

# CA ControlMinder

## Release Notes

12.7



This Documentation, which includes embedded help systems and electronically distributed materials, (hereinafter referred to as the "Documentation") is for your informational purposes only and is subject to change or withdrawal by CA at any time.

This Documentation may not be copied, transferred, reproduced, disclosed, modified or duplicated, in whole or in part, without the prior written consent of CA. This Documentation is confidential and proprietary information of CA and may not be disclosed by you or used for any purpose other than as may be permitted in (i) a separate agreement between you and CA governing your use of the CA software to which the Documentation relates; or (ii) a separate confidentiality agreement between you and CA.

Notwithstanding the foregoing, if you are a licensed user of the software product(s) addressed in the Documentation, you may print or otherwise make available a reasonable number of copies of the Documentation for internal use by you and your employees in connection with that software, provided that all CA copyright notices and legends are affixed to each reproduced copy.

The right to print or otherwise make available copies of the Documentation is limited to the period during which the applicable license for such software remains in full force and effect. Should the license terminate for any reason, it is your responsibility to certify in writing to CA that all copies and partial copies of the Documentation have been returned to CA or destroyed.

TO THE EXTENT PERMITTED BY APPLICABLE LAW, CA PROVIDES THIS DOCUMENTATION "AS IS" WITHOUT WARRANTY OF ANY KIND, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT. IN NO EVENT WILL CA BE LIABLE TO YOU OR ANY THIRD PARTY FOR ANY LOSS OR DAMAGE, DIRECT OR INDIRECT, FROM THE USE OF THIS DOCUMENTATION, INCLUDING WITHOUT LIMITATION, LOST PROFITS, LOST INVESTMENT, BUSINESS INTERRUPTION, GOODWILL, OR LOST DATA, EVEN IF CA IS EXPRESSLY ADVISED IN ADVANCE OF THE POSSIBILITY OF SUCH LOSS OR DAMAGE.

The use of any software product referenced in the Documentation is governed by the applicable license agreement and such license agreement is not modified in any way by the terms of this notice.

The manufacturer of this Documentation is CA.

Provided with "Restricted Rights." Use, duplication or disclosure by the United States Government is subject to the restrictions set forth in FAR Sections 12.212, 52.227-14, and 52.227-19(c)(1) - (2) and DFARS Section 252.227-7014(b)(3), as applicable, or their successors.

Copyright © 2013 CA. All rights reserved. All trademarks, trade names, service marks, and logos referenced herein belong to their respective companies.

## Third-Party Notices

CONTAINS IBM(R) 32-bit Runtime Environment for AIX(TM), Java(TM) 2 Technology Edition, Version 1.4 Modules

(c) Copyright IBM Corporation 1999, 2002

All Rights Reserved

# CA Technologies Product References

This document references the following CA Technologies products:

- CA ControlMinder
- CA Single Sign-On (CA SSO)
- CA Top Secret®
- CA ACF2™
- CA Audit
- CA Network and Systems Management (CA NSM, formerly Unicenter NSM and Unicenter TNG)
- CA Software Delivery (formerly Unicenter Software Delivery)
- CA Service Desk (formerly Unicenter Service Desk)
- CA User Activity Reporting Module (formerly CA User Activity Reporting)
- CA IdentityMinder

# Documentation Conventions

The CA ControlMinder documentation uses the following conventions:

<b>Format</b>	<b>Meaning</b>
Mono-spaced font	Code or program output
<i>Italic</i>	Emphasis or a new term
<b>Bold</b>	Text that you must type exactly as shown
A forward slash (/)	Platform independent directory separator used to describe UNIX and Windows paths

The documentation also uses the following special conventions when explaining command syntax and user input (in a mono-spaced font):

<b>Format</b>	<b>Meaning</b>
<i>Italic</i>	Information that you must supply
Between square brackets ([ ])	Optional operands
Between braces ({ })	Set of mandatory operands

Format	Meaning
Choices separated by pipe ( ).	Separates alternative operands (choose one). For example, the following means <i>either</i> a user name <i>or</i> a group name:  <code>{username groupname}</code>
...	Indicates that the preceding item or group of items can be repeated
<u>Underline</u>	Default values
A backslash at end of line preceded by a space ( \)	Sometimes a command does not fit on a single line in this guide. In these cases, a space followed by a backslash ( \) at the end of a line indicates that the command continues on the following line.  <b>Note:</b> Avoid copying the backslash character and omit the line break. These are not part of the actual command syntax.

### Example: Command Notation Conventions

The following code illustrates how command conventions are used in this guide:

```
ruler className [props({all|{propertyName1[,propertyName2]...})]
```

In this example:

- The command name (ruler) is shown in regular mono-spaced font as it must be typed as shown.
- The *className* option is in italic as it is a placeholder for a class name (for example, USER).
- You can run the command without the second part enclosed in square brackets, which signifies optional operands.
- When using the optional parameter (props), you can choose the keyword *all* or, specify one or more property names separated by a comma.

## File Location Conventions

The CA ControlMinder documentation uses the following file location conventions:

- *ACSharedDir*—A default directory that is used by CA ControlMinder for UNIX.
  - UNIX—/opt/CA/AccessControlShared
  - Windows—\ProgramFiles\CA\AccessControlShared

- *ACServerInstallDir*—The default CA ControlMinder Enterprise Management installation directory.
  - UNIX—/opt/CA/AccessControlServer
  - Windows—\ProgramFiles\CA\AccessControlServer
- *DistServerInstallDir*—The default Distribution Server installation directory.
  - UNIX—/opt/CA/DistributionServer
  - Windows—\ProgramFiles\CA\DistributionServer
- *JBoss\_HOME*—The default JBoss installation directory.
  - UNIX—/opt/jboss-4.2.3.GA
  - Windows—\jboss4.2.3.GA

## Contact CA Technologies

### Contact CA Support

For your convenience, CA Technologies provides one site where you can access the information that you need for your Home Office, Small Business, and Enterprise CA Technologies products. At <http://ca.com/support>, you can access the following resources:

- Online and telephone contact information for technical assistance and customer services
- Information about user communities and forums
- Product and documentation downloads
- CA Support policies and guidelines
- Other helpful resources appropriate for your product

### Providing Feedback About Product Documentation

If you have comments or questions about CA Technologies product documentation, you can send a message to [techpubs@ca.com](mailto:techpubs@ca.com).

To provide feedback about CA Technologies product documentation, complete our short customer survey which is available on the CA Support website at <http://ca.com/docs>.

# Contents

---

## **Chapter 1: Welcome** **11**

CA ControlMinder Installation Media .....	11
Complementary CA User Activity Reporting Module License .....	12
A Single Documentation Set .....	12

## **Chapter 2: New and Changed Features** **15**

CA ControlMinder Enhancements .....	15
Documentation Enhancements .....	16
Fixed Issues in This Release .....	16

## **Chapter 3: System Requirements** **17**

Operating System Support .....	17
Enterprise Management Server Requirements .....	17
Enterprise Management Server Integration Components .....	18
CA ControlMinder Endpoint Management Requirements .....	19
Enterprise Reporting Requirements .....	19
Distribution Server Requirements .....	20
Policy Model Database Requirements .....	20

## **Chapter 4: Documentation** **21**

Guides .....	21
--------------	----

## **Chapter 5: FIPS Compliance** **23**

FIPS Operational Modes .....	23
Unsupported Operating Systems for FIPS-only Mode .....	23
FIPS Encryption Libraries .....	23
FIPS Algorithms Used .....	24
Storage of Keys and Certificates .....	24
Features Affected (UNIX) .....	24
Features Affected (Windows) .....	26

## **Chapter 6: Feature Support Limitations** **29**

SAM Limitations .....	29
SAM Is Not FIPS140-2 and IPV6 Compliant .....	29

---

## Chapter 7: Installation Considerations 31

Server Components Release Only .....	31
Server Component Installation Considerations .....	31
Required 32 bit Libraries for installing the Enterprise Management Server on Red Hat Linux 6 .....	31
Install Primary and Load Balancing Enterprise Management Server on Same Time Zone .....	31
Installing Endpoint Management on 64-bit Linux.....	32
Special Characters in Administrator Name .....	32
Supported JDK and JBoss Versions.....	32
Prerequisite Kit Installer Considerations.....	32
Superuser Account Required for Server Components Installations.....	32
RDBMS Connection Fails During Installation if Java Cannot Be Found .....	32
Enterprise Management Server Installation Does Not Support Spaces in Installation Path .....	33
Set Up CA ControlMinder Enterprise Management to Work with Active Directory on Another Domain .....	33
CA ControlMinder Endpoint Management Installation Instructions Refer to Both Editions of CA ControlMinder.....	34
CA ControlMinder Endpoint Management Shortcut Points to Port Number 8080 .....	34
CA User Activity Reporting Module Supports Only Trusted SSL Connection .....	34
Special Subscription Needed to View CA User Activity Reporting Module Reports from CA ControlMinder Enterprise Management .....	35
Synchronize the System Time of the CA ControlMinder Enterprise Management and Report Portal Computers.....	35
Uninstall Fails if You Are Not the Superuser .....	35

## Chapter 8: Upgrade Considerations 37

Server Component Upgrade Considerations.....	37
Upgrading Enterprise Management Server to r12.7 Does Not Preserve Roles and Tasks.....	37
CA ControlMinder r12.6.01 Requires Hot Fix to Manage Policy Models on CA ControlMinder r12.5 and r12.0.01 .....	37
Software Patch Required to Deploy Policies on Endpoints.....	37
Enterprise Management UI Login Fails When Upgrading from CA ControlMinder 12.6SP1 or lower. ....	38

## Chapter 9: General Considerations 39

Server Components Considerations.....	39
Communication Issues between CA ControlMinder Components and CA ControlMinder Message Queue.....	39
Upgrade With Oracle .....	40
CA ControlMinder Host Name Limitation .....	40
Automatic Generation of Policy Undeploy Script .....	40
Specify the SAM Endpoint NETBIOS Name and Not the DNS Domain Name .....	41
Using the Login Application Script to log on to a Member of a Domain .....	42
You Cannot Configure More Than a Single CA IdentityMinder Provisioning Connector Server .....	42

---

Cannot Configure CA IdentityMinder Provisioning Connector Server Using SSL Port .....	43
Cannot Use SAM to Change Password for the Expert Account .....	43
SQLCMD Utility Does Not Support Blank Passwords .....	43
Oracle11g Server Certificate Required.....	43

## **Chapter 10: Known Issues 45**

Installation Known Issues .....	45
Upgrade Known Issues .....	45
General Known Issues .....	45
Server Components Known Issues .....	45
Documentation Known Issues.....	53

## **Appendix A: Third-Party License Agreements 55**

Software Under the Apache License .....	57
Software Under the Daniel Veillard License.....	64
Software Under the OpenLDAP License.....	66
Software Under the OpenSSL License .....	69
AES 2.4.....	75
AIX JRE 1.4.2 .....	76
AIX JRE 1.5.0 .....	76
ANTLR 2.7.5H3.....	77
Boost 1.32.0 .....	78
CentOS 5.6.....	79
CPAN Perl 5.8.8 .....	79
CRC32 .....	80
Cyrus SASL 2.1.22 .....	82
Detours 3.0.....	85
dom4j 1.5 .....	91
Hibernate 3.2.....	92
ICU4C 3.4.....	93
JBoss 4.0.1 SP1 .....	94
JBoss Application Server v.4.2.3.....	95
JBoss Native v.2.0.6.....	96
JCIFS 1.3.14.....	97
JDOM 1.0.....	98
JWSDP 1.3.....	100
LDAP SDK for Java 1.1.6.....	101
MD5 Message Digest Algorithm.....	102
Microsoft Visual C++ 2005 SP1 Redistributable Package .....	104
MIT Kerberos v5 r1.5.....	107
MIT Kerberos V5 r 1.8.4 .....	130

---

nss_ldap 2.62 .....	153
Oracle JDBC Driver 10g Release 2 (10.2.0.1.0) .....	160
Oracle JDK 1.6.0 19.....	165
PCRE 6.3 .....	172
PuTTY with support for GSSAPI/SSPI 0.58 .....	175
Rhino 1.6r4 .....	175
SAXPath 1 .....	176
SHA-1 .....	179
Sun JDK 1.4.2_13 .....	180
Sun JDK 1.6.0 .....	190
Sun JRE 1.5.0_18 .....	205
WSDL4J 1.5.1 .....	219
XNTP v.3-5.93 .....	220
XScreenSaver .....	221
Zlib 1.2.3 .....	221
ZThread 2.3.2 .....	222
SimpleCaptcha 1.2.....	223

# Chapter 1: Welcome

---

Welcome to CA ControlMinder 12.7. This guide describes new enhancements, changes to existing features, operating system support, system requirements, documentation information, installation and general considerations, published solutions, and known issues for CA ControlMinder.

CA ControlMinder offers enterprise management and reporting capabilities, and advanced policy management features.

To simplify terminology, we refer to the product as CA ControlMinder throughout this guide.

This section contains the following topics:

[CA ControlMinder Installation Media](#) (see page 11)

[Complementary CA User Activity Reporting Module License](#) (see page 12)

[A Single Documentation Set](#) (see page 12)

## CA ControlMinder Installation Media

CA ControlMinder components are available on the following optical discs.

The following optical discs contain Enterprise Management Server and Report Portal components for Windows:

- CA ControlMinder Server Components for Windows

Contains installation files for CA ControlMinder Endpoint Management, CA ControlMinder Distribution Server, and CA ControlMinder Enterprise Management.

CA ControlMinder Enterprise Management includes CA ControlMinder Endpoint Management, CA ControlMinder endpoint components for Windows, CA ControlMinder Distribution Server components, and the Deployment Map Server (DMS).

This optical disc also includes report packages for import in to CA Business Intelligence.

- CA ControlMinder Third Party Components for Windows

Contains a prerequisite installer that installs prerequisite third-party software (JDK and JBoss) on Windows. These software applications are required before you can install CA ControlMinder Server Components.

The following optical discs contain Enterprise Management Server and Report Portal components for Linux:

- CA ControlMinder Server Components for Linux  
Contains installation files for CA ControlMinder Endpoint Management, CA ControlMinder Distribution Server, and CA ControlMinder Enterprise Management.  
  
CA ControlMinder Enterprise Management includes CA ControlMinder Endpoint Management, CA ControlMinder endpoint components for Linux, CA ControlMinder Distribution Server components, and the Deployment Map Server (DMS).  
  
This optical disc also includes report packages for import in to CA Business Intelligence.
- CA ControlMinder Third Party Components for Linux  
Contains prerequisite third-party software (JDK and JBoss) for Linux. These software applications are required before you can install CA ControlMinder Server Components.

## Complementary CA User Activity Reporting Module License

As the owner of the CA ControlMinder, you are also entitled to the CA User Activity Reporting Module product for the limited use of collecting, managing and reporting on CA ControlMinder audit logs. First, you must obtain a license for “CA User Activity Reporting Module Server for CA ControlMinder” (Codes ELMSAC99100/ELMSAC991), which is offered to CA ControlMinder customers for a symbolic price.

To obtain your license for CA User Activity Reporting Module in North America, contact your local account representative. If you are outside of North America, call your local account representative or the local CA Technologies office. You can download CA User Activity Reporting Module online through the Download Center on the CA Support Online web site at <http://ca.com/support> under your CA ControlMinder download links.

## A Single Documentation Set

The following describes the documentation for CA ControlMinder:

- Release Notes
- Implementation Guide
- Enterprise Administration Guide
- Upgrade Guide
- Implementation Guide
- Endpoint Administration Guide for Windows

- Endpoint Administration Guide for UNIX
- Reference Guide
- selang Reference Guide
- Troubleshooting Guide



# Chapter 2: New and Changed Features

---

This section contains the following topics:

[CA ControlMinder Enhancements](#) (see page 15)

[Documentation Enhancements](#) (see page 16)

[Fixed Issues in This Release](#) (see page 16)

## CA ControlMinder Enhancements

The following CA ControlMinder enhancements and fixes were made since the last release:

- **Scalability and Performance**

CA ControlMinder now performs common tasks in less time. The product now supports 100,000 Endpoints and Accounts. For more information see Sizing and Performance.

- **Report Enhancements**

CA ControlMinder now generates Workload Partitioning reports from every product component in a few hours. Seven new reports were added to the product. For more information see Creating Reports.

- **Screen Panel Enhancements**

Views have been added to the UI World View screen for Hosts, Host Groups, Policies, and Shared accounts.

- **REST API**

Enhanced product support of REST by adding additional methods. You can now use REST API to retrieve a list of accounts that specific users can access, manage accounts and endpoints and more. For more information see the REST API section.

- **New SetPUTTY Options**

You can now use the product to customize the PUTTY and Telnet script.

- **Enhanced Login Applications**

The product now supports MS SQL, Oracle, Juniper Netscreen, and FTP login applications.

- **Endpoint Type with SSH and Network Device XML Files**

The SAM (Shared Account Management) endpoint type is enhanced with additional SSH and Network device XML files.

- **Windows 8 Support**

You can now configure Microsoft Windows 8 as a SAM endpoint.

## Documentation Enhancements

The following documentation enhancements were made since the last release:

- **Scenario Based Content**

Added the following scenarios:

- **How to Configure Certificate-Based Authentication**

Certificate Based Authentication enhances authentication capabilities by allowing users to log in without providing their login credentials on each login.

- **Configure the Enterprise Management Server for Integrated Windows Authentication**

Integrated Windows Authentication (IWA) enables users to log in to CA ControlMinder Enterprise Management using domain account credentials from the user Windows sessions.

- **How to Configure the Apache Load Balancer**

Load balancing evenly distributes a task among multiple resources increasing network utilization and reliability.

## Fixed Issues in This Release

Fixes included in this release are documented in the Release FIXLIST. You can access the FIXLIST from the [CA ControlMinder Latest Maintenance Release](#) page on CA Support.

# Chapter 3: System Requirements

---

This section contains the following topics:

[Operating System Support](#) (see page 17)

[Enterprise Management Server Requirements](#) (see page 17)

[Enterprise Management Server Integration Components](#) (see page 18)

[CA ControlMinder Endpoint Management Requirements](#) (see page 19)

[Enterprise Reporting Requirements](#) (see page 19)

[Distribution Server Requirements](#) (see page 20)

[Policy Model Database Requirements](#) (see page 20)

## Operating System Support

For a list of supported operating systems, see the CA ControlMinder Compatibility Matrix that is available from the CA ControlMinder product page on [CA Support](#).

## Enterprise Management Server Requirements

The minimum requirements for the Enterprise Management Server are:

- **Processor**—(Windows) Pentium PC 2.66 GHz; (UNIX) SPARC Workstation 440 MHz
- **Memory**—4-GB RAM
- **Available disk space**—2 GB at an installation directory; 3 GB at %TEMP% (Windows) or /tmp (UNIX); 4-GB swap file; 1.5 GB at the JBoss directory.

**Note:** For the recommended hardware specifications refer to the *Implementation Guide, Planning Your Enterprise Implementation* chapter.

In addition, install the following software in the Enterprise Server:

- **JDK**—Java Development Kit (JDK) 1.6.30 or higher
- **Application server**—JBoss Application Server version 4.2.3.GA
- **A central database (RDBMS)**—Oracle Database 10g, Oracle Database 11g, Microsoft SQL Server 2005, or Microsoft SQL Server 2008

**Note:** You can install the central database on another computer. For information about system requirements for your RDBMS, see the documentation for your product.

On the end-user computer, you need a minimum screen resolution of 1024 x 768 and the following settings as your web browser:

- **Windows**—Microsoft Internet Explorer 6.x or 7.x or 8.x; or Mozilla Firefox 2.x or 3.0 or 3.5
- **Linux**—Mozilla Firefox 2.x or 3.0 or 3.5

## Enterprise Management Server Integration Components

The Enterprise Management Server supports integration with the following products:

- **Active Directory**—(Optional) An enterprise user store.  
**Note:** You do not need to install the user store on the same computer as the Enterprise Management Server.
- **CA Directory**—(Optional) A CA proprietary user store.
- **Sun ONE**—(Optional) An enterprise user store.  
**Note:** You do not need to install the user store on the same computer as the Enterprise Management Server.
- **Report Portal**—CA Business Intelligence.  
**Note:** You do not need to install this software on the same computer as the Enterprise Management Server. For information about system requirements for the Report Portal, see the *CA Business Intelligence Installation Guide*.  
**Note:** For more information about CA Business Intelligence, see the *CA Business Intelligence Installation Guide*, which is available from [CA Technologies Support](#).
- **CA User Activity Reporting Module**—r12.0  
**Note:** Do not install this software on the same computer as the Enterprise Management Server. For information about system requirements for CA User Activity Reporting Module, see the *CA User Activity Reporting Module Release Notes*.
- **CA Service Desk**—r12.1  
**Note:** You do not need to install this software on the same computer as the Enterprise Management Server. For information about system requirements for CA Service Desk, see the *CA Service Desk Release Notes*.
- **CA SiteMinder**  
For more information about the system requirements for CA SiteMinder, see the *CA SiteMinder Release Notes*.

## CA ControlMinder Endpoint Management Requirements

The minimum requirements for the CA ControlMinder Endpoint Management computer are:

**Processor**—(Windows) Pentium PC 2.66 GHz

- **Memory**—2-GB RAM
- **Available disk space**—2-GB at an installation directory; 3 GB at %TEMP% (Windows) or /tmp (UNIX)

In addition, install the following software in the CA ControlMinder Endpoint Management computer:

- **JDK**—Java Development Kit (JDK) 1.6.30 or higher
- **Application server**—JBoss Application Server version 4.2.3.GA
- **CA ControlMinder**—Latest version of endpoint installation

On the end-user computer, you need a minimum screen resolution of 1024 x 768 and the following as your web browser:

- **Windows**—Microsoft Internet Explorer 6.x or 7.x or 8.x; or Mozilla Firefox 2.x or 3.0 or 3.5
- **Linux**—Mozilla Firefox 2.x or 3.0 or 3.5

## Enterprise Reporting Requirements

If you use Oracle Database 10g or Oracle Database 11g as your central database (RDBMS), do the following before you install the CA ControlMinder Enterprise Management:

- Verify that the Oracle host and the CA Business Intelligence host can communicate.
- Install Oracle Client software on the CA Business Intelligence host.
- Verify that the Oracle TNS definition on the CA Business Intelligence host points to the central database.

If you use Microsoft SQL Server 2005, Microsoft SQL Server 2008 or Microsoft SQL Server 2012 as your central database (RDMBS), do the following before you install the Report Server:

- Verify that the MS SQL host and the CA Business Intelligence host can communicate.

**Important!** If you use Microsoft SQL Server as the reporting database, install the Report Portal on a supported Windows operating system.

## Distribution Server Requirements

The minimum requirements for the Distribution Server computer are:

- **Processor**—Pentium PC 266 MHz
- **Memory**—2 GB RAM
- **Available disk space**—2 GB at installation; 1 GB at %TEMP% (Windows) or /tmp (UNIX)

In addition, the Distribution Server computer must have the following software installed:

- **JRE**—Java Runtime Environment (JRE) 1.5.0\_18 or higher

## Policy Model Database Requirements

In addition to endpoint space requirements, you also need additional disk space for each Policy Model you plan to create on the host. Each Policy Model contains a database so you need to calculate the space requirements in the same manner as you did for your CA ControlMinder database.

If you are upgrading and have all your Policy Models databases (PMDBs) in place already, record the space each of the PMDBs uses in the *ACInstallDir/policy\_model\_path/pmdb\_name* directory before you upgrade. Use the following calculations to estimate the additional disk space you will need for upgrading each PMDB:

- *ACInstallDir/policies/pmdb\_name/subscribers.dat* (size) x 2
- *ACInstallDir/policies/pmdb\_name/updates.dat* (size) x 5 + 1000 KB

# Chapter 4: Documentation

---

This section contains the following topics:

[Guides](#) (see page 21)

## Guides

The guides for CA ControlMinder 12.7 are as follows:

- Release Notes
- Implementation Guide
- Endpoint Administration Guide for Windows
- Endpoint Administration Guide for UNIX
- Enterprise Administration Guide
- Integration Guide
- Upgrade Guide
- Reference Guide
- selang Reference Guide
- Troubleshooting Guide

**Note:** To view PDF files, you must download and install a Portable Document Format (PDF) reader. The CA ControlMinder documentation requires Adobe Reader 7.0.7 or later. You can download Adobe Reader from the Adobe website if it is not already installed on your computer.

In addition to the PDF guides, the CA ControlMinder guides are also available in HTML format and Online Help is accessible from the various web-based interfaces.



# Chapter 5: FIPS Compliance

---

This section contains the following topics:

[FIPS Operational Modes](#) (see page 23)

[Unsupported Operating Systems for FIPS-only Mode](#) (see page 23)

[FIPS Encryption Libraries](#) (see page 23)

[FIPS Algorithms Used](#) (see page 24)

[Storage of Keys and Certificates](#) (see page 24)

[Features Affected \(UNIX\)](#) (see page 24)

[Features Affected \(Windows\)](#) (see page 26)

## FIPS Operational Modes

CA ControlMinder has two FIPS operational modes: FIPS-only and regular. In FIPS-only mode, CA ControlMinder uses only those cryptographic functions that are FIPS 140-2 compliant. This means that some CA ControlMinder features are disabled in FIPS-only mode. In regular mode CA ControlMinder uses both FIPS 140-2 cryptographic functions and non-FIPS compliant functions.

**Note:** To switch between FIPS-only mode and regular, use the *fips\_only* configuration setting in the crypto section.

## Unsupported Operating Systems for FIPS-only Mode

FIPS-only mode is not supported on the following CA ControlMinder supported operating system architectures:

- Linux s390
- Linux Itanium (IA64)
- Solaris x64
- Windows Itanium (IA64)

## FIPS Encryption Libraries

In FIPS-only mode CA ControlMinder uses the CAPKI encryption library. On UNIX systems it uses the OS encryption library for password encryption (“crypt” method). In regular mode, CA ControlMinder uses the CAPKI 4.1.3 encryption library in addition to the non-FIPS encryption libraries.

