Using the Java CAPS 6 Installation CLI

Sun microsystems

Contents

Using the Java CAPS 6 Installation CLI

This topic provides instructions that lead you through the procedures (one of which is optional) to successfully install the Java™ Composite Application Platform Suite (Java CAPS) using a command-line interface (CLI). This interface allows you to interact with software or an operating system using a terminal, remote shell, or command prompt.

Prior to attempting an installation, read *Planning for Java CAPS Installation*. It provides pertinent information such as supported platforms, operating system limitations, and parameter definitions. If you have any questions or problems, see the Java CAPS web site at `http://goldstar.stc.com/support`.

To access all the Java CAPS documentation in HTML format on the Sun Developer Network (SDN) web site, go to `http://developers.sun.com/docs/javacaps/` or click the HELP tab in Enterprise Manager.

The HELP tab in the Java CAPS Uploader opens the "Installing Java CAPS Components Using the Java CAPS Uploader" topic.

What You Need to Know

This topic contains conceptual information about the installation.

- "Overview of CLI Installations" on page 6

What You Need to Do

These topics contain the procedures for installing a Java Development Kit (JDK) and Java CAPS.

- "Installing the JDK Software and Setting `JAVA_HOME`" on page 8
- "Creating the Configuration Properties File for Silent Installations" on page 10
- "Installing Java CAPS Silently Using CLI" on page 12
- "To Install Java CAPS Components Using the Command Line Console" on page 14
- "Starting and Stopping Java CAPS" on page 19

Overview of CLI Installations

Before beginning the installation, read *Planning for Java CAPS Installation*, which contains information that is necessary for you to complete a successful install of Java CAPS such as supported platforms, operating system limitations, and parameter definitions. You can use a command–line installation script on any of the supported operating systems by first setting the configuration properties file and then invoking the installation script. The command–line installation installs any or all of the Suite components:

- Sun Java System Application Server 9.1 (SJSAS)
- NetBeans™ IDE 6.1 ML

Note – IDE is an acronym for an integrated development environment. It consists of a number of components such as a compiler, source code editor, build tools, debugger, browser, object inspector, and class hierarchy diagram. The IDE can be used when performing object-oriented software development. The integrated tools can also be used to build a graphical user interface (GUI).

- Java CAPS Repository v. 6
- Java CAPS Enterprise Manager v. 6
- Sun Java JMS IQ™ Manager v. 6
- UDDI Server

Note – Businesses use Universal Description, Discovery, and Integration (UDDI), an XML-based registry, to list themselves on the Internet. Similar in function to a telephone book, it enables companies to engage in e-commerce on the web.

- Java CAPS core products
  - Sun Enterprise Service Bus
  - Sun Business Process Manager
  - Sun Composite Page Designer
  - Sun Data Integrator
- Additional Java CAPS components
  - Sun Adapter for Batch/FTP
  - Sun Adapter for DB2 Connect
  - Sun Adapter for e-Mail
  - Sun Adapter for File
  - Sun Adapter for HTTPS
  - Sun Adapter for JDBC/ODBC
  - Sun Adapter for Oracle

- Sun Adapter for SQL Server
- Sun Adapter for Sybase

Note – Certain adapters require additional installation procedures. For details, see *Installing Third-Party JAR Files*.

- Java Business Integration (JBI) components

Java CAPS Release 6 does not support:

- Spaces in the installation directory path
- Command-line installations on Macintosh systems

You can specify three types of installations with the command-line syntax:

```
JavaCAPS.bin [-f filename] [-i {silent | gui | console} ] [-help]
```

- silent – Script installation with set options described in this guide
- gui – Interactive installation with graphical interface
- console – Graphical text mode installation; documentation to come

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Note – If you run the command-line installation executable file without setting any options in the configuration properties file, you will start the Java CAPS GUI Installer.

You do not have to install all components at the same time. You can install additional Java CAPS products and components at any time after completing the initial installation by setting the configuration properties file and then invoking the command–line installation script to install specific items.

The installation process also installs Sun Uninstaller software.

Note – You must have the JDK software installed and JAVA_HOME set prior to installing Java CAPS; otherwise, the Installer will halt the installation. See "Installing the JDK Software and Setting JAVA_HOME" on page 8.

