CA Access Control Premium Edition

Release Notes

r12.5

Second Edition

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

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CA Product References

This document references the following CA products:

- CA Access Control Premium Edition
- CA Access Control
- 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 Enterprise Log Manager
- CA Identity Manager

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Documentation Changes

Second Edition

The second edition of the documentation was released to coincide with the GA announcement of r12.5.

The following Windows endpoint, UNIX endpoint, UNAB, and server component considerations were added or changed in this edition:

- CA Access Control Generates the Login Session ID (see page 52)
- x64 Feature Support Limitations (see page 54)
- Windows Server 2008 Feature Support Limitations (see page 54)
- TCP and SURROGATE Classes Are Not Active by Default (see page 54)
- Restart Message Pops Up During Installation, Uninstallation, or Upgrade on Windows Server 2008 (see page 61)
- PUPM Agent Programmable Check Out Requires Case Sensitive Host Name (see page 61)
- Compatibility Library Missing on x86_64bit Linux (see page 68)
- Propagating CA Access Control and UNAB to a New Solaris Zone (see page 70)
- Report Agent and PUPM Agent Are Not Supported on Linux IA64 and s390x (see page 70)
- Select the Encryption Method When Upgrading to CA Access Control r12.5 from CA Access Control r8.0 SP1 (see page 71)
- License Agreement Acceptance Keyword Is Case Insensitive (see page 78)
- Communication Issues Between CA Access Control Components and CA Access Control Message Queue (see page 84)
- Define a Comma Separated List of Users When Creating a PUPM Application (see page 85)
- Synchronize the System Time of the CA Access Control Enterprise Management and Report Portal Computers (see page 85)
- Prerequisite Kit Installer Considerations (see page 86)

- PUPM Windows Agentless Connector for Active Directory Search Limitations (see page 86)
- JCS Windows Agentless Connector Support for Active Directory (see page 86)
- Upgrade to CA Access Control r12.5 from CA Access Control r5.3 Is Not Supported (see page 86)

The following Windows endpoint, UNIX endpoint, UNAB, and server component known issues were added or changed in this edition:

- FIPS Only Mode on Windows x64 (see page 62)
- User Mode Instrumentation 64bit Target Systems (see page 62)
- Default Silent Upgrade Command Not Supported on x64 and IA64 Operating Systems (see page 62)
- Upgrade from CA Access Control r12.0 CR1 to CA Access Control r12.5 Is Not Supported (see page 86)
- CA Access Control Does Not Reset Passwords Once the Grace Period Expires (see page 76)
- UNAB Not Supported on AIX, Linux IA64, Linux 390, Solaris x86 and x64, and HPUX IA64 (see page 79)
- UNAB Does Not Support CA Access Control r8.0 SP1 and r12.0 SP1 (see page 79)
- UNAB Is Not FIPS1400 and IPV6 Compliant (see page 80)
- Ten-Second Interval between uxconsole -activate and -deactivate Commands (see page 80)
- CAPKI 4.1.2 Is Not Supported on x64 CA Access Control Endpoint for Windows (see page 87)
- Incomprehensible Characters In the User Interface (see page 87)
- "Encapsulation Page Failed" Error Message When Viewing or Scheduling Reports (see page 88)
- Japanese Reports Viewable in InfoView Only (see page 91)
- Do Not Use '$' Character for CA Access Control Enterprise Management Database Password (see page 92)
- CA Access Control Enterprise Management Time-Out When Creating Large Policies (see page 92)
- PUPM Is Not FIPS1400 and IPV6 Compliant (see page 94)

The following Windows endpoint, UNIX endpoint, and server component considerations were removed from this edition:

- Encryption Mode Communication Limitations
- System Accounts Do Not Have a Unique Login Session ID
- CA Anti-Virus on Linux x86
- RPM Package Upgrade from r12.0 CR1
- Upgrade to CA Access Control Enterprise Management r12.5 from r12.0 SP1 is Not Supported
- Passwords Appear in Clear Text
- UNAB Configuration Policy Tokens Cannot Contain Empty Values

The following Windows endpoint known issue was removed from this edition:

- Provide -container Argument When Using PUPM Agent

First Edition

The first edition of the documentation was released with r12.5. In this edition, the following updates were made to the r12.0 SP1 release of the documentation:

- New and Changed Features (see page 23)—Rewritten chapter for this release.
- Operating System Support (see page 27)—Updated chapter for this release, including information for new features.
- System Requirements (see page 33)—Updated chapter for this release, including minimum requirements for new features.
- Considerations and Known Issues (see page 49)—Updated chapter for this release, including information for new features.
- Third-Party License Agreements (see page 95)—Updated chapter for this release.

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Chapter 1: Welcome

Welcome to CA Access Control Premium Edition r12.5. 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 Access Control Premium Edition.

CA Access Control Premium Edition offers the same functionality and components as CA Access Control. In addition, it offers enterprise management and reporting capabilities, and advanced policy management features.

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

This section contains the following topics:

CA Access Control Editions (see page 17)

CA Access Control Editions

CA Access Control is available in two editions and features vary by product edition:

CA Access Control

Contains the core functionality that provides a total security solution for open systems.

CA Access Control Premium Edition

Offers the same functionality and components as CA Access Control. In addition, it offers enterprise management and reporting capabilities, advanced policy management features, and CA Audit for collecting and managing CA Access Control audit logs.

CA Access Control Premium Edition Installation Media

CA Access Control Premium Edition components are available on six optical discs:

- CA Access Control Endpoint Components for Windows

  Contains CA Access Control for Windows installation files for endpoint components. These include the core CA Access Control functionality required for a standalone Windows computer, additional executables and libraries to extend core functionality (for example, Policy Model support), runtime SDK files and libraries and API samples, mainframe password synchronization, Stack Overflow Protection (STOP), and the PUPM Agent.

- CA Access Control Endpoint Components for UNIX

  Contains CA Access Control for UNIX installation files for endpoint components. These include the core CA Access Control functionality required for a standalone UNIX computer, additional binaries and scripts to extend core functionality (for example, Policy Model support), runtime SDK files and libraries and API samples, mainframe password synchronization, Stack Overflow Protection (STOP), and the PUPM Agent.

  It also contains UNAB installation files.

- CA Access Control Premium Edition Server Components for Windows

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

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

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

- CA Access Control Premium Edition Report Portal for Windows (Disc 1)

  BusinessObjects XI Release 2.1 installation files.

- CA Access Control Premium Edition Report Portal for Windows (Disc 2)

  BusinessObjects XI Release 2.1 SP5 patch for use by Oracle Database 11g users.

- CA Access Control Third Party Components for Windows

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

Note: CA Access Control Premium Edition installation media is different from that of CA Access Control.

CA Access Control Installation Media

CA Access Control components are available on four optical disks:

- CA Access Control Endpoint Components for Windows

  Contains CA Access Control for Windows installation files for endpoint components. These include the core CA Access Control functionality required for a standalone Windows computer, additional executables and libraries to extend core functionality (for example, Policy Model support), runtime SDK files and libraries and API samples, mainframe password synchronization, and Stack Overflow Protection (STOP).

- CA Access Control Endpoint Components for UNIX

  Contains CA Access Control for UNIX installation files for endpoint components. These include the core CA Access Control functionality required for a standalone UNIX computer, additional binaries and scripts to extend core functionality (for example, Policy Model support), API libraries and samples, mainframe password synchronization, and Stack Overflow Protection (STOP).

  It also contains UNAB installation files for use with CA Access Control Premium Edition.

- CA Access Control Server Components for Windows

  Contains CA Access Control Endpoint Management for Windows.

- CA Access Control Third Party Components for Windows

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

Note: CA Access Control Premium Edition installation media is different from that of CA Access Control.

Complementary CA Enterprise Log Manager License

As the owner of the CA Access Control Premium Edition, you are also entitled to the CA Enterprise Log Manager product for the limited use of collecting, managing and reporting on CA Access Control audit logs. First, you must obtain a license for "CA Enterprise Log Manager Server for CA Access Control" (Codes ELMSAC99100/ELMSAC991), which is offered to CA Access Control Premium Edition customers for a symbolic price.

To obtain your license for CA Enterprise Log Manager in North America, contact your local account representative. If you are outside of North America, call your local account representative or the local CA office. You can download CA Enterprise Log Manager online through the Download Center on the CA Support Online web site at http://ca.com/support under your CA Access Control Premium Edition download links.

A Single Documentation Set for All Editions

We supply the same documentation for both editions. Because we supply the same documentation for both editions, some sections of some guides apply only to CA Access Control Premium Edition. The following describes how the documentation applies to CA Access Control:

- Release Notes

  Some information in this guide applies only to CA Access Control Premium Edition features.

- Implementation Guide

  The following chapters apply only to CA Access Control Premium Edition:

  - Chapter 3: Installing the Enterprise Management Server
  - Chapter 6: Integrating with CA Enterprise Log Manager
  - Chapter 7: Implementing Enterprise Reporting
  - Chapter 10: Installing a Disaster Recovery Deployment
  - Chapter 11: Migrating PMDs to an Advanced Policy Management Environment
  - Chapter 12: Upgrading CA Access Control r12.0 SP1 to CA Access Control r12.5

  Other chapters also describe or make references to features that only apply to CA Access Control Premium Edition. For example, the Report Agent, which is part of the endpoint installation, is only relevant for CA Access Control Premium Edition.

- Endpoint Administration Guide for Windows

  The entire guide applies to CA Access Control.

- Endpoint Administration Guide for UNIX

  The entire guide applies to CA Access Control.

- Reference Guide

  Some information in this guide applies only to CA Access Control Premium Edition features.

- selang Reference Guide

  Some information in this guide applies only to CA Access Control Premium Edition features.

- Enterprise Administration Guide

  The entire guide applies only to CA Access Control Premium Edition.

- Troubleshooting Guide

  Some information in this guide applies only to CA Access Control Premium Edition features.

To simplify terminology, we refer to the product as CA Access Control throughout the documentation.

Chapter 2: New and Changed Features

This section contains the following topics:

Privileged User Password Management (see page 23)
UNIX Authentication Broker (see page 24)
Unified Data and Resource Protection Console (see page 24)
Systemwide Audit Mode (see page 24)
Variables Support (see page 25)
Policy Import (see page 25)
Streamlined Installation (see page 25)
CA Enterprise Log Manager Integration (see page 26)

Privileged User Password Management

Privileged User Password Management (PUPM) is the process through which an organization secures, manages, and tracks all activities associated with the most powerful accounts within the organization.