## FIPS Algorithms Used

CA ControlMinder components use the following cryptographic algorithms. Different components use different algorithms.

- In FIPS-only mode:
  - SSL (TLS 1.0)—client/server communication
  - AES in CBC mode—encryption of PMD update file (Windows), bidirectional password history (Windows)
  - SHA-1—Unidirectional password encryption (Windows), Trusted Programs, policy signatures (advanced policy management)
- In regular mode:
  - CA ControlMinder r8 SP1 encryption libraries (DES, Triple DES, AES, MD5, and so on)
  - SSL (SSL V2, SSL V3 and TLS 1.0)—client/server communication
  - SHA-1 (from CAPKI)—used for signatures of trusted programs, signatures of policies
  - AES (from CAPKI)—used for password validation when working with bidirectional password history

## Storage of Keys and Certificates

CA ControlMinder stores keys and certificates as follows.

- Symmetric keys are stored as in eTrust Access Control r8 SP1.
- Certificates (subject certificate, private key, and root certificate) are stored on the file system and protected by CA ControlMinder.

**Note:** CA ControlMinder encrypts the private key using AES symmetric encryption (from the CAPKI libraries) using CA ControlMinder symmetric key.

## Features Affected (UNIX)

The FIPS operational mode can have an effect on the following CA ControlMinder UNIX features:

Feature	Non-FIPS Mode	FIPS Mode
PMD update file encryption	Default symmetric key encryption (two-way)	Disabled

<b>Feature</b>	<b>Non-FIPS Mode</b>	<b>FIPS Mode</b>
Trusted Programs	CAPKI SHA-1 and MD5	CAPKI SHA-1 only
Bidirectional password encryption	Default symmetric key encryption	Disabled
Unidirectional password encryption	Operating system's crypt/bigcrypt method	Operating system's crypt/bigcrypt method
PMD TNG command	Default symmetric key encryption	Disabled
CA ControlMinder TNG daemon	Default symmetric key encryption	Disabled
LDAP password encryption usage (sebuildla -u -n)	Default symmetric key encryption	Disabled
LDAP password encryption generation (seldapcred)	Default symmetric key encryption	Disabled
TCP communication	Default symmetric key encryption (two-way) or CAPKI sockets over SSL V2, SSL V3, or TLS V1	CAPKI sockets over TLS V1
seversion utility	CAPKI SHA-1	CAPKI SHA-1
Trusted Programs (watchdog and seretrust)	CAPKI SHA-1	CAPKI SHA-1
Advanced policy management policy distribution	CAPKI SHA-1 signature, and for backwards compatibility, CA ControlMinder internal SHA-1 signature	CAPKI SHA-1 signature only
selogrd encryption	Default symmetric key encryption and MD5	Disabled
sechkey key change	Default symmetric key encryption	Disabled
iRecorder log file signature	MD5 encryption	Disabled
Report Agent	Enabled	Disabled
SAM Agent	Enabled	Disabled
DMS	Enabled	UNAB endpoints management disabled

**Note:** Where a feature is disabled as a result of the FIPS operational mode, the relevant program prints an error message and exits, or writes the error message to the system log if a non interactive process occurred. For example: Report Agent or SAM Agent.

## Features Affected (Windows)

The FIPS operational mode can have an effect on the following CA ControlMinder Windows features:

Feature	Non-FIPS Mode	FIPS Mode
PMD update file encryption	Default symmetric key encryption (two-way)	CAPKI AES symmetric key encryption
Password history (non-bidirectional)	Saved as CAPKI SHA-1. Password validation with CAPKI SHA-1 and fall through to crypt	Saved as CAPKI SHA-1. Password validation with CAPKI SHA-1 only
Password history (bidirectional)	Default symmetric key encryption. Password validation with default symmetric key encryption	CAPKI AES symmetric key encryption. Password validation with CAPKI AES only.
sechkey key change, password history	Default symmetric key encryption to decrypt and encrypt password history	CAPKI AES symmetric key encryption to decrypt and encrypt password history
sechkey key change, policy model	Default symmetric key encryption to decrypt and encrypt policy model update files	CAPKI AES symmetric key encryption to decrypt and encrypt policy model update files
Trusted Programs	CAPKI SHA-1 and MD5	CAPKI SHA-1 only
Mainframe password synchronization	Enabled	Disabled
iRecorder	Enabled	Disabled
TNG integartion	Enabled	Disabled
Advanced policy management policy distribution	CAPKI SHA-1 signature, and for backwards compatibility, CA ControlMinder internal SHA-1 signature	CAPKI SHA-1 signature only
Report Agent	Enabled	Disabled
SAM Agent	Enabled	Disabled

---

Feature	Non-FIPS Mode	FIPS Mode
DMS	Enabled	UNAB endpoint management disabled

---

**Note:** Where a feature is disabled as a result of the FIPS operational mode, the relevant program prints an error message and exits, or writes the error message to the system log if a non interactive process occurred. For example: Report Agent or SAM Agent.

You should also consider the following:

- When moving from non-FIPS to FIPS, the policy model *cannot* read old commands.
- When moving from FIPS to non-FIPS, the policy model *can* read old commands.
- For non-bidirectional password history, there is no impact when not using crypt in FIPS mode. Crypt is only for backwards compatibility.
- For bidirectional password history, moving from non-FIPS to FIPS, CA ControlMinder cannot decrypt old passwords.



# Chapter 6: Feature Support Limitations

---

This section contains the following topics:

[SAM Limitations](#) (see page 29)

## SAM Limitations

This section describes feature support limitations for SAM endpoints and server components.

### SAM Is Not FIPS140-2 and IPV6 Compliant

Currently, SAM is not FIPS140-2 and IPV6 compliant.



# Chapter 7: Installation Considerations

---

This section contains the following topics:

[Server Components Release Only](#) (see page 31)

[Server Component Installation Considerations](#) (see page 31)

## Server Components Release Only

This release of CA ControlMinder contains the Enterprise Management Server components only.

## Server Component Installation Considerations

This section describes items you should consider when installing server components (the Enterprise Management Server, CA ControlMinder Endpoint Management, and Enterprise Reporting).

### Required 32 bit Libraries for installing the Enterprise Management Server on Red Hat Linux 6

#### Valid on Red Hat Linux 6

Before you install the Enterprise Management Server on Red Hat Linux 6, install the following libraries and packages:

- Libraries: audit-libs, compat-libstdc++, glibc, libgcc, libSM, libXext, LibXp, LibXt, ncurses, pam, libstdc++
- Packages: Ksh, dos2unix

### Install Primary and Load Balancing Enterprise Management Server on Same Time Zone

When configuring Enterprise Management Server for high availability, verify that both the primary and the load balancing servers are installed on the same time zone.

## Installing Endpoint Management on 64-bit Linux

To install Endpoint Management on a 64-bit Linux server, install CA ControlMinder Endpoint Management 32-bit version. The 32-bit version is required as Endpoint Management installs a 32-bit web service.

## Special Characters in Administrator Name

### Valid on Windows

The administrative account user name must not include any special characters. For example: '-' character.

## Supported JDK and JBoss Versions

You can find supported JDK and JBoss versions on the CA ControlMinder Third Party Components DVDs.

## Prerequisite Kit Installer Considerations

When using the Prerequisite Kit installer utility to install CA ControlMinder Enterprise Management from the media, after you are prompted to insert the CA ControlMinder Enterprise Management DVD, you must select Done to continue. You may also need to close the ProductExplorer window that appears when you insert the DVD.

## Superuser Account Required for Server Components Installations

To install any of the CA ControlMinder server components (such as Endpoint Management and Enterprise Management), you must log in as the superuser (root on UNIX or a member of the Administrators group on Windows).

## RDBMS Connection Fails During Installation if Java Cannot Be Found

During CA ControlMinder Enterprise Management installation, when it tries to connect to the RDBMS, a connection failure may suggest that java.exe cannot be located.

Make sure that the full pathname to java.exe is in the system's PATH environment variable.

## Enterprise Management Server Installation Does Not Support Spaces in Installation Path

### Valid on UNIX

Do not enter spaces in the installation path when you install the Enterprise Management Server.

## Set Up CA ControlMinder Enterprise Management to Work with Active Directory on Another Domain

If you want to work with an Active Directory that is located outside of the domain that you installed CA ControlMinder Enterprise Management on, you must change the host TCP/IP settings.

### To set up CA ControlMinder Enterprise Management to work with Active Directory on another domain

#### On Windows

1. Click Start, Control Panel, Network Connections.  
The Network Connections window appears.
2. Right-click the active network connection and click Properties.  
The Connection Properties dialog appears with the General tab open.
3. Select Internet Protocol (TCP/IP) and click Properties.  
The Internet Protocol (TCP/IP) Properties General tab appears.
4. Click Advanced and click the DNS tab in the open dialog.  
The Advanced TCP/IP Settings DNS tab appears.
5. Click Add and enter the IP address of the DNS server of the domain that Active Directory is located on.
6. Select Append these DNS suffices (in order) and click Add to add a suffix.  
The TCP/IP Domain Suffix dialog appears.
7. Enter the domain suffix.  
**Example:** *company.com*
8. Click OK on all open dialogs to confirm your changes and exit.

### On UNIX

Verify that the DNS server name of the domain that Active Directory is located on is set to the correct value.

To verify that the DNS domain name, open the file `/etc/resolv.conf` and verify that the domain is set to the correct value.

## CA ControlMinder Endpoint Management Installation Instructions Refer to Both Editions of CA ControlMinder

The CA ControlMinder Endpoint Management installation instructions that are documented in the Installing CA ControlMinder Endpoint Management chapter of the Implementation Guide apply to both CA ControlMinder and CA ControlMinder. Non-CA ControlMinder users that want to install CA ControlMinder Endpoint Management should follow these instructions and use the non-Premium Server DVD.

## CA ControlMinder Endpoint Management Shortcut Points to Port Number 8080

By default, the CA ControlMinder Endpoint Management installer sets the shortcut to port number 8080. To change the default settings, you must run the CA ControlMinder Endpoint Management installer directly from the CA ControlMinder DVD and not from the ProductExplorer.

Use the following command line to define the port to use when installing CA ControlMinder Endpoint Management:

```
install_EM.exe -DJB0SS_PORT=<18080>
```

Alternatively, you can edit the CA ControlMinder Endpoint Management shortcut to point to a different port after the installation.

## CA User Activity Reporting Module Supports Only Trusted SSL Connection

When defining the connection settings of the CA User Activity Reporting Module server, define the SSL connection settings. CA User Activity Reporting Module does not support non-SSL connection.

**Note:** For more information about integrating with CA User Activity Reporting Module, see the *Implementation Guide*.

## Special Subscription Needed to View CA User Activity Reporting Module Reports from CA ControlMinder Enterprise Management

To use view CA User Activity Reporting Module reports from the CA ControlMinder Enterprise Management interface, apply a special subscription update to your CA User Activity Reporting Module server.

### To apply the subscription update

1. In CA User Activity Reporting Module, click the Administration tab, the Services subtab, and select the Subscription Module.
2. Provide the following RSS feed URL:

`http://securityupdates.ca.com/CA-ELM/r12/OpenAPI/RSSFeed.xml`

3. Download and apply all of the modules to CA User Activity Reporting Module.

You can now view CA User Activity Reporting Module reports from CA ControlMinder Enterprise Management.

## Synchronize the System Time of the CA ControlMinder Enterprise Management and Report Portal Computers

If you install the Report Portal on a separate computer to CA ControlMinder Enterprise Management, you must synchronize the system time of the computers. If you do not synchronize the system times, reports that CA ControlMinder Enterprise Management generates will remain in a pending or recurring status.

## Uninstall Fails if You Are Not the Superuser

To uninstall any of the CA ControlMinder server components (such as Endpoint Management and Enterprise Management), you must log in as the superuser (root on UNIX or Administrator on Windows). If you are not logged in as the superuser, the uninstall fails.



# Chapter 8: Upgrade Considerations

---

This section contains the following topics:

[Server Component Upgrade Considerations](#) (see page 37)

## Server Component Upgrade Considerations

This section describes items you should consider when upgrading server components (the Enterprise Management Server, CA ControlMinder Endpoint Management, and Enterprise Reporting).

### Upgrading Enterprise Management Server to r12.7 Does Not Preserve Roles and Tasks

When upgrading the Enterprise Management Server to 12.7, the roles and tasks that were created before upgrading are not preserved.

The Enterprise Management Server preserves only membership policies.

### CA ControlMinder r12.6.01 Requires Hot Fix to Manage Policy Models on CA ControlMinder r12.5 and r12.0.01

If you are using CA ControlMinder 12.7 Server to manage policy models on CA ControlMinder r12.5 or r12.0.01 endpoints, then install the following hot fixes:

- For r12.5 endpoint, install hot fix T537526
- For r12.0.01 endpoint, install hot fix T537569

**Note:** For more information, contact CA Support at <http://ca.com/support>.

### Software Patch Required to Deploy Policies on Endpoints

To deploy policies on CA ControlMinder r12.5 endpoints from CA ControlMinder Enterprise Management r12.6, you must install patch T537526 on the Enterprise Management Server.

Download the software patch from the [CA Support website](#).

## Enterprise Management UI Login Fails When Upgrading from CA ControlMinder 12.6SP1 or lower.

**Symptom:**

When I upgrade from CA ControlMinder 12.6SP1 or lower to 12.7 or higher, I am not able to log in to the Enterprise Management UI.

**Solution:**

Update the server.xml file in JBOSS (<<jboss-4.2.3.GA>>\server\default\deploy\jboss-web.deployer) to enable the Enterprise Management UI login. Set the emptysessionpath attribute to True for all connector entries.

# Chapter 9: General Considerations

---

This section contains the following topics:

[Server Components Considerations](#) (see page 39)

## Server Components Considerations

This section describes items you should consider when using CA ControlMinder server components (CA ControlMinder Endpoint Management, CA ControlMinder Enterprise Management, and Enterprise Reporting).

## Communication Issues between CA ControlMinder Components and CA ControlMinder Message Queue

The following CA ControlMinder components rely on communications with the CA ControlMinder Message Queue for some functionality:

- Enterprise Management Server
- Report Agent
- DMS
- DH
- UNAB
- SAM Password Consumers
- Agent Manager

These components may not be able to communicate with the Message Queue if it is not running, the configuration options are not set correctly for the Message Queue host or queue, or a generic network error is present.

If communication between any of these components and the Message Queue cannot be established or breaks down, the communication does not resume automatically when the problem is fixed. To work around this issue you must fix the communication issue and then restart the CA ControlMinder component.

## Upgrade With Oracle

Before the upgrade is performed with an Oracle database, execute the following steps and run the noted commands on Oracle:

1. Open SQLPLUS from a command line
2. Connect to the database.
3. Log in as a system or sysdba user.
4. Run the following commands:

```
GRANT EXECUTE ON SYS.DBMS_CRYPTO TO vpm20;  
GRANT UNLIMITED TABLESPACE TO vpm20;  
ALTER SYSTEM SET transactions=275 SCOPE=SPFILE;  
ALTER SYSTEM SET sessions=250 SCOPE=SPFILE;  
ALTER SYSTEM SET processes=200 SCOPE=SPFILE;
```

## CA ControlMinder Host Name Limitation

The host name of the CA ControlMinder endpoint must be 15 characters or less. If the host name of the CA ControlMinder computer exceeds 15 characters, you cannot use CA ControlMinder Endpoint Management to log into the endpoint.

## Automatic Generation of Policy Undeploy Script

When you undeploy a policy that does not have an associated undeploy script, CA ControlMinder automatically generates the required script to remove the policy. This script is based on the deployment script.

If you want to remove the policy but *keep* the policy rules (from the deployment script), provide an undeployment script with a rule that does not modify anything (for example, `GPOLICY policyName`).

## Specify the SAM Endpoint NETBIOS Name and Not the DNS Domain Name

When you create a SAM endpoint in CA ControlMinder Enterprise Management, the host name that you specify in the Name field must match the host name that appears in World View.

If the endpoint is an Active Directory endpoint, specify the NETBIOS domain name in the Host Domain field. If the endpoint is not an Active Directory endpoint, specify the NETBIOS host name in the Host Domain field, not the DNS domain name. For example, if an endpoint is not an Active Directory endpoint, specify the NETBIOS host name (ACSERVER) in the Host Domain field and not the endpoint DNS domain name (acserver.company.com).

If you specify the DNS domain name, advanced features, such as SAM Automatic Login, fail.

## Using the Login Application Script to log on to a Member of a Domain

### Symptom:

When I log in to a server that is a member of a domain using the CA ControlMinder Endpoint Management login application script, I can log in to FTP but the FTP user command indicates "Not connected".

### Solution:

FTP and PuTTY do not support domain users. You cannot use the automatic login application script to enable FTP and PuTTY automatic user logins to a server that is a domain member. To check out a password to log in to a domain member server using FTP or PuTTY, create a new automatic login script.

### Follow these steps:

1. Locate the FTP or PuTTY script on the server.
2. Copy the FTP or PuTTY script.
3. Create another login application script that is based on the existing script.
4. Modify the script with the full user name and domain attributes as follows:

```
userName = "#userName#"
userDomain = "#userDomain#"
password = "#password#"
serverName = "#host#"
fullUserName = userDomain & "\" & username
Set pupmObj = CreateObject("ACLauncher.ACWebLauncher")
hwnd = pupmObj.LaunchePUTTY(serverName, fullUserName, password)
```

5. Assign the new login application to the endpoint.

For more information on the automatic login application script, see [The SAM Automatic Login Application Visual Basic Script](#).

## You Cannot Configure More Than a Single CA IdentityMinder Provisioning Connector Server

Do not configure more than a single CA IdentityMinder provisioning connector server in CA ControlMinder Enterprise Management.

## Cannot Configure CA IdentityMinder Provisioning Connector Server Using SSL Port

When you configure an CA IdentityMinder provisioning connector server, do not specify the CA IdentityMinder provisioning server SSL port (20390). If you specify the connector server SSL port, the connection to the connector server fails.

## Cannot Use SAM to Change Password for the Expert Account

If you use a Check Point firewall on an SSH endpoint, you cannot use SAM to change the password for the expert account on the endpoint. This restriction means that the expert account must be a disconnected account in SAM.

## SQLCMD Utility Does Not Support Blank Passwords

### Valid on SQL Server

The SQL Server command utility sqlcmd does not support blank passwords. If you defined the SQL Server endpoint as a password consumer in CA ControlMinder Enterprise Management and check out a password from SAM, do not leave the password field empty. You can specify the account password or any other string as the password.

## Oracle11g Server Certificate Required

To connect to an Oracle 11g server using auto login with ORACLE\_11G\_WEB.vbs, you must install a server certificate on the endpoint.

**Note:** To connect to the server without SSL, remove the SSL restriction from the Oracle server.



# Chapter 10: Known Issues

---

This section contains the following topics:

[Installation Known Issues](#) (see page 45)

[Upgrade Known Issues](#) (see page 45)

[General Known Issues](#) (see page 45)

## Installation Known Issues

This section describes installation known issues for CA ControlMinder components.

## Upgrade Known Issues

This section describes upgrade known issues for CA ControlMinder components.

## General Known Issues

This section describes general known issues for CA ControlMinder components.

## Server Components Known Issues

This section describes known issues for CA ControlMinder server components (CA ControlMinder Endpoint Management, CA ControlMinder Enterprise Management, and Enterprise Reporting).

## Privileged Account Requests and Daylight Savings Time (DST)

If either the Enterprise Management Server or the requester are in daylight savings time (DST), the following occurs when submitting a privileged account request:

- If the Enterprise Management Server *is* in daylight savings time and the requester is not then the requested time period is one hour later than in the original request.
- If the Enterprise Management Server *is not* in daylight savings time and the requester is in daylight savings time then the requested period is one hour earlier than in the original request.

## Searching in View Recorded Sessions

The following known issues occur when you click View to search View Recorded Sessions in the CA ControlMinder Endpoint Management Recorded Sessions tab:

- When you search for Activity Log Contains (default), no results or messages are displayed.
- When you search for UserID or LoginID, the UserName field displays n\a/n\a.

## Open Session Does Not Work In iOS 5

Open session does not work in iOS 5 due to a problem with iOS. The command to select open sessions in iOS, returns closed sessions as well.

## PMDB Subscribers Not Listed When PMDB Name Exceeds Than 25 Characters

### Symptom:

If a PMDB is created with more than 25 characters, then its subscribers are not listed when, you view it using the Endpoint Management user interface.

### Solution:

This is a known issue with the Endpoint Management user interface. Use the sepmd utility to view the list of subscribers. The command has the following format:

```
sepmd -l pmd
```

**-l**

Lists the subscribers of the Policy Model.

**pmd**

Specifies the name of the Policy Model.

## Telnet Session is Not Supported by Open Sessions

### Valid on Windows

Open session does not detect and recognize the Telnet session as a login. The Telnet session is not supported by open sessions on Windows.

## Default Request Approver Not Configured

### Valid on SunOne and CA Directory

If you use SunOne or the CA Directory user directory, configure the default request approver. You define the default request approver that all privileged account passwords requests are submitted to.

#### Follow these steps:

1. Log in to CA ControlMinder Enterprise Management as a System Manager.
2. Select Users and Groups, Tasks, Modify Admin Task.  
The Modify Admin Task: Search Admin Task window opens.
3. Enter Privileged Account Request in the Name field, then click Search.  
CA ControlMinder Enterprise Management displays the results that match the search criteria.
4. Select the Privileged Account Request and click Select.  
The Modify Admin Task: Privileged Account Request window opens.
5. Navigate to the Events tab and select the workflow process.  
The Workflow Process screen opens.
6. In the Default Approver section, select Add Users.  
The Select User screen opens.
7. Enter the name of the user you want to assign as a default approver and select Search.  
CA ControlMinder Enterprise Management displays the results according to the search criteria.
8. Click Select.  
The user that you selected is added as a default request approver.
9. Click OK to exit.

**Note:** The default request approver that you defined does not apply to users that you created before you installed the Enterprise Management Server. The default request approver for users that previously existed in the user directory is superamdin.

## "No Managed Connections Available Within Configured Blocking Timeout" Error Message When Running Batch Operations

"Managed Connections Available Within Configured Blocking Timeout" error message received when you run batch tasks. For example, you attempt to run the automatic reset password task on a large group or accounts. The error message indicates that the JBoss application server has exhausted the available connections and cannot complete the task.

To work around this problem you need to increase the number of available connections in the pool:

1. Stop the JBoss application server.
2. Navigate to the following directory, where *JBoss\_HOME* indicates the directory where you installed JBoss:

```
JBoss_HOME/server/default/deploy/
```

3. Open the file `imtaskpersistencedb-ds.xml` for editing.
4. Locate the `<max-pool-size>` tag and set the value to 40.
5. Locate the `<idle-timeout-minutes>` tag and set the value to 1.
6. Comment out (`<!--`) the `<blocking-timeout-millis>` tag as follows:

```
<!--blocking-timeout-millis>5000</blocking-timeout-millis-->
```

7. Save and close the file.
8. Start the JBoss application server.

You have increased the number of available connections in the pool. You can now run the task.

## JBoss for Windows Sample Policy Failed to Deploy

The JBoss for Windows sample policy fails to deploy on an endpoint. The policy deployment process terminates with an internal error message indicating that a PROGRAM resource already exists.

To work around the problem, use the JBoss sample policy and modify the policy before you deploy it to create PROGRAM resources explicitly.

## Error Message Displayed When Viewing Policy Management Reports in CA ControlMinder Enterprise Management

CA ControlMinder Enterprise Management displays a message that the task failed when attempting to view policy management reports.

To work around this problem, restart the JBoss application server and the CA Business Intelligence server (Report Portal).

## A CA ControlMinder User Not Defined a Password Cannot Log Into the CA ControlMinder Enterprise Management Server

An CA ControlMinder user account without a password cannot log into the CA ControlMinder Enterprise Management Server.

## Access Roles Are Not Supported in CA ControlMinder Enterprise Management

When you define admin role rules, select users that are members of admin roles. CA ControlMinder Enterprise Management does not support access roles. The access roles option should not appear in the interface.

## "No Operation Required" Message When Modifying UNAB Host or Host Group

When modifying UNAB host or host group settings and submitting the changes, CA ControlMinder Enterprise Management displays the following message: "No operation required". Although this message indicates that no action was taken, the modifications you made to the UNAB host or host group were applied.

## Control Characters May Cause an Application Exception

Control characters in the CA ControlMinder database may cause an application exception or render incorrectly in CA ControlMinder Endpoint Management and CA ControlMinder Enterprise Management.

## Incomprehensible Characters In the User Interface

### Symptom:

When I log into the CA ControlMinder Enterprise Management user interface, I see incomprehensible characters.

### Solution:

The problem is that the database instance you are using does not fully support UTF8 international characters set. To correct this problem, you must reinstall CA ControlMinder Enterprise Management on a fully internationalized database instance.

## Cannot Change the Trust Property of a Monitored File

In CA ControlMinder Endpoint Management, clearing the Trust check box on the Audit tab of a monitored file (SECFILE) resource fails when you try to save the changes.

To work around this issue and change this resource attribute, use selang.

## CA ControlMinder Enterprise Management Time-Out When Creating Large Policies

The CA ControlMinder Enterprise Management user interface times out when you create a policy that contains more than 6000 commands. You cannot continue working in the user interface until CA ControlMinder Enterprise Management creates the policy. To work around this problem, open a new session by logging in to CA ControlMinder Enterprise Management from a new browser.

## Cannot Deploy Policies That Contain a Trailing Backslash

Conventions for selang let you use a backslash character (\) as the last character of a line to indicate that the command continues on the following line. This is not supported by advanced policy management. Make sure that policy commands do not span multiple lines.

**Note:** The following sample policies CA ControlMinder provides contain a trailing backslash: `_AC_WEBSERVICE`, `_APACHE`, `_JBOS`, `_MS_SQL_SERVER`, and `_ORACLE`.

