



# Planning for Java CAPS Installation



Sun Microsystems, Inc.  
4150 Network Circle  
Santa Clara, CA 95054  
U.S.A.

Part No: 820-3741-12  
March 2009

Copyright 2008 Sun Microsystems, Inc. 4150 Network Circle, Santa Clara, CA 95054 U.S.A. All rights reserved.

Sun Microsystems, Inc. has intellectual property rights relating to technology embodied in the product that is described in this document. In particular, and without limitation, these intellectual property rights may include one or more U.S. patents or pending patent applications in the U.S. and in other countries.

U.S. Government Rights – Commercial software. Government users are subject to the Sun Microsystems, Inc. standard license agreement and applicable provisions of the FAR and its supplements.

This distribution may include materials developed by third parties.

Parts of the product may be derived from Berkeley BSD systems, licensed from the University of California. UNIX is a registered trademark in the U.S. and other countries, exclusively licensed through X/Open Company, Ltd.

Sun, Sun Microsystems, the Sun logo, the Solaris logo, the Java Coffee Cup logo, docs.sun.com, Java, and Solaris are trademarks or registered trademarks of Sun Microsystems, Inc. or its subsidiaries in the U.S. and other countries. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. in the U.S. and other countries. Products bearing SPARC trademarks are based upon an architecture developed by Sun Microsystems, Inc.

The OPEN LOOK and Sun<sup>™</sup> Graphical User Interface was developed by Sun Microsystems, Inc. for its users and licensees. Sun acknowledges the pioneering efforts of Xerox in researching and developing the concept of visual or graphical user interfaces for the computer industry. Sun holds a non-exclusive license from Xerox to the Xerox Graphical User Interface, which license also covers Sun's licensees who implement OPEN LOOK GUIs and otherwise comply with Sun's written license agreements.

Products covered by and information contained in this publication are controlled by U.S. Export Control laws and may be subject to the export or import laws in other countries. Nuclear, missile, chemical or biological weapons or nuclear maritime end uses or end users, whether direct or indirect, are strictly prohibited. Export or reexport to countries subject to U.S. embargo or to entities identified on U.S. export exclusion lists, including, but not limited to, the denied persons and specially designated nationals lists is strictly prohibited.

DOCUMENTATION IS PROVIDED "AS IS" AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

# Contents

---

<b>Planning for Java CAPS Installation</b> .....	5
Java CAPS Supported Operating Systems .....	7
Java CAPS Components and Supported External Systems .....	9
System Requirements .....	14
Before You Install .....	18
About the Installation .....	18
Overview of the Graphical User Interface Installation Process .....	19
Overview of the Command-line Interface Installation Process .....	21
Java CAPS Component Names .....	22
Repository Names and User Names .....	24
Environment Names .....	24
Installation Media .....	25
Contents of the Java CAPS “installer” and “components” Download Files .....	25
Contents of the Installation DVDs .....	29
Preparing for Installation .....	30
JDK and JAVA_HOME .....	30
Upgrading to 6 .....	31
Java CAPS Installer Caveats .....	31
Creating a Windows Service for Sun Java System Application Server .....	35
Increasing the NetBeans IDE Heap Size .....	36
▼ To Increase the Heap Size in NetBeans IDE .....	36
UNIX and Linux Patches .....	37
Checking Patch Levels .....	37
Certified Sun Solaris 9 and 10 Patches .....	37
IBM AIX 5L 5.2 and 5.3 Patches .....	38
Certified IBM AIX 5L Version 5.2 Patches .....	38
Certified IBM AIX 5L Version 5.3 Patches .....	38
Linux Patches .....	39

Certified SUSE Linux Enterprise Server 10 Daylight Savings Time Patch ..... 39

# Planning for Java CAPS Installation

---

The topics listed here provide pertinent information that you should be aware of prior to attempting to install the Java™ Composite Application Platform Suite (Java CAPS). If you have any questions or problems, see the Java CAPS Support web site at <http://goldstar.stc.com/support>.

---

**Tip** – 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/>.

You can also access the Java CAPS documentation on the SDN web site by clicking 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 Before Installing

- “Java CAPS Supported Operating Systems” on page 7
- “Java CAPS Components and Supported External Systems” on page 9
- “System Requirements” on page 14
- “Before You Install” on page 18
- “About the Installation” on page 18
- “Installation Media” on page 25
- “Preparing for Installation” on page 30
- “Java CAPS Installer Caveats” on page 31
- “Increasing the NetBeans IDE Heap Size” on page 36
- “UNIX and Linux Patches” on page 37

Beginning with Java CAPS 6, GUI and command-line installations are available for all supported operating systems. The GUI installation enables you choose a complete or a custom

installation and the command-line installation enables you to either set what you want to install in a properties file that is invoked via a script or to run an interactive installation wherein you answer system installation questions.

A complete installation includes the following components:

- Sun Java System Application Server (SJSAS) 9.1 UR2  
A Java Enterprise Edition (Java EE) 5 compatible platform for developing and delivering server side Java applications and web services. It enables you to deploy and monitor Java Business Integration (JBI) based Projects.
- NetBeans IDE 6.1 ML  
An integrated development environment (IDE) for writing, testing, and debugging secure service-oriented architecture (SOA) applications using XML, BPEL, and Java web services. You use the NetBeans IDE to develop and configure a Java CAPS system.
- Java CAPS Repository v. 6  
A NetBeans IDE Update Center host and a distributed version control system for non-JBI based Java CAPS Projects and objects.
- Enterprise Service Bus API Kit, which includes
  - Java CAPS Management API
  - STCMS API
- Sun JMS IQ Manager v. 6  
A Sun JMS IQ Manager that is required to run Non-JBI based Projects.
- UDDI Server  
An XML-based registry which enables e-commerce on the web.
- Enterprise Manager v. 6  
A web-based application that is used to deploy and monitor Java CAPS runtime components.
- Java CAPS Installer
- Java CAPS Uploader
- Domain
- Core components, such as the Enterprise Service Bus (formerly eGate Integrator)
- Add-on components, such as Sun Adapters (formerly eWays)
- JBI components

# Java CAPS Supported Operating Systems

This topic lists the supported operating system requirements for each platform. The requirements listed in this topic are in addition to the supported system requirements.

In previous releases of Java CAPS the operating systems supported runtime while only Windows systems supported design-time. With this release, we have separated the supported operating systems into two categories: Design-time (NetBeans IDE) and Runtime (Sun Java System Application Server).

## Supported Design-time Platforms

NetBeans IDE is available on these operating systems:

- Sun Solaris 10 SPARC
- Sun Solaris 10 x86 (64 bit)
- Sun Solaris 10 x86 (32 bit)
- Apple Mac OS Tiger 10.4 (32 bit)
- Microsoft Windows Vista (32 bit)
- Microsoft Windows XP SP2 (32 bit)
- Microsoft Windows XP SP3 (32 bit) (new in Java CAPS Release 6 Update 1)
- Microsoft Windows Server 2003 R2 SP2 (32 bit)
- Microsoft Windows 2000 SP4 (32 bit)
- Red Hat Enterprise Linux AS 4 (64 bit)
- Red Hat Enterprise Linux AS 4 (32 bit)
- Chinese (Simplified and Traditional) Sun Solaris 10 SPARC with required patches (JVM: 32 and 64 bit)
- Chinese (Simplified and Traditional) Microsoft Windows 2000 SP4, Windows XP SP2, Windows Server 2003 SP2 and R2, and Windows Vista (32 bit)
- Japanese Sun Solaris 10 SPARC with required patches (JVM: 32 and 64 bit)
- Japanese Microsoft Windows 2000 SP4, Windows XP SP2, Windows Server 2003 SP2 and R2, and Windows Vista (32 bit)
- Korean Sun Solaris 10 SPARC with required patches (JVM: 32 and 64 bit)
- Korean Microsoft Windows 2000 SP4, Windows XP SP2, Windows Server 2003 SP2 and R2, and Windows Vista (32 bit)

## Supported Runtime Platforms

Sun Java System Application Server 9.1 UR2 is available on these operating systems:

- Sun Solaris 10 SPARC (JVM: 32 and 64 bit)

- Sun Solaris 10 x86 (OS: 64 bit; JVM: 32 bit)
- Sun Solaris 10 x86 (OS: 32 bit; JVM: 32 bit)
- Sun Solaris 9 SPARC (JVM: 32 bit)
- Open Solaris 2008.05 (new in Java CAPS Release 6 Update 1; evaluation support only)
- Apple Mac OS Tiger 10.4 (OS: 32 bit; JVM: 32 bit)
- IBM AIX 5L 5.3 (OS: 64 bit; JVM: 32 bit)
- IBM AIX 5L 5.2 (OS: 32 bit; JVM: 32 bit)
- Microsoft Windows Vista Business (OS: 32 bit; JVM: 32 bit)
- Microsoft Windows XP SP2 (OS: 32 bit; JVM: 32 bit)
- Microsoft Windows XP SP3 (OS: 32 bit; JVM: 32 bit) (new in Java CAPS Release 6 Update 1)
- Microsoft Windows Server 2003 EE R2 SP2 (OS: 64 bit; JVM: 32 bit)
- Microsoft Windows Server 2003 R2 SP2 (OS: 32 bit; JVM: 32 bit)
- Microsoft Windows 2000 SP4 (OS: 32 bit; JVM: 32 bit)
- Red Hat Enterprise Linux AS 5 (OS: 64 bit; JVM: 32 bit)
- Red Hat Enterprise Linux AS 5 (OS: 32 bit; JVM: 32 bit)
- Red Hat Enterprise Linux AS 4 (OS: 64 bit; JVM: 32 bit)
- Red Hat Enterprise Linux AS 4 (OS: 32 bit; JVM: 32 bit)
- Red Hat Enterprise Linux AS 3 (OS: 64 bit; JVM: 32 bit)
- Red Hat Enterprise Linux AS 3 (OS: 32 bit; JVM: 32 bit)
- SUSE Linux Enterprise Server 10 (OS: 64 bit; JVM: 32 bit)
- SUSE Linux Enterprise Server 9 (OS: 32 bit; JVM: 32 bit)
- Chinese (Simplified and Traditional) Sun Solaris 10 SPARC with required patches (JVM: 32 bit and 64 bit)
- Chinese (Simplified and Traditional) Sun Solaris 10 x86 (JVM: 32 bit and 64 bit)
- Chinese (Simplified) Sun Solaris 9 SPARC with required patches
- Chinese (Simplified) Sun Solaris 9 x86
- Chinese (Simplified and Traditional) Microsoft Windows 2000 SP4, Windows XP SP2, Windows Server 2003 SP2 and R2, and Windows Vista (32 bit)
- Chinese (Simplified and Traditional) Red Hat Enterprise Linux AS 4 (OS: 32 bit; JVM: 64 bit)
- Chinese (Simplified and Traditional) Red Hat Enterprise Linux AS 3 (OS: 32 bit; JVM: 64 bit)
- Japanese Sun Solaris 10 SPARC with required patches (JVM: 32 bit and 64 bit)
- Japanese Sun Solaris 9 SPARC with required patches



- Japanese Sun Solaris 10 x86 (JVM: 32 bit and 64 bit)
- Japanese Sun Solaris 9 x86
- Japanese IBM AIX 5L, version 5.2 (32 bit) with required maintenance level patches
- Japanese Microsoft Windows 2000 SP4, Windows XP SP2, Windows Server 2003 SP2 and R2, and Windows Vista (32 bit)
- Japanese Red Hat Enterprise Linux AS 4 (OS: 32 bit; JVM: 64 bit)
- Japanese Red Hat Enterprise Linux AS 3 (OS: 32 bit; JVM: 64 bit)
- Korean Sun Solaris 10 SPARC with required patches (JVM: 32 bit and 64 bit)
- Korean Sun Solaris 9 SPARC with required patches
- Korean Sun Solaris 10 x86 (JVM: 32 bit and 64 bit)
- Korean Sun Solaris 9 x86
- Korean IBM AIX 5L, version 5.2 (32 bit) with required maintenance level patches
- Korean Microsoft Windows 2000 SP4, Windows XP SP2, Windows Server 2003 SP2 and R2, and Windows Vista (32 bit)
- Korean Red Hat Enterprise Linux AS 4 (OS: 32 bit; JVM: 64 bit)
- Korean Red Hat Enterprise Linux AS 3 (OS: 32 bit; JVM: 64 bit)

---

**Note** – Macintosh operating system support is limited to Development purposes only. Sun Java System Application Server 9.1 UR2 support is limited to the Developer Profile. Sun SeeBeyond JMS IQ Manager (STCMS) and Sun ESB API Kit are supported on a subset of these platforms. Please contact your Sun account representative for more information. Where applicable, adapters for external systems are supported on the above platforms if that platform is supported by the external system vendor.

---

## Java CAPS Components and Supported External Systems

The following tables list each Java CAPS component along with the external systems they support. All components are supported on the same operating systems as Java CAPS (see [“Java CAPS Supported Operating Systems”](#) on page 7).

**TABLE 1** Java CAPS Classic Core Components and Supported External Systems

Product Name	Supported External Systems
Sun Enterprise Service Bus (LDAP user management)	SJSDS EE 6, Open LDAP 2.0.27, Microsoft Windows Server 2003 Active Directory Standard Edition SP 2

**TABLE 1** Java CAPS Classic Core Components and Supported External Systems *(Continued)*

Product Name	Supported External Systems
Sun Business Process Manager	SQL Server 2005, Sybase 12.5, Oracle 10g (10.2.0.1.0), DB2 9.1, and MySQL Enterprise Server (ES) 5.1 (new in Release 6 Update 1)
Sun Composite Page Designer	NA
Sun Master Index	SQL Server 2005, Oracle 11g, Oracle 10g (10.2.0.1.0), Oracle 9i, MySQL ES 5.1 (new in Release 6 Update 1)
Sun Master Patient Index	SQL Server 2005, Oracle 11g, 10g (10.2.0.1.0), Oracle 9i, MySQL ES 5.1 (new in Release 6 Update 1)
Sun Data Integrator	ProstgreSQL, Derby, Oracle version 8 or later, Sybase, DB2 version 5 or later, MySQL ES 5.1 (new in Release 6 Update 1), Axion, other databases such as Access, FoxBase, and so on (through the JDBC driver)
JMS Grid	WebLogic 9.2, WebLogic 10, WebSphere 6.1, JBOSS 4.2

**TABLE 2** Java CAPS Classic Application Adapters and Supported External Systems

Product Name	Supported External Systems
Sun COBOL Copybook Converter	
Sun Adapter for Oracle Applications	Oracle Application 11.5 and 12
Sun Adapter for PeopleSoft	PeopleSoft 8, 8.4, and 9 with People Tools 8.13, 8.42, and 8.4.8 <b>Note</b> – Only HTTP communication is supported with PeopleTools 8.13.
Sun Adapter for SAP ALE	SAP R/3 4.6C Non-Unicode, ECC 5.0 Non-Unicode, ECC 5.0 Unicode, ECC 6.0 Non-Unicode, ECC 6.0 Unicode SAP R/3 4.6C, 4.6D, and 4.7 for Japanese and Korean
Sun Adapter for SAP BAPI	SAP R/3 4.6C Non-Unicode, ECC 5.0 Non-Unicode, ECC 5.0 Unicode, ECC 6.0 Non-Unicode, ECC 6.0 Unicode SAP R/3 4.6C, 4.6D, and 4.7 for Korean
Sun Adapter for Siebel EAI	Supports Siebel version 7, 7.5.3 (OTD), 7.7, and 8.0
Sun Adapter for Lotus Notes/ Domino	6.0, 6.5, and 7.0
Sun Adapter for SWIFT Alliance Access	SWIFT Alliance Access (SAA) 6.0 and 6.1