PUPM in CA Access Control provides role-based access management for privileged accounts on target endpoints from a central location. PUPM also provides secure storage of privileged accounts and application ID passwords, and controls access to privileged accounts and passwords based on policies. Further, PUPM manages privileged accounts and application password lifecycle and let you remove passwords from configuration files and scripts.

PUPM empowers system users to delegate the management of users and access privileged accounts. Users can manage their access to privileged accounts using the PUPM self-service mechanism and request access to privileged accounts as an exception.

CA Access Control integration with CA Enterprise Log Manager provides accountability and tracing of privileged accounts usage.

Note: For more information about PUPM, see the *Enterprise Administration Guide*.

UNIX Authentication Broker

UNIX Authentication Broker (UNAB) lets you log in to UNIX computers using an Active Directory data store. This means you can use a single repository for all your users, letting them log in to all platforms with the same user name and password.

Integrating UNIX accounts with Active Directory enforces strict authentication and password policies, transferring the rudimentary UNIX user and group properties to Active Directory. This lets you manage UNIX users and groups in the same location that you also manage Windows users and groups.

Note: For more information about UNAB, see the *Implementation Guide*.

Unified Data and Resource Protection Console

CA Access Control Enterprise Management is enhanced to provide an integrated console for Data and Resource Protection (DRP) capabilities that CA Access Control provides. DRP capabilities in CA Access Control Enterprise Management include:

- Managing privileged user accounts.
- Managing Active Directory user and group access to UNAB hosts.
- Displaying CA Access Control, PUPM, and UNAB reports that are generated by CA Enterprise Log Manager.

Systemwide Audit Mode

The new SYSTEM_AAUDIT_MODE property in the SEOS class specifies the systemwide audit mode. This property lets you specify the default audit mode for users and enterprise users.

Note: For more information about the systemwide audit mode, see the *Endpoint Administration Guide for Windows* and the *Endpoint Administration Guide for UNIX*.

Variables Support

Variables let you deploy the same policy to endpoints that have different configurations and different operating systems. You can use variables to deploy the same policy to Windows and Solaris endpoints despite the different CA Access Control installation location on each operating system.

Note: For more information about variables, see the *Enterprise Administration Guide.*

Policy Import

Policy import is the process of migrating an existing policy to an advanced policy management environment that lets you deploy and undeploy policies and check the deployment and deviation status of policies.

Note: For more information about policy import, see the *Implementation Guide.*

Streamlined Installation

The installation of CA Access Control r12.5 was simplified to help you to easily deploy CA Access Control in your enterprise. The Installation process of CA Access Control r12.5 was streamlines to allow you to quickly deploy CA Access Control Enterprise Management and CA Access Control. The CA Access Control Enterprise Management wizard based installation guides you through the steps and enables you to install CA Access Control Enterprise Management on a single server.

Note: For more information, see the *Implementation Guide.*

CA Enterprise Log Manager Integration

CA Access Control Enterprise Management is enhanced to provide a unified console for CA Access Control, PUPM, and UNAB CA Enterprise Log Manager reports. CA Access Control Enterprise Management displays the CA Enterprise Log Manager reports directly from the console, so you do not need to access CA Enterprise Log Manager to view the reports. CA Enterprise Log Manager contains dozens of reports that display information from numerous sources of information, including:

- Privileged accounts activity reports
- UNAB activity reports
- CA Access Control usage reports

Chapter 3: Operating System Support

This section contains the following topics:

Operating System Support for Endpoints (see page 27)
Operating System Support for Server Components (see page 30)
Operating System Support for CA DSM Delivery (see page 31)
Operating System Support for UNAB (see page 32)

Operating System Support for Endpoints

The following table lists the supported operating systems for CA Access Control endpoints:

Platform	Architecture	Version	Update Level	Notes
Windows	x86	Server 2003	SP2 and R2 with SP2	Standard or Enterprise editions With or without Active Directory Services
		Cluster Server 2003	SP2	Compute Cluster Edition
		Server 2008	SP1	Standard or Enterprise editions
	x64	Server 2003	SP2 and R2 with SP2	Standard or Enterprise editions
		Cluster Server 2003	SP1	Compute Cluster Edition
		Server 2008	SP1	Standard or Enterprise editions With or without Hyper-V
	Itanium (IA64)	Server 2003	SP2	Enterprise Edition
Microsoft Virtual Server	x86	2005	R2	
AIX	IBM POWER	5.2		32- and 64-bit
		5.3		32- and 64-bit
	IBM POWER	6.1		32- and 64-bit

Platform	Architecture	Version	Update Level	Notes
HP-UX	PA-RISC	11i v1 (11.11)		32- and 64-bit
		11i v1 (11.11) TCB		32- and 64-bit running Trusted Computing Base
		11i v2 (11.23)		
		11i v2 (11.23) TCB		Running Trusted Computing Base
		11i v3 (11.31)		
		11i v3 (11.31) TCB		Running Trusted Computing Base
	Itanium (IA64)	11i v2 (11.23)		
		11i v2 (11.23) TCB		Running Trusted Computing Base
		11i v3 (11.31)		
		11i v3 (11.31) TCB		Running Trusted Computing Base
Sun Solaris	SPARC	8		32- and 64-bit
		9		32- and 64-bit
		10	Base, Update 1 to 6	64-bit
	x64	10	Base, Update 1 to 6	
Linux	x86	RHEL 3 (AS & ES)	Base and Update 1 to 9	RHEL is Red Hat Enterprise Linux
		RHEL 4 (AS & ES)	Base and Update 1 to 7	
		RHEL 5 (BS & AP)	Base and Update 1, 2	
		SLES 9	Base, SP1, SP2, and SP4	SLES is SuSe Linux Enterprise Server
		SLES 10	Base, SP1 and SP2	
		OEL 4		OEL is Oracle Enterprise Linux
		OEL 5		
	x64	RHEL 4 (AS & ES)	Base and Update 1	RHEL is Red Hat

Platform	Architecture	Version	Update Level	Notes
			to 7	Enterprise Linux
		RHEL 5 (BS & AP)	Base and Update 1, 2	
		SLES 9	Base, SP1, SP2, and SP4	SLES is SuSe Linux Enterprise Server
		SLES 10	Base, SP1 and SP2	
		OEL 4		OEL is Oracle Enterprise Linux
		OEL 5		
	AMD64/EM64T	RHEL 3 (AS & ES)	Update 4 to 9	
		RHEL 4 (AS & ES)	Base and Update 1 to 7	
		RHEL 5 (BS & AP)	Base and Update 1, 2	
		SLES 9	Base, SP1, SP2 and SP4	
		SLES 10	Base, SP1 and SP2	
	Itanium (IA64)	RHEL 3 (AS & ES)	Base, Update 3, 7, 8, and 9	
		RHEL 4 (AS & ES)	Base and Update 2 to 7	
		RHEL 5 (BS & AP)	Base and Update 1, 2	
		SLES 9	SP3, SP4	
		SLES 10	Base, SP1 and SP2	
	Z-series (s390x)	RHEL 3 (AS & ES)	Base, Update 4, 7, 8, and 9	
		RHEL 4 (AS & ES)	Base and Update 1 to 7	
		RHEL 5 (BS & AP)	Base and Update 1, 2	
		SLES 9	SP2 to SP4	
		SLES 10	Base, SP1 and SP2	
VMware	x86	ESX Server 3		Base functionality
		ESX Server 3.0.1		Base functionality

Platform	Architecture	Version	Update Level	Notes
		ESX Server 3.02		Base functionality
		ESX Server 3.5	Base, SP1 and SP2	Base functionality

Note: This list of supported operating systems *does not* apply to the advanced policy management server components (DMS and DH), which are only supported on Enterprise Server supported platforms.

Note: For an updated list of supported operating systems, refer to the CA Access Control Compatibility Matrix that is available from the CA Access Control product page on CA Support Online at http://ca.com/support.

Operating System Support for Server Components

The following sections list operating system support for CA Access Control server components.

Note: For an updated list of supported operating systems, refer to the CA Access Control Compatibility Matrix that is available from the CA Access Control product page on CA Support Online at http://ca.com/support.

CA Access Control Endpoint Management

The following table lists the supported operating systems for CA Access Control Endpoint Management:

Platform	Architecture	Version	Update Level	Notes
Windows	x86	Server 2003	SP1, SP2, and R2 with SP2	Enterprise, Standard, or Web editions
Sun Solaris	SPARC	9		32- and 64-bit
		10	Base, Update 1 to 5	64-bit

CA Access Control Premium Edition Enterprise Server

The following table lists the supported operating systems for the Enterprise Server:

Platform	Architecture	Version	Update Level	Notes
Windows	x86	Server 2003	SP1, SP2, and R2 with SP2	Enterprise Edition

The Enterprise Server also requires you set up the following additional server components:

- **A central database**—A supported third-party RDBMS (relational database management system).

  Note: For information about operating system support for your RDBMS, see the documentation for your product.

- **Active Directory**—(Optional) An enterprise user store.

  Note: You must use Active Directory as your enterprise store to manage UNAB.

- **Report Portal**—CA Business Intelligence.

  Note: For information about operating system support for the Report Portal, see the *CA Business Intelligence Installation Guide*.

- **CA Enterprise Log Manager**—Agent and server components that CA Enterprise Log Manager provides.

  Note: For information about operating system support for CA Enterprise Log Manager, see the *CA Enterprise Log Manager Release Notes*.

Note: You can install all of the Enterprise Server components on the same computer. If you do this, you have to make sure that your operating system supports all components, and that the combined system requirements are met.

Operating System Support for CA DSM Delivery

CA Access Control supports endpoint installations using CA Desktop and Server Management (CA DSM) r11.2 C3.

CA Access Control supports CA DSM delivery on all Linux and Windows operating systems that both CA Access Control endpoints *and* the CA DSM Software Delivery Agent support.

Note: For a list of operating systems CA DSM Software Delivery Agent supports, see CA Support Online at http://ca.com/support.