## Policy Script Validation Error Messages Are in a Different Language

### Valid in CA ControlMinder Enterprise Management

If a policy deploys with errors, the selang result messages you see in CA ControlMinder Enterprise Management are in the installation language of the CA ControlMinder endpoint on the Enterprise Management server and not that of the CA ControlMinder Enterprise Management installation.

To see these messages in a localized language, you must install the CA ControlMinder endpoint on the Enterprise Management computer in the desired localized language before you install CA ControlMinder Enterprise Management.

## Cannot View Audit Records for Terminals with Names Longer than 30 Characters

You cannot view audit records if the terminal name has more than 30 characters. This happens when CA ControlMinder Endpoint Management running on a Windows computer manages a UNIX endpoint.

## PMDB Audit Records Are Not Visible When Managing the PMDB

When you manage a PMDB using CA ControlMinder Endpoint Management, you cannot see the PMDB's audit records.

To work around this issue and view the audit records for the PMDB, connect to host where the PMDB resides.

## Open Session For Network Devices Fails

If the privileged account name contains more than ten characters, open session for Network Devices fails.

## "No Such Method" or "Failed to Reset Password" Error Message for Access Control for SAM Endpoint Types

### Valid on Linux

When you install the Enterprise Management Server on a Linux computer, you receive the following error message when you define Access Control for SAM endpoints: "No Such Method".

If you specify that CA ControlMinder Enterprise Management resets a privileged account password on check in, when a user checks in a privileged account on an Access Control for SAM endpoint they receive the following error message: "Failed to Reset Password".

### Follow these steps:

1. Stop the Java Connector Server. Do the following:
  - a. Navigate to the following directory, where *ACServerInstallDir* refers to the directory where the Enterprise Management Server is installed:

```
ACServerInstallDir/Connector_Server/bin
```

- b. Run the following command:

```
./im_jcs stop
```

The Java Connector Server stops.

2. Open the `im_jcs` script for editing.
3. Locate and remove the following line from the script:

```
PREJAR="$FULLBASEPATH/bin/jcs-bootstrap.jar:$FULLBASEPATH/  
conf:$FULLBASEPATH/lib/jcs.jar:"`echo $FULLBASEPATH/  
lib/apacheds-server-main-*-app.jar`
```

4. Copy the following line and paste it into the script:

```
PREJAR="$FULLBASEPATH/bin/jcs-bootstrap.jar:$FULLBASEPATH/  
conf:$FULLBASEPATH/lib/jcs.jar:$FULLBASEPATH/  
lib/nlog4j_V1.2.25.jar:"`echo  
$FULLBASEPATH/lib/apacheds-server-main-*-app.jar`
```

**Important!** Delete the carriage returns in the line after you paste it into the script.

5. Save the file.
6. Start the Java Connector Server.

```
./im_jcs start
```

The Java Connector Server starts. You can now configure the Access Control for SAM endpoint type.

## Telnet Automatic Login Not Supported on Solaris After Upgrade

### Valid on Solaris

The Telnet automatic login is not supported on Solaris after you upgrade to CA ControlMinder 12.7.

## Changes to Windows Services and Scheduled Tasks Are Not Discovered

### Valid on Windows Server 2003

#### Symptom:

When you change a Windows Service or Windows Scheduled Task, the changes cannot be discovered.

#### Solution:

This is a known Microsoft issue. After you change the service or task on the endpoint, delete the existing password consumer. Use the Service Account Discovery Wizard to create a password consumer.

## Approval of Service Account Password Request Fails

After you submit a request for a service account password, the request is not sent to the request approver and you cannot check out the service account password.

## No Audit Record for Password Retrieval by JDBC Password Consumer

The Enterprise Management Server does not write an audit record when a JDBC password consumer gets a password from CA ControlMinder Enterprise Management.

## Error Message When You Use Automatic Login to Log in to Oracle Enterprise Manager

### Valid on Oracle

An error message appears when you use the automatic login option to log into the Oracle Enterprise Manager after you checked out an administrator account password. The error message appears if you terminated the last session by closing the browser window without logging off.

## Remote Desktop Connection Fails When Endpoint Prompts for Password

### Valid on Windows

The Windows Remote Desktop automatic login script fails to log into the endpoint if the endpoint Terminal Services settings are configured to always prompt for password on login.

## SAM Accepts Ticket Numbers for Closed CA Service Desk Tickets

### Valid for integration with CA Service Desk

If you specify the number for a closed CA Service Desk issue or request ticket (ticket type=iss or cr) when you request access to a privileged account, CA ControlMinder Enterprise Management forwards the request to the approver.

## Cannot Specify CA Service Desk Change Order Ticket Number

### Valid for integration with CA Service Desk

If you specify the number for a CA Service Desk change order ticket (ticket type=ch) when you request access to a privileged account, CA ControlMinder Enterprise Management does not forward the request to the approver.

## Documentation Known Issues

This section describes known issues for the CA ControlMinder documentation set.

### No Alternate Text for Graphics In the SDK Guide

There is no alternate text for graphics in the SDK Guide. The SDK Guide was first published with a previous release of CA ControlMinder and is provided as a courtesy with the CA ControlMinder r12.5 documentation.

### PDF Documentation Requires Adobe Reader 7.0.7

To read the documentation for CA ControlMinder in print format (PDF files), you must install Adobe Reader 7.0.7 or later. You can download Adobe Reader from the Adobe website if it is not already installed on your computer.

**Note:** Adobe Reader is not available on HP-UX Itanium (IA64) and Red Hat Linux Itanium IA64.



# Appendix A: Third-Party License Agreements

---

This section contains the following topics:

[Software Under the Apache License](#) (see page 57)  
[Software Under the Daniel Veillard License](#) (see page 64)  
[Software Under the OpenLDAP License](#) (see page 66)  
[Software Under the OpenSSL License](#) (see page 69)  
[AES 2.4](#) (see page 75)  
[AIX JRE 1.4.2](#) (see page 76)  
[AIX JRE 1.5.0](#) (see page 76)  
[ANTLR 2.7.5H3](#) (see page 77)  
[Boost 1.32.0](#) (see page 78)  
[CentOS 5.6](#) (see page 79)  
[CPAN Perl 5.8.8](#) (see page 79)  
[CRC32](#) (see page 80)  
[Cyrus SASL 2.1.22](#) (see page 82)  
[Detours 3.0](#) (see page 85)  
[dom4j 1.5](#) (see page 91)  
[Hibernate 3.2](#) (see page 92)  
[ICU4C 3.4](#) (see page 93)  
[JBoss 4.0.1 SP1](#) (see page 94)  
[JBoss Application Server v.4.2.3](#) (see page 95)  
[JBoss Native v.2.0.6](#) (see page 96)  
[JCIFS 1.3.14](#) (see page 97)  
[JDOM 1.0](#) (see page 98)  
[JWSDP 1.3](#) (see page 100)  
[LDAP SDK for Java 1.1.6](#) (see page 101)  
[MD5 Message Digest Algorithm](#) (see page 102)  
[Microsoft Visual C++ 2005 SP1 Redistributable Package](#) (see page 104)  
[MIT Kerberos v5 r1.5](#) (see page 107)  
[MIT Kerberos V5 r 1.8.4](#) (see page 130)  
[nss ldap 2.62](#) (see page 153)  
[Oracle JDBC Driver 10g Release 2 \(10.2.0.1.0\)](#) (see page 160)  
[Oracle JDK 1.6.0 19](#) (see page 165)  
[PCRE 6.3](#) (see page 172)  
[PuTTY with support for GSSAPI/SSPI 0.58](#) (see page 175)  
[Rhino 1.6r4](#) (see page 175)  
[SAXPath 1](#) (see page 176)  
[SHA-1](#) (see page 179)  
[Sun JDK 1.4.2 13](#) (see page 180)  
[Sun JDK 1.6.0](#) (see page 190)  
[Sun JRE 1.5.0 18](#) (see page 205)  
[WSDL4J 1.5.1](#) (see page 219)  
[XNTP v.3-5.93](#) (see page 220)  
[XScreenSaver](#) (see page 221)  
[Zlib 1.2.3](#) (see page 221)  
[ZThread 2.3.2](#) (see page 222)  
[SimpleCaptcha 1.2](#) (see page 223)

## Software Under the Apache License

Portions of this product include software developed by the Apache Software Foundation (<http://www.apache.org/>).

- Ant 1.6.5
- Axis 1.2.1
- Axis 1.4
- Axis2 1.1.1
- Blowfish encryption N/A
- Commons BeanUtils 1.6.1
- Commons BeanUtils 1.7
- Commons Codec 1.3
- Commons Collection 3.1
- commons dbcp 1.2.1
- Commons Digester 1.7
- commons discovery 0.2
- commons el 1.0
- Commons FileUpload 1.2
- Commons HttpClient 2.0.2

This product includes Jakarta Commons HttpClient 2.0.2 which is distributed in accordance with the following license agreement.

- Commons HttpClient 3.0.1
- Commons Lang 2.1
- Commons Logging 1.0.4
- Commons Logging 1.0.4
- Commons Pool 1.3
- Commons Validator 1.2
- Hazelcast 1.9.4.6
- HTTP Web Server 2.0.54
- HTTP Web Server 2.2.3
- JSTL 1.0.6
- Log4j 1.2.8
- myfaces 1.1.4
- ORO 2.0.8

- Slide 2.1
- Struts 1.2.9
- Tofigurator v.1.0

This product includes Tofigurator v.1.0, which is distributed in accordance with the following license agreement.

- tomahawk 1.1.5
- Tomcat 5.0.28
- Tomcat 5.5.12
- Tomcat 5.5.20

This product includes Apache Tomcat 5.5.20 which is distributed in accordance with the following license agreement.

- Velocity 1.4
- Xalan-C 1.10.0
- Xalan-C 1.9.0
- Xalan-J 2.6.0
- Xalan-J 2.7.0

This product includes Apache Xalan-J v.2.7.0, which is distributed in accordance with the following license agreement(s):

- Xerces-C++ 2.6.0
- Xerces-C++ 2.7.0
- Xerces-C++ 2.8.0

The Apache software is distributed in accordance with the following license agreement:

Apache License

Version 2.0, January 2004

<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

'License' shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

'Licensor' shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

'Legal Entity' shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition,

'control' means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the

outstanding shares, or (iii) beneficial ownership of such entity.

'You' (or 'Your') shall mean an individual or Legal Entity exercising permissions granted by this License.

'Source' form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

'Object' form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and versions to other media types.

'Work' shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

'Derivative Works' shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

'Contribution' shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally

submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, 'submitted' means any form of electronic, verbal, or written communication sent

to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as 'Not a Contribution.'

'Contributor' shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and

subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual,

worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the

Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work

or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

(a) You must give any other recipients of the Work or Derivative Works a copy of this License; and

(b) You must cause any modified files to carry prominent notices stating that You changed the files; and

(c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and

(d) If the Work includes a 'NOTICE' text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or

documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents

of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided

that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with

the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work

by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions.

Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor,

except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an 'AS IS' BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A

PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special,

incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor

has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity,

or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only

on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify,

defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

## Software Under the Daniel Veillard License

Portions of this product include software developed by the Daniel Veillard.

- Libxml2 2.6.27
- Libxml2 2.6.7

The libxml2 software is distributed in accordance with the following license agreement:

Copyright (C) 1998-2002 Daniel Veillard. All Rights Reserved.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE DANIEL VEILLARD BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of Daniel Veillard shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization from him.

## Software Under the OpenLDAP License

This product includes software developed by The OpenLDAP Foundation:

- OpenLDAP 2.1
- OpenLDAP 2.4.x
- OpenLDAP 2.3.39 (20071118)

This product includes software distributed in accordance with the following license agreement:

The software is distributed in accordance with the following license agreement:

The OpenLDAP Public License

Version 2.8, 17 August 2003

Redistribution and use of this software and associated documentation

("Software"), with or without modification, are permitted provided

that the following conditions are met:

1. Redistributions in source form must retain copyright statements and notices,
2. Redistributions in binary form must reproduce applicable copyright statements and notices, this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution, and
3. Redistributions must contain a verbatim copy of this document.

The OpenLDAP Foundation may revise this license from time to time.

Each revision is distinguished by a version number. You may use this Software under terms of this license revision or under the terms of any subsequent revision of the license.

THIS SOFTWARE IS PROVIDED BY THE OPENLDAP FOUNDATION AND ITS CONTRIBUTORS "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OPENLDAP FOUNDATION, ITS CONTRIBUTORS, OR THE AUTHOR(S) OR OWNER(S) OF THE SOFTWARE BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The names of the authors and copyright holders must not be used in advertising or otherwise to promote the sale, use or other dealing in this Software without specific, written prior permission. Title to copyright in this Software shall at all times remain with copyright holders.

OpenLDAP is a registered trademark of the OpenLDAP Foundation.

Copyright 1999-2003 The OpenLDAP Foundation, Redwood City,  
California, USA. All Rights Reserved. Permission to copy and  
distribute verbatim copies of this document is granted.

## Software Under the OpenSSL License

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>):

- OpenSSL 0.9.8.d

This product also includes libraries from an SSL implementation written by Eric Young ([ey@cryptsoft.com](mailto:ey@cryptsoft.com)). This product includes software written by Tim Hudson ([tjh@cryptsoft.com](mailto:tjh@cryptsoft.com)).

- OpenSSL 0.9.8h

This product also includes libraries from an SSL implementation written by Eric Young ([ey@cryptsoft.com](mailto:ey@cryptsoft.com)). This product includes OpenSSL Toolkit v0.9.8h, which is distributed in accordance with the following terms:

### LICENSE ISSUES

=====

The OpenSSL toolkit stays under a dual license, i.e. both the conditions of the OpenSSL License and the original SSLeay license apply to the toolkit. See below for the actual license texts. Actually both licenses are BSD-style Open Source licenses. In case of any license issues related to OpenSSL please contact [openssl-core@openssl.org](mailto:openssl-core@openssl.org).

### OpenSSL License

-----

/\* =====

\* Copyright (c) 1998-2003 The OpenSSL Project. All rights reserved.

\*

\* Redistribution and use in source and binary forms, with or without

- \* modification, are permitted provided that the following conditions
- \* are met:
- \*
  - \* 1. Redistributions of source code must retain the above copyright
  - \* notice, this list of conditions and the following disclaimer.
  - \*
    - \* 2. Redistributions in binary form must reproduce the above copyright
    - \* notice, this list of conditions and the following disclaimer in
    - \* the documentation and/or other materials provided with the
    - \* distribution.
    - \*
      - \* 3. All advertising materials mentioning features or use of this
      - \* software must display the following acknowledgment:
      - \* "This product includes software developed by the OpenSSL Project
      - \* for use in the OpenSSL Toolkit. (<http://www.openssl.org/>)"
      - \*
        - \* 4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to
        - \* endorse or promote products derived from this software without
        - \* prior written permission. For written permission, please contact
        - \* [openssl-core@openssl.org](mailto:openssl-core@openssl.org).
        - \*
          - \* 5. Products derived from this software may not be called "OpenSSL"
          - \* nor may "OpenSSL" appear in their names without prior written
          - \* permission of the OpenSSL Project.
          - \*

\* 6. Redistributions of any form whatsoever must retain the following

\* acknowledgment:

\* "This product includes software developed by the OpenSSL Project

\* for use in the OpenSSL Toolkit (<http://www.openssl.org/>)"

\*

\* THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT ``AS IS|&"&| AND ANY

\* EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE

\* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR

\* PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR

\* ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,

\* SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT

\* NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES;

\* LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)

\* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT,

\* STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)

\* ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED

\* OF THE POSSIBILITY OF SUCH DAMAGE.

\* =====

\*

\* This product includes cryptographic software written by Eric Young

\* (eay@cryptsoft.com). This product includes software written by Tim

\* Hudson (tjh@cryptsoft.com).

\*

\*/

Original SSLeay License

-----

```
/* Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com)
 * All rights reserved.
 *
 * This package is an SSL implementation written
 * by Eric Young (eay@cryptsoft.com).
 * The implementation was written so as to conform with Netscapes SSL.
 *
 * This library is free for commercial and non-commercial use as long as
 * the following conditions are aheared to. The following conditions
 * apply to all code found in this distribution, be it the RC4, RSA,
 * lhash, DES, etc., code; not just the SSL code. The SSL documentation
 * included with this distribution is covered by the same copyright terms
 * except that the holder is Tim Hudson (tjh@cryptsoft.com).
 *
 * Copyright remains Eric Young's, and as such any Copyright notices in
 * the code are not to be removed.
 * If this package is used in a product, Eric Young should be given attribution
 * as the author of the parts of the library used.
 * This can be in the form of a textual message at program startup or
 * in documentation (online or textual) provided with the package.
 *
 * Redistribution and use in source and binary forms, with or without
```

- \* modification, are permitted provided that the following conditions
- \* are met:
- \* 1. Redistributions of source code must retain the copyright
- \* notice, this list of conditions and the following disclaimer.
- \* 2. Redistributions in binary form must reproduce the above copyright
- \* notice, this list of conditions and the following disclaimer in the
- \* documentation and/or other materials provided with the distribution.
- \* 3. All advertising materials mentioning features or use of this software
- \* must display the following acknowledgement:
- \* "This product includes cryptographic software written by
- \* Eric Young (eay@cryptsoft.com)"
- \* The word 'cryptographic' can be left out if the routines from the library
- \* being used are not cryptographic related :-).
- \* 4. If you include any Windows specific code (or a derivative thereof) from
- \* the apps directory (application code) you must include an acknowledgement:
- \* "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"
- \*
- \* THIS SOFTWARE IS PROVIDED BY ERIC YOUNG ``AS IS|&"&| AND
- \* ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE
- \* IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR
- \* PURPOSE
- \* ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE
- \* FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL
- \* DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE
- \* GOODS
- \* OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)

- \* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT
- \* LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
- \* OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
- \* SUCH DAMAGE.
- \*
- \* The licence and distribution terms for any publically available version or
- \* derivative of this code cannot be changed. i.e. this code cannot simply be
- \* copied and put under another distribution licence
- \* [including the GNU Public Licence.]
- \*/

## AES 2.4

Portions of this product include software developed by Enhanced Software Technologies. The Enhanced Software software is distributed in accordance with the following license agreement.

This software is Copyright 1999,2000 Enhanced Software Technologies Inc.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement:

This product includes software developed by Enhanced Software Technologies Inc. and its contributors.

4. Neither the name of the Company nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COMPANY AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE

ARE DISCLAIMED. IN NO EVENT SHALL THE COMPANY OR CONTRIBUTORS BE LIABLE

FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## **AIX JRE 1.4.2**

CONTAINS IBM(R) 32-bit Runtime Environment for AIX(TM), Java(TM) 2 Technology Edition, Version 1.4 Modules

(c) Copyright IBM Corporation 1999, 2002

All Rights Reserved

## **AIX JRE 1.5.0**

CONTAINS IBM(R) 32-bit Runtime Environment for AIX(TM), Java(TM) 2 Technology Edition, Version 1.5 Modules

(c) Copyright IBM Corporation 1999, 2002

All Rights Reserved

## ANTLR 2.7.5H3

Portions of this product include software developed by the ANTLR.org. The ANTLR software is distributed in accordance with the following license agreement.

ANTLR 3 License

[The BSD License]

Copyright (c) 2005, Terence Parr

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name of the author nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## Boost 1.32.0

The CA product includes Boost, which is distributed in accordance with the following:

Boost Software License - Version 1.0 - August 17th, 2003

Permission is hereby granted, free of charge, to any person or organization obtaining a copy of the software and accompanying documentation covered by this license (the "Software") to use, reproduce, display, distribute, execute, and transmit the Software, and to prepare derivative works of the Software, and to permit third-parties to whom the Software is furnished to do so, all subject to the following:

The copyright notices in the Software and this entire statement, including the above license grant, this restriction and the following disclaimer, must be included in all copies of the Software, in whole or in part, and all derivative works of the Software, unless such copies or derivative works are solely in the form of machine-executable object code generated by a source language processor.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

## CentOS 5.6

### CentOS 5.6

This CA product is distributed with CentOS 5.6 (the “GPL Software”), the use of which is governed by the following terms:

The GPL Software is open source software that is used with this CA software program (the “CA Product”). The GPL Software is not owned by CA, Inc. (“CA”). Use, copying, distribution and modification of the GPL Software are governed by the GNU General Public License version 2 (the “GPL”). A copy of the GPL license can be found in the same directory where the Third Party Product is located. Additionally, a copy of the GPL license can be found at <http://www.opensource.org/licenses/gpl-2.0.html> or write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA. CA makes the source code for the GPL Software available at [http://opensrcd.ca.com/ips/09001\\_1/](http://opensrcd.ca.com/ips/09001_1/), and includes a copy of the source code on the same media as the executable code. Use of the CA Product is governed solely by the CA end user license agreement (“EULA”), not by the GPL license. You cannot use, copy, modify or redistribute any CA Product code except as may be expressly set forth in the EULA. The GPL Software is provided “AS IS” WITHOUT WARRANTY OR CONDITION OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Further details of the disclaimer of warranty with respect to the GPL Software can be found in the GPL license itself. To the full extent permitted under applicable law, CA disclaims all warranties and liability arising from or related to any use of the GPL Software.

## CPAN Perl 5.8.8

Portions of this product include software copyrighted by Larry Wall. The Standard Version of Perl 5.8.3 can be downloaded from <http://www.perl.org/>.

## CRC32

Portions of this product include software developed by Markus Friedl and are distributed in accordance with the following copyright and permission notices.

```
/*      $OpenBSD: crc32.c,v 1.9 2003/02/12 21:39:50 markus Exp $  */
```

```
/*
```

```
* Copyright (c) 2003 Markus Friedl. All rights reserved.
```

```
*
```

```
* Redistribution and use in source and binary forms, with or without
```

```
* modification, are permitted provided that the following conditions
```

```
* are met:
```

```
* 1. Redistributions of source code must retain the above copyright
```

```
* notice, this list of conditions and the following disclaimer.
```

```
* 2. Redistributions in binary form must reproduce the above copyright
```

```
* notice, this list of conditions and the following disclaimer in the
```

```
* documentation and/or other materials provided with the distribution.
```

```
*
```

```
* THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS|&"&| AND ANY EXPRESS OR
```

```
* IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES
```

```
* OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED.
```

```
* IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT,
```

```
* INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT
```

```
* NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,
```

```
* DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
```

```
* THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT
```

\* (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF

\* THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

\*/

## Cyrus SASL 2.1.22

### Cyrus SASL Library

This product includes software developed by Computing Services at Carnegie Mellon University (<http://www.cmu.edu/computing/>). The Cyrus SASL Library was obtained under the following license:

```
/* CMU libsasl
 *
 * Tim Martin
 *
 * Rob Earhart
 *
 * Rob Siemborski
 *
 */
/*
 * Copyright (c) 1998-2003 Carnegie Mellon University. All rights reserved.
 *
 * Redistribution and use in source and binary forms, with or without
 * modification, are permitted provided that the following conditions
 * are met:
 *
 * 1. Redistributions of source code must retain the above copyright
 * notice, this list of conditions and the following disclaimer.
 *
 * 2. Redistributions in binary form must reproduce the above copyright
 * notice, this list of conditions and the following disclaimer in
 * the documentation and/or other materials provided with the
```

\* distribution.

\*

\* 3. The name "Carnegie Mellon University" must not be used to

\* endorse or promote products derived from this software without

\* prior written permission. For permission or any other legal

\* details, please contact

\* Office of Technology Transfer

\* Carnegie Mellon University

\* 5000 Forbes Avenue

\* Pittsburgh, PA 15213-3890

\* (412) 268-4387, fax: (412) 268-7395

\* tech-transfer@andrew.cmu.edu

\*

\* 4. Redistributions of any form whatsoever must retain the following

\* acknowledgment:

\* "This product includes software developed by Computing Services

\* at Carnegie Mellon University (<http://www.cmu.edu/computing/>)."

\*

\* CARNEGIE MELLON UNIVERSITY DISCLAIMS ALL WARRANTIES WITH REGARD TO

\* THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY

\* AND FITNESS, IN NO EVENT SHALL CARNEGIE MELLON UNIVERSITY BE LIABLE

\* FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES

\* WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN

\* AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING

\* OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

\*/

## Detours 3.0

### MICROSOFT SOFTWARE LICENSE TERMS

#### MICROSOFT RESEARCH DETOURS 3.0

These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft

- updates,
- supplements,
- Internet-based services, and
- support services

for this software, unless other terms accompany those items. If so, those terms apply.

By using the software, you accept these terms. If you do not accept them, do not use the software. Instead, return it to the retailer for a refund or credit. If you cannot obtain a refund there, contact Microsoft or the Microsoft affiliate serving your country for information about Microsoft's refund policies. See [www.microsoft.com/worldwide](http://www.microsoft.com/worldwide). In the United States and Canada, call (800) MICROSOFT or see [www.microsoft.com/info/nareturns.htm](http://www.microsoft.com/info/nareturns.htm).

If you comply with these license terms, you have the rights below for each license you acquire.

#### 1.OVERVIEW.

a.Software. The software includes development tools, software programs and documentation.

b.License Model. The software is licensed on a per user basis.

#### 2.INSTALLATION AND USE RIGHTS.

a.General. One user may install and use copies of the software to design, develop, test and demonstrate your programs.

b.Included Microsoft Programs. These license terms apply to all Microsoft programs included with the software. If the license terms with any of those programs give you other rights that do not expressly conflict with these license terms, you also have those rights.

### 3.ADDITIONAL LICENSING REQUIREMENTS AND/OR USE RIGHTS.

a.User Testing. Your end users may access the software to perform acceptance tests on your programs.

b.Font Components. While the software is running, you may use its fonts to display and print content. You may only

- embed fonts in content as permitted by the embedding restrictions in the fonts; and
- temporarily download them to a printer or other output device to help print content.

c.Distributable Code. The software contains code that you are permitted to distribute in programs you develop if you comply with the terms below.

i.Right to Use and Distribute. The code and text files listed below are “Distributable Code.”

•REDIST.TXT Files. You may copy and distribute the object code form of code listed in REDIST.TXT files.