**TABLE 2** Java CAPS Classic Application Adapters and Supported External Systems *(Continued)*

Product Name	Supported External Systems
Sun Adapter for SWIFT Alliance Gateway	Swift 6.0 and 6.1, certified for 2006, 2007, and 2008 (2008 is new in Release 6 Update 1)  Supported platforms include Windows XP, Solaris 10 (SPARC), AIX 5.2

**TABLE 3** Java CAPS Classic Database Adapters and Supported External Systems

Product Name	Supported External Systems
Sun Adapter for Oracle	Oracle 9.2.0, Oracle 10g R2, Oracle 11g
Sun Adapter for DB2 Universal Database	DB2 UDB 8.1, 8.2, 9.0, and 9.1 on Windows and Unix; DB2 V5R2 and V5R3 on AS400; DB2 8.2 and 9.1 on z/OS
Sun Adapter for DB2 Connect	DB2 Connect 8.1, 8.2, and 9.1
Sun Adapter for SQL Server	Microsoft SQL Server 7, SQL Server 2000, and SQL Server 2005
Sun Adapter for JDBC/ODBC	Type 2, Type 3, and Type 4 drivers  DB2 8.2 on AS400, SQLServer 2005, Oracle 10g R2, MySQL 5.0.27, Derby 10.2.1.7, Postgre SQL 8.2
Sun Adapter for Informix	Informix V10
Sun Adapter for Sybase	Sybase Adaptive Enterprise Server 11.9, 12.5, and 15
Sun Adapter for VSAM	WebSphere-II-Classic Federation 8.2 driver

**TABLE 4** Java CAPS Classic Communication Adapters and Supported External Systems

Product Name	Supported External Systems
Sun Adapter for COM/DCOM	n/a
Sun Adapter for Batch/FTP	n/a
Sun Adapter for File	n/a
Sun Adapter for e-Mail	Windows 2003 Email server ( that comes with IIS), and Sendmail that comes with Solaris 10  Supported protocols are SMTP, POP3, and MIME
Sun Adapter for LDAP	Windows 2000 Server Active Directory, Windows 2003 Server Active Directory, Sun Java System Directory Server v6.0, OpenLDAP 2.1, OpenLDAP 2.3

**TABLE 4** Java CAPS Classic Communication Adapters and Supported External Systems *(Continued)*

Product Name	Supported External Systems
Sun Adapter for MSMQ	Windows XP, Windows 2003 Server Supports Microsoft MSMQ version 3.0
Sun Adapter for HTTPS	SOAP Version 1.2 Supports SSL 2.0 and 3.0, TLS 1.0
Sun Adapter for SNA	n/a
Sun Adapter for TCP/IP HL7	Supports HL7 Standard versions 2.1, 2.2, 2.3, 2.3.1, 2.4, 2.5, and 2.5.1
Sun Adapter for TCP/IP	n/a

**TABLE 5** Java CAPS Classic Web Server Adapters and Supported External Systems

Product Name	Supported External Systems
Sun Adapter for Sun Java System Application Server	Sun Java System Application Server 8.1 and 9.1
Sun Adapter for WebSphere MQ	WebSphere 5.3 and 6.0
Sun Adapter for WebLogic	Weblogic 7.0, 8.1, 9.0, 9.2, and 10

**TABLE 6** Java CAPS Classic Mainframe Adapters and Supported External Systems

Product Name	Supported External Systems
Sun Adapter for CICS	CICS version 3.1, can use IBM CICS Transaction Gateway (versions 5.1, 6.0, 6.0.1, and 6.1) or Sun CICSListener to access transactions
Sun Adapter for IMS	WebSphere-II-Classic Federation 8.2 driver, IMS Connect 9.1
Sun Adapter for ADABAS	WebSphere-II-Classic Federation 8.2 driver
Sun Adapter for ADABAS Natural	

**TABLE 7** Java CAPS Classic Message Libraries and Supported External Systems

Product Name	Supported External Systems
Sun Message Library for HL7	Supports HL7 Standard versions 2.1, 2.2, 2.3, 2.3.1, 2.4, 2.5, and 2.5.1
Sun Message Library for SWIFT	ISO 15022 FIN messages for SWIFT 2007 and 2008 Standard

**TABLE 7** Java CAPS Classic Message Libraries and Supported External Systems *(Continued)*

Product Name	Supported External Systems
Sun Message Library for ASC X12	ASC X12 versions 4010, 4011, 4012, 4020, 4021, 4022, 4030, 4031, 4032, 4040, 4041, 4042, 4050, 4051, 4052, 4060, 4061, 5010, and 5020; SEF Wizard supports SEF 1.5 and 1.6
Sun Message Library for HIPAA	HIPAA 2000 Standard, 2000 Addenda, HIPAA 2005; SEF Wizard supports SEF 1.5 and 1.6
Sun Message Library for EDIFACT	UN/EDIFACT versions 3 and 4, Directories D.00A, D.00B, D.01A, D.95A, D.95B, D.96A, D.96B, D.97A, D.97B, D.98A, D.98B, D.99A, D.99B

**TABLE 8** Java CAPS Classic Add-ons and Supported External Systems

Product Name	Supported External Systems
Sun SNMP Agent	SNMP v2, SNMP v3
Sun Alert Agent	n/a
Sun Adapter Development Kit	n/a
Sun Enterprise Service Bus API Kit	JMS v1.1

**TABLE 9** Java CAPS JBI Service Engines and Supported External Systems

Product Name	Supported External Systems
BPEL Service Engine	BPEL 2.0, Oracle 10g, MySQL ES 5.0, JavaDB (Derby) 10.2.1.7
XSLT Service Engine	n/a
Java EE Service Engine	n/a
Data Mashup Service Engine	Oracle 11g, MySQL ES 5.0.6
Sun Data Integrator	MySQL Enterprise Server (ES) 5.1, PostgreSQL, Derby, Oracle version 8 or later, Sybase, DB2 version 5 or later, Axion, and other databases, such as Access and FoxBase, through the JDBC driver

**TABLE 10** Java CAPS JBI Binding Components and Supported External Systems

Product Name	Supported External Systems
Database Binding Component	Oracle 11g, MySQL ES 5.0.60, DB2 9.1, Microsoft SQL Server 2005 with SP2, Sybase 15
File Binding Component	n/a

TABLE 10 Java CAPS JBI Binding Components and Supported External Systems (Continued)

Product Name	Supported External Systems
FTP Binding Component	n/a
HTTP Binding Component	n/a
JMS Binding Component	JMQ 4.3, WebLogic 9.2, WebLogic 10, WebSphere 6.1, JBOSS 4.2
LDAP Binding Component	Sun Java System Directory Server Enterprise Edition 6.3, Windows Server 2003 Active Directory, OpenLDAP 2.3.39, OpenDS 1.0.0

TABLE 11 Java CAPS JCA Adapters and Supported External Systems

Product Name	Supported External Systems
TCP/IP	n/a
JDBC JCA Adapter	DB2 8.2 on AS400, Microsoft SQL Server 2005, Oracle 10g R2, MySQL ES 5.0.27, Java DB (Derby) 10.2.1.7, Postre SQL 8.2
File JCA Adapter	n/a
Batch JCA Adapter	n/a
Oracle JCA Adapter	

## System Requirements

Your system configuration depends upon which systems you use and how you intend to use Java CAPS. The requirements listed in this topic are in addition to the supported operating system requirements.

### Mozilla Firefox Version

Java CAPS supports Mozilla Firefox v. 2.0 or above for accessing all Java CAPS browser components.

### Internet Explorer Version

Java CAPS supports Internet Explorer 6.0 (Service Pack 1 or Service Pack 2) and Internet Explorer 7.0 for accessing all Java CAPS browser components.

### Repository and Domain Firewall Port Requirements

When you have a firewall in place between a Repository Server and a domain, selected ports must be open in order for monitoring to function properly.

- For Repository ports, ensure that the following monitor-side ports are open:

- Base port +4 (RMI Connector)
- Base port +5 (HTTP Connector)

For example, if the default port is 12000, the RMI Connector port would be 12004 and the HTTP Connector port would be 12005.