Operating System Support for UNAB

The following table lists the supported operating systems for UNAB:

Platform	Architecture	Version	Update Level	Notes
Linux	x86	RHEL 3 (AS & ES)		RHEL is Red Hat Enterprise Linux
		RHEL 4 (AS & ES)		
		RHEL 5 (BS & AP)	Base and Update 1, 2	
		SLES 9	Base, SP1, SP2, and SP4	SLES is SuSe Linux Enterprise Server
		SLES 10		Without XEN support
	x64	RHES 4 (AS & ES)	Base and Update 1 to 7	
		RHEL 5 (BS & AP)	Base and Update 1, 2	
		SLES 9	Base, SP1, SP2, and SP4	SLES is SuSe Linux Enterprise Server
		SLES 10	Base, SP1 and SP2	Without XEN support
Sun Solaris	SPARC	8		32- and 64-bit
		9		32- and 64-bit
		10	Base, Update 1 to 6	64-bit
AIX	IBM POWER	5.2		32- and 64-bit
		5.3		32- and 64-bit
		6.1		32- and 64-bit
HP-UX	PA-RISC	11i v1 (11.11)		32- and 64-bit
		11i v2 (11.23)		
		11i v3 (1.31)		

Chapter 4: System Requirements

This section contains the following topics:

Windows Endpoint Requirements (see page 33)
UNIX Endpoint Requirements (see page 33)
Policy Model Database Requirements (see page 34)
CA Access Control Endpoint Management Requirements (see page 34)
CA Access Control Premium Edition Enterprise Server Requirements (see page 35)
PUPM Endpoint Support (see page 36)
Distribution Server Requirements (see page 36)
UNAB Requirements (see page 36)

Windows Endpoint Requirements

The minimum requirements for a CA Access Control Windows endpoint are:

- **Processor**—Intel-based Pentium 4 PC 1.6 GHz
- **Memory**—1 GB RAM
- **Available disk space**—100 MB

In addition, you need disk space for your CA Access Control database, which is the repository of records describing your users and user groups, your protected files and other resources, and the authorizations that permit controlled access to the resources. For example, a database for one thousand users, with one thousand files, and five hundred access rules, occupies approximately 2 MB of disk space.

UNIX Endpoint Requirements

The minimum requirements for a CA Access Control UNIX endpoint are:

- **Memory**—128 MB RAM (256 MB recommended)
- **Available disk space**—100 MB (150 MB for general installations)

The following table details the space required for each installation package:

Package	Space Required (MB)
Client	60
MFSD	2

Package	Space Required (MB)
Unicenter	4
API	20

In addition, you need disk space for your CA Access Control database, which is the repository of records describing your users and user groups, your protected files and other resources, and the authorizations that permit controlled access to the resources. For example, a database for one thousand users, one thousand files, and five hundred access rules, occupies approximately 2 MB of disk space.

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 Access Control 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*/policies/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

CA Access Control Endpoint Management Requirements

The minimum requirements for the CA Access Control Endpoint Management computer are:

- **Processor**—Pentium PC 266 MHz
- **Memory**—2 GB RAM
- **Available disk space**—2 GB at installation; 3 GB at %TEMP%

In addition, the CA Access Control Endpoint Management computer should have the following software installed:

- **JDK**—Java Development Kit (JDK) 1.4.2_12 or higher
- **Application server**—JBoss Application Server version 4.0.5.GA
- **CA Access Control**—Latest version of endpoint installation

On the end user's 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 Mozilla Firefox 2.x or 3.0 or 3.5
- **Linux**—Mozilla Firefox 2.x or 3.0 or 3.5

CA Access Control Premium Edition Enterprise Server Requirements

The minimum requirements for the Enterprise Server are:

- **Processor**—Pentium PC 266 MHz
- **Memory**—2 GB RAM
- **Available disk space**—2 GB at installation directory; 3 GB at %TEMP%

In addition, the Enterprise Server should have the following software installed:

- **JDK**—Java Development Kit (JDK) 1.4.2_12 or higher
- **Application server**—JBoss Application Server version 4.0.5.GA
- **A central database (RDBMS)**—Oracle Database 10g, Oracle Database 11g, or Microsoft SQL Server 2005

  Note: This central database does not need to be installed on the same computer. For information about system requirements for your RDBMS, see the documentation for your product.

- **Active Directory**—(Optional) An enterprise user store.

  Note: This user store does not need to be installed on the same computer.

- **Report Portal**—CA Business Intelligence.

  Note: This software does not need to be installed on the same computer. For information about system requirements for the Report Portal, see the *CA Business Intelligence Installation Guide*.

  Important! If you use Oracle Database 11g, install the BusinessObjects XI Release 2.1 SP5 patch that is available on the CA Access Control Premium Edition Report Portal (Disc 2) DVD under the \boeXIR2_SP5 directory.

- **CA Enterprise Log Manager**—r12.0

  Note: This software does not need to be installed on the same computer. For information about system requirements for CA Enterprise Log Manager, see the *CA Enterprise Log Manager Release Notes*.

Note: You can install all of the Enterprise Server components on the same computer. If you do this, you have to make sure that your operating system supports all components, and that the combined system requirements are met.

On the end user's 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 Mozilla Firefox 2.x or 3.0 or 3.5
- **Linux**—Mozilla Firefox 2.x or 3.0 or 3.5

PUPM Endpoint Support

The following endpoint types are supported by CA Access Control Enterprise Management for PUPM:

- Microsoft SQL Server
- PeopleSoft
- IBM i (formerly i5/OS and OS/400)
- Kerberos Server
- Oracle Server
- Windows (Windows Agentless)
- UNIX (SSH Device)
- CA Identity Manager Provisioning Connection

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%

UNAB Requirements

The minimum requirements for UNAB are:

- **Memory**—128-MB RAM (256 MB recommended)
- **Available disk space**—100 MB

Also, you must have an Active Directory server configured, depending on the installation type:

- Windows Server 2000 SP4, if you have a partial integration installation
- Windows Server 2003 SP2 R2, if you have a full integration installation

Further, complete the following before you install UNAB:

- Backup the local user store.
- Install Identity Management for UNIX on the Active Directory server.

  This adds the Server for NIS and Password Synchronization server components for Active Directory.
- Synchronize the clocks between the UNIX and Active Directory computers.
- Synchronize the clocks between the Tibco and UNAB computers.
- Verify that the UNIX computer name resolves correctly from both the UNIX and Active Directory computers.
- (Optional) Check for UNAB system compliance to make sure the operating system you are installing on complies with its requirements.

  This check runs automatically when you install UNAB

Note: For more information about these prerequisite tasks, see the *Implementation Guide*.

Chapter 5: Documentation

This section contains the following topics:

Guides (see page 39)
Documentation Conventions (see page 39)

Guides

The PDF guides for CA Access Control Premium Edition r12.5 are as follows:

- Release Notes
- Implementation Guide
- Endpoint Administration Guide for Windows
- Endpoint Administration Guide for UNIX
- Enterprise Administration 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 Access Control 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 Access Control guides are also available in HTML format and Online Help is accessible from the various web-based interfaces.

Documentation Conventions

The CA Access Control documentation uses the following conventions:

Format	Meaning
Mono-spaced font	Code or program output
Italic	Emphasis or a new term
Bold	Text that you must type exactly as shown

Format	Meaning
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):

Format	Meaning
Italic	Information that you must supply
Between square brackets ([])	Optional operands
Between braces ({})	Set of mandatory operands
Choices separated by pipe (|).	Separates alternative operands (choose one). For example, the following means *either* a user name *or* a group name: {*username*|*groupname*}
...	Indicates that the preceding item or group of items can be repeated
Underline	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. **Note:** 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.

Chapter 6: FIPS Compliance

This section contains the following topics:

FIPS Operational Modes (see page 43)
Unsupported Operating Systems for FIPS-only Mode (see page 43)
FIPS Encryption Libraries (see page 43)
FIPS Algorithms Used (see page 44)
Storage of Keys and Certificates (see page 44)
Features Affected (UNIX) (see page 44)
Features Affected (Windows) (see page 46)

FIPS Operational Modes

CA Access Control has two FIPS operational modes: FIPS-only and regular. In FIPS-only mode, CA Access Control uses only those cryptographic functions that are FIPS 140-2 compliant. This means that some CA Access Control features are disabled in FIPS-only mode. In regular mode CA Access Control 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 Access Control supported operating system architectures:

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

FIPS Encryption Libraries

In FIPS-only mode CA Access Control uses the CAPKI encryption library. On UNIX systems it uses the OS encryption library for password encryption ("crypt" method). In regular mode, CA Access Control uses the CAPKI 4.0 encryption library in addition to the non-FIPS encryption libraries.

FIPS Algorithms Used

CA Access Control 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:
  - 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 ETPKI)—used for signatures of trusted programs, signatures of policies
  - AES (from ETPKI)—used for password validation when working with bidirectional password history

Storage of Keys and Certificates

CA Access Control 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 Access Control.

  Note: CA Access Control encrypts the private key using AES symmetric encryption (from the ETPKI libraries) using CA Access Control symmetric key.

Features Affected (UNIX)

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

Feature	Non-FIPS Mode	FIPS Mode
PMD update file encryption	Default symmetric key encryption (two-way)	Disabled
Trusted Programs	CAPKI SHA-1 and MD5	CAPKI SHA-1 only

Feature	Non-FIPS Mode	FIPS Mode
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 Access Control 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
selogrd encryption	Default symmetric key encryption and MD5	Disabled
sechkey key change	Default symmetric key encryption	Disabled
iRecorder log file signature	MD5 encryption	Disabled

Note: Where a feature is disabled as a result of the FIPS operational mode, the relevant program prints an error message and exits.

Features Affected (Windows)

The FIPS operational mode can have an effect on the following CA Access Control 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 Access Control internal SHA-1 signature	CAPKI SHA-1 signature only

Note: Where a feature is disabled as a result of the FIPS operational mode, the relevant program prints an error message and exits.

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 Access Control cannot decrypt old passwords.

Chapter 7: Considerations and Known Issues

This section contains the following topics:

Windows Endpoint Considerations (see page 49)
Windows Endpoint Known Issues (see page 61)
UNIX Endpoint Considerations (see page 63)
UNIX Endpoint Known Issues (see page 73)
UNAB Considerations (see page 77)
UNAB Known Issues (see page 78)
Server Components Considerations (see page 80)
Server Components Known Issues (see page 87)
Documentation Known Issues (see page 94)

Windows Endpoint Considerations

This section describes items you should consider when using CA Access Control on Windows endpoints.

Default Installation Location

The default installation location has changed in r12.0 and is as follows:

\Program Files\CA\AccessControl

Versions You Can Upgrade From

You can upgrade to CA Access Control r12.5 for Windows from r12.0, r12.0 SP1, r8 SP1 (only from a CR release, not from the base version), and r5.2.

McAfee Entercept Buffer Overflow

The CA Access Control STOP feature is incompatible with the McAfee Entercept buffer overflow technology.

Turn off the CA Access Control STOP feature or the McAfee Entercept buffer overflow protection feature.

Reboot May Be Required When Upgrading

When you upgrade an r12.0 SP1 endpoint to r12.5, it is not mandatory that you reboot the computer. After the upgrade, CA Access Control preserves backwards compatibility. However, the upgrade is not complete until you reboot the computer, and all r12.5 functionality may not be supported until after the reboot.