•Third Party Distribution. You may permit distributors of your programs to copy and distribute the Distributable Code as part of those programs.

ii.Distribution Requirements. For any Distributable Code you distribute, you must

- add significant primary functionality to it in your programs;
- require distributors and external end users to agree to terms that protect it at least as much as this agreement;
- display your valid copyright notice on your programs; and
- indemnify, defend, and hold harmless Microsoft from any claims, including attorneys’ fees, related to the distribution or use of your programs.

iii.Distribution Restrictions. You may not

- alter any copyright, trademark or patent notice in the Distributable Code;
- use Microsoft’s trademarks in your programs’ names or in a way that suggests your programs come from or are endorsed by Microsoft;
- distribute Distributable Code to run on a platform other than the Windows platform;
- include Distributable Code in malicious, deceptive or unlawful programs; or

- modify or distribute the source code of any Distributable Code so that any part of it becomes subject to an Excluded License. An Excluded License is one that requires, as a condition of use, modification or distribution, that

- the code be disclosed or distributed in source code form; or

- others have the right to modify it.

4.SCOPE OF LICENSE. The software is licensed, not sold. This agreement only gives you some rights to use the software. Microsoft reserves all other rights. Unless applicable law gives you more rights despite this limitation, you may use the software only as expressly permitted in this agreement. In doing so, you must comply with any technical limitations in the software that only allow you to use it in certain ways. You may not

- work around any technical limitations in the software;

- reverse engineer, decompile or disassemble the software, except and only to the extent that applicable law expressly permits, despite this limitation;

- make more copies of the software than specified in this agreement or allowed by applicable law, despite this limitation;

- publish the software for others to copy;

- rent, lease or lend the software; or

- use the software for commercial software hosting services.

5.BACKUP COPY. You may make one backup copy of the software. You may use it only to reinstall the software.

6.DOCUMENTATION. Any person that has valid access to your computer or internal network may copy and use the documentation for your internal, reference purposes.

7.EXPORT RESTRICTIONS. The software is subject to United States export laws and regulations. You must comply with all domestic and international export laws and regulations that apply to the software. These laws include restrictions on destinations, end users and end use. For additional information, see [www.microsoft.com/exporting](http://www.microsoft.com/exporting).

8.SUPPORT SERVICES. Microsoft provides support services for the software as described at [www.support.microsoft.com/common/international.aspx](http://www.support.microsoft.com/common/international.aspx).

9.ENTIRE AGREEMENT. This agreement (including the warranty below), and the terms for supplements, updates, Internet-based services and support services that you use, are the entire agreement for the software and support services.

10.APPLICABLE LAW.

a. United States. If you acquired the software in the United States, Washington state law governs the interpretation of this agreement and applies to claims for breach of it, regardless of conflict of laws principles. The laws of the state where you live govern all other claims, including claims under state consumer protection laws, unfair competition laws, and in tort.

b. Outside the United States. If you acquired the software in any other country, the laws of that country apply.

11. LEGAL EFFECT. This agreement describes certain legal rights. You may have other rights under the laws of your state or country. You may also have rights with respect to the party from whom you acquired the software. This agreement does not change your rights under the laws of your state or country if the laws of your state or country do not permit it to do so.

12. LIMITATION ON AND EXCLUSION OF DAMAGES. You can recover from Microsoft and its suppliers only direct damages up to the amount you paid for the software. You cannot recover any other damages, including consequential, lost profits, special, indirect or incidental damages.

This limitation applies to

- anything related to the software, services, content (including code) on third party Internet sites, or third party programs; and
- claims for breach of contract, breach of warranty, guarantee or condition, strict liability, negligence, or other tort to the extent permitted by applicable law.

It also applies even if

- repair, replacement or a refund for the software does not fully compensate you for any losses; or
- Microsoft knew or should have known about the possibility of the damages.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. They also may not apply to you because your country may not allow the exclusion or limitation of incidental, consequential or other damages.

\*\*\*\*\*

\*

LIMITED WARRANTY

A.LIMITED WARRANTY. If you follow the instructions, the software will perform substantially as described in the Microsoft materials that you receive in or with the software.

B.TERM OF WARRANTY; WARRANTY RECIPIENT; LENGTH OF ANY IMPLIED WARRANTIES. The limited warranty covers the software for one year after acquired by the first user. If you receive supplements, updates, or replacement software during that year, they will be covered for the remainder of the warranty or 30 days, whichever is longer. If the first user transfers the software, the remainder of the warranty will apply to the recipient.

To the extent permitted by law, any implied warranties, guarantees or conditions last only during the term of the limited warranty. Some states do not allow limitations on how long an implied warranty lasts, so these limitations may not apply to you. They also might not apply to you because some countries may not allow limitations on how long an implied warranty, guarantee or condition lasts.

C.EXCLUSIONS FROM WARRANTY. This warranty does not cover problems caused by your acts (or failures to act), the acts of others, or events beyond Microsoft's reasonable control.

D.REMEDY FOR BREACH OF WARRANTY. Microsoft will repair or replace the software at no charge. If Microsoft cannot repair or replace it, Microsoft will refund the amount shown on your receipt for the software. It will also repair or replace supplements, updates and replacement software at no charge. If Microsoft cannot repair or replace them, it will refund the amount you paid for them, if any. You must uninstall the software and return any media and other associated materials to Microsoft with proof of purchase to obtain a refund. These are your only remedies for breach of the limited warranty.

E.CONSUMER RIGHTS NOT AFFECTED. You may have additional consumer rights under your local laws, which this agreement cannot change.

F.WARRANTY PROCEDURES. You need proof of purchase for warranty service.

1.United States and Canada. For warranty service or information about how to obtain a refund for software acquired in the United States and Canada, contact Microsoft at

- (800) MICROSOFT;
- Microsoft Customer Service and Support, One Microsoft Way, Redmond, WA 98052-6399; or
- visit [www.microsoft.com/info/nareturns.htm](http://www.microsoft.com/info/nareturns.htm).

2.Europe, Middle East and Africa. If you acquired the software in Europe, the Middle East or Africa, Microsoft Ireland Operations Limited makes this limited warranty. To make a claim under this warranty, you should contact either

- Microsoft Ireland Operations Limited, Customer Care Centre, Atrium Building Block B, Carmanhall Road, Sandyford Industrial Estate, Dublin 18, Ireland; or

- the Microsoft affiliate serving your country (see [www.microsoft.com/worldwide](http://www.microsoft.com/worldwide)).

3. Outside United States, Canada, Europe, Middle East and Africa. If you acquired the software outside the United States, Canada, Europe, the Middle East and Africa, contact the Microsoft affiliate serving your country (see [www.microsoft.com/worldwide](http://www.microsoft.com/worldwide)).

G. NO OTHER WARRANTIES. The limited warranty is the only direct warranty from Microsoft. Microsoft gives no other express warranties, guarantees or conditions. Where allowed by your local laws, Microsoft excludes implied warranties of merchantability, fitness for a particular purpose and non-infringement. If your local laws give you any implied warranties, guarantees or conditions, despite this exclusion, your remedies are described in the Remedy for Breach of Warranty clause above, to the extent permitted by your local laws.

H. LIMITATION ON AND EXCLUSION OF DAMAGES FOR BREACH OF WARRANTY. The Limitation on and Exclusion of Damages clause above applies to breaches of this limited warranty.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. You may also have other rights which vary from country to country.

Please note: As this software is distributed in Quebec, Canada, some of the clauses in this agreement are provided below in French.

Remarque : Ce logiciel étant distribué au Québec, Canada, certaines des clauses dans ce contrat sont fournies ci-dessous en français.

## dom4j 1.5

Portions of this product include software developed by the DOM4J Project (<http://dom4j.org/>) and is distributed in accordance with the following license agreement.

BSD style license

Redistribution and use of this software and associated documentation ("Software"), with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain copyright statements and notices. Redistributions must also contain a copy of this document.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

The name "DOM4J" must not be used to endorse or promote products derived from this Software without prior written permission of MetaStuff, Ltd. For written permission, please contact [dom4j-info@metastuff.com](mailto:dom4j-info@metastuff.com).

Products derived from this Software may not be called "DOM4J" nor may "DOM4J" appear in their names without prior written permission of MetaStuff, Ltd. DOM4J is a registered trademark of MetaStuff, Ltd.

Due credit should be given to the DOM4J Project - <http://www.dom4j.org>

THIS SOFTWARE IS PROVIDED BY METASTUFF, LTD. AND CONTRIBUTORS "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL METASTUFF, LTD. OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Copyright 2001-2005 (C) MetaStuff, Ltd. All Rights Reserved.

## Hibernate 3.2

CA ControlMinder Enterprise Management

This product is shipped with Hibernate v.3.2, the use of which is governed by the following terms:

Hibernate v.3.2 is open source software that is used with this CA software program (the CA Product). Hibernate v.3.2 is not owned by CA, Inc. ("CA"). Use, copying, distribution and modification of Hibernate v.3.2 are governed by the GNU Lesser General Public License ("LGPL") version 2.1. A copy of the LGPL license in its entirety can be found in the same directory on the installation disk on which Hibernate v.3.2 is distributed. CA makes the source code for Hibernate v.3.2 available at [http://opensrcd.ca.com/ips/06519\\_8/](http://opensrcd.ca.com/ips/06519_8/), and includes a copy of the source code on the same disk as the executable code. Use of the CA Product is governed solely by the CA end user license agreement ("EULA"), not by the LGPL license. You cannot use, copy, modify or redistribute any CA Product code except as may be expressly set forth in the EULA. Hibernate v.3.2 is provided "AS IS" WITHOUT WARRANTY OR CONDITION OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Further details of the disclaimer of warranty with respect to Hibernate v.3.2 can be found in the LGPL license itself. To the full extent permitted under applicable law, CA disclaims all warranties and liability arising from or related to any use of Hibernate v.3.2.

## ICU4C 3.4

Portions of this product include software developed by the International Business Machines Corporation. The IBM software is distributed in accordance with the following license agreement.

ICU License - ICU 1.8.1 and later

### COPYRIGHT AND PERMISSION NOTICE

Copyright (c) 1995-2003 International Business Machines Corporation and others

All rights reserved.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, provided that the above copyright notice(s) and this permission notice appear in all copies of the Software and that both the above copyright notice(s) and this permission notice appear in supporting documentation.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL

INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization of the copyright holder.

## JBoss 4.0.1 SP1

JBoss software is an open source library that is used with the software. The JBoss software is not owned by Computer Associates International, Inc. ( CA ). Use, copying, distribution and modification of the JBoss software are governed by the GNU Lesser General Public License ( LGPL ) version 2.1. A copy of the LGPL license can be found in the directory on the installation disk on which the JBoss software is distributed. Additionally, a copy of the LGPL license can be found at <http://opensource.org/licenses/lgpl-license.php> or write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA. CA makes the source code for the JBoss software available at , and includes a copy of the source code on the same disk as the executable code. Use of the software is governed solely by the end user license agreement ( EULA ), not by the LGPL license. You cannot use, copy, modify or redistribute any code except as may be expressly set forth in the EULA. The JBoss software is provided AS IS WITHOUT WARRANTY OR CONDITION OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Further details of the disclaimer of warranty with respect to the JBoss software can be found in the LGPL license itself. To the full extent permitted under applicable law, CA disclaims all warranties and liability arising from or related to any use of the JBoss software.

## JBoss Application Server v.4.2.3

This product is distributed with JBoss Application Server v.4.2.3 (the LGPL Software), the use of which is governed by the following terms:

The LGPL Software is open source software that is used with this CA software program (the CA Product). The LGPL Software is not owned by CA, Inc. (CA). Use, copying, distribution and modification of the LGPL Software are governed by the GNU Lesser General Public License (LGPL) version 2.1. A copy of the LGPL license can be found in the same directory on the installation disk on which the LGPL Software is distributed. Additionally, a copy of the LGPL license can be found at <http://www.opensource.org/licenses/lgpl-2.1.php> or write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA. CA makes the source code for the LGPL Software available at <http://opensrcd.ca.com>, and includes a copy of the source code on the same disk as the executable code. Use of the CA Product is governed solely by the CA end user license agreement (EULA), not by the LGPL license. You cannot use, copy, modify or redistribute any CA Product code except as may be expressly set forth in the EULA. The LGPL Software is provided AS IS WITHOUT WARRANTY OR CONDITION OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Further details of the disclaimer of warranty with respect to the LGPL Software can be found in the LGPL license itself. To the full extent permitted under applicable law, CA disclaims all warranties and liability arising from or related to any use of the LGPL Software.

## JBoss Native v.2.0.6

This product is distributed with JBoss Native v.2.0.6 (the LGPL Software), the use of which is governed by the following terms:

The LGPL Software is open source software that is used with this CA software program (the CA Product). The LGPL Software is not owned by CA, Inc. (CA). Use, copying, distribution and modification of the LGPL Software are governed by the GNU Lesser General Public License (LGPL) version 2.1. A copy of the LGPL license can be found in the same directory on the installation disk on which the LGPL Software is distributed. Additionally, a copy of the LGPL license can be found at <http://www.opensource.org/licenses/lgpl-2.1.php> or write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA. CA makes the source code for the LGPL Software available at <http://opensrcd.ca.com>, and includes a copy of the source code on the same disk as the executable code. Use of the CA Product is governed solely by the CA end user license agreement (EULA), not by the LGPL license. You cannot use, copy, modify or redistribute any CA Product code except as may be expressly set forth in the EULA. The LGPL Software is provided AS IS WITHOUT WARRANTY OR CONDITION OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Further details of the disclaimer of warranty with respect to the LGPL Software can be found in the LGPL license itself. To the full extent permitted under applicable law, CA disclaims all warranties and liability arising from or related to any use of the LGPL Software.

## JCIFS 1.3.14

This product is distributed with JCIFS Client Library 1.3.14 (the "LGPL Software"), the use of which is governed by the following terms:

The LGPL Software is open source software that is used with this CA software program (the CA Product). The LGPL Software is not owned by CA, Inc. ("CA"). Use, copying, distribution and modification of the LGPL Software are governed by the GNU Lesser General Public License ("LGPL") version 2.1. A copy of the LGPL license can be found in the same directory on the installation disk on which the LGPL Software is distributed. Additionally, a copy of the LGPL license can be found at <http://www.opensource.org/licenses/lgpl-2.1.php> or write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA. CA makes the source code for the LGPL Software available at [http://opensrcd.ca.com/ips/07299\\_1/](http://opensrcd.ca.com/ips/07299_1/), and includes a copy of the source code on the same disk as the executable code. Use of the CA Product is governed solely by the CA end user license agreement ("EULA"), not by the LGPL license. You cannot use, copy, modify or redistribute any CA Product code except as may be expressly set forth in the EULA. The LGPL Software is provided "AS IS" WITHOUT WARRANTY OR CONDITION OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Further details of the disclaimer of warranty with respect to the LGPL Software can be found in the LGPL license itself. To the full extent permitted under applicable law, CA disclaims all warranties and liability arising from or related to any use of the LGPL Software.

## JDOM 1.0

This product includes software developed by the JDOM Project (<http://www.jdom.org/>). The JDOM software is distributed in accordance with the following license agreement.

\$Id: LICENSE.txt,v 1.11 2004/02/06 09:32:57 jhunter Exp \$

Copyright (C) 2000-2004 Jason Hunter & Brett McLaughlin.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions, and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions, and the disclaimer that follows these conditions in the documentation and/or other materials provided with the distribution.
3. The name "JDOM" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact .
4. Products derived from this software may not be called "JDOM", nor

may "JDOM" appear in their name, without prior written permission from the JDOM Project Management .

In addition, we request (but do not require) that you include in the end-user documentation provided with the redistribution and/or in the software itself an acknowledgement equivalent to the following:

"This product includes software developed by the JDOM Project (<http://www.jdom.org/>)."

Alternatively, the acknowledgment may be graphical using the logos available at <http://www.jdom.org/images/logos>.

THIS SOFTWARE IS PROVIDED "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE JDOM AUTHORS OR THE PROJECT CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This software consists of voluntary contributions made by many

individuals on behalf of the JDOM Project and was originally  
created by Jason Hunter and  
Brett McLaughlin . For more information  
on the JDOM Project, please see <<http://www.jdom.org/>>.

## JWSDP 1.3

This Product is distributed with JAVA WEB SERVICES DEVELOPER PACK, VERSION 1.3

From Sun Microsystems, Inc. (JWSDP). The JWSDP is distributed in accordance with the Sun Microsystems, Inc. Software License Agreement. Sun has provided additional copyright notices and disclaimers, and other information that may be applicable to portions of the JWSDP in the THIRDPARTYLICENSEREADME.txt file that accompanies the JWSDP.

## LDAP SDK for Java 1.1.6

This product is distributed with LDAP SDK for Java 1.1.6 (the "LGPL Software"), the use of which is governed by the following terms:

The LGPL Software is open source software that is used with this CA software program (the CA Product). The LGPL Software is not owned by CA, Inc. ("CA"). Use, copying, distribution and modification of the LGPL Software are governed by the GNU Lesser General Public License ("LGPL") version 2.1. A copy of the LGPL license can be found in the same directory on the installation disk on which the LGPL Software is distributed. Additionally, a copy of the LGPL license can be found at <http://www.opensource.org/licenses/lgpl-2.1.php> or write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA. CA makes the source code for the LGPL Software available at [http://opensrcd.ca.com/ips/07299\\_2/](http://opensrcd.ca.com/ips/07299_2/), and includes a copy of the source code on the same disk as the executable code. Use of the CA Product is governed solely by the CA end user license agreement ("EULA"), not by the LGPL license. You cannot use, copy, modify or redistribute any CA Product code except as may be expressly set forth in the EULA. The LGPL Software is provided "AS IS" WITHOUT WARRANTY OR CONDITION OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Further details of the disclaimer of warranty with respect to the LGPL Software can be found in the LGPL license itself. To the full extent permitted under applicable law, CA disclaims all warranties and liability arising from or related to any use of the LGPL Software.

## MD5 Message Digest Algorithm

Portions of this product include the RSA Data Security, Inc. MD5 Message-Digest Algorithm. The RSA Data Security software is distributed in accordance with the following license agreement.

```
/* MD5.H - header file for MD5C.C
```

```
*/
```

```
/* Copyright (C) 1991-2, RSA Data Security, Inc. Created 1991. All  
rights reserved.
```

License to copy and use this software is granted provided that it is identified as the "RSA Data Security, Inc. MD5 Message-Digest Algorithm" in all material mentioning or referencing this software or this function.

License is also granted to make and use derivative works provided that such works are identified as "derived from the RSA Data Security, Inc. MD5 Message-Digest Algorithm" in all material mentioning or referencing the derived work.

RSA Data Security, Inc. makes no representations concerning either the merchantability of this software or the suitability of this software for any particular purpose. It is provided "as is" without express or implied warranty of any kind.

Rivest

[Page 8]

RFC 1321

MD5 Message-Digest Algorithm

April 1992

These notices must be retained in any copies of any part of this  
documentation and/or software.

\*/

## Microsoft Visual C++ 2005 SP1 Redistributable Package

### MICROSOFT SOFTWARE LICENSE TERMS

### MICROSOFT VISUAL C++ 2005 RUNTIME LIBRARIES

These license terms are an agreement between Microsoft Corporation (or based on where you live, one of its affiliates) and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any Microsoft

- \* updates,
- \* supplements,
- \* Internet-based services, and
- \* support services

for this software, unless other terms accompany those items. If so, those terms apply.

By using the software, you accept these terms. If you do not accept them, do not use the software.

If you comply with these license terms, you have the rights below.

1. **INSTALLATION AND USE RIGHTS.** You may install and use any number of copies of the software on your devices.

2. **SCOPE OF LICENSE.** The software is licensed, not sold. This agreement only gives you some rights to use the software. Microsoft reserves all other rights. Unless applicable law gives you more rights despite this limitation, you may use the software only as expressly permitted in this agreement. In doing so, you must comply with any technical limitations in the software that only allow you to use it in certain ways. You may not

- \* disclose the results of any benchmark tests of the software to any third party without Microsoft's prior written approval;
- \* work around any technical limitations in the software;
- \* reverse engineer, decompile or disassemble the software, except and only to the extent that applicable law expressly permits, despite this limitation;
- \* make more copies of the software than specified in this agreement or allowed by applicable law, despite this limitation;
- \* publish the software for others to copy;

\* rent, lease or lend the software;

\* transfer the software or this agreement to any third party; or

\* use the software for commercial software hosting services.

3. BACKUP COPY. You may make one backup copy of the software. You may use it only to reinstall the software.

4. DOCUMENTATION. Any person that has valid access to your computer or internal network may copy and use the documentation for your internal, reference purposes.

5. EXPORT RESTRICTIONS. The software is subject to United States export laws and regulations. You must comply with all domestic and international export laws and regulations that apply to the software. These laws include restrictions on destinations, end users and end use. For additional information, see [www.microsoft.com/exporting](http://www.microsoft.com/exporting).

6. SUPPORT SERVICES. Because this software is "as is," we may not provide support services for it.

7. ENTIRE AGREEMENT. This agreement, and the terms for supplements, updates, Internet-based services and support services that you use, are the entire agreement for the software and support services.

8. APPLICABLE LAW.

a. United States. If you acquired the software in the United States, Washington state law governs the interpretation of this agreement and applies to claims for breach of it, regardless of conflict of laws principles. The laws of the state where you live govern all other claims, including claims under state consumer protection laws, unfair competition laws, and in tort.

b. Outside the United States. If you acquired the software in any other country, the laws of that country apply.

9. LEGAL EFFECT. This agreement describes certain legal rights. You may have other rights under the laws of your country. You may also have rights with respect to the party from whom you acquired the software. This agreement does not change your rights under the laws of your country if the laws of your country do not permit it to do so.

10. DISCLAIMER OF WARRANTY. The software is licensed "as-is." You bear the risk of using it. Microsoft gives no express warranties, guarantees or conditions. You may have additional consumer rights under your local laws which this agreement cannot change. To the extent permitted under your local laws, Microsoft excludes the implied warranties of merchantability, fitness for a particular purpose and non-infringement.

11. LIMITATION ON AND EXCLUSION OF REMEDIES AND DAMAGES. You can recover from Microsoft and its suppliers only direct damages up to U.S. \$5.00. You cannot recover any other damages, including consequential, lost profits, special, indirect or incidental damages.

This limitation applies to

- \* anything related to the software, services, content (including code) on third party Internet sites, or third party programs; and

- \* claims for breach of contract, breach of warranty, guarantee or condition, strict liability, negligence, or other tort to the extent permitted by applicable law.

It also applies even if Microsoft knew or should have known about the possibility of the damages. The above limitation or exclusion may not apply to you because your country may not allow the exclusion or limitation of incidental, consequential or other damages.

## MIT Kerberos v5 r1.5

This product includes MIT Kerberos v5 r1.5, excluding the OpenVision Kerberos Administration System donated by Kerberos to MIT for inclusion in the standard Kerberos 5 distribution.

Kerberos Version 5, Release 1.5.3

Release Notes

The MIT Kerberos Team

Unpacking the Source Distribution

-----

The source distribution of Kerberos 5 comes in a gzipped tarfile, `krb5-1.5.3.tar.gz`. Instructions on how to extract the entire distribution follow.

If you have the GNU tar program and gzip installed, you can simply do:

```
gtar xzpf krb5-1.5.3.tar.gz
```

If you don't have GNU tar, you will need to get the FSF gzip distribution and use `gzcat`:

```
gzcat krb5-1.5.3.tar.gz | tar xpf -
```

Both of these methods will extract the sources into `krb5-1.5.3/src` and the documentation into `krb5-1.5.3/doc`.

### Building and Installing Kerberos 5

-----

The first file you should look at is `doc/install-guide.ps`; it contains the notes for building and installing Kerberos 5. The info file `krb5-install.info` has the same information in info file format. You can view this using the GNU emacs info-mode, or by using the standalone info file viewer from the Free Software Foundation. This is also available as an HTML file, `install.html`.

Other good files to look at are `admin-guide.ps` and `user-guide.ps`, which contain the system administrator's guide, and the user's guide, respectively. They are also available as info files `kerberos-admin.info` and `krb5-user.info`, respectively. These files are also available as HTML files.

If you are attempting to build under Windows, please see the `src/windows/README` file. Note that this release might not build under Windows currently.

### Reporting Bugs

-----

Please report any problems/bugs/comments using the krb5-send-pr program. The krb5-send-pr program will be installed in the sbin directory once you have successfully compiled and installed Kerberos V5 (or if you have installed one of our binary distributions).

If you are not able to use krb5-send-pr because you haven't been able to compile and install Kerberos V5 on any platform, you may send mail to [krb5-bugs@mit.edu](mailto:krb5-bugs@mit.edu).

You may view bug reports by visiting

<http://krbdev.mit.edu/rt/>

and logging in as "guest" with password "guest".

Major changes in krb5-1.5.3

-----

[5512] Fix MITKRB5-SA-2007-001: telnetd allows login as arbitrary user

[CVE-2007-0956, VU#220816]

[5513] Fix MITKRB5-SA-2007-002: buffer overflow in krb5\_klog\_syslog

[CVE-2007-0957, VU#704024]

[5520] Fix MITKRB5-SA-2007-003: double-free in kadmind - the RPC library could perform a double-free due to a GSS-API library bug [CVE-2007-1216, VU#419344]

krb5-1.5.3 changes by ticket ID

-----

5512 (krb5-1.5.x) MITKRB5-SA-2007-001: telnetd allows login as arbitrary user

5513 (krb5-1.5.x) MITKRB5-SA-2007-002: buffer overflow in krb5\_klog\_syslog

5520 (krb5-1.5.x) MITKRB5-SA-2007-003: double-free in kadmind

Major changes in krb5-1.5.2

-----

\* Fix for MITKRB5-SA-2006-002: the RPC library could call an uninitialized function pointer, which created a security vulnerability for kadmind.

\* Fix for MITKRB5-SA-2006-003: the GSS-API mechglue layer could fail to initialize some output pointers, causing callers to attempt to free uninitialized pointers. This caused a security vulnerability in kadmind.