What You Need to Do

These links take you to the procedures that lead you through installing Java CAPS.

- "Installing the JDK Software and Setting JAVA_HOME" on page 8
- "Creating the Configuration Properties File for Silent Installations" on page 10
- "Installing Java CAPS Silently Using CLI" on page 12
- "Installing Java CAPS Using the CLI Console" on page 14

Installing the JDK Software and Setting JAVA_HOME

If you do not already havethe JDK software installed or if JAVA_HOME is not set, the Java CAPS installation will not be successful. The following tasks provide the information you need to install JDK software and set JAVA_HOME on UNIX or Windows systems.

The following list provides the Java CAPS JDK requirements by platform.

Solaris

JDK5: At least release 1.5.0_14

JDK6: At least release 1.6.0_03

IBM AIX

JDK5: The latest 1.5 release supported by IBM AIX

Linux (Red Hat and SUSE)

JDK5: At least release 1.5.0_14

JDK6: At least release 1.6.0_03

Macintosh

JDK5: The latest 1.5 release supported by Apple

Microsoft Windows

JDK5: At least release 1.5.0_14

JDK6: At least release 1.6.0_03

Caution – It is not recommended to user JDK 1.6.0_13 or 1.6.0_14 with Java CAPS due to issues with several of the wizards used to develop applications. In addition, the installation fails on Windows when using JDK 1.6.0_13 or 1.6.0_14. The Java CAPS Installer does not support JDK release 1.6.0_04 in the 64–bit version on Solaris SPARC or AMD 64–bit environments. The installer also does not support JDK 1.6.0 or later on AIX 5.3.

▼ To Install the JDK Software and Set JAVA_HOME on a UNIX System

1   Install the JDK software.

   a.   Go to http://java.sun.com/javase/downloads/index.jsp**.**

   b.   Select the appropriate JDK software version and click Download.
     The JDK software is installed on your computer, for example, /usr/jdk/jdk1.6.0_02. You can change this location.

2   Set JAVA_HOME.

   ■   **Korn and bash shells:**

export JAVA_HOME=*jdk-install-dir*

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

- **Bourne shell:**

  JAVA_HOME=*jdk-install-dir*

  export JAVA_HOME

  PATH=$JAVA_HOME**/bin:$PATH**

  export PATH

- **C shell:**

  setenv JAVA_HOME *jdk-install-dir*

  setenv PATH $JAVA_HOME**/bin:$PATH**

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

3 **Change the permissions to enable you to run the Java CAPS Installer.**
   chmod 755 JavaCAPS.bin

▼ To Install the JDK Software and Set JAVA_HOME **on a Windows System**

1 **Install the JDK software.**

   a. **Go to** http://java.sun.com/javase/downloads/index.jsp**.**

   b. **Select the appropriate JDK software and click Download.**
      The JDK software is installed on your computer, for example, at C:\Program
      Files\Java\jdk1.6.0_02. You can move the JDK software to another location if desired.

2 **To set** JAVA_HOME**:**

   a. **Right click My Computer and select Properties.**

   b. **On the Advanced tab, select Environment Variables, and then edit** JAVA_HOME **to point to
      where the JDK software is located, for example,** C:\Program Files\Java\jdk1.6.0_02**.**

Creating the Configuration Properties File for Silent Installations

Use the sample file in this topic to set up your configuration properties file. Copy the file to the directory where you are going to install Java CAPS.

Note – When installing using Silent mode, the scripted file, `file.properties`, is automatically generated by the Java CAPS Installer if the product has already been installed.