When you upgrade an r5.2, r8.0 SP1, or r12.0 endpoint to r12.5, you must reboot the computer.

Supported Installation Languages

When you install CA Access Control silently, you can specify the language in which CA Access Control is installed. The following are the supported language IDs you can specify and their respective languages:

- 1033—English
- 1041—Japanese
- 1042—Korean

CA Access Control Backdoor

During the evaluation phase, rules may be incorrectly defined. Incorrectly defined rules can prevent users from logging in or executing commands. For example, a rule that denies access to the system directory or vital parts of the Windows registry. Because it is difficult to stop CA Access Control and fix these mistakes, CA Access Control comes with a backdoor that lets you fix these types of problem. Because backdoors can be maliciously exploited, CA Access Control also lets you disable this backdoor once your system is set up and stable.

To access this backdoor, select Safe Mode or Safe Mode with Networking from the boot menu. When you select one of these options the system starts without automatically starting the CA Access Control services.

To disable this backdoor, define the registry value 'LockEE' of data type reg_dword under the registry key HKEY_LOCAL_MACHINE\Software\ComputerAssociates\ AccessControl\AccessControl\ and set it to 1.

Note: This registry value does not exist by default.

Now when you start the system with LockEE set to 1 in:

- Safe Mode, only CA Access Control Engine and CA Access Control Watchdog load.

  The CA Access Control Agent (and any Policy Models), which rely on network services, do not load.

- Safe Mode with Networking, CA Access Control starts normally.

CA Access Control Database Size Limitation

The CA Access Control database is limited to one million (1,000,000) objects. This size limitation is only likely to affect your deployment if you use advanced policy management in a large environment.

If the CA Access Control database in your enterprise is expected to hold 1,000,000 objects, you need to remove old DEPLOYMENT objects that are no longer in use.

Example: Calculating the Number of Objects in the CA Access Control Database

The following example shows you how to calculate the number of objects that you can expect to have in the DMS-the central CA Access Control management database.

In this example, we have an enterprise deployment of CA Access Control on 5000 endpoints, each holding 50 assigned policies. As a result, the DMS contains at least 250,000 objects, as follows:

5,000 endpoints X 50 policies = 250,000 DEPLOYMENT objects

If over time you create four versions of each policy, and assign these policies to each of your 5000 endpoints, the number of objects in the DMS will reach the 1,000,000 objects limit, as follows:

5,000 endpoints X 50 policies X 4 version = 1,000,000 DEPLOYMENT objects

CA Access Control Generates the Login Session ID

CA Access Control generates at startup the login session ID that it adds to audit log records. This means that a logged on user gets a different session ID within the same terminal session every time CA Access Control restarts. The session ID remains the same only within the same CA Access Control session.

Conflicts with Other Software in Databases You Create

To avoid conflicts between CA Access Control and other products, CA Access Control provides a coexistence utility that detects and defines special rules for any such software found. When you create a new CA Access Control database using dbmgr, we highly recommended you issue the command with the additional *-k* switch. This switch creates the database with special coexistence rules.

Alternatively, run the coexistence utility separately after you create the database. From the CA Access Control Bin directory, issue the command:

eACoexist.exe *ACInstallDir*\Coexistence

Mainframe Password Synchronization Prerequisite

To work with Mainframe Password Synchronization on the server that has TNG/TND/NSM installed, CA Access Control requires a prerequisite TNG/TND/NSM fix - T129430. Please contact support for getting the fix.

Firewall Settings

When you install CA Access Control on Windows Server 2003, or Windows Server 2008, CA Access Control opens port 8891 for non-SSL TCP connections and port 5249 for SSL TCP connections. This serves as the default port for CA Access Control agent-client connections.

Note: For more information on ports CA Access Control uses on Windows, see the *Reference Guide*.

IA64 Feature Support Limitations

The following features are not supported on IA64 platforms:

- Unicenter TNG migration and integration
- Mainframe password synchronization
- STOP
- Report Agent
- PUPM Agent
- SSL
- FIPS 140-2 compliance

x64 Feature Support Limitations

The following are known limitations on x64 platforms:

- Unicenter TNG migration and integration
- Mainframe password synchronization
- Process interception (class PROCESS functionality)
- Impersonation interception (class SURROGATE functionality), if SurrogateInterceptionMode is set to 1

  Important! Impersonation interception is supported on x64 and x86 platforms by default via the RunAs plug-in (SurrogateInterceptionMode is set to 0).

  Note: For more information about the SurrogateInterceptionMode registry setting, see to the *Reference Guide*.

Windows Server 2008 Feature Support Limitations

The following are known limitations on Windows Server 2008:

- Impersonation interception (class SURROGATE functionality), if SurrogateInterceptionMode is set to 1

  Important! Impersonation interception is supported on x64 and x86 platforms by default via the RunAs plug-in (SurrogateInterceptionMode is set to 0).

  Note: For more information about the SurrogateInterceptionMode registry setting, see to the *Reference Guide*.

TCP and SURROGATE Class Are Not Active By Default

CA Access Control database classes TCP and SURROGATE are not active by default.

If you upgrade from an earlier release where the TCP class is active but you do not have any TCP records and have not changed the _default TCP resource, CA Access Control deactivates the class during upgrade. The same is true for the SURROGATE class.

If you upgrade from an earlier release where the SURROGATE class is active and you have defined SURROGATE records or have changed the value of any SURROGATE record from its default, CA Access Control retains the SURROGATE class configuration after the upgrade. The class remains active and kernel mode interception remains enabled.

Enterprise Users Do Not Correspond to the _undefined User

If you use enterprise users (osuser_enabled is set to 1), CA Access Control does not consider any user as undefined.

Rules for the _undefined user are not relevant in this case.

Short File Names (8.3 Format) Are Not Supported

CA Access Control r12.5 does not support rules created as short file names (8.3 format). When you define any of the following classes, you must enter the full path name of the file or directory:

- FILE
- PROGRAM
- PROCESS
- SECFILE
- SPECIALPGM

The following is an example of a rule using a full path name:

```
nr file ("C:\program files\text.txt")
```

The following is an example of a rule using a short path name that is *not* supported:

```
nr file ("C:\progra~1\test.txt")
```

Policy Model Names Are Case-sensitive

Policy Model names are case-sensitive on Windows for compatibility with UNIX. When specifying PMDB names in commands, make sure you use the correct case.

Note: Although PMDB names are case-sensitive, you cannot have two PMDBs on the same computer with only the letter case being different. This is because CA Access Control uses the PMDB name as part of the file path but Windows is case-insensitive and so does not permit this. For example, myPMDB and MYpmdb are two different Policy Model databases but cannot live on the same system.

seaudit Displays Trace Records by User Name

The seaudit utility displays trace records by user name, not by user ID.

Note: You can choose to revert the seaudit utility output to the way it was in a previous release using the -format option. For more information, see the *Reference Guide*.

Process Creation Trace Limitations

- CA Access Control traces process creation in Windows. However, seosd fetches new process arguments and writes the arguments to the general trace only if the user who started the process is marked to be traced.
- When a new process is created, its arguments may not be available until the process finishes initialization. seosd attempts to trace the process arguments asynchronously; however if the process is very short, the process may terminate before seosd can fetch the process arguments and write them to the trace. In this case the following message appears in the trace:

  EXECARGS: Not available (87)

- Process IDs are reused in Windows. If a process is very short, it is theoretically possible that seosd will fetch process arguments for a different process that acquired the same process ID, and write these arguments to the trace.

PMDB and Host Names Do Not Support Non-English Characters

You cannot use non-English characters in PMDB and host names.

Password Propagation Requires a Restart When You Change Encryption Modes

When you change the encryption mode (for example, to FIPS-only mode), you must restart CA Access Control services if you need to propagate passwords from a password PMDB.

Authorization Recognizes Resource Group Ownership

CA Access Control takes into account resource group ownership when checking user authorization to a resource. This behavior was introduced in r12.0. In earlier releases, the authorization process considered only the resource's owner.

For example, you define a FILE resource with a default access of none and no owner that is a member to a GFILE resource with a named owner. In CA Access Control r12.0 and later, the named group owner has full access to the file. In earlier releases, nobody has access to the file.

Non-IPv4 telnet Connections Are Not Secured on Windows Server 2008

On Windows Server 2008, CA Access Control cannot secure a telnet connection unless it uses IPv4.

To protect a localhost telnet connection–telnet from the localhost to the localhost–on Windows Server 2008, you need to modify the /etc/HOSTS file as follows:

```
127.0.0.1       localhost
#     ::1             localhost
127.0.0.1       <your server name without domain suffix>
```

The above configuration works around this issue on an IPv4 domain. If your computer is on an IPv6 domain, you need to add the following line:

```
127.0.0.1   <your server name with domain suffix>
```

Login Interception is Supported by Sub-authentication Method Only

Login interception on Windows is supported only by CA Access Control sub-authentication method.

You cannot set login interception through the kernel. As a result, you should consider the following:

- Since the sub-authentication component works on the Domain Controller (DC) level, and it is up to the OS to decide which DC authenticates the user's login events (and triggers the CA Access Control sub-authentication module), in a Windows domain environment, CA Access Control needs to be installed on every DC.
- When working in a Windows domain environment, CA Access Control login policy (TERMINAL rules) need to be located on the DCs and not necessarily on the target server.

  For example, if you would like to protect or audit login events made by domain users on a file server, which is part of the Windows domain but is not a DC, the CA Access Control login policy needs to be defined on the DC and not on the target file server. This is because when a domain user accesses the shared file directory, a login authorization occurs on the DC, not the file server.
- When there is more than one DC, CA Access Control login authorization could be processed on any one of the DCs. As a result, we recommended you synchronize CA Access Control login policy between all DCs.

  You can implement this through either the Policy Model mechanism, where all DCs are subscribers to a PMDB, or by adding all DCs into a host group and deploying a common policy using advanced policy management.
- Some user properties, which correspond to login events, are updated at runtime-during event authorization. These properties might be out-of-sync because the login authorization happens only on one of the DCs. These properties are *Gracelogins*, *Last accessed*, and *Last access time*.

  That said, it is possible that, for example, the user's property *Last access time* value will be different between DCs because CA Access Control sub-authentication was triggered on one of the DCs, not on all of them.
- To enforce local users (that is, not domain users) login events, CA Access Control needs to be installed on the local computer that the local user needs access to. This is because the local computer is used as the domain computer (the domain is the local computer).
- Remote Desktop Protocol (RDP)/Terminal Services login events are enforced on the target server as it was in previous CA Access Control versions. However, for RDP login events, CA Access Control login policy should be defined on the target server.