### Major known bugs in krb5-1.5.2

-----

5293 crash creating db2 database in non-existent directory

Attempting to create a KDB in a non-existent directory using the Berkeley DB back end may cause a crash resulting from a null pointer dereference. If a core dump occurs, this may cause a local exposure of sensitive information such a master key password. This will be fixed in an upcoming patch release.

### krb5-1.5.2 changes by ticket ID

-----

Listed below are the RT tickets of bugs fixed in krb5-1.5.2. Please see

<http://krbdev.mit.edu/rt/NoAuth/krb5-1.5/fixes-1.5.2.html>

for a current listing with links to the complete tickets.

3965 Autoconf 2.60 datarootdir issue

4237 windows ccache and keytab file paths without a prefix

4305 windows thread support frees thread local storage after TlsSetValue

4309 wix installer - win2k compatibility for netidmgr

- 4310 NSIS installer - update for Win2K NetIDMgr
- 4312 KFW 3.1 Beta 2 NetIDMgr Changes
- 4354 db2 policy database loading broken
- 4355 test policy dump/load in make check
- 4368 kdc: make\_toolong\_error does not initialize all fields for  
krb5\_mk\_error
- 4407 final commits for KFW 3.1 Beta 2
- 4499 Document prerequisites for make check
- 4500 Initialize buffer before calling res\_ninit
- 5307 fix MITKRB5-SA-2006-002 for 1.5-branch
- 5308 fix MITKRB5-SA-2006-003 for 1.5-branch

Major changes in 1.5.1

-----

The only significant change in krb5-1.5.1 is to fix the security vulnerabilities described in MITKRB5-SA-2006-001, which are local privilege escalation vulnerabilities in applications running on Linux and AIX.

krb5-1.5.1 changes by ticket ID

-----

Listed below are the RT tickets of bugs fixed in krb5-1.5.1. Please see

---

<http://krbdev.mit.edu/rt/NoAuth/krb5-1.5/fixes-1.5.1.html>

for a current listing with links to the complete tickets.

- 3904 fix uninitialized vars
- 3956 gssapi compilation errors on Windows
- 3971 broken configure test for dlopen
- 3998 Document add\_entry in ktutil man page
- 4012 reverse test for copy\_oid\_set in lib/gssapi/krb5/indicate\_mechs.c
- 4036 reject configure option for static libraries
- 4037 respect LDFLAGS in NetBSD build
- 4063 gss mech glue implementation should validate opaque pointer types
- 4088 gss\_import\_name can fail to call gssint\_initialize\_library()
- 4125 fix MITKRB5-SA-2006-001: multiple local privilege escalation vulnerabilities
- 4137 ksu spuriously fails when exiting shell when ksu-ing to non-root
- 4168 clean up mkrel patchlevel.h editing etc.

#### Major changes in 1.5

-----

Kerberos 5 Release 1.5 includes many significant changes to the Kerberos build system, to GSS-API, and to the Kerberos KDC and administration system. These changes build up infrastructure as part of our efforts to make Kerberos more extensible and flexible. While

we are confident that these changes will improve Kerberos in the long run, significant code restructuring may introduce portability problems or change behavior in ways that break applications. It is always important to test a new version of critical security software like Kerberos before deploying it in your environment to confirm that the new version meets your environment's requirements. Because of the significant restructuring, it is more important than usual to perform this testing and to report problems you find.

Highlights of major changes include:

- \* KDB abstraction layer, donated by Novell.
  
- \* plug-in architecture, allowing for extension modules to be loaded at run-time.
  
- \* multi-mechanism GSS-API implementation ("mechglue"), donated by Sun Microsystems
  
- \* Simple and Protected GSS-API negotiation mechanism ("SPNEGO") implementation, donated by Sun Microsystems
  
- \* Per-directory ChangeLog files have been deleted. Releases now include auto-generated revision history logs in the combined file doc/CHANGES.

## Changes by ticket ID

-----

Listed below are the RT tickets of bugs fixed in krb5-1.5. Please see

<http://krbdev.mit.edu/rt/NoAuth/krb5-1.5/fixed-1.5.html>

for a current listing with links to the complete tickets.

- 581 verify\_krb\_v4\_tgt is not 64-bit clean
- 856 patch to add shared library support for BSD/OS 4
- 1245 source tree not 64-bit clean
- 1288 v4 ticket file format incompatibilities
- 1431 fix errno.h references for cygwin
- 1434 use win32 rename solution in rcache for cygwin
- 1988 profile library fails to handle space in front of comments
- 2577 [Russ Allbery] Bug#250966: /usr/sbin/klogind: Authorization  
behavior not fully documented
- 2615 Fwd: Patch for telnet / telnetd to avoid crashes when used  
with MS kdc and PAC field
- 2628 Cygwin build patches
- 2648 [Russ Allbery] Bug#262192: libkrb53: krb\_get\_pw\_in\_tkt  
problems with AFS keys
- 2712 whitespace patch for src/kdc/kerberos\_v4.c

- 2759 fake-getaddrinfo.h incorrectly checks for gethostbyname\_r errors
- 2761 move getaddrinfo hacks into support lib for easier maintenance
- 2763 file ccache should be held open while scanning for credentials
- 2786 dead code in init\_common() causes malloc(0)
- 2791 hooks for recording statistics on locking behavior
- 2807 Add VERSIONRC branding to krb5 support dll
- 2855 Possible thread safety issue in lib/krb5/os/def\_realm.c
- 2856 Need a function to clone krb5\_context structs for thread safe apps
- 2863 windows klist won't link
- 2880 fix calling convention for thread support fns
- 2882 Windows 2003 SP1 ktpass.exe generate keytab files fail to load with 1.4
- 2886 krb5\_do\_preauth could attempt to free NULL pointer
- 2931 implement SPNEGO
- 2932 implement multi-mech GSSAPI
- 2933 plug-in architecture
- 2936 supplementary error strings
- 2959 profile library should check high-resolution timestamps if available
- 2979 threaded test program built even with thread support disabled
- 3008 Incorrect cross-references in man pages
- 3010 Minor path and service man page fixes
- 3011 krb5-config should never return -l/usr/include
- 3013 Man pages for fakeka and krb524init
- 3014 texinfo variable fixes, info dir entries
- 3030 Bug report: Kinit has no support for addresses in  
credentials. Kinit -a is not enabled.

- 3065 Implement RFC 3961 PRF
- 3086 [Sergio Gelato] Bug#311977: libkrb53: gss\_init\_sec\_context  
sometimes fails to initialise output\_token
- 3088 don't always require support library when building with sun cc
- 3122 fixes for AIX 5.2 select() and IPv4/IPv6 issues
- 3129 shlib build problems on HP-UX 10.20 with gcc-3.4.3
- 3233 kuserok needs to check for uid 99 on Mac OS X
- 3252 Tru64 compilation fails after k5-int.h/krb5.h changes
- 3266 Include errno.h in kdc/kerberos\_v4.c
- 3268 kprop should fall back on port 754 rather than failing
- 3269 telnet help should connect to a host named help
- 3308 kadmind.local is killed due to segmentation fault when  
principal name argument is missing.
- 3332 don't destroy uninitialized rcache mutex in error cases
- 3358 krb5 doesn't build when pthread\_mutexattr\_setrobust\_np is  
defined but not declared
- 3364 plugins should be thread-safe
- 3415 Windows 64-bit support
- 3416 tweak kdb interface for thread safety
- 3417 move/add thread support to support lib
- 3423 Add support for utmps interface on HP-UX 11.23
- 3426 trunk builds without thread support are not working
- 3434 sizeof type should be checked at compile time, not configure time
- 3438 enhancement: report errno when generic I/O errors happen in kinit
- 3445 args to ctype.h macros should be cast to unsigned char, not int

- 3466 ioctl header portability fixes for telnet on GNU/kFreeBSD
- 3467 Allow GSS\_C\_NO\_OID in krb5\_gss\_canon\_name
- 3468 udp\_preference\_limit typo in krb5.conf man page
- 3490 getpwnam\_r status checked incorrectly
- 3502 Cannot acquire initiator cred using gss\_acquire\_cred with  
explicit name on Windows
- 3512 updates to NSIS installer for KFW
- 3521 Add configurable Build value to File and Product versions for Windows
- 3549 library double-free with an empty keytab
- 3607 clients/ksu/setenv.c doesn't build on Solaris
- 3620 use strerror\_r
- 3668 Prototype for krb5\_c\_prf missing const
- 3671 shsUpdate should take an unsigned int for length
- 3675 unsigned/signed int warnings in krb5\_context variables.
- 3687 initialize cc\_version to 0 not NULL
- 3688 Added CoreFoundation bundle plugin support
- 3689 build kadm5 headers in generate-files-mac target
- 3690 build rpc includes in generate-files-mac target.
- 3697 kadmin hangs indefinitely when admin princ has escaped chars
- 3706 ipv4+ipv6 messages can trip up KDC replay detection
- 3714 fix incorrect padata memory allocation in send\_tgs.c
- 3716 Plugin search algorithm should take lists of name and directories
- 3719 fix bug in flag checking in libdb2 mpool code
- 3724 need to export kadm5\_set\_use\_password\_server
- 3736 Cleanup a number of cast away from const warnings in gssapi

- 3739 vsnprintf not present on windows
- 3746 krb5\_cc\_gen\_new memory implementation doesn't create a new ccache
- 3761 combine kdc.conf, krb5.conf data in KDC programs
- 3783 install headers into include/krb5
- 3790 memory leak in GSSAPI credential releasing code
- 3791 memory leak in gss\_krb5\_set\_allowable\_enctypes error path
- 3825 krb5int\_get\_plugin\_dir\_data() uses + instead of \* in realloc
- 3826 memory leaks in krb5kdc due to not freeing error messages
- 3854 CCAPI krb4int\_save\_credentials\_addr should match prototype
- 3866 gld --as-needed not portable enough
- 3879 Update texinfo.tex
- 3888 ftpd's getline conflicts with current glibc headers
- 3898 Export gss\_inquire\_mechs\_for\_name for KFW
- 3899 Export krb5\_gss\_register\_acceptor\_identity in KFW
- 3900 update config.guess and config.sub
- 3902 g\_userok.c has implicit declaration of strlen
- 3903 various kadm5 files need string.h
- 3905 warning fixes for spnego
- 3909 Plugins need to use RTLD\_GROUP when available, but definitely  
not RTLD\_GLOBAL
- 3910 fix parallel builds for libgss
- 3911 getaddrinfo code uses vars outside of storage duration
- 3918 fix warnings for lib/gssapi/mechglue/g\_initialize.c
- 3920 cease export of krb5\_gss\_\*
- 3921 remove unimplemented/unused mechglue functions

- 3922 mkrel should update patchlevel.h prior to reconf
- 3923 implement RFC4120 behavior on TCP requests with high bit set in length
- 3924 the krb5\_get\_server\_rcache routine frees already freed memory  
in error path
- 3925 krb5\_get\_profile should reflect profile in the supplied context
- 3927 fix signedness warnings in spnego\_mech.c
- 3928 fix typo in MS\_BUG\_TEST case in krb5\_gss\_glue.c
- 3940 Disable MSLSA: ccache in WOW64 on pre-Vista Beta 2 systems
- 3942 make gssint\_get\_mechanism match prototype
- 3944 write svn log output when building release
- 3945 mkrel should only generate doc/CHANGES for checkouts
- 3948 Windows: fix krb5.h generation
- 3949 fix plugin.c to compile on Windows
- 3950 autoconf 2.60 compatibility
- 3951 remove unused dlopen code in lib/gssapi/mechglue/g\_initialize.c
- 3952 fix calling convention for krb5 error-message routines,  
document usage of krb5\_get\_error\_message
- 3953 t\_std\_conf references private function due to explicit linking  
of init\_os\_ctx.o
- 3954 remove mechglue gss\_config's gssint\_userok and pname\_to\_uid
- 3957 remove unused lib/gssapi/mechglue/g\_utils.c
- 3959 re-order inclusions in spnego\_mech.c to avoid breaking system headers
- 3962 krb5\_get\_server\_rcache double free
- 3964 "kdb5\_util load" to existing db doesn't work, needed for kpropd
- 3968 fix memory leak in mechglue/g\_init\_sec\_ctx.c

3970 test kdb5\_util dump/load functionality in dejagnu

3972 make gss\_unwrap match prototype

3974 work around failure to load into nonexistent db

Known bugs by ticket ID:

-----

Listed below are the RT tickets for known bugs in krb5-1.5. Please

see

<http://krbdev.mit.edu/rt/NoAuth/krb5-1.5/bugs-1.5.html>

for an up-to-date list, including links to the complete tickets.

3947 allow multiple calls to krb5\_get\_error\_message to retrieve message

3956 gssapi compilation errors on Windows

3973 kdb5\_util load now fails if db doesn't exist [workaround]

Copyright Notice and Legal Administrivia

-----

Copyright (C) 1985-2007 by the Massachusetts Institute of Technology.

All rights reserved.

Export of this software from the United States of America may require a specific license from the United States Government. It is the responsibility of any person or organization contemplating export to obtain such a license before exporting.

WITHIN THAT CONSTRAINT, permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of M.I.T. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. Furthermore if you modify this software you must label your software as modified software and not distribute it in such a fashion that it might be confused with the original MIT software. M.I.T. makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

THIS SOFTWARE IS PROVIDED ``AS IS|&"&| AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Individual source code files are copyright MIT, Cygnus Support, OpenVision, Oracle, Sun Soft, FundsXpress, and others.

Project Athena, Athena, Athena MUSE, Discuss, Hesiod, Kerberos, Moira, and Zephyr are trademarks of the Massachusetts Institute of Technology (MIT). No commercial use of these trademarks may be made without prior written permission of MIT.

"Commercial use" means use of a name in a product or other for-profit manner. It does NOT prevent a commercial firm from referring to the MIT trademarks in order to convey information (although in doing so, recognition of their trademark status should be given).

----

Portions contributed by Matt Crawford were work performed at Fermi National Accelerator Laboratory, which is operated by Universities Research Association, Inc., under contract DE-AC02-76CHO3000 with the U.S. Department of Energy.

---- The implementation of the Yarrow pseudo-random number generator in `src/lib/crypto/yarrow` has the following copyright:

Copyright 2000 by Zero-Knowledge Systems, Inc.

Permission to use, copy, modify, distribute, and sell this software and its documentation for any purpose is hereby granted without fee,

provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Zero-Knowledge Systems, Inc. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. Zero-Knowledge Systems, Inc. makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

ZERO-KNOWLEDGE SYSTEMS, INC. DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL ZERO-KNOWLEDGE SYSTEMS, INC. BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTUOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

---- The implementation of the AES encryption algorithm in src/lib/crypto/aes has the following copyright:

Copyright (c) 2001, Dr Brian Gladman , Worcester, UK.

All rights reserved.

LICENSE TERMS

The free distribution and use of this software in both source and binary form is allowed (with or without changes) provided that:

1. distributions of this source code include the above copyright notice, this list of conditions and the following disclaimer;
2. distributions in binary form include the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other associated materials;
3. the copyright holder's name is not used to endorse products built using this software without specific written permission.

#### DISCLAIMER

This software is provided 'as is' with no explicit or implied warranties in respect of any properties, including, but not limited to, correctness and fitness for purpose.

--- The implementations of GSSAPI mechglue in GSSAPI-SPNEGO in `src/lib/gssapi`, including the following files:

`lib/gssapi/generic/gssapi_err_generic.et`

`lib/gssapi/mechglue/g_accept_sec_context.c`

`lib/gssapi/mechglue/g_acquire_cred.c`

lib/gssapi/mechglue/g\_canon\_name.c  
lib/gssapi/mechglue/g\_compare\_name.c  
lib/gssapi/mechglue/g\_context\_time.c  
lib/gssapi/mechglue/g\_delete\_sec\_context.c  
lib/gssapi/mechglue/g\_dsp\_name.c  
lib/gssapi/mechglue/g\_dsp\_status.c  
lib/gssapi/mechglue/g\_dup\_name.c  
lib/gssapi/mechglue/g\_exp\_sec\_context.c  
lib/gssapi/mechglue/g\_export\_name.c  
lib/gssapi/mechglue/g\_glue.c  
lib/gssapi/mechglue/g\_imp\_name.c  
lib/gssapi/mechglue/g\_imp\_sec\_context.c  
lib/gssapi/mechglue/g\_init\_sec\_context.c  
lib/gssapi/mechglue/g\_initialize.c  
lib/gssapi/mechglue/g\_inq\_context.c  
lib/gssapi/mechglue/g\_inq\_cred.c  
lib/gssapi/mechglue/g\_inq\_names.c  
lib/gssapi/mechglue/g\_process\_context.c  
lib/gssapi/mechglue/g\_rel\_buffer.c  
lib/gssapi/mechglue/g\_rel\_cred.c  
lib/gssapi/mechglue/g\_rel\_name.c  
lib/gssapi/mechglue/g\_rel\_oid\_set.c  
lib/gssapi/mechglue/g\_seal.c  
lib/gssapi/mechglue/g\_sign.c  
lib/gssapi/mechglue/g\_store\_cred.c

lib/gssapi/mechglue/g\_unseal.c  
lib/gssapi/mechglue/g\_verify.c  
lib/gssapi/mechglue/mglueP.h  
lib/gssapi/mechglue/oid\_ops.c  
lib/gssapi/spnego/gssapiP\_spnego.h  
lib/gssapi/spnego/spnego\_mech.c

are subject to the following license:

Copyright (c) 2004 Sun Microsystems, Inc.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.

IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

#### Acknowledgments

-----

Thanks to Russ Allbery for contributing and integrating patches from Debian and other places.

Thanks to Michael Calmer for contributing patches for code clean-up.

Thanks to Novell for donating the KDB abstraction layer.

Thanks to Sun Microsystems for donating their implementations of mechglue and SPNEGO.

Thanks to the numerous others who reported bugs and/or contributed patches.

Thanks to iDefense for notifying us about the vulnerability in MITKRB5-SA-2007-002.

Thanks to the members of the Kerberos V5 development team at MIT, both

past and present: Danilo Almeida, Jeffrey Altman, Justin Anderson,  
Richard Basch, Jay Berkenbilt, Mitch Berger, Andrew Boardman, Joe  
Calzaretta, John Carr, Don Davis, Alexandra Ellwood, Nancy Gilman,  
Matt Hancher, Sam Hartman, Paul Hill, Marc Horowitz, Eva Jacobus,  
Miroslav Jurisic, Barry Jaspan, Geoffrey King, Kevin Koch, John Kohl,  
Peter Litwack, Scott McGuire, Kevin Mitchell, Cliff Neuman, Paul Park,  
Ezra Peisach, Chris Provenzano, Ken Raeburn, Jon Rochlis, Jeff  
Schiller, Jen Selby, Brad Thompson, Harry Tsai, Ted Ts'o, Marshall  
Vale, Tom Yu.

## MIT Kerberos V5 r 1.8.4

This product includes Kerberos 1.8.4 which is distributed in accordance with the following license agreement:

Copyright (C) 1985-2010 by the Massachusetts Institute of Technology.

All rights reserved.

Export of this software from the United States of America may require a specific license from the United States Government. It is the responsibility of any person or organization contemplating export to obtain such a license before exporting.

WITHIN THAT CONSTRAINT, permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of M.I.T. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. Furthermore if you modify this software you must label your software as modified software and not distribute it in such a fashion that it might be confused with the original MIT software. M.I.T. makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

THIS SOFTWARE IS PROVIDED "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Individual source code files are copyright MIT, Cygnus Support, Novell, OpenVision Technologies, Oracle, Red Hat, Sun Microsystems, FundsXpress, and others.

Project Athena, Athena, Athena MUSE, Discuss, Hesiod, Kerberos, Moira, and Zephyr are trademarks of the Massachusetts Institute of Technology (MIT). No commercial use of these trademarks may be made without prior written permission of MIT.

"Commercial use" means use of a name in a product or other for-profit manner. It does NOT prevent a commercial firm from referring to the MIT trademarks in order to convey information (although in doing so, recognition of their trademark status should be given).

-----

Portions of src/lib/crypto have the following copyright:

Copyright (C) 1998 by the FundsXpress, INC.

All rights reserved.

Export of this software from the United States of America may require a specific license from the United States Government. It is the responsibility of any person or organization contemplating export to obtain such a license before exporting.

WITHIN THAT CONSTRAINT, permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of FundsXpress. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. FundsXpress makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

THIS SOFTWARE IS PROVIDED "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

-----

The following copyright and permission notice applies to the OpenVision Kerberos Administration system located in kadmin/create, kadmin/dbutil, kadmin/passwd, kadmin/server, lib/kadm5, and portions of lib/rpc:

Copyright, OpenVision Technologies, Inc., 1996, All Rights Reserved

WARNING: Retrieving the OpenVision Kerberos Administration system source code, as described below, indicates your acceptance of the following terms. If you do not agree to the following terms, do not retrieve the OpenVision Kerberos administration system.

You may freely use and distribute the Source Code and Object Code compiled from it, with or without modification, but this Source Code is provided to you "AS IS" EXCLUSIVE OF ANY WARRANTY, INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ANY OTHER WARRANTY, WHETHER EXPRESS OR IMPLIED. IN NO EVENT WILL OPENVISION HAVE ANY LIABILITY FOR ANY LOST PROFITS, LOSS OF DATA OR COSTS OF PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES, OR FOR ANY SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THIS AGREEMENT, INCLUDING, WITHOUT LIMITATION, THOSE RESULTING FROM THE USE OF THE SOURCE CODE, OR THE FAILURE OF THE SOURCE CODE TO PERFORM, OR FOR ANY OTHER REASON.

OpenVision retains all copyrights in the donated Source Code. OpenVision also retains copyright to derivative works of the Source Code, whether created by OpenVision or by a third party. The OpenVision copyright notice must be preserved if derivative works are made based on the donated Source Code.

OpenVision Technologies, Inc. has donated this Kerberos Administration system to MIT for inclusion in the standard Kerberos 5 distribution. This donation underscores our commitment to continuing Kerberos technology development and our gratitude for the valuable work which has been performed by MIT and the Kerberos community.

-----

Portions contributed by Matt Crawford <crawdad@fnal.gov> were work performed at Fermi National Accelerator Laboratory, which is operated by Universities Research Association, Inc., under contract DE-AC02-76CHO3000 with the U.S. Department of Energy.

-----

The implementation of the Yarrow pseudo-random number generator in `src/lib/crypto/yarrow` has the following copyright:

Copyright 2000 by Zero-Knowledge Systems, Inc.

Permission to use, copy, modify, distribute, and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Zero-Knowledge Systems, Inc. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. Zero-Knowledge Systems, Inc. makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

ZERO-KNOWLEDGE SYSTEMS, INC. DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL ZERO-KNOWLEDGE SYSTEMS, INC. BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTUOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

-----

The implementation of the AES encryption algorithm in `src/lib/crypto/aes` has the following copyright:

Copyright (c) 2001, Dr Brian Gladman <brg@gladman.uk.net>, Worcester, UK.

All rights reserved.

#### LICENSE TERMS

The free distribution and use of this software in both source and binary form is allowed (with or without changes) provided that:

1. distributions of this source code include the above copyright notice, this list of conditions and the following disclaimer;
2. distributions in binary form include the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other associated materials;
3. the copyright holder's name is not used to endorse products built using this software without specific written permission.

#### DISCLAIMER

This software is provided 'as is' with no explicit or implied warranties in respect of any properties, including, but not limited to, correctness and fitness for purpose.

-----

Portions contributed by Red Hat, including the pre-authentication plug-ins framework, contain the following copyright:

Copyright (c) 2006 Red Hat, Inc.

Portions copyright (c) 2006 Massachusetts Institute of Technology

All Rights Reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

\* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

\* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

\* Neither the name of Red Hat, Inc., nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

-----

The implementations of GSSAPI mechglue in GSSAPI-SPNEGO in src/lib/gssapi, including the following files:

lib/gssapi/generic/gssapi\_err\_generic.et  
lib/gssapi/mechglue/g\_accept\_sec\_context.c  
lib/gssapi/mechglue/g\_acquire\_cred.c  
lib/gssapi/mechglue/g\_canon\_name.c  
lib/gssapi/mechglue/g\_compare\_name.c  
lib/gssapi/mechglue/g\_context\_time.c  
lib/gssapi/mechglue/g\_delete\_sec\_context.c  
lib/gssapi/mechglue/g\_dsp\_name.c

lib/gssapi/mechglue/g\_dsp\_status.c  
lib/gssapi/mechglue/g\_dup\_name.c  
lib/gssapi/mechglue/g\_exp\_sec\_context.c  
lib/gssapi/mechglue/g\_export\_name.c  
lib/gssapi/mechglue/g\_glue.c  
lib/gssapi/mechglue/g\_imp\_name.c  
lib/gssapi/mechglue/g\_imp\_sec\_context.c  
lib/gssapi/mechglue/g\_init\_sec\_context.c  
lib/gssapi/mechglue/g\_initialize.c  
lib/gssapi/mechglue/g\_inquire\_context.c  
lib/gssapi/mechglue/g\_inquire\_cred.c  
lib/gssapi/mechglue/g\_inquire\_names.c  
lib/gssapi/mechglue/g\_process\_context.c  
lib/gssapi/mechglue/g\_rel\_buffer.c  
lib/gssapi/mechglue/g\_rel\_cred.c  
lib/gssapi/mechglue/g\_rel\_name.c  
lib/gssapi/mechglue/g\_rel\_oid\_set.c  
lib/gssapi/mechglue/g\_seal.c  
lib/gssapi/mechglue/g\_sign.c  
lib/gssapi/mechglue/g\_store\_cred.c  
lib/gssapi/mechglue/g\_unseal.c  
lib/gssapi/mechglue/g\_userok.c  
lib/gssapi/mechglue/g\_utils.c  
lib/gssapi/mechglue/g\_verify.c  
lib/gssapi/mechglue/gssd\_pname\_to\_uid.c

lib/gssapi/mechglue/mglueP.h  
lib/gssapi/mechglue/oid\_ops.c  
lib/gssapi/spnego/gssapiP\_spnego.h  
lib/gssapi/spnego/spnego\_mech.c

and the initial implementation of incremental propagation, including  
the following new or changed files:

include/iprop\_hdr.h  
kadmin/server/ipropd\_svc.c  
lib/kdb/iprop.x  
lib/kdb/kdb\_convert.c  
lib/kdb/kdb\_log.c  
lib/kdb/kdb\_log.h  
lib/krb5/error\_tables/kdb5\_err.et  
slave/kpropd\_rpc.c  
slave/kproplog.c

and marked portions of the following files:

lib/krb5/os/hst\_realm.c

are subject to the following license:

Copyright (c) 2004 Sun Microsystems, Inc.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

-----

MIT Kerberos includes documentation and software developed at the University of California at Berkeley, which includes this copyright notice:

Copyright (C) 1983 Regents of the University of California.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE

FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

-----

Portions contributed by Novell, Inc., including the LDAP database backend, are subject to the following license:

Copyright (c) 2004-2005, Novell, Inc.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- \* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- \* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

\* The copyright holder's name is not used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS"

AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE

ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

-----

Portions funded by Sandia National Laboratory and developed by the University of Michigan's Center for Information Technology Integration, including the PKINIT implementation, are subject to the following license:

COPYRIGHT (C) 2006-2007

THE REGENTS OF THE UNIVERSITY OF MICHIGAN

ALL RIGHTS RESERVED

Permission is granted to use, copy, create derivative works and redistribute this software and such derivative works for any purpose, so long as the name of The University of Michigan is not used in any advertising or publicity pertaining to the use of distribution of this software without specific, written prior authorization. If the above copyright notice or any other identification of the University of Michigan is included in any copy of any portion of this software, then the disclaimer below must also be included.