To comment out bundles and features you do not want to install, place a hash (#) symbol at the beginning of the relevant lines. You must set the following variables:

installername	The name of the installation executable file.
USER_JDK__HOME	The directory where your JDK software is located.
USER_INSTALL_DIR	The directory where you are installing Java CAPS.
REPOSITORY_NAME	The name of the computer on which you are installing the Repository. You can change the default repository of repository1 but do not use simply "repository" because assigning a name that is the same as the component name in lowercase can cause connection problems.
STCMS_OS_TYPE	The name of the operating system on which you are installing the Sun Java JMS IQ Manager. Possible values are:

solx86	Solaris 10 x86 (32/64-bit), Intel
solamd64	Solaris 10 x86 (64-bit), AMD
solaris64	Solaris 10 (64-bit), SPARC
aix32	IBM AIX 5L 5.2 and 5.3 (32-bit)
aix64	IBM AIX 5L 5.2 and 5.3 (64-bit)
linux7	Red Hat Enterprise Linux Advanced Server 3, 4, and 5 (32/64-bit), Intel
linuxamd64	Red Hat Enterprise Linux Advanced Server 3, 4, and 5 (64-bit), AMD
redhat5_64	Red Hat Enterprise Linux 5 Advanced Server (Intel and AMD x86-64)
suse8	SUSE Linux Enterprise Server 9 and 10 (32/64-bit), Intel
win32	Windows (32-bit)
donotinstall	Do not install

In the sample file, APPSERVER stands for the Sun Java System Application Server, and EM stands for Enterprise Manager.

You can set the file to install only runtime components or only design-time components.

- To install only runtime components:
  - Change the install set from Complete to Custom (CHOSEN_INSTALL_SET=Custom).
  - Set the runtime components that you want. The runtime components are Sun Java System Application Server, Repository, and Sun JMS IQ Manager.
  - Comment out components that you do not want to install, such as NetBeans.
- To install only design-time components:
  - Change the install set from Complete to Custom (CHOSEN_INSTALL_SET=Custom).
  - Ensure that NetBeans is set.
  - Comment out components that you do not want to install, such as Repository.

EXAMPLE 1 Sample Configuration Properties File for Silent Installations

```
#Installation command examples
#installername -i silent
#installername -f file.properties


#[silent|gui|console]
CHOSEN_INSTALL_FEATURE_LIST=Repository,NetBeans,Appserver,STCMS,UDDI,EM
#[Complete|Custom]
CHOSEN_INSTALL_SET=Complete


#Choose JDK
#----------
USER_JDK_HOME=install-dir

#Choose Install Folder
#---------------------
USER_INSTALL_DIR=C:\\JavaCAPS6

#Repository Get User Input
#-------------------------
REPOSITORY_NAME=repository1
REPOSITORY_ADMIN_PORT=12000

#NetBeans Get User Input
#----------------------
NETBEANS_INSTALL_NBMS=1

#Appserver Get User Input
```

EXAMPLE 1   Sample Configuration Properties File for Silent Installations   *(Continued)*

```
#------------------------
APPSERVER_ADMIN_USER=admin
APPSERVER_ADMIN_PASSWORD=adminadmin
APPSERVER_MASTER_PASSWORD=changeit
APPSERVER_DOMAIN_NAME=domain1
# Basic Ports
APPSERVER_ADMIN_PORT=4848
APPSERVER_HTTP_PORT=8080
APPSERVER_HTTPS_PORT=8181
# Advanced Ports
APPSERVER_JMS_PORT=7676
APPSERVER_JMX_ADMIN_PORT=8686
APPSERVER_IIOP_PORT=3100
APPSERVER_IIOP_SSL_PORT=3820
APPSERVER_IIOP_MUTUALAUTH_PORT=3920

#STCMS Get User Input
#-------------------
STCMS_OS_TYPE=OS
STCMS_PORT=18007
STCMS_SSL_PORT=18008
STCMS_MIGRATION_FROM_DIR=

#EM Get User Input
#----------------
EMANAGER_HOST_NAME=localhost
EMANAGER_ADMIN_PORT=15000
```

After creating a configuration properties file, you are ready to perform a silent CLI installation. For more information, see .

Installing Java CAPS Silently Using CLI

You can use the Java CAPS command-line installation script to perform a complete installation silently. A silent installation means that you will not interact with the Installer, nor will you see the process unless you open the directory to which you are installing.

Note – When installing using Silent mode, the scripted file, `file.properties`, is automatically generated by the Java CAPS Installer if the product has already been installed.

In order to perform a silent installation, you must first create a configuration properties file. For more information, see "Creating the Configuration Properties File for Silent Installations" on page 10.