Policy Manager Interface Discontinued

Policy Manager is not included in r12.0 and later releases. The web-based CA Access Control Endpoint Management replaces this interface. The r8 SP1 Policy Manager is upward compatible with new CA Access Control endpoints. However, it supports pre-r12.0 features only.

Audit Log Backup Files Are Protected by Default

By default, CA Access Control protects audit log backup files if you configure settings to keep timestamped backups. This is the same default protection that the size-triggered audit backup file receives. To remove these files, you need to set permissive rules in the database.

Cannot Define Record In SPECIALPGM Class for Incoming Network Interception Events

You cannot define a record in the SPECIALPGM class for incoming network interception events. This is because the incoming network interception event does not have a process name in this context. To bypass writing an audit record for the interception event, set the AUDIT property to NONE for the corresponding record in the TCP class.

Change to Default Audit Value for Some Users

Before r12.0 SP1 CR1, the default audit mode was None for the following accessors:

- Users that do not have a defined AUDIT value in their corresponding USER class record, and that are not associated with a profile group that has a defined AUDIT value.
- Any user that is not defined in the database (represented by the _undefined user record).

  Note: If you use enterprise users, CA Access Control does not consider any users as undefined. Properties of the _undefined user are not relevant in this case.

From r12.0 SP1 CR1, the default audit mode for these accessors is Failure, LoginSuccess, and LoginFailure. To retain earlier behavior, set the value of the AUDIT property to None for these users.

Change to Value of AUDIT Property for GROUP Records

If you have a GROUP record that has two functions:

- A profile that defines an audit policy for one set of users
- A container for a second set of users

From r12.0 SP1 CR1 onwards, the GROUP record also defines the audit policy for the second set of users. To avoid problems that this behavior change may cause, create a separate GROUP for the second set of users.

SAN Support

CA Access Control supports a SAN (storage area network) environment when you install CA Access Control on:

- A local file system and use it to protect files on a SAN, when the SAN is accessible from a single host.

  Note: If the SAN is accessible from multiple hosts, install CA Access Control on each host that can access the SAN and use each installation to protect files on the SAN.

- A SAN disk, subject to the following limitations:
  - CA Access Control drivers must be installed on the local file system.
  - You must manually start CA Access Control on the SAN disk each time you start or restart the computer. Do not start CA Access Control automatically when you start or restart the computer.

    Note: The previous condition only applies when you install CA Access Control on a SAN disk. If you install CA Access Control on a local file system and use it to protect files on a SAN, you do *not* need to manually start CA Access Control each time you restart the computer.

If the SAN is accessible from multiple hosts and CA Access Control is installed on the SAN, and you want to install CA Access Control from a different host to the same location on the SAN, consider the following before you begin:

- The new installation of CA Access Control replaces the existing installation of CA Access Control and overwrites the existing CA Access Control configuration files and database.
- You must stop the existing installation of CA Access Control before you begin the new installation.

Restart Message Pops Up During Installation, Uninstallation, or Upgrade on Windows Server 2008

When you install, uninstall or upgrade CA Access Control on Windows Server 2008, a dialog box may appear informing you that a restart is required after the process is complete. To continue, close the dialog box by selecting OK.

PUPM Agent Programmable Check Out Requires Case Sensitive Host Name

When using PUPM Agent programmable check-out (Application to Application) command-line interface, verify that you use case-sensitive host name.

Upgrades from r8 SP1 GA Are Not Supported

Upgrading from eTrust Access Control r8 SP1 GA version is not supported. Upgrade is supported from any r8 SP1 CR, starting with the initial r8 SP1 CR: "September 2006 - QO83379".

Install an r8 SP1 CR before you upgrade.

Uninstall Does Not Remove CA License Files

When you uninstall CA Access Control, the CA License files are not deleted. By default, the CA License files are in the CA_license directory (for example, C:\Program Files\CA\SharedComponents\CA_LIC).

Windows Endpoint Known Issues

This section describes known issues for CA Access Control for Windows.

Privileged Processes Can Save and Restore a Registry Tree Without Authorization

On Window Server 2003 and later, when a process obtains the special privileges SE_BACKUP_NAME and SE_RESTORE_NAME, it can save and restore a registry tree without CA Access Control authorization.

IA64 and x64 Architectures: Cannot Install a Prerequisite in Silent Mode

CA Access Control installation cannot install the prerequisite Microsoft Visual C++ 2005 Redistributable Package in silent mode on x64 and Itanium (IA64) architectures. To work around this issue, install the Microsoft Visual C++ 2005 Redistributable Package before you start a silent installation of CA Access Control on these architectures.

FIPS Only Mode on Windows x64

CAPKI 4.1.2 is now supported on x64 CA Access Control endpoint for Windows. However, due to a known issue with RSA, when running the CAPKI 4.1.2 in FIPS enabled mode, communication is significantly delayed.

User Mode Instrumentation 64bit Target Systems

On 64bit operating systems, user mode instrumentation is not supported on 32bit target systems.

Default Silent Upgrade Command Not Supported

When you upgrade CA Access Control r12.0 SP1 to r12.5 on x64 or IA64 operating systems in silent mode, you cannot use the default silent upgrade command:

```
setup.exe /s /v"/qn COMMAND=proceed /l*v <log-file-name>"
```

To perform a silent upgrade of CA Access Control r12.0 SP1, specify the properties that require upgrading. You must not define the Task Delegation or Report Agent properties (TASK_DELEGATION=1, REPORT_AGENT=1).

Note: For more information about silent mode installation, see the *Implementation Guide.*

Upgrade from CA Access Control r12.0 CR1 to CA Access Control r12.5 Not Supported

Currently, the silent upgrade from CA Access Control r12.0CR1 to CA Access Control r12.5 is not supported.

UNIX Endpoint Considerations

This section describes items you should consider when using CA Access Control on UNIX endpoints.

Default Installation Location

The default installation location of r12.5 is as follows:

/opt/CA/AccessControl

Versions You Can Upgrade From

You can upgrade to CA Access Control r12.5 for UNIX from r12.0 SP1, r12.0, r8 SP1, and r5.3.

Linux Kernel Recompilation

On Linux, if you recompile your kernel, you must copy the system.map file to the /boot directory to load the CA Access Control daemons.

Streams Module Is Not Active by Default

By default, the TCP, CONNECT, and HOST classes are not active and the CA Access Control kernel module is not loaded into streams. Before you activate any of these classes, be sure that the streams module is enabled for network interception.

Note: Streams module is only available for systems that support streams.

PDF Documentation Requires Adobe Reader 7.0.7

To read the documentation for CA Access Control 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.

Some Utilities Require That You Start The Kernel

You must load the CA Access Control kernel module for some utilities to use the CA Access Control kernel interface. These utilities include selogrd and selogrcd on most platforms.

RENAME Authority Depends on READ Authority on a 2.4 Kernel RHEL

On Red Hat Linux computers with a 2.4 kernel, to deny the RENAME authority you must also deny the READ authority.

SNMP Extension of selogrd Requires a Variable for a Non-Default Installation Path

If you want to use the SNMP extension of selogrd, and CA Access Control is not installed in the default location (/opt/CA/AccessControl), you must set an environment variable before running selogrd. The environment variables are as follows:

- In AIX, set LIBPATH to *ACInstallDir*/lib
- In Solaris, set LD_LIBRARY_PATH to *ACInstallDir*/lib
- In LINUX, set LD_LIBRARY_PATH to *ACInstallDir*/lib
- In HP, set SHLIB_PATH to *ACInstallDir*/lib

ACInstallDir is the directory where you installed CA Access Control.

Access to SSH Failed Login Attempts Requires PAM Configuration

To obtain failed login events from SSH, the SSH version you are using must be compiled and configured to support PAM.

If your version of SSH does not use PAM, CA Access Control cannot detect whether a user has violated the failed login rules.

PAM Configuration for CA Access Control Features

CA Access Control PAM features that rely on identifying user login attempts (for example, segrace, serevu, and log audit records) do not work if the line "auth requisite" appears before the CA Access Control line "auth optional *pam_module*" in the operating systems's PAM configuration file.

If you want PAM to write user login attempts, the PAM configuration file should contain the line "auth required *pam_module*" instead of "auth requisite *pam_module*". If you specify the control-flag *required* and the module fails, it continues to next module. If you use the control-flag *requisite* and the module fails, it exits immediately and does not reach the CA Access Control line and so *pam_module* does not run.

Note: *pam_module* is the name of the PAM module file on your platform. For example, on Linux, this is pam_unix2.so.

Lookaside Database Creation from LDAP DIT Requirements

To add information from the LDAP Directory Information Tree (DIT) to the user lookaside database that sebuildla creates (*-n* option), the computer must have LDAP v3 run-time support.

telnet and rsh Require Specific PAM Configuration

You cannot use telnet or rsh to log in to a computer if your PAM configuration file:

- Is missing the following operating system's line:

  ```
  login account    optional    /usr/lib/security/libpam_unix.1
  ```

- Has the following CA Access Control line:

  ```
  login account    optional    /usr/lib/security/pam_seos.sl
  ```

To fix this, comment out the CA Access Control line if you want PAM to use the "OTHERaccount..." line instead, or uncomment the operating system's line.

SNMP Configuration

When you set selogrd to route audit records to SNMP listeners, you can use an SNMP community name that is different from the default name ("public"). To do this, use the following format in the selogrd.cfg configuration file:

snmp *gateway@community*

gateway

Defines the SNMP gateway host name.

community

Defines the SNMP community name that matches the target SNMP environment.

Configure PAM to Work on AIX

When you use PAM to authenticate users for CA Access Control purposes (auth_login = pam), CA Access Control needs to use the PAM API library.

AIX does not provide the PAM library in a shared library format that CA Access Control can easily link to. When CA Access Control attempts to use the PAM API it fails with an error "cannot find /usr/lib/libpam.o".

To configure PAM to work on AIX

1. Locate the AIX supplied *libpam.a* archive:

   cd /usr/lib

2. This archive contains the AIX PAM shared library (shr.o).
3. Extract shr.o from libpam.a to /usr/lib:

   ar -xv libpam.a

4. Rename shr.o to libpam.o:

   mv shr.o libpam.o

syslog Messages That Have a Reduced Priority

The following syslog messages have been reduced to informational priority (INFO rather than ERROR):

- CA Access Control daemon going down.
- START-UP: CA Access Control PID=%d
- SEOS_load: use_streams=$use_streams unload_enable=$unload_enable
- Loading CA Access Control kernel extension.
- $prodname kernel extension is already loaded.
- Starting $SeosBinDir/seosd daemon. (CA Access Control)
- Watchdog started.
- Watchdog initialized Watchdog extensions.

syslog Messages Are Affected by the Product Name Change

syslog messages have been affected by the CA Access Control name change in r12.0.