THIS SOFTWARE IS PROVIDED AS IS, WITHOUT REPRESENTATION FROM THE UNIVERSITY OF MICHIGAN AS TO ITS FITNESS FOR ANY PURPOSE, AND WITHOUT WARRANTY BY THE UNIVERSITY OF MICHIGAN OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE REGENTS OF THE UNIVERSITY OF MICHIGAN SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WITH RESPECT TO ANY CLAIM ARISING OUT OF OR IN CONNECTION WITH THE USE OF THE SOFTWARE, EVEN IF IT HAS BEEN OR IS HEREAFTER ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

-----

The pkcs11.h file included in the PKINIT code has the following  
license:

Copyright 2006 g10 Code GmbH

Copyright 2006 Andreas Jellinghaus

This file is free software; as a special exception the author gives  
unlimited permission to copy and/or distribute it, with or without  
modifications, as long as this notice is preserved.

This file is distributed in the hope that it will be useful, but  
WITHOUT ANY WARRANTY, to the extent permitted by law; without even  
the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR  
PURPOSE.

-----

Portions contributed by Apple Inc. are subject to the following license:

Copyright 2004-2008 Apple Inc. All Rights Reserved.

Export of this software from the United States of America may require

a specific license from the United States Government. It is the responsibility of any person or organization contemplating export to obtain such a license before exporting.

WITHIN THAT CONSTRAINT, permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Apple Inc. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. Apple Inc. makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

THIS SOFTWARE IS PROVIDED ``AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

-----

The implementations of `strncpy` and `strncat` in `src/util/support/strncat.c` have the following copyright and permission notice:

Copyright (c) 1998 Todd C. Miller <Todd.Miller@courtesan.com>

Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

-----

The implementations of UTF-8 string handling in src/util/support and src/lib/krb5/unicode are subject to the following copyright and permission notice:

The OpenLDAP Public License

Version 2.8, 17 August 2003

Redistribution and use of this software and associated documentation ("Software"), with or without modification, are permitted provided

that the following conditions are met:

1. Redistributions in source form must retain copyright statements and notices,
2. Redistributions in binary form must reproduce applicable copyright statements and notices, this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution, and
3. Redistributions must contain a verbatim copy of this document.

The OpenLDAP Foundation may revise this license from time to time.

Each revision is distinguished by a version number. You may use this Software under terms of this license revision or under the terms of any subsequent revision of the license.

THIS SOFTWARE IS PROVIDED BY THE OPENLDAP FOUNDATION AND ITS CONTRIBUTORS ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OPENLDAP FOUNDATION, ITS CONTRIBUTORS, OR THE AUTHOR(S) OR OWNER(S) OF THE SOFTWARE BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES;

LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The names of the authors and copyright holders must not be used in advertising or otherwise to promote the sale, use or other dealing in this Software without specific, written prior permission. Title to copyright in this Software shall at all times remain with copyright holders.

OpenLDAP is a registered trademark of the OpenLDAP Foundation.

Copyright 1999-2003 The OpenLDAP Foundation, Redwood City, California, USA. All Rights Reserved. Permission to copy and distribute verbatim copies of this document is granted.

-----

Marked test programs in `src/lib/krb5/krb` have the following copyright:

Copyright (c) 2006 Kungliga Tekniska Högskolan  
(Royal Institute of Technology, Stockholm, Sweden).  
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of KTH nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY KTH AND ITS CONTRIBUTORS ``AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL KTH OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR

OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

## nss\_ldap 2.62

This product includes Heimdal software distributed pursuant to the following terms:

GNU LESSER GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc.

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

This version of the GNU Lesser General Public License incorporates the terms and conditions of version 3 of the GNU General Public License, supplemented by the additional permissions listed below.

0. Additional Definitions.

As used herein, "this License" refers to version 3 of the GNU Lesser General Public License, and the "GNU GPL" refers to version 3 of the GNU General Public License.

"The Library" refers to a covered work governed by this License, other than an Application or a Combined Work as defined below.

An "Application" is any work that makes use of an interface provided

by the Library, but which is not otherwise based on the Library.

Defining a subclass of a class defined by the Library is deemed a mode of using an interface provided by the Library.

A "Combined Work" is a work produced by combining or linking an Application with the Library. The particular version of the Library with which the Combined Work was made is also called the "Linked Version".

The "Minimal Corresponding Source" for a Combined Work means the Corresponding Source for the Combined Work, excluding any source code for portions of the Combined Work that, considered in isolation, are based on the Application, and not on the Linked Version.

The "Corresponding Application Code" for a Combined Work means the object code and/or source code for the Application, including any data and utility programs needed for reproducing the Combined Work from the Application, but excluding the System Libraries of the Combined Work.

1. Exception to Section 3 of the GNU GPL.

You may convey a covered work under sections 3 and 4 of this License without being bound by section 3 of the GNU GPL.

2. Conveying Modified Versions.

If you modify a copy of the Library, and, in your modifications, a facility refers to a function or data to be supplied by an Application that uses the facility (other than as an argument passed when the facility is invoked), then you may convey a copy of the modified version:

- a) under this License, provided that you make a good faith effort to ensure that, in the event an Application does not supply the function or data, the facility still operates, and performs whatever part of its purpose remains meaningful, or
- b) under the GNU GPL, with none of the additional permissions of this License applicable to that copy.

### 3. Object Code Incorporating Material from Library Header Files.

The object code form of an Application may incorporate material from a header file that is part of the Library. You may convey such object code under terms of your choice, provided that, if the incorporated material is not limited to numerical parameters, data structure layouts and accessors, or small macros, inline functions and templates (ten or fewer lines in length), you do both of the following:

- a) Give prominent notice with each copy of the object code that the

Library is used in it and that the Library and its use are covered by this License.

b) Accompany the object code with a copy of the GNU GPL and this license document.

#### 4. Combined Works.

You may convey a Combined Work under terms of your choice that, taken together, effectively do not restrict modification of the portions of the Library contained in the Combined Work and reverse engineering for debugging such modifications, if you also do each of the following:

a) Give prominent notice with each copy of the Combined Work that the Library is used in it and that the Library and its use are covered by this License.

b) Accompany the Combined Work with a copy of the GNU GPL and this license document.

c) For a Combined Work that displays copyright notices during execution, include the copyright notice for the Library among these notices, as well as a reference directing the user to the copies of the GNU GPL and this license document.

d) Do one of the following:

0) Convey the Minimal Corresponding Source under the terms of this License, and the Corresponding Application Code in a form suitable for, and under terms that permit, the user to recombine or relink the Application with a modified version of the Linked Version to produce a modified Combined Work, in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.

1) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (a) uses at run time a copy of the Library already present on the user's computer system, and (b) will operate properly with a modified version of the Library that is interface-compatible with the Linked Version.

e) Provide Installation Information, but only if you would otherwise be required to provide such information under section 6 of the GNU GPL, and only to the extent that such information is necessary to install and execute a modified version of the Combined Work produced by recombining or relinking the Application with a modified version of the Linked Version. (If you use option 4d0, the Installation Information must accompany

the Minimal Corresponding Source and Corresponding Application Code. If you use option 4d1, you must provide the Installation Information in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.)

#### 5. Combined Libraries.

You may place library facilities that are a work based on the Library side by side in a single library together with other library facilities that are not Applications and are not covered by this License, and convey such a combined library under terms of your choice, if you do both of the following:

- a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities, conveyed under the terms of this License.
- b) Give prominent notice with the combined library that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

#### 6. Revised Versions of the GNU Lesser General Public License.

The Free Software Foundation may publish revised and/or new versions of the GNU Lesser General Public License from time to time. Such new

versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library as you received it specifies that a certain numbered version of the GNU Lesser General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that published version or of any later version published by the Free Software Foundation. If the Library as you received it does not specify a version number of the GNU Lesser General Public License, you may choose any version of the GNU Lesser General Public License ever published by the Free Software Foundation.

If the Library as you received it specifies that a proxy can decide whether future versions of the GNU Lesser General Public License shall apply, that proxy's public statement of acceptance of any version is permanent authorization for you to choose that version for the Library.

## Oracle JDBC Driver 10g Release 2 (10.2.0.1.0)

ORACLE TECHNOLOGY NETWORK

DEVELOPMENT AND DISTRIBUTION LICENSE AGREEMENT

"We," "us," and "our" refers to Oracle USA, Inc., for and on behalf of itself and its subsidiaries and affiliates under common control. "You" and "your" refers to the individual or entity that wishes to use the programs from Oracle. "Programs" refers to the software product you wish to download and use and program documentation. "License" refers to your right to use the programs under the terms of this agreement. This agreement is governed by the substantive and procedural laws of California. You and Oracle agree to submit to the exclusive jurisdiction of, and venue in, the courts of San Francisco, San Mateo, or Santa Clara counties in California in any dispute arising out of or relating to this agreement.

We are willing to license the programs to you only upon the condition that you accept all of the terms contained in this agreement. Read the terms carefully and select the "Accept" button at the bottom of the page to confirm your acceptance. If you are not willing to be bound by these terms, select the "Do Not Accept" button and the registration process will not continue.

### License Rights

We grant you a nonexclusive, nontransferable limited license to use the programs for purposes of developing your applications. You may also distribute the programs with your applications to your customers. If you want to use the programs for any purpose other than as expressly permitted under this agreement you must contact us, or an Oracle reseller, to obtain the appropriate license. We may audit your use of the programs. Program documentation is either shipped with the programs, or documentation may accessed online at <http://otn.oracle.com/docs>.

### Ownership and Restrictions

We retain all ownership and intellectual property rights in the programs. You may make a sufficient number of copies of the programs for the licensed use and one copy of the programs for backup purposes.

You may not:

- use the programs for any purpose other than as provided above;
- distribute the programs unless accompanied with your applications;
- charge your end users for use of the programs;
- remove or modify any program markings or any notice of our proprietary rights;
- use the programs to provide third party training on the content and/or functionality of the programs, except for training your licensed users;
- assign this agreement or give the programs, program access or an interest in the programs to any individual or entity except as provided under this agreement;
- cause or permit reverse engineering (unless required by law for interoperability), disassembly or decompilation of the programs;
- disclose results of any program benchmark tests without our prior consent; or,
- use any Oracle name, trademark or logo.

#### Program Distribution

We grant you a nonexclusive, nontransferable right to copy and distribute the programs to your end users provided that you do not charge your end users for use of the programs and provided your end users may only use the programs to run your applications for their business operations. Prior to distributing the programs you shall require your end users to execute an agreement binding them to terms consistent with those contained in this section and the sections of this agreement entitled "License Rights," "Ownership and Restrictions," "Export," "Disclaimer of Warranties and Exclusive Remedies," "No Technical Support," "End of Agreement," "Relationship Between the Parties," and "Open Source." You must also include a provision stating that your end users shall have no right to distribute the programs, and a provision specifying us as a third party beneficiary of the agreement. You are responsible for obtaining these agreements with your end users.

You agree to: (a) defend and indemnify us against all claims and damages caused by your distribution of the programs in breach of this agreements and/or failure to include the required contractual provisions in your end user agreement as stated above; (b) keep executed end user agreements and records of end user information including name, address, date of distribution and identity of programs distributed; (c) allow us to inspect your end user agreements and records upon request; and, (d) enforce the terms of your end user agreements so as to effect a timely cure of any end user breach, and to notify us of any breach of the terms.

#### Export

You agree that U.S. export control laws and other applicable export and import laws govern your use of the programs, including technical data; additional information can be found on Oracle's Global Trade Compliance web site located at <http://www.oracle.com/products/export/index.html?content.html>. You agree that neither the programs nor any direct product thereof will be exported, directly, or indirectly, in violation of these laws, or will be used for any purpose prohibited by these laws including, without limitation, nuclear, chemical, or biological weapons proliferation.

#### Disclaimer of Warranty and Exclusive Remedies

THE PROGRAMS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. WE FURTHER DISCLAIM ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NONINFRINGEMENT.

IN NO EVENT SHALL WE BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, OR DAMAGES FOR LOSS OF PROFITS, REVENUE, DATA OR DATA USE, INCURRED BY YOU OR ANY THIRD PARTY, WHETHER IN AN ACTION IN CONTRACT OR TORT, EVEN IF WE HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. OUR ENTIRE LIABILITY FOR DAMAGES HEREUNDER SHALL IN NO EVENT EXCEED ONE THOUSAND DOLLARS (U.S. \$1,000).

#### No Technical Support

Our technical support organization will not provide technical support, phone support, or updates to you for the programs licensed under this agreement.

### Restricted Rights

If you distribute a license to the United States government, the programs, including documentation, shall be considered commercial computer software and you will place a legend, in addition to applicable copyright notices, on the documentation, and on the media label, substantially similar to the following:

#### NOTICE OF RESTRICTED RIGHTS

"Programs delivered subject to the DOD FAR Supplement are 'commercial computer software' and use, duplication, and disclosure of the programs, including documentation, shall be subject to the licensing restrictions set forth in the applicable Oracle license agreement. Otherwise, programs delivered subject to the Federal Acquisition Regulations are 'restricted computer software' and use, duplication, and disclosure of the programs, including documentation, shall be subject to the restrictions in FAR 52.227-19, Commercial Computer Software-Restricted Rights (June 1987). Oracle USA, Inc., 500 Oracle Parkway, Redwood City, CA 94065."

### End of Agreement

You may terminate this agreement by destroying all copies of the programs. We have the right to terminate your right to use the programs if you fail to comply with any of the terms of this agreement, in which case you shall destroy all copies of the programs.

### Relationship Between the Parties

The relationship between you and us is that of licensee/licensor. Neither party will represent that it has any authority to assume or create any obligation, express or implied, on behalf of the other party, nor to represent the other party as agent, employee, franchisee, or in any other capacity. Nothing in this agreement shall be construed to limit either party's right to independently develop or distribute software that is functionally similar to the other party's products, so long as proprietary information of the other party is not included in such software.

### Open Source

"Open Source" software - software available without charge for use, modification and distribution - is often licensed under terms that require the user to make the user's modifications to the Open Source software or any software that the user 'combines' with the Open Source software freely available in source code form. If you use Open Source software in conjunction with the programs, you must ensure that your use does not: (i) create, or purport to create, obligations of us with respect to the Oracle programs; or (ii) grant, or purport to grant, to any third party any rights to or immunities under our intellectual property or proprietary rights in the Oracle programs. For example, you may not develop a software program using an Oracle program and an Open Source program where such use results in a program file(s) that contains code from both the Oracle program and the Open Source program (including without limitation libraries) if the Open Source program is licensed under a license that requires any "modifications" be made freely available. You also may not combine the Oracle program with programs licensed under the GNU General Public License ("GPL") in any manner that could cause, or could be interpreted or asserted to cause, the Oracle program or any modifications thereto to become subject to the terms of the GPL.

#### Entire Agreement

You agree that this agreement is the complete agreement for the programs and licenses, and this agreement supersedes all prior or contemporaneous agreements or representations. If any term of this agreement is found to be invalid or unenforceable, the remaining provisions will remain effective.

Last updated: 03/09/05

## Oracle JDK 1.6.0 19

This Product is distributed with Sun JDK 1.6.0\_19 (JAVA SE DEVELOPMENT KIT (JDK), VERSION 6) (Sun JDK). The Sun JDK is distributed in accordance with the Sun Microsystems, Inc. (Sun) Binary Code License Agreement set forth below. As noted in Section G of the Supplemental License Terms of this license, Sun has provided additional copyright notices and license terms that may be applicable to portions of the Sun JDK in the THIRDPARTYLICENSEREADME.txt file that accompanies the Sun JDK.

SUN MICROSYSTEMS, INC. ("SUN") IS WILLING TO LICENSE THE SOFTWARE IDENTIFIED BELOW TO YOU ONLY UPON THE CONDITION THAT YOU ACCEPT ALL OF THE TERMS CONTAINED IN THIS BINARY CODE LICENSE AGREEMENT AND SUPPLEMENTAL LICENSE TERMS (COLLECTIVELY "AGREEMENT"). PLEASE READ THE AGREEMENT CAREFULLY. BY USING THE SOFTWARE YOU ACKNOWLEDGE THAT YOU HAVE READ THE TERMS AND AGREE TO THEM. IF YOU ARE AGREEING TO THESE TERMS ON BEHALF OF A COMPANY OR OTHER LEGAL ENTITY, YOU REPRESENT THAT YOU HAVE THE LEGAL AUTHORITY TO BIND THE LEGAL ENTITY TO THESE TERMS. IF YOU DO NOT HAVE SUCH AUTHORITY, OR IF YOU DO NOT WISH TO BE BOUND BY THE TERMS, THEN YOU MUST NOT USE THE SOFTWARE ON THIS SITE OR ANY OTHER MEDIA ON WHICH THE SOFTWARE IS CONTAINED.

1. DEFINITIONS. "Software" means the identified above in binary form, any other machine readable materials (including, but not limited to, libraries, source files, header files, and data files), any updates or error corrections provided by Sun, and any user manuals, programming guides and other documentation provided to you by Sun under this Agreement. "General Purpose Desktop Computers and Servers" means computers, including desktop and laptop computers, or servers, used for general computing functions under end user control (such as but not specifically limited to email, general purpose Internet browsing, and office suite productivity tools). The use of Software in systems and solutions that provide dedicated functionality (other than as mentioned above) or designed for use in embedded or function-specific software applications, for example but not limited to: Software embedded in or bundled with industrial control systems, wireless mobile telephones, wireless handheld devices, netbooks, kiosks, TV/STB, Blu-ray Disc devices, telematics and network control switching equipment, printers and storage management systems, and other related systems are excluded from this definition and not licensed under this Agreement. "Programs" means Java technology applets and applications intended to run on the Java Platform Standard Edition (Java SE) platform on Java-enabled General Purpose Desktop Computers and Servers.

2. LICENSE TO USE. Subject to the terms and conditions of this Agreement, including, but not limited to the Java Technology Restrictions of the Supplemental License Terms, Sun grants you a non-exclusive, non-transferable, limited license without license fees to reproduce and use internally Software complete and unmodified for the sole purpose of running Programs. Additional licenses for developers and/or publishers are granted in the Supplemental License Terms.

3. RESTRICTIONS. Software is confidential and copyrighted. Title to Software and all associated intellectual property rights is retained by Sun and/or its licensors. Unless enforcement is prohibited by applicable law, you may not modify, decompile, or reverse engineer Software. You acknowledge that Licensed Software is not designed or intended for use in the design, construction, operation or maintenance of any nuclear facility. Sun Microsystems, Inc. disclaims any express or implied warranty of fitness for such uses. No right, title or interest in or to any trademark, service mark, logo or trade name of Sun or its licensors is granted under this Agreement. Additional restrictions for developers and/or publishers licenses are set forth in the Supplemental License Terms.

4. LIMITED WARRANTY. Sun warrants to you that for a period of ninety (90) days from the date of purchase, as evidenced by a copy of the receipt, the media on which Software is furnished (if any) will be free of defects in materials and workmanship under normal use. Except for the foregoing, Software is provided "AS IS". Your exclusive remedy and Sun's entire liability under this limited warranty will be at Sun's option to replace Software media or refund the fee paid for Software. Any implied warranties on the Software are limited to 90 days. Some states do not allow limitations on duration of an implied warranty, so the above may not apply to you. This limited warranty gives you specific legal rights. You may have others, which vary from state to state.

5. DISCLAIMER OF WARRANTY. UNLESS SPECIFIED IN THIS AGREEMENT, 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 THESE DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

6. LIMITATION OF LIABILITY. TO THE EXTENT NOT PROHIBITED BY LAW, IN NO EVENT WILL SUN OR ITS LICENSORS BE LIABLE FOR ANY LOST REVENUE, PROFIT OR DATA, OR FOR SPECIAL, INDIRECT, CONSEQUENTIAL, INCIDENTAL OR PUNITIVE DAMAGES, HOWEVER CAUSED REGARDLESS OF THE THEORY OF LIABILITY, ARISING OUT OF OR RELATED TO THE USE OF OR INABILITY TO USE SOFTWARE, EVEN IF SUN HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. In no event will Sun's liability to you, whether in contract, tort (including negligence), or otherwise, exceed the amount paid by you for Software under this Agreement. The foregoing limitations will apply even if the above stated warranty fails of its essential purpose. Some states do not allow the exclusion of incidental or consequential damages, so some of the terms above may not be applicable to you.

7. TERMINATION. This Agreement is effective until terminated. You may terminate this Agreement at any time by destroying all copies of Software. This Agreement will terminate immediately without notice from Sun if you fail to comply with any provision of this Agreement. Either party may terminate this Agreement immediately should any Software become, or in either party's opinion be likely to become, the subject of a claim of infringement of any intellectual property right. Upon Termination, you must destroy all copies of Software.

8. EXPORT REGULATIONS. All Software and technical data delivered under this Agreement are subject to US export control laws and may be subject to export or import regulations in other countries. You agree to comply strictly with all such laws and regulations and acknowledge that you have the responsibility to obtain such licenses to export, re-export, or import as may be required after delivery to you.

9. TRADEMARKS AND LOGOS. You acknowledge and agree as between you and Sun that Sun owns the SUN, SOLARIS, JAVA, JINI, FORTE, and iPLANET trademarks and all SUN, SOLARIS, JAVA, JINI, FORTE, and iPLANET-related trademarks, service marks, logos and other brand designations ("Sun Marks"), and you agree to comply with the Sun Trademark and Logo Usage Requirements currently located at <http://www.sun.com/policies/trademarks>. Any use you make of the Sun Marks inures to Sun's benefit.

10. U.S. GOVERNMENT RESTRICTED RIGHTS. If Software is being acquired by or on behalf of the U.S. Government or by a U.S. Government prime contractor or subcontractor (at any tier), then the Government's rights in Software and accompanying documentation will be only as set forth in this Agreement; this is in accordance with 48 CFR 227.7201 through 227.7202-4 (for Department of Defense (DOD) acquisitions) and with 48 CFR 2.101 and 12.212 (for non-DOD acquisitions).

11. **GOVERNING LAW.** Any action related to this Agreement will be governed by California law and controlling U.S. federal law. No choice of law rules of any jurisdiction will apply.

12. **SEVERABILITY.** If any provision of this Agreement is held to be unenforceable, this Agreement will remain in effect with the provision omitted, unless omission would frustrate the intent of the parties, in which case this Agreement will immediately terminate.

13. **INTEGRATION.** This Agreement is the entire agreement between you and Sun relating to its subject matter. It supersedes all prior or contemporaneous oral or written communications, proposals, representations and warranties and prevails over any conflicting or additional terms of any quote, order, acknowledgment, or other communication between the parties relating to its subject matter during the term of this Agreement. No modification of this Agreement will be binding, unless in writing and signed by an authorized representative of each party.

#### SUPPLEMENTAL LICENSE TERMS

These Supplemental License Terms add to or modify the terms of the Binary Code License Agreement. Capitalized terms not defined in these Supplemental Terms shall have the same meanings ascribed to them in the Binary Code License Agreement . These Supplemental Terms shall supersede any inconsistent or conflicting terms in the Binary Code License Agreement, or in any license contained within the Software.

A. **Software Internal Use and Development License Grant.** Subject to the terms and conditions of this Agreement and restrictions and exceptions set forth in the Software "README" file incorporated herein by reference, including, but not limited to the Java Technology Restrictions of these Supplemental Terms, Sun grants you a non-exclusive, non-transferable, limited license without fees to reproduce internally and use internally the Software complete and unmodified for the purpose of designing, developing, and testing your Programs.

B. License to Distribute Software. Subject to the terms and conditions of this Agreement and restrictions and exceptions set forth in the Software README file, including, but not limited to the Java Technology Restrictions of these Supplemental Terms, Sun grants you a non-exclusive, non-transferable, limited license without fees to reproduce and distribute the Software, provided that (i) you distribute the Software complete and unmodified and only bundled as part of, and for the sole purpose of running, your Programs, (ii) the Programs add significant and primary functionality to the Software, (iii) you do not distribute additional software intended to replace any component(s) of the Software, (iv) you do not remove or alter any proprietary legends or notices contained in the Software, (v) you only distribute the Software subject to a license agreement that protects Sun's interests consistent with the terms contained in this Agreement, and (vi) you agree to defend and indemnify Sun and its licensors from and against any damages, costs, liabilities, settlement amounts and/or expenses (including attorneys' fees) incurred in connection with any claim, lawsuit or action by any third party that arises or results from the use or distribution of any and all Programs and/or Software.

