Description |
|--------------------------------|---|---|
| Change in Daylight Saving Time | All | <p>In 2007, the algorithm governing the dates on which Daylight Saving Time begins and ends in the US and Canada changed. Formerly DST began on the second Sunday in April and ended the last Sunday in October; now DST begins on the second Sunday in March and ends the first Sunday in November. Applications running with older JREs might report incorrect time during the periods added to DST (in 2007, March 11 through April 2 and October 29 through November 4).</p> <p>A JRE that fixes this issue is included in Avaki 7.1/Data Integration Suite 1.1 Data Federation and subsequent releases.</p> <p>For more on this issue, see http://java.sun.com/developer/technicalArticles/Intl/USDST/</p> |
| RSA/SSL security vulnerability | All | <p>JRE and JSSE verify some incorrect RSA signatures. This allows some applets or applications that are signed by forged signing certificates and Web sites with forged Web server certificates to be verified as valid.</p> <p>A JRE that fixes this issue is included in Avaki 7.1/Data Integration Suite 1.1 Data Federation and subsequent releases.</p> <p>For more on this issue, see http://sunsolve.sun.com/search/document.do?asset-key=1-26-102686-1</p> |

| Issue | Platforms with a JRE available to address the issue | Description |
|--------------------------------------|---|--|
| JSSE denial of service vulnerability | Windows, Solaris, Linux | <p>JSSE does not correctly process SSL/TLS handshake requests. On servers that listen for SSL/TLS connections using JSSE, this vulnerability can be exploited to create a denial of service (DoS) condition.</p> <p>For platforms on which such a JRE is available, a JRE that fixes this issue will be included in Data Integration Suite 1.2 Data Federation.</p> <p>Upgrade recommendations:</p> <p>Windows, Solaris, and Linux: Sybase recommends upgrading JREs now, rather than waiting for Data Integration Suite 1.2.</p> <p>IBM AIX: IBM has announced that JRE 1.4.2 SR10 for AIX addresses this vulnerability, but Sybase has not tested Data Federation with this new JRE and cannot recommend upgrading yet.</p> <p>HP-UX PA-RISC and Itanium: As of September 2007, no JRE addressing this vulnerability is available.</p> <p>For more on this issue, see http://sunsolve.sun.com/search/document.do?asset-key=1-26-102997-1&searchclause=102997</p> |

Upgrading JREs

Follow these steps to upgrade the JRE in each grid server, grid domain controller, share server, proxy server, data grid access server, command line client, and instance of Avaki Studio or Workspace Data Federation (WSDF) installed as Avaki 6.2, Avaki 7.0, Data Integration Suite 1.0 Data Federation, Avaki 7.1, Data Integration Suite 1.1 Data Federation, or Workspace 1.6.

Step 1 Shut down the Avaki server, command client, or Studio/WSDF instance:

| | |
|---|--|
| Avaki/Data Federation servers | See the 7.0 or 6.2 version of the <i>Sybase Avaki EII Administration Guide</i> for server shutdown instructions. |
| Command clients | avaki client --disconnect |
| Avaki Studio/ Data Federation Studio | File > Exit |

Step 2 Rename the jre subdirectory in your Avaki or Data Federation installation directory:

Original name: <Avaki-DF-install-dir>/jre
New name: <Avaki-DF-install-dir>/jre.old

Step 3 Download and extract the appropriate JRE for your platform (or SDK, for Windows). This table lists the versions Sybase has tested. You may want to download later versions if they are available. The table also includes general instructions and instructions related to Avaki/Data Federation; some of the download sites provide installation instructions which you should also follow.