Where messages contained the "eTrust AC" string before, they now contain the "CA Access Control" string.

Enterprise Users Do Not Correspond to the _undefined User

If you use enterprise users (osuser_enabled is set to 1), CA Access Control does not consider any user as undefined.

Rules for the _undefined user are not relevant in this case.

The All Users Mask (*) Applies to Users That Are Not Defined

If you do not use enterprise users (osuser_enabled is set to 0), users that are not defined in the CA Access Control database are included in rules that apply to all users (using the mask *).

If you want to exclude undefined users from rules that apply to all users, create a more specific rule for the _undefined user that defines the required access to users that are not defined in the database.

serevu Configuration

If you want to work with serevu, and *root* does not have the ADMIN attribute or terminal access to the local database, you should define the following:

```
eu _serevu admin logical
authorize terminal localTerminalName uid(_serevu) access(a)
er specialpgm $ACDIR/bin/serevu seosuid(_serevu ) unixuid(root)
```

serevu Configuration for Working with a Policy Model

If you want serevu to send commands to the PMD (which, you can configure in serevu.cfg) and *root* is not defined on the PMD with the ADMIN attribute or with terminal access, you should define the following on the PMD and all of its subscribers:

```
eu _serevu logical
authorize admin USER uid(_serevu) access(a)
# The following line can be executed on the master PMD only
authorize terminal localTerminalName uid(_serevu) access(a)
```

Compiling API Samples

You should use gmake (GNU make) and not make to compile the API samples.

Compatibility Library Missing on x86_64bit Linux

By default x86_64 Linux operating systems are not installed with the 32bit compatibility libraries. CA Access Control endpoint requires that the library libstdc++.so.6 exists under the usr/lib directory.

Verify that this library exists on the endpoint before you install CA Access Control.

FIPS 140-2 Library Upgrade

CA Access Control r12.5 uses CAPKI 4.1 instead of ETPKI 3.2. The upgrade is automatic and keeps the ETPKI 3.2 libraries on your computer if they are used by other components. To determine whether other components are using ETPKI 3.2, CAPKI uses an internal reference count. When this count equals 0, ETPKI 3.2 uninstalls on upgrade.

CAPKI 4.1 provides a static library (libcapki_stub.lib for Windows, libcapki_stub.a for UNIX) that acts as a stub for the CAPKI interface and removes the need to dynamically load the library.

More information:

FIPS Operational Modes (see page 43)

Authorization Recognizes Resource Group Ownership

CA Access Control takes into account resource group ownership when checking user authorization to a resource. This behavior was introduced in r12.0. In earlier releases, the authorization process considered only the resource's owner.

For example, you define a FILE resource with a default access of none and no owner that is a member to a GFILE resource with a named owner. In CA Access Control r12.0 and later, the named group owner has full access to the file. In earlier releases, nobody has access to the file.

Unicenter Integration is Not Supported on HP-UX Itanium and RHEL Itanium

Unicenter integration is not supported on HP-UX Itanium (IA64) and Red Hat Linux Itanium IA64.

CA Access Control Generates the Login Session ID

CA Access Control generates at startup the login session ID that it adds to audit log records. This means that a logged on user gets a different session ID within the same terminal session every time CA Access Control restarts. The session ID remains the same only within the same CA Access Control session.

Policy Manager Interface Discontinued

Policy Manager is not included in r12.0 and later releases. The web-based CA Access Control Endpoint Management replaces this interface. The r8 SP1 Policy Manager is upward compatible with new CA Access Control endpoints. However, it supports pre-r12.0 features only.

Propagating CA Access Control and UNAB to a New Solaris Zone

When you setup a new Solaris zone, there are several post installation steps you must complete before you can propagate CA Access Control and UNAB to the new zone.

Note: For more information on setting up a new zone correctly, see Sun's System Administration Guide: Solaris Containers--Resource Management and Solaris Zones, which is available at the Sun Microsystems Documentation website.

Security Administrator Discontinued

The Security Administrator Motif interface is not included in r12.0 and later releases. The web-based CA Access Control Endpoint Management replaces this interface. The r8 SP1 Security Administrator is upward compatible with new CA Access Control endpoints. However, it supports pre-r12.0 features only.

Note: As the Security Administrator is not provided, the CAeACGUI native package is not supplied. Also, the -admin option of the install_base script is no longer available.

Audit Log Backup Files Are Protected by Default

By default, CA Access Control protects audit log backup files if you configure settings to keep timestamped backups. This is the same default protection that the size-triggered audit backup file receives. To remove these files, you need to set permissive rules in the database.

Report Agent and PUPM Agent Are Not Supported on Linux IA64 and s390x

The Report Agent daemon and the PUPM Agent are not supported on Linux Itanium (IA64) and Z-series (s390x). CA Access Control does not install the Report Agent and the PUPM Agent on these operating systems regardless of the selections you make during installation.

Select the Encryption Method When Upgrading to CA Access Control r12.5 from CA Access Control r.8.0 SP1

Consider the following before you upgrade CA Access Control r8.0 SP1 to CA Access Control r12.5:

- If you choose to upgrade to CA Access Control r12.5 from CA Access Control r8.0 SP1 using the install_base -autocfg command, select the encryption method that is currently used, if the existing encryption method is either AES256, AES192 or AES128.
- If you choose to upgrade CA Access Control 12.5 from CA Access Control r8.0 SP1 using the native packages installation, customize the package and select the encryption method that is currently used, if the existing encryption method is AES256.

  Example:

  SET_SYMMETRIC="yes"

  LIB_ENCRYPTION= <1-5>

  Note: For more information about native packages installation, see the *Implementation Guide.*
- If you select to use the default encryption method during upgrade, CA Access Control sets scramble as the default encryption method and not AES256. To change the encryption method, select another encryption library.

Example: Delete Existing Encryption Library and Select A Different Library

This example shows you how to select a different encryption library. In this example, the default encryption library, scramble, is removed and a link to another encryption method, AES256 is created.

Rm –rf /SEOSDIR/lib/libcrypt

ln –s //SEOSDIR/lib/<new lib>.so.125.0 /SEOSDIR/lib/libcrypt

newlib~~ à libaes256.so.1215.0, libtripldes –etc`

Systemwide Audit Mode for UNIX Upgrades

The SYSTEM_AAUDIT_MODE property in the SEOS class specifies the default audit mode for users and enterprise users (systemwide audit mode). When you upgrade to CA Access Control r12.5, CA Access Control sets the value of the SYSTEM_AAUDIT_MODE property to the value of the DefaultAudit configuration setting in the [newusr] section of the lang.ini file.

Note: The default value of both the SYSTEM_AAUDIT_MODE property and the DefaultAudit configuration setting is Failure LoginSuccess LoginFailure.

Change to Default Audit Value for Some Users

Before r12.0 SP1 CR1, the default audit mode was None for the following accessors:

- Users that do not have a defined AUDIT value in their corresponding USER class record, and that are not associated with a profile group that has a defined AUDIT value.
- Any user that is not defined in the database (represented by the _undefined user record).

  Note: If you use enterprise users, CA Access Control does not consider any users as undefined. Properties of the _undefined user are not relevant in this case.

From r12.0 SP1 CR1, the default audit mode for these accessors is Failure, LoginSuccess, and LoginFailure. To retain earlier behavior, set the value of the AUDIT property to None for these users.

Change to Value of AUDIT Property for GROUP Records

If you have a GROUP record that has two functions:

- A profile that defines an audit policy for one set of users
- A container for a second set of users

From r12.0 SP1 CR1 onwards, the GROUP record also defines the audit policy for the second set of users. To avoid problems that this behavior change may cause, create a separate GROUP for the second set of users.

SAN Support

CA Access Control supports a SAN (storage area network) environment when you install CA Access Control on a local file system and use it to protect files on a SAN, when the SAN is accessible from the single host where CA Access Control is installed.

Note: If the SAN is accessible from multiple hosts, install CA Access Control on each host that can access the SAN and use each installation to protect files on the SAN.

If the SAN is accessible from multiple hosts and CA Access Control is installed on the SAN, and you want to install CA Access Control from a different host to the same location on the SAN, consider the following before you begin:

- The new installation of CA Access Control replaces the existing installation of CA Access Control and overwrites the existing CA Access Control configuration files and database.
- You must stop the existing installation of CA Access Control before you begin the new installation.

Note: CA Access Control behavior is unspecified when you install it on a SAN and it is executed from multiple connected hosts.

UNIX Endpoint Known Issues

This section describes known issues for CA Access Control for UNIX.

CA Access Control Must Start After ENF on Linux

On Linux, if you load ENF (the Unicenter TNG or NSM kernel for version 3.x and earlier) after the CA Access Control kernel, you cannot unload the CA Access Control kernel.

Start CA Access Control after Unicenter TNG or Unicenter NSM.

Active Directory User Cannot Change Password on Solaris

Due to Sun Solaris password limitations, users that are logging in to the UNIX host with Active Directory account, cannot change their account password using Solaris passwd tool. If the user must change the account password on the first login, the user must login from a system other than Solaris.

If UNAB is running on the UNIX host, use the following command to change the local account password:

```
passwd -r files username
```

STOP is Not Activated when Native Stack Randomization is Enforced on Linux

The STOP feature on Red Hat Linux and SuSE Linux is not activated when Linux native stack randomization (ExecShield randomize) is enforced.

On Linux s390 RHEL 4, native stack randomization does not work and must be deactivated for STOP to be active. To deactivate native stack randomization, enter the following command:

```
echo 0 > /proc/sys/kernel/exec-shield-randomize
```

Cannot Use UNIX selang Environment to Create User When passwd_format=NT

If you set the seos.ini file token "passwd_format" ([passwd] section) to "NT", you must use the "native" option (rather than “unix”) when you create a user in selang. For example:

```
nu uSr_1026 native password(uSr_1026)
```

Alternatively, make sure that you work in the native environment (rather than the unix one), as follows:

```
env native
chusr usr_1 password(mypassword)
```

install_base May Show Errors in a Solaris Zones Installation

If you install CA Access Control using *install_base* in Solaris zones, errors that are caused by attempting to write to read-only files may appear.

Use Solaris native packaging to install CA Access Control on zones.

Use of uninstall_AC on Global Zone May Prevent Zone Users from Logging In

If you uninstall CA Access Control from the Solaris global zone using *uninstall_AC* before you uninstall from all zones, users may not be able to log in to the zones.