Java CAPS Release 6 does not support:

- Spaces in the installation directory path
- Command line installations on Macintosh systems

▼ To Install Java CAPS Silently Using CLI

Before You Begin
- Plan your installation by reading *Planning for Java CAPS Installation*, which contains information necessary for your to complete a successful installation of Java CAPS such as supported platforms, operating system limitations, and parameter definitions.
- Install the JDK software and set JAVA_HOME. For more information, see "Installing the JDK Software and Setting JAVA_HOME" on page 8
- Set up a configuration properties file. For more information, see "Creating the Configuration Properties File for Silent Installations" on page 10.

1 Download the installation executable file from the delivery media to the installation directory.

You can download the file from the following media:

- The Sun Download Center (SDLC) URL supplied by Sun Support
- The DVDs that come with the Java Composite Application Platform Suite Media Kit

2 If you have not done so already, copy the configuration properties file to the directory where you are going to install Java CAPS.

For more information, see "Creating the Configuration Properties File for Silent Installations" on page 10.

3 Extract the installation executable file to the directory where you are going to install Java CAPS.

- **Solaris, AIX, and Linux:** JavaCAPS.bin
- **Windows:** JavaCAPS.exe

⚠️ **Caution** – On UNIX systems, the Java CAPS Installer uses /tmp as its workspace by default even when /var/tmp is the system temporary directory, as is the case on Solaris SPARC systems. If you do not have access to /tmp, set the environment variable to IATEMPDIR=/var/tmp. The Java CAPS Installer will then use /var/tmp as its temporary directory.

4 Go to the installation directory where you copied the configuration properties file and the installation executable file and execute the file.

- **Solaris, AIX, and Linux: sh ./JavaCAPS.bin -i silent -f file.properties**

> - **Windows: JavaCAPS.exe -i silent -f file.properties**

Java CAPS is installed in the directory you specified.

Installing Java CAPS Using the CLI Console

This procedure installs the Sun Java System Application Server 9.1 (SJSAS). NetBeans IDE 6.1 ML, and Java CAPS core products such as the Sun Enterprise Service Bus, Java CAPS Repository version 6, Java CAPS Enterprise Manager version 6, Sun JMS IQ Manager version 6, and the UDDI Server using the Java CAPS Console command line installation.

Java CAPS Release 6 does not support:

- Spaces in the installation directory path
- Command line installations on Macintosh systems

▼ To Install Java CAPS Components Using the Command Line Console

Before You Begin Exit from all programs prior to beginning the installation.

Note – You can cancel the installation at any time during the process.

- Plan your installation by reading *Planning for Java CAPS Installation*, which contains information necessary for your to complete a successful installation of Java CAPS such as supported platforms, operating system limitations, and parameter definitions.

- Install the JDK software and set JAVA_HOME. For more information, see "Installing the JDK Software and Setting JAVA_HOME" on page 8

1 Download the installation executable file from the delivery media to the installation directory.

You can download the file from the following media:

- **The Sun Download Center (SDLC) URL supplied by Sun Support**
- **The DVDs that come with the Java Composite Application Platform Suite Media Kit**

2 Extract the installation executable file to the directory where are going to install Java CAPS.

- Solaris, AIX, and Linux: JavaCAPS.bin
- Windows: JavaCAPS.exe

⚠ **Caution –** On UNIX systems, the Java CAPS Installer uses /tmp as its workspace by default even when /var/tmp is the system temporary directory, as is the case on Solaris SPARC systems. If you do not have access to /tmp, set the environment variable IATEMPDIR=/var/tmp. The Java CAPS Installer will then use /var/tmp as its temporary directory.

3   Begin the Console installation.

- Solaris, AIX, and Linux: `JavaCAPS.bin -i console`
- Windows: `JavaCAPS.exe -i console`

The Console installation begins.

4   Read the introduction to the installation, and press Enter to begin the installation.

5   Read each section of the License Agreement, pressing Enter after each segment. Type Y to accept the terms.

6   When asked to choose an installation directory, type an absolute path or press Enter to accept the default value of JavaCAPS6.

- **If a directory named** `JavaCAPS6` **already exists, type I to confirm your selection.**

- **If the directory named** `JavaCAPS6` **already exists and you want to use another directory, type 2.**

7   Choose an installation set.

"Complete" is the default. Choosing "Customize" allows you to select the product features you want to install.