- For domain ports, ensure that the following domain-side ports are open:

- Base port +0 (HTTP Connector)
- Base port +1 (RMI)
- Base port +2

For example, if the default port is 18000, the HTTP Connector port would be 18000, the RMI port would be 18001.

### Java CAPS Installation Requirements

To install Java CAPS you need:

- For the installation executable file: 800+ MB
- For a complete Java CAPS installation
  - Sun Solaris: 3.25 GB
  - Apple Macintosh: 1.5 GB
  - IBM AIX: 1.75 GB (does not include NetBeans IDE)
  - Microsoft Windows: 1.5 GB
  - Red Hat and SUSE Linux: 1.5 GB

### Windows System Requirements

The following table lists the minimum requirements for installing and running each of the Java CAPS components on a Windows system. The RAM and disk space requirements do not take into consideration the RAM and disk space required by the operating system. For the best performance, you should install these components on different systems. However, if you choose to install some or all of these components on the same machine (for example, in a test environment), keep in mind that the requirements for each additional component are cumulative.

TABLE 12 Windows System Requirements

Component	CPU	RAM	Disk Space
Repository	1.2 GHz	240 MB	1.2 GB
Enterprise Manager	1.2 GHz	400 MB	170 MB

TABLE 12 Windows System Requirements (Continued)

Component	CPU	RAM	Disk Space
<b>Note –</b>			
<ul style="list-style-type: none"> <li>■ For Sun Java System Application Server requirements, see “Supported Platforms” in <i>Sun Java System Application Server 9.1 Update 1-9.1 Update 2 Release Notes</i></li> <li>■ For NetBeans IDE requirements, see <a href="http://www.netbeans.org/community/releases/61/relnotes.html">http://www.netbeans.org/community/releases/61/relnotes.html</a></li> </ul>			

Additionally, to use the Sun Enterprise Service Bus on Windows, you need two of the following:

- A TCP/IP network connection
- Internet Explorer 6.0 with Service Pack 1 or Service Pack 2 or Internet Explorer 7.0
- Mozilla Firefox 2.0 or above

#### Additional Windows Considerations

- The disk space requirement listed for the Domain does not include space for the queues and log files that are created by the user as Integration and Message Services are executed.
- The Sun Enterprise Service Bus GUI is supported when using Microsoft Terminal Services®, but not with other “remote” Windows tools.

#### UNIX and Linux System Requirements

The following tables list the minimum requirements for installing the Repository and Domain on various UNIX and Linux systems. The RAM and disk space requirements do not take into consideration the RAM and disk space required by the operating system. For the best performance, you should install these components on different systems. However, if you choose to install these components on the same machine (for example, in a test environment), keep in mind that the requirements for each additional component are cumulative.

Dual (or multi) CPUs are recommended for best performance of the Domain, especially if you run the Repository and the Domain on the same system.

TABLE 13 UNIX and Linux System Requirements

Platform	Component	CPU	RAM	Disk Space
IBM AIX	Repository	450 MHz	180 MB	900 MB
	Enterprise Manager	450 MHz	400 MB	180 MB
Linux (Red Hat and SUSE)	Repository	1.2 GHz	240 MB	900 MB
	Enterprise Manager	1.2 GHz	400 MB	180 MB
Sun Solaris	Repository	400 MHz	240 MB	850 MB



TABLE 13 UNIX and Linux System Requirements (Continued)

Platform	Component	CPU	RAM	Disk Space
	Enterprise Manager	400 MHz	400 MB	210 MB

**Note –**

- For Sun Java System Application Server requirements, see “Supported Platforms” in *Sun Java System Application Server 9.1 Update 1-9.1 Update 2 Release Notes*
- For NetBeans IDE, see <http://www.netbeans.org/community/releases/61/relnotes.html>

Additionally, to use the Enterprise Service Bus on UNIX, you need:

- A TCP/IP network connection
- FTP and Telnet capabilities
- Mozilla Firefox 2.0 or above

**Additional UNIX Considerations**

The disk space requirement listed for the Domain does not include space for the queues and log files that are created by the user as Integration and Message Services are executed.

**IBM AIX Specific Requirements**

On IBM AIX, the Java Composite Application Platform Suite supports both 32- and 64-bit platforms. For your system to function properly, ensure that you install the correct SAR file.

**Macintosh System Requirements**

The following table lists the minimum requirements for installing and running each of the Java CAPS components on a Macintosh' system. The RAM and disk space requirements do not take into consideration the RAM and disk space required by the operating system. For the best performance, you should install these components on different systems. However, if you choose to install some or all of these components on the same machine (for example, in a test environment), keep in mind that the requirements for each additional component are cumulative.

TABLE 14 Macintosh System Requirements

Component	CPU	RAM	Disk Space
Repository	1.2 GHz	500 MB	250 MB
Enterprise Manager	1.2 GHz	400 MB	100 MB

TABLE 14 Macintosh System Requirements (Continued)

Component	CPU	RAM	Disk Space
<b>Note –</b>			
<ul style="list-style-type: none"> <li>■ For Sun Java System Application Server requirements, see “Supported Platforms” in <i>Sun Java System Application Server 9.1 Update 1-9.1 Update 2 Release Notes</i></li> <li>■ For NetBeans IDE requirements, see <a href="http://www.netbeans.org/community/releases/61/relnotes.html">http://www.netbeans.org/community/releases/61/relnotes.html</a></li> </ul>			

Additionally, to use the Sun Enterprise Service Bus on Macintosh systems, you need two of the following:

- A TCP/IP network connection
- Internet Explorer 6.0 with Service Pack 1 or Service Pack 2 or Internet Explorer 7.0
- Mozilla Firefox 2.0 or above

**Note –** The disk space requirement listed for the Domain does not include space for the queues and log files that are created by the user as Integration and Message Services are executed.

## Before You Install

The following topics explain issues to consider before you begin your Java CAPS installation.

### Windows Pre-Installation

Exit from all Windows programs prior to running the setup.

### Default User Names and Passwords

The Java CAPS default user name is *admin* and the password is *adminadmin*. You use them when you start Enterprise Manager.

## About the Installation

This topic provides an overview of the GUI and command-line installations, a list of what Java CAPS product names were in the past and what they are now, and the location of the product SAR files on the DVDs.



**Caution –** Java CAPS Release 6 does not support spaces in the installation directory path.

The installation process is different from prior installations of Java CAPS, and with Release 6 you can perform a complete or custom installation on any supported platform.

---

**Note** – There is one exception to this statement; Release 6 does not support Macintosh installation using the command-line interface.

---

The installation flexibility of Java CAPS enables you to:

- Install more than one Domain on a single system.
- Manage multiple Projects on a single environment.
  - The separation of design from deployment makes it possible to use the same components in more than one Project.
- Centralize your software distribution.
  - After uploading software into “software packages,” Administrators select which physical server or groups of physical servers receive the software.
  - HTTP connections are used to upload and download the software to and from the Repository.

## Overview of the Graphical User Interface Installation Process

- Use the executable file downloaded from the Sun Download Center or the DVDs from the Media Kit to run the Java CAPS Installer to install:
  - Repository Server
  - NetBeans IDE 6.1 ML, including  
All JBI based Java CAPS components packaged with the initial installation
  - Sun Java System Application Server 9.1 UR2, including
    - Sun JMS IQ Manager
    - UDDI Server
  - Enterprise Manager
  - Domains, which are a Sun Enterprise Service Bus run-time environment that contains the software and other installed components that are required at run time, such as:
    - The Sun Java System Application Server, which provides middleware services for security and state maintenance, data access and persistence, and transactions.
    - The System Management Service, which manages and monitors Java CAPS deployments.
    - The Sun JMS IQ Manager, which provides JMS messaging.

Although the Domain installation also includes the components necessary for basic communication between the Java CAPS system and files, communications with databases and other products require that you add on components.

You to create, start, and stop Domains using Domain Manager or a command prompt.

- Four Java CAPS core products.
  - Sun Enterprise Service Bus
  - Sun Business Process Manager
  - Sun Composite Page Designer
  - Sun Data Integrator
- Nine Sun Adapters, which enable communication with specific external systems or OTD libraries.
  - 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
- NetBeans IDE, which enables you to install JBI based Java CAPS components and configure the Java CAPS system.