Use Solaris native packaging to install and uninstall CA Access Control on zones.

Early RPM Package Manager Versions Fail When Building Customized Package

RPM Package Manager versions earlier than rpm-4.2.2-0.8 will fail when building a customized package (customize_eac_rpm script).

Note: This is a known issue with the RPM Package Manager. For more information refer to the Red Hat Bugzilla website and look for bug 103867.

Pre-r12.0 Versions Must Use a Maximum of 54 Characters for the Encryption Key

If your environment includes versions of CA Access Control earlier than r12.0, you must use a maximum of 54 characters for the encryption key.

When PAM is Active segrace Is Not Called for FTP and SSH Grace Login

When PAM is activated, segrace is not called automatically for a grace login to FTP and SSH services.

PAM Does Not Work on Linux s390x with Older /lib64/libc.so.6 Library

PAM on Linux s390 and s390x does not work if the /lib64/libc.so.6 library on the host is older than the version CA Access Control PAM library was compiled with.

The library version should be 2.3.2 or later.

RPM Package Verification May Return Errors

When verifying RPM package installations you may receive some verification errors.

These errors do not indicate that there are issues with the functionality of the installed product and you can safely ignore them.

CA Access Control Does Not Reset Passwords Once the Grace Period Expires

Valid on Solaris, HPUX and AIX

If UNAB is installed on the CA Access Control endpoint, CA Access Control PAM does not invoke the 'sepass' utility to reset the account password when the user password grace period expires,

This problem affects login applications that use loginflags(pamlogin), for example, SSH login, rlogin, FTP and Telnet. SSH login will not be recognized as a login action by CA Access Control on Solaris, HPUX and AIX. To workaround this problem, use loginflags(none) for SSH login applications.

Solaris Network Event Bypass Does Not Work for Some Processes

CA Access Control on Solaris does not bypass network events (bypass type PBN of SPECIALPGM records) for processes that start before CA Access Control starts.

API Libraries for Linux Z-series Are 32-bit

The API libraries that CA Access Control supplies for Linux Z-series (s390x) are 32-bit.

CA Access Control does not supply 64-bit libraries for Linux Z-series (s390x).

Client-Server Communication Mode Incompatibility

A client set up with non_ssl or all_modes cannot communicate with a server set up with fips_only communication mode.

HP-UX requires an Updated Patch Level

On HP-UX, CA Access Control requires an updated patch level to install properly. We recommend the following OS patches:

- 11.23 on IA64—Patch PHSS_37492 or OS QPK1123 Bundle that is dated September 2006 or later.
- 11.11 on PA-RISC—Patch PHSS_35716 or OS QPK Bundle that is dated December 2006 or later.
- 11.23 on PA-RISC—OS QPK Bundle that is dated December 2006 or later.

Use of selang -d on a Backed Up PMDB Can Lead to Issues

To back up a PMDB, including the advanced policy management server components (DMS and DH), use the sepmd -bd backup option introduced in r12.0.

When backing up any PMDB, avoid using the following command, which can lead to various issues:

selang -d . -f *file_name*

You should use the following command instead:

selang -p *pmd_name* -f *file_name*

Native Package Upgrade from r12.0 CR1 Does Not Work

You cannot use native packages to upgrade from r12.0 CR1 to r12.0 SP1 on Linux.

Use regular script installation to upgrade from r12.0 CR1. On Linux, you can also use the --oldpackage option when you upgrade using RPM packaging to work around this issue.

You Cannot Login to CA Access Control for UNIX Using 'Administrator' Account When UNAB Is Installed

You cannot login to CA Access Control endpoint for UNIX with the 'Administrator' Active Directory user account if UNAB is installed on the endpoint. To workaround this problem, you can create userPrincipleName for this account.

Stat Interception Calls Not Supported on AIX Systems

File access check on a stat system call with the STAT_intercept token set to "1" is not supported on AIX systems.

UNAB Considerations

This section describes items you should consider when using UNAB.

HP-UX Feature Support Limitations

The following are known UNAB and CA Access Control limitations on HP-UX operating systems:

- HP-UX Trusted Computing Base (TBC) is not supported.
- Password change for Active Directory users that do not appear in /etc/passwd, is not supported.
- seversion utility does not display SHA-1 signature.

Note: We recommend that you stop or restart the pwgrd daemon after modifying an Active Directory user account.

Login to UNAB with Active Directory Account

If you want to log in to UNAB with an Active Directory account that did not previously exist on the local host, follow these steps:

1. Register the UNAB host with Active Directory as follows:

   uxconsole -register

2. Activate UNAB as follows:

   uxconsole -activate

3. Create a UNAB login authorization (login policy) or local login policy (etc/passwd) to enable Active Directory users to log in.

License Agreement Acceptance Keyword is Case Insensitive

When customizing the UNAB or CA Access Control installation packages, note that the license agreement acceptance keyword, "Proceed", is case insensitive.

UNAB Known Issues

This section describes known issues for UNAB.

Successful Login to Host Generates an Error Message

A limitation in the UNIX PAM flow results in logging a successful login to a UNAB host as an error message, indicating that account authentication failed in the */var/log/message.*

uxconsole -manage -edit Option is Not Supported

Currently the UNAB uxconsole -manage -edit option is not supported. You cannot use the uxconsole to edit users and groups parameters before migrating them to Active Directory.

UNAB not Started by CA Access Control Watchdog on Linux x64

When running UNAB and CA Access Control 64-bit version on Linux x64, UNAB is not registered as a daemon and as a result, the CA Access Control watchdog daemon (seoswd) cannot start the UNAB daemon if it was not shut down in an orderly fashion.

UNAB Not Supported on AIX, Linux IA64, Linux 390, Solaris x86 and x64 and HPUX IA64

Currently, you cannot install UNAB on AIX, Linux IA64, Linux 390, Solaris x86 and x64 and HPUX IA64 operating systems.

UNAB Entries Contain Blank Fields in Event Viewer

UNAB events are displayed in the Windows Event Viewer with blank fields.

UNAB Does Not Support CA Access Control r8.0 SP1 and r12.0 SP1

Currently, you cannot install UNAB on CA Access Control r8.0 SP1 and r12.0 SP1 endpoints.

User Can Log In to UNAB Endpoint After UNIX Attributes Are Removed

If you use Active Directory to manage the users who can log in to UNAB endpoints, and you remove the UNIX attributes from a user, the user can still log in to UNAB endpoints.

Identical Message Queue Passwords are Required for CA Access Control Enterprise Management and UNAB

You must use identical passwords for the Message Queue on both CA Access Control Enterprise Management and UNAB. Enter the following command to set the password on the UNAB host:

acuxchkey -t -pwd *password*

Note: For more information about this utility, see the *Reference Guide*.

UNAB is not FIPS1400 and IPV6 Compliant

Currently, UNAB is not FIPS1400 and IPV6 compliant.

Ten-Second Interval between uxconsole -activate and -deactivate Commands

There is a ten-second refresh period when activating and then deactivating UNAB.

Server Components Considerations

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

RDBMS Connection Fails During Installation if Java Cannot Be Found

During CA Access Control 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.

Supported JDK and JBoss Versions

You can find supported JDK and JBoss versions on the CA Access Control Premium Edition Third Party Components DVDs.

CA Access Control Database Size Limitation

The CA Access Control database is limited to one million (1,000,000) objects. This size limitation is only likely to affect your deployment if you use advanced policy management in a large environment.

If the CA Access Control database in your enterprise is expected to hold 1,000,000 objects, you need to remove old DEPLOYMENT objects that are no longer in use.

Example: Calculating the Number of Objects in the CA Access Control Database

The following example shows you how to calculate the number of objects that you can expect to have in the DMS-the central CA Access Control management database.

In this example, we have an enterprise deployment of CA Access Control on 5000 endpoints, each holding 50 assigned policies. As a result, the DMS contains at least 250,000 objects, as follows:

5,000 endpoints X 50 policies = 250,000 DEPLOYMENT objects

If over time you create four versions of each policy, and assign these policies to each of your 5000 endpoints, the number of objects in the DMS will reach the 1,000,000 objects limit, as follows:

5,000 endpoints X 50 policies X 4 version = 1,000,000 DEPLOYMENT objects

CA Access Control Endpoint Management Shortcut Points to Port Number 8080

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

Use the following command line to define a the port to use when installing CA Access Control Endpoint Management:

install_EM_r125.exe -DJBOSS_PORT=<*18080*>

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

CA Access Control Endpoint Management Installation Instructions Refer to Both Editions of CA Access Control

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

Do Not Execute the PUPM Privileged Accounts Discovery Wizard on More Than One Endpoint Type Concurrently

PUPM does not support running the Privileged Accounts Discovery Wizard on more than one endpoint type concurrently. Running the wizard on more than one endpoint type concurrently results in failure to create privileged accounts in the PUPM database or, failure to reset the account passwords on discovery.

Always run the discovery wizard on one endpoint type at a time, verify that the wizard successfully completed the tasks and then run the wizard on another endpoint type.

CA Enterprise Log Manager Does Not Include PUPM, UNAB Reports

In this version, CA Enterprise Log Manager does not include PUPM nor UNAB reports.

CA Enterprise Log Manager Supports Only Trusted SSL Connection

When defining the connection settings of the CA Enterprise Log Manager server, define the SSL connection settings. CA Enterprise Log Manager does not support non-SSL connection.

Note: For more information about integrating with CA Enterprise Log Manager, see the *Implementation Guide*.

Special Subscription Needed to View CA Enterprise Log Manager Reports from CA Access Control Enterprise Management

To use view CA Enterprise Log Manager reports from the CA Access Control Enterprise Management interface, apply a special subscription update to your CA Enterprise Log Manager server.

To apply the subscription update

1. In CA Enterprise Log Manager, 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 Enterprise Log Manager.

   You can now view CA Enterprise Log Manager reports from CA Access Control Enterprise Management.

Set Up CA Access Control 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 Access Control Enterprise Management on, you must change the host TCP/IP settings.

To set up CA Access Control Enterprise Management to work with Active Directory on another domain

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.

Automatic Generation of Policy Undeploy Script

When you undeploy a policy that does not have an associated undeploy script, CA Access Control 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, er GPOLICY *policyName*).

Communication Issues between CA Access Control Components and CA Access Control Message Queue

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

- Report Agent
- DMS
- UNAB
- PUPM Application to Application

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 Access Control component.

CA Access Control Enterprise Management Default Encryption Method Set to 256AES

The CA Access Control Enterprise Management default encryption method is set to 256AES and not scramble.