C. License to Distribute Redistributables. Subject to the terms and conditions of this Agreement and restrictions and exceptions set forth in the Software README file, including but not limited to the Java Technology Restrictions of these Supplemental Terms, Sun grants you a non-exclusive, non-transferable, limited license without fees to reproduce and distribute those files specifically identified as redistributable in the Software "README" file ("Redistributables") provided that: (i) you distribute the Redistributables complete and unmodified, and only bundled as part of Programs, (ii) the Programs add significant and primary functionality to the Redistributables, (iii) you do not distribute additional software intended to supersede any component(s) of the Redistributables (unless otherwise specified in the applicable README file), (iv) you do not remove or alter any proprietary legends or notices contained in or on the Redistributables, (v) you only distribute the Redistributables pursuant to a license agreement that protects Sun's interests consistent with the terms contained in the Agreement, (vi) you agree to defend and indemnify Sun and its licensors from and against any damages, costs, liabilities, settlement amounts and/or expenses (including attorneys' fees) incurred in connection with any claim, lawsuit or action by any third party that arises or results from the use or distribution of any and all Programs and/or Software.

D. Java Technology Restrictions. You may not create, modify, or change the behavior of, or authorize your licensees to create, modify, or change the behavior of, classes, interfaces, or subpackages that are in any way identified as "java", "javax", "sun" or similar convention as specified by Sun in any naming convention designation.

E. Distribution by Publishers. This section pertains to your distribution of the Software with your printed book or magazine (as those terms are commonly used in the industry) relating to Java technology ("Publication"). Subject to and conditioned upon your compliance with the restrictions and obligations contained in the Agreement, in addition to the license granted in Paragraph 1 above, Sun hereby grants to you a non-exclusive, nontransferable limited right to reproduce complete and unmodified copies of the Software on electronic media (the "Media") for the sole purpose of inclusion and distribution with your Publication(s), subject to the following terms: (i) You may not distribute the Software on a stand-alone basis; it must be distributed with your Publication(s); (ii) You are responsible for downloading the Software from the applicable Sun web site; (iii) You must refer to the Software as Java™ SE Development Kit 6; (iv) The Software must be reproduced in its entirety and without any modification whatsoever (including, without limitation, the Binary Code License and Supplemental License Terms accompanying the Software and proprietary rights notices contained in the Software); (v) The Media label shall include the following information: Copyright 2006, Sun Microsystems, Inc. All rights reserved. Use is subject to license terms. Sun, Sun Microsystems, the Sun logo, Solaris, Java, the Java Coffee Cup logo, J2SE, and all trademarks and logos based on Java are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries. This information must be placed on the Media label in such a manner as to only apply to the Sun Software; (vi) You must clearly identify the Software as Sun's product on the Media holder or Media label, and you may not state or imply that Sun is responsible for any third-party software contained on the Media; (vii) You may not include any third party software on the Media which is intended to be a replacement or substitute for the Software; (viii) You shall indemnify Sun for all damages arising from your failure to comply with the requirements of this Agreement. In addition, you shall defend, at your expense, any and all claims brought against Sun by third parties, and shall pay all damages awarded by a court of competent jurisdiction, or such settlement amount negotiated by you, arising out of or in connection with your use, reproduction or distribution of the Software and/or the Publication. Your obligation to provide indemnification under this section shall arise provided that Sun: (a) provides you prompt notice of the claim; (b) gives you sole control of the defense and settlement of the claim; (c) provides you, at your expense, with all available information, assistance and authority to defend; and (d) has not compromised or settled such claim without your prior written consent; and (ix) You shall provide Sun with a written notice for each Publication; such notice shall include the following information: (1) title of Publication, (2) author(s), (3) date of Publication, and (4) ISBN or ISSN numbers. Such notice shall be sent to Sun Microsystems, Inc., 4150 Network Circle, M/S USCA12-110, Santa Clara, California 95054, U.S.A , Attention: Contracts Administration.

F. Source Code. Software may contain source code that, unless expressly licensed for other purposes, is provided solely for reference purposes pursuant to the terms of this Agreement. Source code may not be redistributed unless expressly provided for in this Agreement.

G. Third Party Code. Additional copyright notices and license terms applicable to portions of the Software are set forth in the THIRDPARTYLICENSEREADME.txt file. In addition to any terms and conditions of any third party opensource/freeware license identified in the THIRDPARTYLICENSEREADME.txt file, the disclaimer of warranty and limitation of liability provisions in paragraphs 5 and 6 of the Binary Code License Agreement shall apply to all Software in this distribution.

H. Termination for Infringement. Either party may terminate this Agreement immediately should any Software become, or in either party's opinion be likely to become, the subject of a claim of infringement of any intellectual property right.

I. Installation and Auto-Update. The Software's installation and auto-update processes transmit a limited amount of data to Sun (or its service provider) about those specific processes to help Sun understand and optimize them. Sun does not associate the data with personally identifiable information. You can find more information about the data Sun collects at <http://java.com/data/>.

For inquiries please contact: Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, U.S.A.

## PCRE 6.3

Portions of this product include software developed by Philip Hazel. The University of Cambridge Computing Service software is distributed in accordance with the following license agreement.

### THE BASIC LIBRARY FUNCTIONS

-----

Written by: Philip Hazel

Email local part: ph10

Email domain: cam.ac.uk

University of Cambridge Computing Service,  
Cambridge, England. Phone: +44 1223 334714.

Copyright (c) 1997-2006 University of Cambridge

All rights reserved.

### THE C++ WRAPPER FUNCTIONS

-----

Contributed by: Google Inc.

Copyright (c) 2006, Google Inc.

---

All rights reserved.

THE "BSD" LICENCE

-----

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- \* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
  
- \* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
  
- \* Neither the name of the University of Cambridge nor the name of Google Inc. nor the names of their contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE

ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

End

## PuTTY with support for GSSAPI/SSPI 0.58

This product includes PuTTY which is distributed in accordance with the following license agreement:

PuTTY is copyright 1997-2005 Simon Tatham.

Portions copyright Robert de Bath, Joris van Rantwijk, Delian Delchev, Andreas Schultz, Jeroen Massar, Wez Furlong, Nicolas Barry, Justin Bradford, Ben Harris, Malcolm Smith, Markus Kuhn, and CORE SDI S.A.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the 'Software'), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED 'AS IS', WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

## Rhino 1.6r4

The source code version of Rhino 1.6 Release 4 is licensed under the Mozilla Public License Version 1.1 which can be found at <http://www.mozilla.org/MPL/> and is made available for download from [http://opencrd.ca.com/ips/P02056\\_4/](http://opencrd.ca.com/ips/P02056_4/).

## SAXPath 1

This product includes software developed by the SAXPath Project (<http://www.saxpath.org/>). The SAXPath software is distributed in accordance with the following license agreement.

/\*--

\$Id: LICENSE,v 1.1 2002/04/26 17:43:56 jstrachan Exp \$

Copyright (C) 2000-2002 werken digital.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions, and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions, and the disclaimer that follows these conditions in the documentation and/or other materials provided with the distribution.
3. The name "SAXPath" must not be used to endorse or promote products

derived from this software without prior written permission. For written permission, please contact [license@saxpath.org](mailto:license@saxpath.org).

4. Products derived from this software may not be called "SAXPath", nor may "SAXPath" appear in their name, without prior written permission from the SAXPath Project Management ([pm@saxpath.org](mailto:pm@saxpath.org)).

In addition, we request (but do not require) that you include in the end-user documentation provided with the redistribution and/or in the software itself an acknowledgement equivalent to the following:

"This product includes software developed by the  
SAXPath Project (<http://www.saxpath.org/>)."

Alternatively, the acknowledgment may be graphical using the logos available at <http://www.saxpath.org/>

THIS SOFTWARE IS PROVIDED "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE SAXPath AUTHORS OR THE PROJECT CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT

OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF  
SUCH DAMAGE.

This software consists of voluntary contributions made by many  
individuals on behalf of the SAXPath Project and was originally  
created by bob mcwhirter and  
James Strachan . For more information on the  
SAXPath Project, please see <<http://www.saxpath.org/>>.

\*/

## SHA-1

This product includes software developed by Internet Society. The software is distributed in accordance with the following license agreement.

Copyright (C) The Internet Society (2001). All Rights Reserved.

This document and translations of it may be copied and furnished to others, and derivative works that comment on or otherwise explain it or assist in its implementation may be prepared, copied, published and distributed, in whole or in part, without restriction of any kind, provided that the above copyright notice and this paragraph are included on all such copies and derivative works. However, this document itself may not be modified in any way, such as by removing the copyright notice or references to the Internet Society or other Internet organizations, except as needed for the purpose of developing Internet standards in which case the procedures for copyrights defined in the Internet Standards process must be followed, or as required to translate it into languages other than English.

The limited permissions granted above are perpetual and will not be revoked by the Internet Society or its successors or assigns.

This document and the information contained herein is provided on an "AS IS" basis and THE INTERNET SOCIETY AND THE INTERNET ENGINEERING TASK FORCE DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

## Sun JDK 1.4.2\_13

This Product is distributed with Sun JRE 1.4.2\_13 (JAVATM2 RUNTIME ENVIRONMENT (J2RE), VERSION 1.4.2\_13) (Sun JRE). The Sun JRE is distributed in accordance with the Sun Microsystems, Inc. (Sun) Binary Code License Agreement set forth below. As noted in Section F of the Supplemental License Terms of this license, Sun has provided additional copyright notices and license terms that may be applicable to portions of the Sun JRE in the THIRDPARTYLICENSEREADME.txt file that accompanies the Sun JRE.

### LICENSE:

Sun Microsystems, Inc.

Binary Code License Agreement

for the

JAVATM 2 RUNTIME ENVIRONMENT (J2RE), STANDARD EDITION, VERSION 1.4.2\_X

SUN MICROSYSTEMS, INC. ("SUN") IS WILLING TO LICENSE THE SOFTWARE IDENTIFIED BELOW TO YOU ONLY UPON THE CONDITION THAT YOU ACCEPT ALL OF THE TERMS CONTAINED IN THIS BINARY CODE LICENSE AGREEMENT AND SUPPLEMENTAL LICENSE TERMS (COLLECTIVELY "AGREEMENT"). PLEASE READ THE AGREEMENT CAREFULLY. BY DOWNLOADING OR INSTALLING THIS SOFTWARE, YOU ACCEPT THE TERMS OF THE AGREEMENT. INDICATE ACCEPTANCE BY SELECTING THE "ACCEPT" BUTTON AT THE BOTTOM OF THE AGREEMENT. IF YOU ARE NOT WILLING TO BE BOUND BY ALL THE TERMS, SELECT THE "DECLINE" BUTTON AT THE BOTTOM OF THE AGREEMENT AND THE DOWNLOAD OR INSTALL PROCESS WILL NOT CONTINUE.

1.DEFINITIONS. "Software" means the identified above in binary form, any other machine readable materials (including, but not limited to, libraries, source files, header files, and data files), any updates or

error corrections provided by Sun, and any user manuals, programming guides and other documentation provided to you by Sun under this Agreement. "Programs" mean Java applets and applications intended to run on the Java 2 Platform, Standard Edition (J2SETM platform) platform on Java-enabled general purpose desktop computers and servers.

2.LICENSE TO USE. Subject to the terms and conditions of this Agreement, including, but not limited to the Java Technology Restrictions of the Supplemental License Terms, Sun grants you a non-exclusive, non-transferable, limited license without license fees to reproduce and use internally Software complete and unmodified for the sole purpose of running Programs. Additional licenses for developers and/or publishers are granted in the Supplemental License Terms.

3.RESTRICTIONS. Software is confidential and copyrighted. Title to Software and all associated intellectual property rights is retained by Sun and/or its licensors. Unless enforcement is prohibited by applicable law, you may not modify, decompile, or reverse engineer Software. You acknowledge that Licensed Software is not designed or intended for use in the design, construction, operation or maintenance of any nuclear facility. Sun Microsystems, Inc. disclaims any express or implied warranty of fitness for such uses. No right, title or interest in or to any trademark, service mark, logo or trade name of Sun or its licensors is granted under this Agreement. Additional restrictions for developers and/or publishers licenses are set forth in the Supplemental License

Terms.

4.LIMITED WARRANTY. Sun warrants to you that for a period of ninety (90) days from the date of purchase, as evidenced by a copy of the receipt, the media on which Software is furnished (if any) will be free of defects in materials and workmanship under normal use. Except for the foregoing, Software is provided "AS IS". Your exclusive remedy and Sun's entire liability under this limited warranty will be at Sun's option to replace Software media or refund the fee paid for Software. Any implied warranties on the Software are limited to 90 days. Some states do not allow limitations on duration of an implied warranty, so the above may not apply to you. This limited warranty gives you specific legal rights. You may have others, which vary from state to state.

5.DISCLAIMER OF WARRANTY. UNLESS SPECIFIED IN THIS AGREEMENT, 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 THESE DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

6.LIMITATION OF LIABILITY. TO THE EXTENT NOT PROHIBITED BY LAW, IN NO EVENT WILL SUN OR ITS LICENSORS BE LIABLE FOR ANY LOST REVENUE, PROFIT OR DATA, OR FOR SPECIAL, INDIRECT, CONSEQUENTIAL, INCIDENTAL OR PUNITIVE DAMAGES, HOWEVER CAUSED REGARDLESS OF THE THEORY OF LIABILITY, ARISING OUT OF OR RELATED TO THE USE OF OR INABILITY TO USE SOFTWARE, EVEN IF SUN HAS

BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. In no event will Sun's liability to you, whether in contract, tort (including negligence), or otherwise, exceed the amount paid by you for Software under this Agreement. The foregoing limitations will apply even if the above stated warranty fails of its essential purpose. Some states do not allow the exclusion of incidental or consequential damages, so some of the terms above may not be applicable to you.

7.SOFTWARE UPDATES FROM SUN. You acknowledge that at your request or consent optional features of the Software may download, install, and execute applets, applications, software extensions, and updated versions of the Software from Sun ("Software Updates"), which may require you to accept updated terms and conditions for installation. If additional terms and conditions are not presented on installation, the Software Updates will be considered part of the Software and subject to the terms and conditions of the Agreement.

8.SOFTWARE FROM SOURCES OTHER THAN SUN. You acknowledge that, by your use of optional features of the Software and/or by requesting services that require use of the optional features of the Software, the Software may automatically download, install, and execute software applications from sources other than Sun ("Other Software"). Sun makes no representations of a relationship of any kind to licensors of Other Software. TO THE EXTENT NOT PROHIBITED BY LAW, IN NO EVENT WILL SUN OR ITS LICENSORS BE LIABLE FOR ANY LOST REVENUE, PROFIT OR DATA, OR FOR SPECIAL, INDIRECT, CONSEQUENTIAL,

INCIDENTAL OR PUNITIVE DAMAGES, HOWEVER CAUSED REGARDLESS OF THE THEORY OF

LIABILITY, ARISING OUT OF OR RELATED TO THE USE OF OR INABILITY TO USE

OTHER SOFTWARE, EVEN IF SUN HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH

DAMAGES. Some states do not allow the exclusion of incidental or

consequential damages, so some of the terms above may not be applicable to

you.

9.TERMINATION. This Agreement is effective until terminated. You may terminate this Agreement at any time by destroying all copies of Software.

This Agreement will terminate immediately without notice from Sun if you

fail to comply with any provision of this Agreement. Either party may

terminate this Agreement immediately should any Software become, or in

either party's opinion be likely to become, the subject of a claim of

infringement of any intellectual property right. Upon Termination, you

must destroy all copies of Software.

10.EXPORT REGULATIONS. All Software and technical data delivered under this Agreement are subject to US export control laws and may be subject to

export or import regulations in other countries. You agree to comply

strictly with all such laws and regulations and acknowledge that you have

the responsibility to obtain such licenses to export, re-export, or import

as may be required after delivery to you.

11.TRADEMARKS AND LOGOS. You acknowledge and agree as between you and Sun

that Sun owns the SUN, SOLARIS, JAVA, JINI, FORTE, and iPLANET trademarks and all SUN, SOLARIS, JAVA, JINI, FORTE, and iPLANET-related trademarks, service marks, logos and other brand designations ("Sun Marks"), and you agree to comply with the Sun Trademark and Logo Usage Requirements currently located at <http://www.sun.com/policies/trademarks>. Any use you make of the Sun Marks inures to Sun's benefit.

12.U.S. GOVERNMENT RESTRICTED RIGHTS. If Software is being acquired by or on behalf of the U.S. Government or by a U.S. Government prime contractor or subcontractor (at any tier), then the Government's rights in Software and accompanying documentation will be only as set forth in this Agreement; this is in accordance with 48 CFR 227.7201 through 227.7202-4 (for Department of Defense (DOD) acquisitions) and with 48 CFR 2.101 and 2.212 (for non-DOD acquisitions).

13.GOVERNING LAW. Any action related to this Agreement will be governed by California law and controlling U.S. federal law. No choice of law rules of any jurisdiction will apply.

14.SEVERABILITY. If any provision of this Agreement is held to be unenforceable, this Agreement will remain in effect with the provision omitted, unless omission would frustrate the intent of the parties, in which case this Agreement will immediately terminate.

15.INTEGRATION. This Agreement is the entire agreement between you and Sun

relating to its subject matter. It supersedes all prior or contemporaneous oral or written communications, proposals, representations and warranties and prevails over any conflicting or additional terms of any quote, order, acknowledgment, or other communication between the parties relating to its subject matter during the term of this Agreement. No modification of this Agreement will be binding, unless in writing and signed by an authorized representative of each party.

#### SUPPLEMENTAL LICENSE TERMS

These Supplemental License Terms add to or modify the terms of the Binary Code License Agreement. Capitalized terms not defined in these Supplemental Terms shall have the same meanings ascribed to them in the Binary Code License Agreement . These Supplemental Terms shall supersede any inconsistent or conflicting terms in the Binary Code License Agreement, or in any license contained within the Software.

A. Software Internal Use and Development License Grant. Subject to the terms and conditions of this Agreement, including, but not limited to the Java Technology Restrictions of these Supplemental Terms, Sun grants you a non-exclusive, non-transferable, limited license without fees to reproduce internally and use internally the Software complete and unmodified (unless otherwise specified in the applicable README file) for the purpose of designing, developing, and testing your Programs.

B. License to Distribute Software. Subject to the terms and conditions of this Agreement, including, but not limited to the Java Technology Restrictions of these Supplemental Terms, Sun grants you a non-exclusive, non-transferable, limited license without fees to reproduce and distribute the Software, provided that (i) you distribute the Software complete and unmodified (unless otherwise specified in the applicable README file) and only bundled as part of, and for the sole purpose of running, your Programs, (ii) the Programs add significant and primary functionality to the Software, (iii) you do not distribute additional software intended to replace any component(s) of the Software (unless otherwise specified in the applicable README file), (iv) you do not remove or alter any proprietary legends or notices contained in the Software, (v) you only distribute the Software subject to a license agreement that protects Sun's interests consistent with the terms contained in this Agreement, and (vi) you agree to defend and indemnify Sun and its licensors from and against any damages, costs, liabilities, settlement amounts and/or expenses (including attorneys' fees) incurred in connection with any claim, lawsuit or action by any third party that arises or results from the use or distribution of any and all Programs and/or Software.

C. License to Distribute Redistributables. Subject to the terms and conditions of this Agreement, including but not limited to the Java Technology Restrictions of these Supplemental Terms, Sun grants you a non-exclusive, non-transferable, limited license without fees to reproduce and distribute those files specifically identified as redistributable in

the Software "README" file ("Redistributables") provided that: (i) you distribute the Redistributables complete and unmodified (unless otherwise specified in the applicable README file), and only bundled as part of Programs, (ii) you do not distribute additional software intended to supersede any component(s) of the Redistributables (unless otherwise specified in the applicable README file), (iii) you do not remove or alter any proprietary legends or notices contained in or on the Redistributables, (iv) you only distribute the Redistributables pursuant to a license agreement that protects Sun's interests consistent with the terms contained in the Agreement, (v) you agree to defend and indemnify Sun and its licensors from and against any damages, costs, liabilities, settlement amounts and/or expenses (including attorneys' fees) incurred in connection with any claim, lawsuit or action by any third party that arises or results from the use or distribution of any and all Programs and/or Software.

D.Java Technology Restrictions. You may not modify the Java Platform Interface ("JPI", identified as classes contained within the "java" package or any subpackages of the "java" package), by creating additional classes within the JPI or otherwise causing the addition to or modification of the classes in the JPI. In the event that you create an additional class and associated API(s) which (i) extends the functionality of the Java platform, and (ii) is exposed to third party software developers for the purpose of developing additional software which invokes such additional API, you must promptly publish broadly an accurate

specification for such API for free use by all developers. You may not create, or authorize your licensees to create, additional classes, interfaces, or subpackages that are in any way identified as "java", "javax", "sun" or similar convention as specified by Sun in any naming convention designation.

E.Source Code. Software may contain source code that, unless expressly licensed for other purposes, is provided solely for reference purposes pursuant to the terms of this Agreement. Source code may not be redistributed unless expressly provided for in this Agreement.

F.Third Party Code. Additional copyright notices and license terms applicable to portions of the Software are set forth in the THIRDPARTYLICENSEREADME.txt file. In addition to any terms and conditions of any third party opensource/freeware license identified in the THIRDPARTYLICENSEREADME.txt file, the disclaimer of warranty and limitation of liability provisions in paragraphs 5 and 6 of the Binary Code License Agreement shall apply to all Software in this distribution.

For inquiries please contact: Sun Microsystems, Inc., 4150 Network Circle,  
Santa Clara, California 95054, U.S.A.

(LFI#135955/Form ID#011801)

## Sun JDK 1.6.0

This Product is distributed with Sun JDK 1.6.0 (JAVA SE DEVELOPMENT KIT (JDK), VERSION 6) (Sun JDK). The Sun JDK is distributed in accordance with the Sun Microsystems, Inc. (Sun) Binary Code License Agreement set forth below. As noted in Section G of the Supplemental License Terms of this license, Sun has provided additional copyright notices and license terms that may be applicable to portions of the Sun JDK in the THIRDPARTYLICENSEREADME.txt file that accompanies the Sun JDK.

Sun Microsystems, Inc. Binary Code License Agreement

for the JAVA SE DEVELOPMENT KIT (JDK), VERSION 6

SUN MICROSYSTEMS, INC. ("SUN") IS WILLING TO LICENSE  
THE SOFTWARE IDENTIFIED BELOW TO YOU ONLY UPON THE  
CONDITION THAT YOU ACCEPT ALL OF THE TERMS CONTAINED  
IN THIS BINARY CODE LICENSE AGREEMENT AND SUPPLEMENTAL  
LICENSE TERMS (COLLECTIVELY "AGREEMENT"). PLEASE READ  
THE AGREEMENT CAREFULLY. BY DOWNLOADING OR INSTALLING  
THIS SOFTWARE, YOU ACCEPT THE TERMS OF THE AGREEMENT.  
INDICATE ACCEPTANCE BY SELECTING THE "ACCEPT" BUTTON  
AT THE BOTTOM OF THE AGREEMENT. IF YOU ARE NOT WILLING  
TO BE BOUND BY ALL THE TERMS, SELECT THE "DECLINE"  
BUTTON AT THE BOTTOM OF THE AGREEMENT AND THE DOWNLOAD  
OR INSTALL PROCESS WILL NOT CONTINUE.

1. DEFINITIONS. "Software" means the identified above  
in binary form, any other machine readable materials

(including, but not limited to, libraries, source files, header files, and data files), any updates or error corrections provided by Sun, and any user manuals, programming guides and other documentation provided to you by Sun under this Agreement.

"Programs" mean Java applets and applications intended to run on the Java Platform, Standard Edition (Java SE) on Java-enabled general purpose desktop computers and servers.

2. LICENSE TO USE. Subject to the terms and conditions of this Agreement, including, but not limited to the Java Technology Restrictions of the Supplemental License Terms, Sun grants you a non-exclusive, non-transferable, limited license without license fees to reproduce and use internally Software complete and unmodified for the sole purpose of running Programs. Additional licenses for developers and/or publishers are granted in the Supplemental License Terms.

3. RESTRICTIONS. Software is confidential and copyrighted. Title to Software and all associated intellectual property rights is retained by Sun and/or its licensors. Unless enforcement is prohibited by applicable law, you may not modify, decompile, or

reverse engineer Software. You acknowledge that Licensed Software is not designed or intended for use in the design, construction, operation or maintenance of any nuclear facility. Sun Microsystems, Inc. disclaims any express or implied warranty of fitness for such uses. No right, title or interest in or to any trademark, service mark, logo or trade name of Sun or its licensors is granted under this Agreement. Additional restrictions for developers and/or publishers licenses are set forth in the Supplemental License Terms.

4. LIMITED WARRANTY. Sun warrants to you that for a period of ninety (90) days from the date of purchase, as evidenced by a copy of the receipt, the media on which Software is furnished (if any) will be free of defects in materials and workmanship under normal use. Except for the foregoing, Software is provided "AS IS". Your exclusive remedy and Sun's entire liability under this limited warranty will be at Sun's option to replace Software media or refund the fee paid for Software. Any implied warranties on the Software are limited to 90 days. Some states do not allow limitations on duration of an implied warranty, so the above may not apply to you. This limited warranty

gives you specific legal rights. You may have others,  
which vary from state to state.

5. DISCLAIMER OF WARRANTY. UNLESS SPECIFIED IN THIS AGREEMENT, 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 THESE DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

6. LIMITATION OF LIABILITY. TO THE EXTENT NOT PROHIBITED BY LAW, IN NO EVENT WILL SUN OR ITS LICENSORS BE LIABLE FOR ANY LOST REVENUE, PROFIT OR DATA, OR FOR SPECIAL, INDIRECT, CONSEQUENTIAL, INCIDENTAL OR PUNITIVE DAMAGES, HOWEVER CAUSED REGARDLESS OF THE THEORY OF LIABILITY, ARISING OUT OF OR RELATED TO THE USE OF OR INABILITY TO USE SOFTWARE, EVEN IF SUN HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. In no event will Sun's liability to you, whether in contract, tort (including negligence), or otherwise, exceed the amount paid by you for Software under this Agreement. The foregoing limitations will apply even if the above stated warranty fails of its essential purpose. Some states do not allow the

exclusion of incidental or consequential damages, so some of the terms above may not be applicable to you.