---

**Note** – You can install all JBI based Java CAPS components at this time.

---

- Use NetBeans IDE Update Center to install JBI based Java CAPS components.

---

**Note** – If you choose to install all the JBI based Java CAPS components that are included with the initial installation, you would skip this step until there were updates to install. See the NetBeans IDE documentation located on [docs.sun.com](http://docs.sun.com) for detailed information on how to complete these tasks.

---

- Use the Java CAPS Uploader to upload and install additional components not included with the initial installation.

The installation stores and manages the setup, component, and configuration information for Java CAPS Projects.

---

**Note** – A topic with information on how to install patches will be included with the next phase of the Java CAPS 6 delivery.

---

## Overview of the Command-line Interface Installation Process

The command-line installation differs from the GUI installation in that it consists of two installs that mirror the Java CAPS Installer installation, but does not offer the NetBeans IDE Update Manager or the Java CAPS Uploader installations.

- Silent, which is a script installation with set options that you set in a properties file.
- Console, which is a graphical text mode installation.
- For the command-line installations to function correctly you must first download the ISO images from the Sun Download Center to your installation directory. With these installations you can install any or all of the following Java CAPS components:
  - Repository Server
  - NetBeans IDE 6.1 ML, including  
All JBI based Java CAPS components packaged with the initial installation
  - Sun Java System Application Server 9.1 UR2, including
    - Sun JMS IQ Manager
    - UDDI Server
  - Enterprise Manager
  - Domains, which are a Sun Enterprise Service Bus run-time environment that contains the software and other installed components that are required at run time, such as:
    - The Sun Java System Application Server, which provides middleware services for security and state maintenance, data access and persistence, and transactions.
    - The System Management Service, which manages and monitors Java CAPS deployments.
    - The Sun JMS IQ Manager, which provides JMS messaging.  
Although the Domain installation also includes the components necessary for basic communication between the Java CAPS system and files, communications with databases and other products require that you add on components.  
You to create, start, and stop Domains using Domain Manager or a command prompt.
  - Four Java CAPS core products.
    - Sun Enterprise Service Bus
    - Sun Business Process Manager

- Sun Composite Page Designer
- Sun Data Integrator
- Nine Sun Adapters, which enable communication with specific external systems or OTD libraries.
  - Sun Adapter for 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

## Java CAPS Component Names

With Release 6, the Java CAPS Repository-based components have undergone a name change. The SAR files have not been changed to match the new component names. [Table 15](#) provides Release 5.1.3 component names and what they have changed to for Release 6.

**TABLE 15** Component Name Comparison

Release 5.1.3 Component Names	Release 6 Component Names
Sun SeeBeyond eGate Integrator	Sun Enterprise Service Bus
Sun SeeBeyond eInsight Business Process Manager	Sun Business Process Manager
Sun SeeBeyond eVision Studio	Sun Composite Page Designer
Sun SeeBeyond eTL Integrator	Sun Data Integrator
Sun SeeBeyond eView Studio	Sun Master Index
Sun SeeBeyond eIndex Single Patient View	Sun Master Patient Index
Sun Java Message Grid	Sun Java Message Service Grid
Sun SeeBeyond eWay Adapter for SAP ALE	Sun Adapter for SAP ALE
Sun SeeBeyond eWay Adapter for SAP BAPI	Sun Adapter for SAP BAPI
Sun SeeBeyond eWay Adapter for Oracle Applications	Sun Adapter for Oracle Applications
Sun SeeBeyond eWay Adapter for SWIFT Alliance Gateway	Sun Adapter for SWIFT Alliance Gateway
Sun SeeBeyond eWay e-Mail Adapter	Sun Adapter for e-Mail

TABLE 15 Component Name Comparison (Continued)

Release 5.1.3 Component Names	Release 6 Component Names
Sun SeeBeyond eWay TCP/IP Adapter	Sun Adapter for TCP/IP
Sun SeeBeyond eWay LDAP Adapter	Sun Adapter for LDAP
Sun SeeBeyond eWay COM/DCOM Adapter	Sun Adapter for COM/DCOM
Sun SeeBeyond eWay SNA Adapter	Sun Adapter for SNA
Sun SeeBeyond eWay TCP/IP HL7 Adapter	Sun Adapter for TCP/IP HL7
Sun SeeBeyond eWay Adapter for MSMQ	Sun Adapter for MSMQ
Sun SeeBeyond eWay Adapter for Oracle	Sun Adapter for Oracle
Sun SeeBeyond eWay Adapter for SQL Server	Sun Adapter for SQL Server
Sun SeeBeyond eWay Adapter for DB2 Universal Database	Sun Adapter for DB2 Universal Database
Sun SeeBeyond eWay JDBC/ODBC Adapter	Sun Adapter for JDBC/ODBC
Sun SeeBeyond eWay Adapter for DB2 Connect	Sun Adapter for DB2 Connect
Sun SeeBeyond eWay Adapter for Sybase	Sun Adapter for Sybase
Sun SeeBeyond eWay Adapter for VSAM	Sun Adapter for VSAM
Sun SeeBeyond eWay Adapter for Informix	Sun Adapter for Informix
Sun SeeBeyond eWay Adapter for Sun Java System Application Server	Sun Adapter for Sun Java System Application Server
Sun SeeBeyond eWay Adapter for WebLogic	Sun Adapter for WebLogic
Sun SeeBeyond eWay Adapter for WebSphere MQ	Sun Adapter for WebSphere MQ
Sun SeeBeyond eWay Development Kit	Sun Adapter Development Kit
Sun SeeBeyond eWay Adapter for CICS	Sun Adapter for CICS
Sun SeeBeyond eWay Adapter for IMS	Sun Adapter for IMS
Sun SeeBeyond eWay File Adapter	Sun Adapter for File
Sun SeeBeyond eWay Adapter for Siebel EAI	Sun Adapter for Siebel EAI
Sun SeeBeyond eWay Adapter for PeopleSoft	Sun Adapter for PeopleSoft
Sun SeeBeyond eWay Batch Adapter	Sun Adapter for Batch/FTP
Sun SeeBeyond eWay HTTPS Adapter	Sun Adapter for HTTPS
Sun SeeBeyond eGate API Kit	Sun Enterprise Service Bus API Kit

TABLE 15 Component Name Comparison (Continued)

Release 5.1.3 Component Names	Release 6 Component Names
Sun SeeBeyond HL7 OTD Library	Sun Message Library for HL7
Sun SeeBeyond SWIFT OTD Library	Sun Message Library for SWIFT
Sun SeeBeyond OTD Library for ASC X12	Sun Message Library for ASC X12
Sun SeeBeyond OTD Library for HIPAA	Sun Message Library for HIPAA
Sun SeeBeyond Alert Agent	Sun Alert Agent
Sun SeeBeyond SNMP Agent	Sun SNMP Agent
Sun SeeBeyond COBOL Copybook Converter	Sun COBOL Copybook Converter
Sun SeeBeyond Protocol Manager for ASC X12	Sun Protocol Manager for ASC X12
Sun SeeBeyond Protocol Manager for HIPAA	Sun Protocol Manager for HIPAA

## Repository Names and User Names

The Sun Enterprise Service Bus maintains its own list of Repository names and user names; it does not poll the operating system or network to obtain or validate user names or Repository names. To simplify system administration, use your current naming conventions for Repository and user names.

Repository and user names (as well as passwords) are case sensitive, even on Windows systems. Although there is no limitation on the length of the names, you should keep them a reasonable length. Valid characters include all letters and numbers, dashes, and underscores.

---

**Note** – Periods, spaces, and other punctuation are not valid characters for any Java CAPS user name, password, or component name.

---

### Default “Administrator” User Name

The default user name and password for the Sun Enterprise Service Bus are **admin** and **adminadmin**.