| Platform | Instructions |
|--------------------------------|---|
| Windows (i586) SDK 1.4.2_15 | <p>Step 1 Go to http://java.sun.com/j2se/1.4.2/download.html.</p> <p>Step 2 Click Download J2SE SDK.</p> <p>Step 3 On the download page, accept the license agreement.</p> <p>Step 4 Select j2sdk-1_4_2_15-windows-i586-p.exe and click Download selected with Sun Download Manager.</p> <p>Step 5 From the downloaded SDK, copy the JRE (and only the JRE) into your Avaki or Data Federation install directory as <Avaki-DF-install-dir>/jre.</p> |

| Platform | Instructions |
|------------------------------|--|
| Solaris JRE 1.4.2_15 | <p>Step 1 Go to http://java.sun.com/j2se/1.4.2/download.html.</p> <p>Step 2 Click Download J2SE JRE.</p> <p>Step 3 On the download page, accept the license agreement.</p> <p>Step 4 Select <i>both</i> of the following:</p> <ul style="list-style-type: none"> • j2re-1_4_2_15-solaris-sparc.sh for 32bit • j2re-1_4_2_15-solaris-sparcv9.sh for 64bit <p>Step 5 Click Download selected with Sun Download Manager.</p> <p>Step 6 Copy the extracted 32-bit JRE into your Avaki or Data Federation install directory as <Avaki-DF-install-dir>/jre.</p> <p>Step 7 Copy the extracted 64-bit JRE to the same place, <Avaki-DF-install-dir>/jre, on top of the 32-bit JRE.</p> |
| Linux (i586) JRE 1.4.2_15 | <p>Step 1 Go to http://java.sun.com/j2se/1.4.2/download.html.</p> <p>Step 2 Click Download J2SE JRE.</p> <p>Step 3 On the download page, accept the license agreement.</p> <p>Step 4 Select j2re-1_4_2_15-linux-i586.bin and click Download selected with Sun Download Manager.</p> <p>Step 5 Copy the extracted JRE into your Avaki or Data Federation install directory as <Avaki-DF-install-dir>/jre.</p> |
| AIX JRE 1.4.2 (SR7) | <p>Step 1 Go to http://www-128.ibm.com/developerworks/java/jdk/aix/service.html.</p> <p>Step 2 In the top row of the table, click Java 1.4.2 64-bit.</p> <p>Step 3 Sign in using your IBM Registration ID.</p> <p>Step 4 Select and download jre14_64.tar.gz.</p> <p>Step 5 Copy the extracted JRE into your Avaki or Data Federation install directory as <Avaki-DF-install-dir>/jre.</p> <p>Step 6 Before restarting the Avaki server or command client, change the operating system's process data size limit to unlimited. The C shell (csh) and its derivatives (such as tcsh) use the limit command to modify limits. The Bourne shell (sh) and its derivatives (such as ksh and bash) use the ulimit command. To display current settings, use limit or ulimit -a. To set the data size to unlimited, use limit datasize unlimited or ulimit -d unlimited.</p> |

| Platform | Instructions |
|-------------------------------|---|
| HP-UX PA-RISC RTE 1.4.2.12 | <p>Step 1 Go to http://www.hp.com/products1/unix/java/java2/sdkrte14/index.html.</p> <p>Step 2 Under PA-RISC, click RTE 1.4.2.12.</p> <p>Step 3 Accept the license terms, fill in the required information, and click Finish to start the download.</p> <p>Step 4 Copy the extracted JRE into your Avaki or Data Federation install directory as <code><Avaki-DF-install-dir>/jre</code>.</p> |
| HP-UX Itanium RTE 1.4.2.12 | <p>Step 1 Go to http://www.hp.com/products1/unix/java/java2/sdkrte14/index.html.</p> <p>Step 2 Under Itanium, click RTE 1.4.2.12.</p> <p>Step 3 Accept the license terms, fill in the required information, and click Finish to start the download.</p> <p>Step 4 Copy the extracted JRE into your Avaki or Data Federation install directory as <code><Avaki-DF-install-dir>/jre</code>.</p> |

Step 4 Restart the server, command client, or Studio/WSDF instance. If it starts without problems and you can log in, you have successfully completed the JRE upgrade.

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