7. TERMINATION. This Agreement is effective until terminated. You may terminate this Agreement at any time by destroying all copies of Software. This Agreement will terminate immediately without notice from Sun if you fail to comply with any provision of this Agreement. Either party may terminate this Agreement immediately should any Software become, or in either party's opinion be likely to become, the subject of a claim of infringement of any intellectual property right. Upon Termination, you must destroy all copies of Software.

8. EXPORT REGULATIONS. All Software and technical data delivered under this Agreement are subject to US export control laws and may be subject to export or import regulations in other countries. You agree to comply strictly with all such laws and regulations and acknowledge that you have the responsibility to obtain such licenses to export, re-export, or import as may be required after delivery to you.

9. TRADEMARKS AND LOGOS. You acknowledge and agree as

---

between you and Sun that Sun owns the SUN, SOLARIS, JAVA, JINI, FORTE, and iPLANET trademarks and all SUN, SOLARIS, JAVA, JINI, FORTE, and iPLANET-related trademarks, service marks, logos and other brand designations ("Sun Marks"), and you agree to comply with the Sun Trademark and Logo Usage Requirements currently located at <http://www.sun.com/policies/trademarks>. Any use you make of the Sun Marks inures to Sun's benefit.

10. U.S. GOVERNMENT RESTRICTED RIGHTS. If Software is being acquired by or on behalf of the U.S. Government or by a U.S. Government prime contractor or subcontractor (at any tier), then the Government's rights in Software and accompanying documentation will be only as set forth in this Agreement; this is in accordance with 48 CFR 227.7201 through 227.7202-4 (for Department of Defense (DOD) acquisitions) and with 48 CFR 2.101 and 12.212 (for non-DOD acquisitions).

11. GOVERNING LAW. Any action related to this Agreement will be governed by California law and controlling U.S. federal law. No choice of law rules of any jurisdiction will apply.

12. SEVERABILITY. If any provision of this Agreement is held to be unenforceable, this Agreement will remain in effect with the provision omitted, unless omission would frustrate the intent of the parties, in which case this Agreement will immediately terminate.

13. INTEGRATION. This Agreement is the entire agreement between you and Sun relating to its subject matter. It supersedes all prior or contemporaneous oral or written communications, proposals, representations and warranties and prevails over any conflicting or additional terms of any quote, order, acknowledgment, or other communication between the parties relating to its subject matter during the term of this Agreement. No modification of this Agreement will be binding, unless in writing and signed by an authorized representative of each party.

#### SUPPLEMENTAL LICENSE TERMS

These Supplemental License Terms add to or modify the terms of the Binary Code License Agreement.

Capitalized terms not defined in these Supplemental Terms shall have the same meanings ascribed to them in

the Binary Code License Agreement . These Supplemental Terms shall supersede any inconsistent or conflicting terms in the Binary Code License Agreement, or in any license contained within the Software.

A. Software Internal Use and Development License

Grant. Subject to the terms and conditions of this Agreement and restrictions and exceptions set forth in the Software "README" file incorporated herein by reference, including, but not limited to the Java Technology Restrictions of these Supplemental Terms, Sun grants you a non-exclusive, non-transferable, limited license without fees to reproduce internally and use internally the Software complete and unmodified for the purpose of designing, developing, and testing your Programs.

B. License to Distribute Software. Subject to the terms and conditions of this Agreement and restrictions and exceptions set forth in the Software README file, including, but not limited to the Java Technology Restrictions of these Supplemental Terms, Sun grants you a non-exclusive, non-transferable, limited license without fees to reproduce and distribute the Software, provided that (i) you

distribute the Software complete and unmodified and only bundled as part of, and for the sole purpose of running, your Programs, (ii) the Programs add significant and primary functionality to the Software, (iii) you do not distribute additional software intended to replace any component(s) of the Software, (iv) you do not remove or alter any proprietary legends or notices contained in the Software, (v) you only distribute the Software subject to a license agreement that protects Sun's interests consistent with the terms contained in this Agreement, and (vi) you agree to defend and indemnify Sun and its licensors from and against any damages, costs, liabilities, settlement amounts and/or expenses (including attorneys' fees) incurred in connection with any claim, lawsuit or action by any third party that arises or results from the use or distribution of any and all Programs and/or Software.

C. License to Distribute Redistributables. Subject to the terms and conditions of this Agreement and restrictions and exceptions set forth in the Software README file, including but not limited to the Java Technology Restrictions of these Supplemental Terms, Sun grants you a non-exclusive, non-transferable,

limited license without fees to reproduce and distribute those files specifically identified as redistributable in the Software "README" file ("Redistributables") provided that: (i) you distribute the Redistributables complete and unmodified, and only bundled as part of Programs, (ii) the Programs add significant and primary functionality to the Redistributables, (iii) you do not distribute additional software intended to supersede any component(s) of the Redistributables (unless otherwise specified in the applicable README file), (iv) you do not remove or alter any proprietary legends or notices contained in or on the Redistributables, (v) you only distribute the Redistributables pursuant to a license agreement that protects Sun's interests consistent with the terms contained in the Agreement, (vi) you agree to defend and indemnify Sun and its licensors from and against any damages, costs, liabilities, settlement amounts and/or expenses (including attorneys' fees) incurred in connection with any claim, lawsuit or action by any third party that arises or results from the use or distribution of any and all Programs and/or Software.

D. Java Technology Restrictions. You may not create,

modify, or change the behavior of, or authorize your licensees to create, modify, or change the behavior of, classes, interfaces, or subpackages that are in any way identified as "java", "javax", "sun" or similar convention as specified by Sun in any naming convention designation.

E. Distribution by Publishers. This section pertains to your distribution of the Software with your printed book or magazine (as those terms are commonly used in the industry) relating to Java technology ("Publication"). Subject to and conditioned upon your compliance with the restrictions and obligations contained in the Agreement, in addition to the license granted in Paragraph 1 above, Sun hereby grants to you a non-exclusive, nontransferable limited right to reproduce complete and unmodified copies of the Software on electronic media (the "Media") for the sole purpose of inclusion and distribution with your Publication(s), subject to the following terms: (i) You may not distribute the Software on a stand-alone basis; it must be distributed with your Publication(s); (ii) You are responsible for downloading the Software from the applicable Sun web site; (iii) You must refer to the Software as Java™

SE Development Kit 6; (iv) The Software must be reproduced in its entirety and without any modification whatsoever (including, without limitation, the Binary Code License and Supplemental License Terms accompanying the Software and proprietary rights notices contained in the Software); (v) The Media label shall include the following information: Copyright 2006, Sun Microsystems, Inc. All rights reserved. Use is subject to license terms. Sun, Sun Microsystems, the Sun logo, Solaris, Java, the Java Coffee Cup logo, J2SE, and all trademarks and logos based on Java are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries. This information must be placed on the Media label in such a manner as to only apply to the Sun Software; (vi) You must clearly identify the Software as Sun's product on the Media holder or Media label, and you may not state or imply that Sun is responsible for any third-party software contained on the Media; (vii) You may not include any third party software on the Media which is intended to be a replacement or substitute for the Software; (viii) You shall indemnify Sun for all damages arising from your failure to comply with the requirements of this Agreement. In addition, you shall defend, at your

expense, any and all claims brought against Sun by third parties, and shall pay all damages awarded by a court of competent jurisdiction, or such settlement amount negotiated by you, arising out of or in connection with your use, reproduction or distribution of the Software and/or the Publication. Your obligation to provide indemnification under this section shall arise provided that Sun: (a) provides you prompt notice of the claim; (b) gives you sole control of the defense and settlement of the claim; (c) provides you, at your expense, with all available information, assistance and authority to defend; and (d) has not compromised or settled such claim without your prior written consent; and (ix) You shall provide Sun with a written notice for each Publication; such notice shall include the following information: (1) title of Publication, (2) author(s), (3) date of Publication, and (4) ISBN or ISSN numbers. Such notice shall be sent to Sun Microsystems, Inc., 4150 Network Circle, M/S USCA12-110, Santa Clara, California 95054, U.S.A , Attention: Contracts Administration.

F. Source Code. Software may contain source code that, unless expressly licensed for other purposes, is provided solely for reference purposes pursuant to the

terms of this Agreement. Source code may not be redistributed unless expressly provided for in this Agreement.

G. Third Party Code. Additional copyright notices and license terms applicable to portions of the Software are set forth in the THIRDPARTYLICENSEREADME.txt file. In addition to any terms and conditions of any third party opensource/freeware license identified in the THIRDPARTYLICENSEREADME.txt file, the disclaimer of warranty and limitation of liability provisions in paragraphs 5 and 6 of the Binary Code License Agreement shall apply to all Software in this distribution.

H. Termination for Infringement. Either party may terminate this Agreement immediately should any Software become, or in either party's opinion be likely to become, the subject of a claim of infringement of any intellectual property right.

I. Installation and Auto-Update. The Software's installation and auto-update processes transmit a limited amount of data to Sun (or its service provider) about those specific processes to help Sun

understand and optimize them. Sun does not associate the data with personally identifiable information.

You can find more information about the data Sun collects at <http://java.com/data/>.

For inquiries please contact: Sun Microsystems, Inc.,  
4150 Network Circle, Santa Clara, California 95054,  
U.S.A.

## Sun JRE 1.5.0\_18

This Product is distributed with Sun JRE 1.5.0\_18 (JAVA 2 PLATFORM STANDARD EDITION DEVELOPMENT KIT 5.0) ("Sun JDK"). The Sun JDK is distributed in accordance with the Sun Microsystems, Inc. ("Sun") Binary Code License Agreement set forth below. As noted in Section G of the Supplemental License Terms of this license, Sun has provided additional copyright notices and license terms that may be applicable to portions of the Sun JDK in the THIRDPARTYLICENSEREADME.txt file.

Sun Microsystems, Inc. Binary Code License Agreement

for the JAVA 2 PLATFORM STANDARD EDITION DEVELOPMENT KIT 5.0

SUN MICROSYSTEMS, INC. ("SUN") IS WILLING TO LICENSE THE SOFTWARE IDENTIFIED BELOW TO YOU ONLY UPON THE CONDITION THAT YOU ACCEPT ALL OF THE TERMS CONTAINED IN THIS BINARY CODE LICENSE AGREEMENT AND SUPPLEMENTAL LICENSE TERMS (COLLECTIVELY "AGREEMENT"). PLEASE READ THE AGREEMENT CAREFULLY. BY DOWNLOADING OR INSTALLING THIS SOFTWARE, YOU ACCEPT THE TERMS OF THE AGREEMENT. INDICATE ACCEPTANCE BY SELECTING THE "ACCEPT" BUTTON AT THE BOTTOM OF THE AGREEMENT. IF YOU ARE NOT WILLING TO BE BOUND BY ALL THE TERMS, SELECT THE "DECLINE" BUTTON AT THE BOTTOM OF THE AGREEMENT AND THE DOWNLOAD OR INSTALL PROCESS WILL NOT CONTINUE.

1. DEFINITIONS. "Software" means the identified above in binary form, any other machine readable materials

(including, but not limited to, libraries, source files, header files, and data files), any updates or error corrections provided by Sun, and any user manuals, programming guides and other documentation provided to you by Sun under this Agreement. "General Purpose Desktop Computers and Servers" means computers, including desktop and laptop computers, or servers, used for general computing functions under end user control (such as but not specifically limited to email, general purpose Internet browsing, and office suite productivity tools). The use of Software in systems and solutions that provide dedicated functionality (other than as mentioned above) or designed for use in embedded or function-specific software applications, for example but not limited to: Software embedded in or bundled with industrial control systems, wireless mobile telephones, wireless handheld devices, netbooks, kiosks, TV/STB, Blu-ray Disc devices, telematics and network control switching equipment, printers and storage management systems, and other related systems is excluded from this definition and not licensed under this Agreement. "Programs" means Java technology applets and applications intended to run on the Java 2 Platform Standard Edition (J2SE) platform on Java-enabled General Purpose Desktop Computers and Servers.

2. LICENSE TO USE. Subject to the terms and conditions of this Agreement, including, but not limited to the Java Technology Restrictions of the Supplemental License Terms, Sun grants you a non-exclusive, non-transferable, limited license without license fees to reproduce and use internally Software complete and unmodified for the sole purpose of running Programs. Additional licenses for developers and/or publishers are granted in the Supplemental License Terms.

3. RESTRICTIONS. Software is confidential and copyrighted. Title to Software and all associated intellectual property rights is retained by Sun and/or its licensors. Unless enforcement is prohibited by applicable law, you may not modify, decompile, or reverse engineer Software. You acknowledge that Licensed Software is not designed or intended for use in the design, construction, operation or maintenance of any nuclear facility. Sun Microsystems, Inc. disclaims any express or implied warranty of fitness for such uses. No right, title or interest in or to any trademark, service mark, logo or trade name of Sun or its licensors is granted under this Agreement. Additional restrictions for developers and/or publishers licenses are set forth in the Supplemental License Terms.

4. LIMITED WARRANTY. Sun warrants to you that for a period

of ninety (90) days from the date of purchase, as evidenced by a copy of the receipt, the media on which Software is furnished (if any) will be free of defects in materials and workmanship under normal use. Except for the foregoing, Software is provided "AS IS". Your exclusive remedy and Sun's entire liability under this limited warranty will be at Sun's option to replace Software media or refund the fee paid for Software. Any implied warranties on the Software are limited to 90 days. Some states do not allow limitations on duration of an implied warranty, so the above may not apply to you. This limited warranty gives you specific legal rights. You may have others, which vary from state to state.

5. DISCLAIMER OF WARRANTY. UNLESS SPECIFIED IN THIS AGREEMENT, 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 THESE DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

6. LIMITATION OF LIABILITY. TO THE EXTENT NOT PROHIBITED BY LAW, IN NO EVENT WILL SUN OR ITS LICENSORS BE LIABLE FOR ANY LOST REVENUE, PROFIT OR DATA, OR FOR SPECIAL, INDIRECT,

CONSEQUENTIAL, INCIDENTAL OR PUNITIVE DAMAGES, HOWEVER CAUSED REGARDLESS OF THE THEORY OF LIABILITY, ARISING OUT OF OR RELATED TO THE USE OF OR INABILITY TO USE SOFTWARE, EVEN IF SUN HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

In no event will Sun's liability to you, whether in contract, tort (including negligence), or otherwise, exceed the amount paid by you for Software under this Agreement.

The foregoing limitations will apply even if the above stated warranty fails of its essential purpose. Some states do not allow the exclusion of incidental or consequential damages, so some of the terms above may not be applicable to you.

7. TERMINATION. This Agreement is effective until terminated. You may terminate this Agreement at any time by destroying all copies of Software. This Agreement will terminate immediately without notice from Sun if you fail to comply with any provision of this Agreement. Either party may terminate this Agreement immediately should any Software become, or in either party's opinion be likely to become, the subject of a claim of infringement of any intellectual property right. Upon Termination, you must destroy all copies of Software.

8. EXPORT REGULATIONS. All Software and technical data

delivered under this Agreement are subject to US export control laws and may be subject to export or import regulations in other countries. You agree to comply strictly with all such laws and regulations and acknowledge that you have the responsibility to obtain such licenses to export, re-export, or import as may be required after delivery to you.

9. TRADEMARKS AND LOGOS. You acknowledge and agree as between you and Sun that Sun owns the SUN, SOLARIS, JAVA, JINI, FORTE, and iPLANET trademarks and all SUN, SOLARIS, JAVA, JINI, FORTE, and iPLANET-related trademarks, service marks, logos and other brand designations ("Sun Marks"), and you agree to comply with the Sun Trademark and Logo Usage Requirements currently located at <http://www.sun.com/policies/trademarks>. Any use you make of the Sun Marks inures to Sun's benefit.

10. U.S. GOVERNMENT RESTRICTED RIGHTS. If Software is being acquired by or on behalf of the U.S. Government or by a U.S. Government prime contractor or subcontractor (at any tier), then the Government's rights in Software and accompanying documentation will be only as set forth in this Agreement; this is in accordance with 48 CFR 227.7201 through 227.7202-4 (for Department of Defense (DOD)

acquisitions) and with 48 CFR 2.101 and 12.212 (for non-DOD acquisitions).

11. GOVERNING LAW. Any action related to this Agreement will be governed by California law and controlling U.S. federal law. No choice of law rules of any jurisdiction will apply.

12. SEVERABILITY. If any provision of this Agreement is held to be unenforceable, this Agreement will remain in effect with the provision omitted, unless omission would frustrate the intent of the parties, in which case this Agreement will immediately terminate.

13. INTEGRATION. This Agreement is the entire agreement between you and Sun relating to its subject matter. It supersedes all prior or contemporaneous oral or written communications, proposals, representations and warranties and prevails over any conflicting or additional terms of any quote, order, acknowledgment, or other communication between the parties relating to its subject matter during the term of this Agreement. No modification of this Agreement will be binding, unless in writing and signed by an authorized representative of each party.

## SUPPLEMENTAL LICENSE TERMS

These Supplemental License Terms add to or modify the terms of the Binary Code License Agreement. Capitalized terms not defined in these Supplemental Terms shall have the same meanings ascribed to them in the Binary Code License Agreement. These Supplemental Terms shall supersede any inconsistent or conflicting terms in the Binary Code License Agreement, or in any license contained within the Software.

A. Software Internal Use and Development License Grant. Subject to the terms and conditions of this Agreement and restrictions and exceptions set forth in the Software "README" file incorporated herein by reference, including, but not limited to the Java Technology Restrictions of these Supplemental Terms, Sun grants you a non-exclusive, non-transferable, limited license without fees to reproduce internally and use internally the Software complete and unmodified for the purpose of designing, developing, and testing your Programs.

B. License to Distribute Software. Subject to the terms and conditions of this Agreement and restrictions and exceptions set forth in the Software README file, including, but not limited to the Java Technology Restrictions of these

Supplemental Terms, Sun grants you a non-exclusive, non-transferable, limited license without fees to reproduce and distribute the Software, provided that (i) you distribute the Software complete and unmodified and only bundled as part of, and for the sole purpose of running, your Programs, (ii) the Programs add significant and primary functionality to the Software, (iii) you do not distribute additional software intended to replace any component(s) of the Software, (iv) you do not remove or alter any proprietary legends or notices contained in the Software, (v) you only distribute the Software subject to a license agreement that protects Sun's interests consistent with the terms contained in this Agreement, and (vi) you agree to defend and indemnify Sun and its licensors from and against any damages, costs, liabilities, settlement amounts and/or expenses (including attorneys' fees) incurred in connection with any claim, lawsuit or action by any third party that arises or results from the use or distribution of any and all Programs and/or Software.

C. License to Distribute Redistributables. Subject to the terms and conditions of this Agreement and restrictions and exceptions set forth in the Software README file, including but not limited to the Java Technology Restrictions of these Supplemental Terms, Sun grants you a non-exclusive,

non-transferable, limited license without fees to reproduce and distribute those files specifically identified as redistributable in the Software "README" file ("Redistributables") provided that: (i) you distribute the Redistributables complete and unmodified, and only bundled as part of Programs, (ii) the Programs add significant and primary functionality to the Redistributables, (iii) you do not distribute additional software intended to supersede any component(s) of the Redistributables (unless otherwise specified in the applicable README file), (iv) you do not remove or alter any proprietary legends or notices contained in or on the Redistributables, (v) you only distribute the Redistributables pursuant to a license agreement that protects Sun's interests consistent with the terms contained in the Agreement, (vi) you agree to defend and indemnify Sun and its licensors from and against any damages, costs, liabilities, settlement amounts and/or expenses (including attorneys' fees) incurred in connection with any claim, lawsuit or action by any third party that arises or results from the use or distribution of any and all Programs and/or Software.

D. Java Technology Restrictions. You may not create, modify, or change the behavior of, or authorize your licensees to create, modify, or change the behavior of,

classes, interfaces, or subpackages that are in any way identified as "java", "javax", "sun" or similar convention as specified by Sun in any naming convention designation.

E. Distribution by Publishers. This section pertains to your distribution of the Software with your printed book or magazine (as those terms are commonly used in the industry) relating to Java technology ("Publication"). Subject to and conditioned upon your compliance with the restrictions and obligations contained in the Agreement, in addition to the license granted in Paragraph 1 above, Sun hereby grants to you a non-exclusive, nontransferable limited right to reproduce complete and unmodified copies of the Software on electronic media (the "Media") for the sole purpose of inclusion and distribution with your Publication(s), subject to the following terms: (i) You may not distribute the Software on a stand-alone basis; it must be distributed with your Publication(s); (ii) You are responsible for downloading the Software from the applicable Sun web site; (iii) You must refer to the Software as Java™ 2 Platform Standard Edition Development Kit 5.0; (iv) The Software must be reproduced in its entirety and without any modification whatsoever (including, without limitation, the Binary Code License and Supplemental License Terms accompanying the Software and proprietary rights notices contained in the

Software); (v) The Media label shall include the following information: Copyright 2006, Sun Microsystems, Inc. All rights reserved. Use is subject to license terms. Sun, Sun Microsystems, the Sun logo, Solaris, Java, the Java Coffee Cup logo, J2SE, and all trademarks and logos based on Java are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries. This information must be placed on the Media label in such a manner as to only apply to the Sun Software; (vi) You must clearly identify the Software as Sun's product on the Media holder or Media label, and you may not state or imply that Sun is responsible for any third-party software contained on the Media; (vii) You may not include any third party software on the Media which is intended to be a replacement or substitute for the Software; (viii) You shall indemnify Sun for all damages arising from your failure to comply with the requirements of this Agreement. In addition, you shall defend, at your expense, any and all claims brought against Sun by third parties, and shall pay all damages awarded by a court of competent jurisdiction, or such settlement amount negotiated by you, arising out of or in connection with your use, reproduction or distribution of the Software and/or the Publication. Your obligation to provide indemnification under this section shall arise provided that Sun: (a) provides you prompt notice of the claim; (b) gives you sole

control of the defense and settlement of the claim; (c) provides you, at your expense, with all available information, assistance and authority to defend; and (d) has not compromised or settled such claim without your prior written consent; and (ix) You shall provide Sun with a written notice for each Publication; such notice shall include the following information: (1) title of Publication, (2) author(s), (3) date of Publication, and (4) ISBN or ISSN numbers. Such notice shall be sent to Sun Microsystems, Inc., 4150 Network Circle, M/S USCA12-110, Santa Clara, California 95054, U.S.A , Attention: Contracts Administration.

F. Source Code. Software may contain source code that, unless expressly licensed for other purposes, is provided solely for reference purposes pursuant to the terms of this Agreement. Source code may not be redistributed unless expressly provided for in this Agreement.

G. Third Party Code. Additional copyright notices and license terms applicable to portions of the Software are set forth in the THIRDPARTYLICENSEREADME.txt file. In addition to any terms and conditions of any third party opensource/freeware license identified in the THIRDPARTYLICENSEREADME.txt file, the disclaimer of warranty

and limitation of liability provisions in paragraphs 5 and 6 of the Binary Code License Agreement shall apply to all Software in this distribution.

H. Termination for Infringement. Either party may terminate this Agreement immediately should any Software become, or in either party's opinion be likely to become, the subject of a claim of infringement of any intellectual property right.

I. Installation and Auto-Update. The Software's installation and auto-update processes transmit a limited amount of data to Sun (or its service provider) about those specific processes to help Sun understand and optimize them. Sun does not associate the data with personally identifiable information. You can find more information about the data Sun collects at <http://java.com/data/>.

For inquiries please contact: Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, U.S.A.  
(LFI#143333/Form ID#011801)

## WSDL4J 1.5.1

"This product includes wsdl4j 1.5.1, which was obtained under the Common Public License, and is distributed by CA for use with this CA product in unmodified, object code form, under the CA license agreement. Any provisions in the CA license agreement that differ from the Common Public License are offered by CA alone and not by any other party. The third party licensors of this component provide it on an "AS-IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE, and disclaim liability for any claim or loss, including, without limitation, direct, indirect, special, punitive, exemplary or consequential damages. Source code for this component is available at <http://wsdl4j.sourceforge.net/> under the terms of the Common Public License"

## XNTP v.3-5.93

This product includes XNTP v.3-5.93. XNTP v.3-5.93 is distributed in accordance with the following notice and permission:

\*\*\*\*\*

```
*                                     *
* Copyright (c) David L. Mills 1992, 1993, 1994, 1995, 1996      *
*                                     *
* Permission to use, copy, modify, and distribute this software and *
* its documentation for any purpose and without fee is hereby      *
* granted, provided that the above copyright notice appears in all *
* copies and that both the copyright notice and this permission    *
* notice appear in supporting documentation, and that the name     *
* University of Delaware not be used in advertising or publicity   *
* pertaining to distribution of the software without specific,     *
* written prior permission. The University of Delaware makes no   *
* representations about the suitability this software for any      *
* purpose. It is provided "as is" without express or implied      *
* warranty.                                                         *
```

\*\*\*\*\*/

## XScreenSaver

Copyright © 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005 by Jamie Zawinski. Permission to use, copy, modify, distribute, and sell this software and its documentation for any purpose is hereby granted without fee, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation. No representations are made about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

## Zlib 1.2.3

This product includes zlib developed by Jean-loup Gailly and Mark Adler.

## ZThread 2.3.2

Portions of this product include software developed by Eric Crahen. The ZThread software is distributed in accordance with the following license agreement.

Copyright (c) 2005, Eric Crahen

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE

AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY,

WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN

CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

## SimpleCaptcha 1.2

This product includes SimpleCaptcha 1.2 which is distributed in accordance with the following license agreement:

Copyright (c) 2008, James Childers

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of SimpleCaptcha nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.