Determine the installation set.

- **To install all of the product features, type 1 for Complete (the default).**

- **To select the product features you want to install, type 2 for Customize.**

  If you select Customize, type the numbers that represent the features you *do not* want to install separated by commas.

8   When asked to choose a Java Developer Kit (JDK), provide an absolute path to the JDK or press Enter to accept the default.

> **Note** – You must have already installed the JDK prior to beginning the installation. If you have not already installed the JDK, see "Installing the JDK Software and Setting JAVA_HOME" on page 8.

9 Set up the Repository.

- **Accept the default name for the Repository, "repository1," or provide a custom value.**

- **Accept the default port number for the Repository, "12000," or provide a custom value.**

10 When asked to install NBMs for NetBeans IDE, either accept the default value, "1" for "TRUE," or type 2 for "FALSE."

11 Determine the settings for the Sun Java System Application Server.

Record your selections for later use. To start the Sun Java System Application Server you need the administrator user name, password, and master password during the log in process.

Setting	Description	Default
Admin user name	The name you use when you log in as administrator.	admin
Admin password	The password you use when you log in as administrator. This password must be a minimum of eight characters.	adminadmin
Master password for the SSL certificate for AS Admin operations	The key used to protect data in the Sun Java System Application Server, that is, the password of the secure keystore. This key must be at least 8 characters long.	changeit
Admin port number	The port on which the Sun Java System Application Server listens for administrative HTTP requests.	4848
HTTP port number	The port on which the Sun Java System Application Server listens for HTTP requests for web applications that you deploy.	8080
Secure HTTPS port number	The port on which the Sun Java System Application Server listens for HTTPS requests for web applications that you deploy.	8181

Setting	Description	Default
JMS port number	The port on which the Sun Java System Application Server listens for JMS IQ Manager requests.	7676
JMX admin port number	The port on which the Sun Java System Application Server listens for JMX administration requests.	8686
IIOP port number	The port on which the Sun Java System Application Server listens for CORBA requests.	3100
Secure IIOP port number for the initial server instance	The port on which the Sun Java System Application Server listens for secure CORBA requests.	3820
Mutual Authentication IIOP port number for the initial server instance		3920

Tip – Record the administrator name, password, and master password, as well as the port numbers, for later use. The Sun Java System Application Server asks for the administrator name, password, and master password when you start it using the `start_appserver_domain1` script. When you start the server from AS Admin or NetBeans IDE the administrator name, password, and master password are not required.

12   Provide the appropriate information to set up the Sun JMS IQ Manager.

You must install the Sun Java System Application Server if you install the Sun JMS IQ Manager. You can also install the JMS IQ Manager manually to a different Sun Java System Application Server after this installation completes.

a.   Provide the appropriate OS type.

The Sun Java IQ Manager uses native binaries. There are different binaries for different operating systems and processor architectures. When providing the OS value, use the abbreviation.

`solx86`	Sun Solaris 10 x86 (32/64-bit), Intel
`solamd64`	Sun Solaris 10 x86 (64-bit), AMD
`solaris64`	Sun Solaris 10 (64-bit), SPARC
`aix32`	IBM AIX 5L 5.2 and 5.3 (32-bit)
`aix64`	IBM AIX 5L 5.2 and 5.3 (64-bit)
`linux7`	Red Hat Enterprise Linux Advanced Server 3, 4, and 5 (32/64-bit), Intel

`linuxamd64`	Red Hat Enterprise Linux Advanced Server 3, 4, and 5 (64-bit), AMD
`redhat5_64`	Red Hat Enterprise Linux 5 Advanced Server (Intel and AMD x86-64)
`suse8`	SUSE Linux Enterprise Server 9 and 10 (32/64-bit), Intel
`win32`	Windows (32-bit)
`donotinstall`	Does not install the Sun JMS IQ Manager

    b. Accept the default Sun JMS IQ Manager port number of 18007 or provide a custom value.

    c. Accept the default Sun JMS IQ Manager SSL port number of 18008 or provide a custom value.

    d. If you have used the Sun JMS IQ Manager prior to Java CAPS Release 6, you can migrate it from the previous directory to your current installation directory by providing an absolute path.