## Environment Names

After you complete a Project, you must set up an Environment and deploy it. An Environment is a collection of Domain(s) that house Project components and information about external systems. You set up an Environment and deploy it after completing a Project. A deployment Environment includes:

- Domain (an instance of the Sun Enterprise Service Bus runtime environment)



- Sun Java System Application Server
- Sun JMS IQ Manager
- External Systems

Environment names can contain letters, numbers, dashes, and underscores. There is no character limit. Spaces and punctuation marks are not valid characters for Project names.

## Installation Media

There are two ways to install Java CAPS products:

- Use the supplied URL to download the ZIP or TAR file that contains the appropriate executable file. To obtain the appropriate file contact Java CAPS Support at <http://goldstar.stc.com/support> and they will supply you with the link and a serial number to so you can perform the download.

---

**Note** – You should have 5.0 Gbyte free disk space.

---

- Use the DVDs included with the Java Composite Application Platform Suite Media Kit

## Contents of the Java CAPS “installer” and “components” Download Files

Use the Java CAPS “installer” TAR and ZIP files to perform a graphical user interface or command-line interface installation and use the Java CAPS “components” ZIP files to install the adapters, add-ons, API kits, and message libraries not included with the installation. See “[Java CAPS Component Names](#)” on page 22 for a complete listing of Release 6 names.

### Java CAPS “installer” TAR and ZIP Files

---

**Note** – The installation documentation is bundled with each TAR and ZIP file.

---

- \Java-Caps-R6-Installer-AIX.tar
  - \Documentation
  - \Legal
  - \JavaCAPS.bin
- \Java-Caps-R6-Installer-Linux.tar
  - \Documentation
  - \Legal

- \JavaCAPS.bin
- \Java-Caps-R6-Installer-MacOSX.zip
  - \Documentation
  - \Legal
  - \JavaCAPS.zip
- \Java-Caps-R6-Installer-Solaris.tar
  - \Documentation
  - \Legal
  - \JavaCAPS.bin
- \Java-Caps-R6-Installer-Windows.zip
  - \Documentation
  - \Legal
  - \JavaCAPS.exe

## Java CAPS “components” ZIP Files

- \adapters.zip
  - \CICSeWay.sar
  - \COMeWay.sar
  - \DB2ConnecteWay.sar
  - \eWayDevelopmentKit.sar
  - \HL7eWay.sar (new in Java CAPS 6 Update Release 1)
  - \IMSeWay.sar
  - \InformixeWay.sar
  - \LDAPeWay.sar
  - \MFS.sar
  - \MQSerieSeWay.sar
  - \MSMQeWay.sar
  - \OracleApplicationseWay.sar
  - \PeopleSofteWay.sar
  - \SAPALeWay.sar
  - \SAPBAPIeWay.sar
  - \SiebelEAIeWay.sar
  - \SNAeWay.sar
  - \SunJavaSystemeWay.sar
  - \SwiftAGeWay.sar
  - \TCPIPeWay.sar
  - \VSAMeWay.sar
  - \WebLogiceWay.sar
- \addons.zip
  - \master\_patient\_index

- \oracle
  - \eIndex.sar
- \sqlserver
  - \eIndex.sar
- \MDM
  - \eTLMigrationTool.sar
  - \eView.sar
  - \solutions
    - \MDM\_Solutions.zip
- \AdapterPack.zip
- \AlertAgent.sar
- \CobolCopyBook.sar
- \Enterprise\_Manager\_SVGPlugin-win32.sar
- \SNMPAgent.sar
- \ESB\_API\_KIT.zip
  - \EM\_API\_KIT.zip
  - \STCMS\_API\_KIT.zip
- \message\_libraries.zip
  - \EDIFACT
    - \EDIFACT\_v3\_D00A\_OTD.sar
    - \EDIFACT\_v3\_D00B\_OTD.sar
    - \EDIFACT\_v3\_D01A\_OTD.sar
    - \EDIFACT\_v3\_D01B\_OTD.sar
    - \EDIFACT\_v3\_D95A\_OTD.sar
    - \EDIFACT\_v3\_D95B\_OTD.sar
    - \EDIFACT\_v3\_D96A\_OTD.sar
    - \EDIFACT\_v3\_D96B\_OTD.sar
    - \EDIFACT\_v3\_D97A\_OTD.sar
    - \EDIFACT\_v3\_D97B\_OTD.sar
    - \EDIFACT\_v3\_D98A\_OTD.sar
    - \EDIFACT\_v3\_D98B\_OTD.sar
    - \EDIFACT\_v3\_D99A\_OTD.sar
    - \EDIFACT\_v3\_D99B\_OTD.sar
    - \EDIFACT\_v3\_SyntaxMessages\_OTD.sar
    - \EDIFACT\_v4\_D00A\_OTD.sar
    - \EDIFACT\_v4\_D00B\_OTD.sar
    - \EDIFACT\_v4\_D01A\_OTD.sar
    - \EDIFACT\_v4\_D01B\_OTD.sar

- \EDIFACT\_v4\_D95A\_OTD.sar
- \EDIFACT\_v4\_D95B\_OTD.sar
- \EDIFACT\_v4\_D96A\_OTD.sar
- \EDIFACT\_v4\_D96B\_OTD.sar
- \EDIFACT\_v4\_D97A\_OTD.sar
- \EDIFACT\_v4\_D97B\_OTD.sar
- \EDIFACT\_v4\_D98A\_OTD.sar
- \EDIFACT\_v4\_D98B\_OTD.sar
- \EDIFACT\_v4\_D99A\_OTD.sar
- \EDIFACT\_v4\_D99B\_OTD.sar
- \EDIFACT\_v4\_SyntaxMessages\_OTD.sar
- \HIPAA
  - \HIPAA\_2000\_Addenda\_OTD.sar
  - \HIPAA\_2000\_Standard\_OTD.sar
  - \HIPAA\_2005\_OTD.sar
- \HL7
  - \HL7eWay.sar
  - \HL7OTDLibrary21.sar
  - \HL7OTDLibrary22.sar
  - \HL7OTDLibrary23.sar
  - \HL7OTDLibrary24.sar
  - \HL7OTDLibrary25.sar
  - \HL7OTDLibrary231.sar
  - \HL7OTDLibrary251.sar
  - \HL7OTDLibrary.sar
  - \HL7OTDLibraryGeneric.sar
  - \HL7V32006ACCTBilling.sar
  - \HL7V32006ClaimsAndReimb.sar
  - \HL7V32006ClinicalGenomics.sar
  - \HL7V32006MedicalRecords.sar
  - \HL7V32006MsgContActInfra.sar
  - \HL7V32006PatientAdmin.sar
  - \HL7V32006PersonnelManagement.sar
  - \HL7V32006PublicHealthRepot.sar
  - \HL7V32006QueryInfra.sar
  - \HL7V32006RegulatedStudies.sar
  - \HL7V32006Schedling.sar
  - \HL7V32006SharedMessages.sar
  - \HL7V32006TransInfra.sar
- \SEF
  - \SEF\_OTD\_Wizard.sar
- \Swift

- \SwiftOTDLibrary2007.sar
- \SwiftOTDLibrary2008.sar
- \SwiftOTDLibrary.sar
- \samples
  - \SAB610\_FTA\_Sample.zip
  - \SwiftSample\_SAA\_AFT\_MQSA.zip
- \X12
  - \X12\_v4010\_OTD.sar
  - \X12\_v4011\_OTD.sar
  - \X12\_v4012\_OTD.sar
  - \X12\_v4020\_OTD.sar
  - \X12\_v4021\_OTD.sar
  - \X12\_v4022\_OTD.sar
  - \X12\_v4030\_OTD.sar
  - \X12\_v4031\_OTD.sar
  - \X12\_v4032\_OTD.sar
  - \X12\_v4040\_OTD.sar
  - \X12\_v4041\_OTD.sar
  - \X12\_v4042\_OTD.sar
  - \X12\_v4050\_OTD.sar
  - \X12\_v4051\_OTD.sar
  - \X12\_v4052\_OTD.sar
  - \X12\_v4060\_OTD.sar
  - \X12\_v4061\_OTD.sar
  - \X12\_v5010\_OTD.sar
  - \X12\_v5020\_OTD.sar

## Contents of the Installation DVDs

There are two installation DVDs delivered with the Java Composite Application Platform Suite Media Kit. See [“Java CAPS Component Names” on page 22](#) for a complete listing of Release 6 names.

- Java CAPS 6 DVD 1 of 2, Part No. 708-0357-10, contains the ZIP and TAR files for completing an installation of Java CAPS. See [“Java CAPS “installer” TAR and ZIP Files” on page 25](#) for a breakdown of the contents of this DVD.
- Java CAPS 6 DVD 2 of 2, Part No. 708-0358-10, contains the ZIP files for all the components that are not included with the Java CAPS Installer, including adapters, add-ons, API Kits, and message libraries. See [“Java CAPS “components” ZIP Files” on page 26](#) for a breakdown of the contents of this DVD.

---

**Note** – The Java CAPS Management and Monitoring APIs ZIP file (`EM_API_KIT.zip`) and the Sun JMS IQ Manager (`STCMS_API_KIT.zip`) are delivered as part of `\ESB_API_KIT`.

---

## Preparing for Installation

When preparing to install Java CAPS you must consider the computer systems on which you plan to the Suite components, along with gathering important information that you must decide upon before performing the installation.

### What Must Be Determined Before You Start the Installation Process

- Select the system that will host the Repository.
- Select the system(s) that will serve as Domains. It is possible for the same system to serve both as a Repository and a Domain. Whether you decide to do this depends on the requirements of your installation. Contact Sun Support if you need assistance making this determination.
- Select the system(s) that will host NetBeans IDE.
- Determine which add-on applications you require.
- Ensure that each system that you select meets the system requirements for Java CAPS. For more information on resource requirements, see [“System Requirements” on page 14](#).

### What Information is Required Before You Start the Installation Process

- The default Java CAPS “Administrator” password for Windows installations. For more information see [“Default “Administrator” User Name” on page 24](#).
- The name of each system where a Repository or Domain will be installed. For more information see [“Repository Names and User Names” on page 24](#).
- Confirmation that you have 10 consecutive ports available for the Repository installation (the default is 12000–12009). You will need the base port number later when you connect to the Repository.

---

**Note** – Make sure that the port number is not in use. To determine which ports are in use, type: `netstat -a | find port_number`.

---

## JDK and JAVA\_HOME

The Java Development Kit (JDK) must be installed, and the `JAVA_HOME` environment variable must be set, on the computer on which you install Java CAPS prior to beginning the installation. This is required to perform the installation and for Java CAPS utilities, such as

Enterprise Manager Command-Line Client and Command Line Code Generation, to function correctly. Different operating systems require different JDK. To determine which JDK you need, see “Installing JDK and Setting JAVA\_HOME” in *Using the Java CAPS 6 Installation CLI* or “Installing JDK and Setting JAVA\_HOME” in *Using the Java CAPS 6 Installation GUI*.

## Upgrading to 6

The process of upgrading to Release 6 is new and is different from the previous upgrading process. Beginning with Release 6, you no longer perform an in-place installation. Instead, install Java CAPS 6 in a new directory, and then import your Projects from previous releases.

When upgrading from previous releases of Java CAPS to release 6:

- Install Java CAPS in a new directory.
- Export your Projects and Environments from the earlier release of Java CAPS
- Import your Projects and Environments into release 6 using the NetBeans IDE Update Center

For instructions on how to complete a successful upgrade see *Upgrading to Java CAPS 6*.

## Java CAPS Installer Caveats

If problems occur during an installation, peruse this topic, for some of the more common resolutions

- **Java CAPS Installer Fails to Parse the Property File**

During installation if your environment contains a backward slash (\), a `java.lang.IllegalArgumentException: Malformed \uxxxx encoding is thrown`. This happens because the environment variables `ps1` and `PS1` contain the backslash character \; that is, `\u@h:\W\$.` The Java CAPS Installer first loads the environment variable values into the `env.properties.xxxx` file and then reads the property file. If this file contains the \ character, it will fail to read. You must reset these environment variable values to blank or some other values without a backslash; such as, `export ps1=` and `export PS1=`. This corrects the error.

- **Java CAPS Installer Does Not Support Silent Mode Installation on MacOS**

Currently the Java CAPS installer does not accept the arguments to run in silent mode on Macintosh operating systems. It can only run in GUI mode.

---

**Note** – As this would be costly to develop there is a good chance that the Java CAPS Installer will not support silent installations on Macintosh operating systems.

---

- **Executing the Windows Link File from the DOS Command Line**

You cannot type the \*.lnk file and press Enter from the command line to execute the link file. Instead, you have two options.

- From Windows command line, type **start \*.lnk** and then press Enter. For example **start start\_appserver\_domain1**.
- From Windows Explorer double-click the \*.lnk file. For example start\_appserver\_domain1.

- **Changing the Locale on Sun Solaris or Generic UNIX Systems**

You can change the locale on Solaris and generic UNIX systems by setting the environment and using the correct commands.

- To list the available installed locale use the command `> locale -a`.
- To change to the locale you want use the command `> export LANG=zh_TW #` and then `> export LC_ALL=zh_TW #` to set up the environment, where zh\_TW is the locale for traditional Chinese.

- **Java CAPS Installer Fails to Launch When Temp Directory Not Found**

If you encounter the problem that you cannot access the /tmp folder, there is a workaround wherein you can set the environment variable IATEMPDIR=/var/tmp. After this environment variable is set, the Java CAPS Installer uses /var/tmp as its temp directory.

- **Overriding JVM**

You can override the JVM in the Java CAPS Installer. To do this, pass LAX\_VM *javaexecutable* to the Java CAPS Installer. For example, `JavaCAPS.exe LAX_VM javapath/java.exe`.

---

**Note** – The Java executable that is specified must match the “Installer Valid VM List” that is listed under Project\Config.

---

- **Which Java on UNIX Systems**

On UNIX systems, which java is the same Java that the Java CAPS Installer uses. You do not have `jdk1.6.0_05/bin` in the path. To double check always run `which java` or `java -version` on UNIX systems to ensure you are using the desired version.

There is also a way to pass the JDK to the Java CAPS Installer: `JavaCAPS.exe LAX_VM javapath/java.exe`.

- **Debugging the Win32 Installer**

To view or capture the debug output from a Java CAPS Installer, you need to hold down the `Ctrl` key immediately after launching the Java CAPS Installer until a console window appears. Before you exit the Java CAPS Installer, copy the console output to a text file for later review.

If you have trouble capturing the console output, you need to try a slightly more convoluted method to copy the output; this is often the case when using Win9x.



1. Launch the Java CAPS Installer and allow it to extract the necessary files.
2. When the Java CAPS Installer reaches the "Preparing to Install" screen where it gives you the opportunity to choose a language, navigate to your Windows "temp" directory.  
It contains a temp folder named with several numeric digits.
3. Ensure you have the most recent directory by sorting the directories by "last modified," and then open the appropriate directory.
4. Delete the file called `sea_loc`.
5. Return to the Java CAPS Installer, click OK, and then at the first opportunity, select Exit.
6. Return to the directory inside the temp directory where you deleted the `sea_loc` file and open the directory called `Windows`.  
In the `Windows` directory there is an `*.exe` file, most likely named `install.exe`. In the same directory there is a file with the same name but with the `*.lax` extension, for example `install.lax`.
7. Open the `*.lax` file, for example `install.lax`, with a plain text editor and edit the lines `lax.stderr.redirect=` and `lax.stdout.redirect=` to `lax.stderr.redirect=output.txt` and `lax.stdout.redirect=output.txt`.
8. After you have made these changes, save the file and launch the `*.exe` file, for example `install.exe`.
9. After the installation is complete there is an `output.txt` file in the same directory as the `*.lax` file.  
The `output.txt` file should contain the same information as that generated in the console.

#### ■ Debugging the UNIX Installer

To capture the debug output from the UNIX command line you need to enter one of the following (based on what shell you are using) at the command line prior to executing the Java CAPS Installer:

- `export LAX_DEBUG=true`
- `setenv LAX_DEBUG true`
- `LAX_DEBUG=true`  
`set LAX_DEBUG`
- Or whatever would be appropriate for your shell.