13   Provide the appropriate information to set up the Enterprise Manager.

    a. Accept the default Host Name or provide a custom value.

    The Host Name is the name of the computer on which you are installing Java CAPS. Enterprise Manager relays this name to other components, such as the Sun Java System Application Server. These components then use this name to access Enterprise Manager. Although this value is usually the name of the computer Enterprise Manager is running on, you can specify the name of a proxy server.

    Note – The Host Name is the name of the computer on which you are installing. Enterprise Manager relays this name to other components, such as the Sun Java System Application Server; these components then use this name to access Enterprise Manager. Although this is usually the name of the computer Enterprise Manager is running on, you can specify the name of a proxy server.

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    b. Accept the default Admin Port for Enterprise Manager or provide a custom value.

    The default value is 15000. This port assignment requires five consecutive available ports. Therefore, during installation, the system selects four additional port numbers that sequentially follow the initial port number (15001–15004 for the default). Because port checking performed at installation only detects ports in use at that time, the installation will not detect ports that are configured to be used by other applications that are not running at that time. Consequently, be careful if you choose to change the default port value.

After setting the parameters for all the components you are installing, a Pre-Installation Summary appears that lists your selections for this installation.

14 **If you are satisfied with your installation selections, press Enter to continue and then press Enter a second time to begin the installation.**

Note – If you are not satisfied with your installation selections, use the Previous and Next buttons to navigate backward and forward in the installation and make the appropriate changes.

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15 **After the installation completes, press Enter to exit from the Console Installer.**

⚠ **Caution** – Ensure that you exit from the Console Installer as directed. If you exit the program by pressing CTRL-C, the javacaps_install_log.xml file will not be placed in the installation directory.

After you exit the Installer, a Sun Product Registration form opens on your browser. You can complete the Java CAPS product registration at that time, or you can return to the registration form at a later time by navigating to the base installation directory and typing register.html at the command prompt.

Starting and Stopping Java CAPS

To start and stop Java CAPS, fter the initial installation, navigate to the Java CAPS install directory or to the directory where the component is installed that you want to start or stop. Run the appropriate command.

Component	From Java CAPS Installation Directory	From Component Installation Directory
Sun Java System Application Server	UNIX – sh start_appserver_domain1.sh	
	UNIX – sh stop_appserver_domain1.sh	
	Windows GUI – start_appserver_domain1	
	Windows GUI – stop_appserver_domain1	
	Windows CLI – start start_appserver_domain1	
	Windows CLI – start stop_appserver_domain1	

Component	From Java CAPS Installation Directory	From Component Installation Directory
Repository	UNIX – sh start_repository.sh	**UNIX directory** – *install-directory*/repository/repository
	UNIX – sh stop_repository.sh	
	Windows GUI – start_repository	CLI – sh startserver.sh
	Windows GUI – stop_repository	CLI – sh stopserver.sh
	Windows CLI – start start_repository	**Windows directory** – *install-directory*\repository\repository
	Windows CLI – start stop_repository	
		GUI – startserver.bat
		GUI – stopserver.bat
		CLI – start startserver
		CLI – start stopserver
Enterprise Manager	UNIX – sh start_emanager.sh	**UNIX directory** – *install-directory*/emanager
	UNIX – sh stop_emanager.sh	
	Windows GUI – start_emanager	CLI – sh startserver.sh
	Windows GUI – stop_emanager	CLI – sh stopserver.sh
	Windows CLI – start start_emanager	**Windows directory** – *install-directory*\emanager
	Windows CLI – start stop_emanager	
		GUI – startserver.bat
		GUI – stopserver.bat
		CLI – start startserver
		CLI – start stopserver
NetBeans IDE	Windows GUI – start_netbeans	**Windows directory** – *install-directory*\netbeans\bin
	Windows CLI – start start_netbeans	
	To stop NetBeans click "X" in title bar	GUI – netbeans.exe
		CLI – start netbeans

Note – Windows provides a Repository Service Manager. To open it, navigate to *install-directory*\repository\repository and invoke servicemanager.bat to open the Sun Java CAPS Repository Server Service Manager dialog box. Use the dialog box options to install and uninstall services, and to start and stop the Repository Server.