Run the Java CAPS Installer. The output that is produced should help you debug the Java CAPS Installer. If you want to redirect the output to a file, set `LAX_DEBUG=file` as per the above instruction. Then, run the Java CAPS Installer. Once the installation completes a file named `jx.log` is generated in the same directory as the Java CAPS Installer. This file contains the entire debug output generated by the installation. If you are capturing this information in order to send it to Zero G, include both debug output formats above in their entirety.

## Example of UNIX Debugging Commands

```
boreas% sh
$ LAX_DEBUG=true
$ export LAX_DEBUG
$ PATH=/home/ylee/boreas/jdk1.6.0_05/bin:$PATH
$ export PATH
$ which java
/home/ylee/boreas/jdk1.6.0_05/bin/java
$ sh ./JavaCAPS.bin -i console
Preparing to install...
```

### ■ Debugging the MacOS X Installer

By default both `stderr` and `stdout` is redirected to `/Applications/Utilities/Console.app`. This application is built into Mac OS X. Review the output, and save it to a file if necessary.

### ■ Debugging the MacOS Installer

To view or capture the debug output from the Java CAPS Installer, you need to hold down the `Ctrl` key immediately after launching the Installer until a console window appears. Before exiting the Installer, copy the console output to a text file for later review.

To debug the Java CAPS Installer on specifically on Mac OS 9.1:

1. Run the Java CAPS Installer as normal.
2. When you get to the point of picking a language, open the trash can. There should be a folder named something like `IA Javainstaller (delete) xxxxxx`. Sort by date to make sure that you get the latest.
3. Move this folder to the desktop, open it, and then open the MacOS directory.
4. Delete the file named `sea_loc` inside this folder.
5. Exit the Java CAPS Installer.
6. Edit the `.lax` file with a text editor, and add the word “console” to the strings.
  - `lax.stderr.redirect=` so it reads as `lax.stderr.redirect=console`
  - `lax.stdout.redirect=` so it reads as `lax.stdout.redirect=console`
7. Save the file and close.
8. Run the Java CAPS Installer.

The application should run normally, and bring up the debug output.
9. Review the debug output to determine any issues.

# Creating a Windows Service for Sun Java System Application Server

You can create a Window Service for the Sun Java System Application Server by using the Java CAPS Installer to run scripts that create a service after creating a successful installation.

## To Create the Windows Service

```
C:\WINDOWS\system32\sc.exe create DOMAIN1 binPath=
"C:\JavaCAPS6\appserver\lib\appservService.exe

"C:\JavaCAPS6\appserver\bin\asadmin.bat start-domain --user admin

--passwordfile C:\JavaCAPS6\appserver\passwordfile domain1"

"C:\JavaCAPS6\appserver\bin\asadmin.bat stop-domain domain1""

start=auto DisplayName="SunJavaSystemAppServer DOMAIN1"
```

Contents of C:\JavaCAPS6\appserver\passwordfile:

```
AS_ADMIN_ADMINPASSWORD=adminadmin

AS_ADMIN_MASTERPASSWORD=changeit

AS_ADMIN_PASSWORD=adminadmin
```

The output is [SC] CreateService SUCCESS.

## To Start, Stop, and Delete the Windows Service Using the Example

- To start the Windows Service, enter > **net start DOMAIN1**.

---

**Note** – The output is The SunJavaSystemAppServer DOMAIN1 service is starting.. and The SunJavaSystemAppServer DOMAIN1 service was started successfully.

---

- To stop the Windows Service, enter > **net stop DOMAIN1**.
- To delete the Windows Service, enter > **sc delete DOMAIN1**.

# Increasing the NetBeans IDE Heap Size

If you install the Sun Message Library for HL7, we recommend that you increase the NetBeans IDE heap memory size. If the heap size is not sufficient it could result in out of memory exceptions from the build-in parser. Use the `netbeans.conf` file to set the heap size for the JVM on which NetBeans IDE runs.

The recommended heap sizes for NetBeans C/C++ Development Pack for medium- and large-sized applications are:

- For developing medium-sized applications, that is 100–2000 source files, on a system with one CPU and 1 GB of RAM: 512 MB
- For developing large-sized applications, that is more than 2000 source files, on a system with one or multiple CPUs and 2 GB of RAM: 1.5 GB

## ▼ To Increase the Heap Size in NetBeans IDE

**Before You Begin** It is recommended that you preserve a copy of the `netbeans.conf` file before beginning this process.

- 1 **From the `etc` directory in the NetBeans IDE installation directory, copy the `netbeans.conf` file into your NetBeans IDE user directory, for example: `$HOME/.netbeans/caps/etc` directory.**

---

**Note** – You may need to create the `etc` directory in the NetBeans IDE user directory.

---

- 2 **In your NetBeans IDE user directory, edit the `-J-Xmx` command line Java startup switch in the `netbeans.conf` file, for example:**

```
# command line switches
netbeans_default_options=" -J-Xms32m -J-Xmx128m -J-XX:PermSize=32m
-J-XX:MaxPermSize=96m -J-Xverify:none -J-Dapple.laf.useScreenMenuBar=true"
```

- 3 **Restart NetBeans IDE.**

---

**Note** – To ensure that you do not run out of memory while the built-in parser is running, you can also add the garbage collector switches `-J-XX:+UseConcMarkSweepGC` (concurrent collector) and `-J-XX:+UseParNewGC` (parallel collector) to the `netbeans.conf` file.

---

# UNIX and Linux Patches

There are required and certified UNIX and Linux patches for Java CAPS 6.

- “Checking Patch Levels” on page 37
- “Certified Sun Solaris 9 and 10 Patches” on page 37
- “IBM AIX 5L 5.2 and 5.3 Patches” on page 38
- “Linux Patches” on page 39

## Checking Patch Levels

Use these commands to check which patch levels are currently installed on your operating system:

- Sun Solaris patches

```
pkginfo  
cat /etc/release
```

- IBM AIX patches

```
instfix -i
```

- Linux patches

```
uname -a
```

## Certified Sun Solaris 9 and 10 Patches

There is one certified patch for Sun Solaris 9:

```
Solaris 9 Maintenance Update 3 4-2003
```

---

**Note** – This patch is also valid on Japanese and Korean operating systems.

---

A complete list of the patches included in these Clusters is available from Sun Support.

---

**Note** – This patch is recommended but not required.

---

## Daylight Savings Time Patches

If you want your logger and scheduling to be correct, you need to install the appropriate patches:

- **SPARC Platform**

- Solaris 9 with timezone patch 113225-08 or later and libc patch 112874-33 or later
- Solaris 10 with timezone patch 122032-04 or later and libc patch 119689-07 or later
- **AMD Opteron Platform**
  - Solaris 10 with timezone patch 122033-03 or later and libc patch 121208-02 or later

## IBM AIX 5L 5.2 and 5.3 Patches

The following patches are certified patches for IBM AIX:

### Certified IBM AIX 5L Version 5.2 Patches

There is one certified patch for IBM AIX 5L version 5.2:

5200-08\_AIX\_ML (Maintenance Level 8)

If you want your logger and scheduling to be correct, you need to install this Daylight Savings Time patch:

5.2 APAR IY5213

### Certified IBM AIX 5L Version 5.3 Patches

There is one certified patch for IBM AIX 5L version 5.3:

5300-05\_AIX\_ML (Maintenance Level 5)

If you want your logger and scheduling to be correct, you need to install this Daylight Savings Time patch:

5.3 APAR IY75211

---

**Note** – The IBM AIX patches are also valid on Japanese and Korean operating systems.

---

# Linux Patches

The following patches are certified patches for Red Hat Linux and SUSE Linux:

## **Certified SUSE Linux Enterprise Server 10 Daylight Savings Time Patch**

If you want your logger and scheduling to be correct on your Linux systems, you need to install this Daylight Savings Time patch:

`tzdata-2007c-1.e12_1`