Define a Comma Separated List of Users When Creating a PUPM Application

When defining a PUPM application in CA Access Control Enterprise Management, use a comma (,) to separate the users in the Identifier Users list. Use the following format when adding users:

user1, user2, [..]

Note: On Windows, you must provide the fully qualified user name.

Oracle Database XE Does Not Resolve the database SID as Required

Oracle Database XE does not resolve the Oracle database SID to service name in JDBC database URLs as required by CA Access Control Enterprise Management. This means that you may need to ensure that the Oracle database SID matches the Oracle database service name (SID=SERVICE_NAME) to work around this issue.

To set this, you need to modify the Oracle listener configuration file (listener.ora).

Required Upgrade Sequence

When you upgrade CA Access Control in an enterprise implementation, you should always upgrade the server components before you upgrade endpoints.

Superuser Account Required for Server Components Installations

To install any of the CA Access Control server components (such as Endpoint Management and Enterprise Management), you must log in as the superuser (root on UNIX or Administrator on Windows).

Synchronize the System Time of the CA Access Control Enterprise Management and Report Portal Computers

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

Prerequisite Kit Installer Considerations

When using the Prerequisite Kit installer utility to install CA Access Control Enterprise Management from the media, after you are prompted to insert the CA Access Control 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.

PUPM Windows Agentless Connector for Active Directory Search Limitations

When using the PUPM Windows Agentless connector to connect to Active Directory the wild card (*) and retrieve all search options do not work. To search for users you must supply the specific account details.

Do Not Use Administration API Functions Inside a seosd Exit

To avoid deadlocks, do not use any Administration API functions inside a seosd exit.

Uninstall Fails if You Are Not the Superuser

To uninstall any of the CA Access Control 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.

JCS Windows Agentless Connector Support for Active Directory

To configure the Java Connector Server (JCS) Windows Agentless connector to work with Active Directory, when you create an endpoint of type Windows Agentless, make sure you specify the host name along with the domain as follows:

computer@domain

Upgrade to CA Access Control r12.5 from CA Access Control r5.3 Is Not Supported

You cannot upgrade to CA Access Control r12.5 from CA Access Control r5.3. To upgrade to CA Access Control r12.5, we recommend that you first install CA Access Control r8.0 SP1 CR1 and then install CA Access Control r12.5.

Server Components Known Issues

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

Server Components are Not Supported on Solaris

CA Access Control Endpoint Management and CA Access Control Premium Edition Enterprise Server are not supported on Solaris computers. Ignore procedures related to installing and using these components on Solaris in the documentation.

You can only install these CA Access Control Endpoint Management and CA Access Control Premium Edition Enterprise Server on supported Windows computers.

Control Characters May Cause an Application Exception

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

CAPKI 4.1.2 Is Not Supported on x64 CA Access Control Endpoint for Windows

CAPKI 4.1.2 is not supported on x64 CA Access Control endpoint for Windows. When running the CAPKI 4.1.2 in FIPS enabled mode, communication is significantly delayed.

Incomprehensible Characters In the User Interface

Symptom:

When I log into the CA Access Control 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 Access Control Enterprise Management on a fully internationalized database instance.

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 Access Control Endpoint Management running on a Windows computer manages a UNIX endpoint.

Report Portal Installation Fails If C:\temp Does Not Exist

By default, the Report Portal installation creates a log file on C:\temp. If this directory does not exist, the installation will fail without any feedback. Make sure this directory exists or customize the location of the log file.

Reset Host Does Not Work If GHNODE Name Contains a Space

In CA Access Control Enterprise Management, if a host group (GHNODE) contains a space character in its name and you try to reset a host (HNODE) that is a member of that host group, the reset operation fails. CA Access Control returns the following message:

ERROR: Executing command: 'cr GHNODE *GHNODE Name* mem-("*HNODE_Name*") noexit' failed with error code: 10057.
ERROR: Syntax error
ERROR: Invalid token *Name*

To work around this issue, do not include a space character in host group names.

"Encapsulation Page Failed" Error Message When Viewing or Scheduling Reports

An "Encapsulation Page Failed" error message appears when you try to view or schedule the following reports:

- CA Access Control PUPM Users by Privileged Account
- CA Access Control PUPM Roles and Privileged Accounts by User

List of Values Does Not Refresh Automatically When Data Sources Change

On the Report Portal, the List of Values (LOV) in the standard reports CA Access Control provides out-of-the-box does not refresh automatically when data source environments change. This is a known issue with BusinessObjects. You must manually refresh LOVs when you schedule reports.

To refresh these values manually

1. Click Start, Programs, BusinessObjects XI Release 2, BusinessObjects Enterprise, BusinessObjects Enterprise Java Administration Launchpad.

   The Business Objects Business Intelligence platform Administration Launchpad opens in a web-browser.

2. Click Central Management Console.

   The Central Management Console Home page appears.

3. Click Folders in the Organize pane on the left.

   The Top Level Folders page appears.

4. Click the CA Reports folder.

   The CA Reports page appears, displaying the list of folders in CA Reports.

5. Click CA Access Control.

   A page displaying all of the reports available in this folder appears.

6. For each of the CA Access Control Crystal Reports displayed in the list, do the following:

   a. Click the report.

      A page displaying the properties of the report appears.

   b. Click Refresh Options in the Properties tab of the page.

      A list of properties you can refresh appears.

   c. Click Select All, click Refresh Report, then click Update.

      The selected Crystal Report refreshes.

Refresh Mechanism in On-Demand Reports Stops Working After a Manual Refresh

On the Report Portal, if you follow the procedure for manually refreshing reports (see page 89) the refresh mechanism in On-Demand reports stops working. To correct this, change the global refresh setting as follows.

To change the global refresh setting on Windows

1. Open the Windows Registry Editor.
2. Navigate to the following registry key:

   HKEY_LOCAL_MACHINE\SOFTWARE\Business Objects\Suite 11.0\Crystal Reports\
3. Click Edit, New, Key.

   A new registry key appears.
4. Rename the key to *Database*.
5. In the new key, click Edit, New, String Value.

   A new registry entry of type REG_SZ appears.
6. Rename the entry to *AlwaysRefreshUniverseLOV*.
7. Double-click the entry and edit its Value data to 1.

   The new registry entry is set.

To change the global refresh setting on Solaris

1. Open a terminal window.
2. Source the env.sh file in the setup directory of the BusinessObjects installation path as follows:

   ../bobje/setup/env.sh
3. Enter **regedit** on the command line.

   The Mainwin registry appears.
4. Navigate to the following entry:

   HKEY_LOCAL_MACHINE\SOFTWARE\Business Objects\Suite 11.0\Crystal Reports\
5. Create a new key called Database.
6. In the Database key, create a new string value *AlwaysRefreshUniverseLOV* with the value 1.

Note: This is a global setting and has a performance impact on all BusinessObjects reports on this server. Values in input parameter lists are not cached in this configuration.

Japanese Reports Viewable in InfoView Only

You can view the following CA Access Control Japanese reports only from InfoView and not from CA Access Control Enterprise Management:

- Baseline Resource Compliance
- Group Privileges

Login to CA Access Control Enterprise Management Using Active Directory Administrator Account

When Active Directory is the user store for CA Access Control Enterprise Management, you must log in to CA Access Control Enterprise Management with the Active Directory account that you provided during the installation and not with the built-in superadmin account. When using Active Directory for the user store, the superadmin account is not assigned the admin role of SystemManager and you should not use it to administer CA Access Control Enterprise Management.

Cannot Display r5.3 Audit Records

CA Access Control Endpoint Management cannot display audit records for eTrust Access Control r5.3. Use seaudit to display audit records from endpoints using this version of the product.

Cannot Change Active Directory Account Password using CA Access Control Enterprise Management Windows Connector

The CA Access Control Enterprise Management Windows connector does not support changing Active Directory account password. You can use the CA Access Control Enterprise Management Windows connector to change the passwords of local Windows accounts.

PMDB Audit Records Are Not Visible When Managing the PMDB

When you manage a PMDB using CA Access Control 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.

Cannot Change the Trust Property of a Monitored File

In CA Access Control 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.

Do Not Use '$' Character for CA Access Control Enterprise Management Database Password

Symptom:

When I install CA Access Control Enterprise Management, I enter the database password and receive the following error message: "Database version could not be detected".

Solution:

CA Access Control Enterprise Management installation displays this error message if you enter a '$' character at the end of the password. If you must place a '$' character at the end of the password, you must change the database password after the installation.

Note: For more information about password management, see the *Reference Guide*.

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

When modifying UNAB host or host group settings and submitting the changes, CA Access Control 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.

CA Access Control Enterprise Management Time-Out When Creating Large Policies

The CA Access Control 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 Access Control Enterprise Management creates the policy. To work around this problem, open a new session by logging in to CA Access Control Enterprise Management from a new browser.

Non-English Installation Displays Some English Text

CA Access Control Enterprise Management installation in non-English mode displays some English text.

Uninstall Displays CA Identity Manager Uninstall Screen

When you uninstall CA Access Control Enterprise Management, the wizard displays an CA Identity Manager uninstall screen.

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 Access Control provides contain a trailing backslash: _AC_WEBSERVICE, _APACHE, _JBOSS, _MS_SQL_SERVER, and _ORACLE.

Access Roles Are Not Supported in CA Access Control Enterprise Management

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

Report Portal Fails to Load a Service

Valid on Windows

After you restart a Windows Report Portal, the following message appears:

At least one service or driver failed during system startup.
Use Event Viewer to examine the event log for details

This message appears because the BusinessObjects Desktop Intelligence service does not load automatically. This does not affect the CA Access Control reporting service as it does not use this service.

To work around this issue, change the startup type of the service to *Manual*.

Policy Script Validation Error Messages Are in a Different Language

Valid in CA Access Control Enterprise Management

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

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

PUPM Windows Agentless Connector for Active Directory Search Limitations

When using the PUPM Windows Agentless connector to connect to Active Directory with more then 2000 users, the wild card (*) and retrieve all search options do not work. To search for users you must supply the specific account details.

PUPM Windows Agentless Connector Does Not Support Windows 2000

The PUPM Windows Agentless connector does not support Windows 2000 Server.

PUPM Is Not FIPS1400 and IPV6 Compliant

Currently, PUPM is not FIPS1400 and IPV6 compliant.

Documentation Known Issues

This section describes known issues for the CA Access Control 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 Access Control and is provided as a courtesy with the CA Access Control r12.5 documentation.

Appendix A: Third-Party License Agreements

This section contains the following topics:

Software Under the Apache License (see page 96)
Software Under the Daniel Veillard License (see page 103)
Software Under the OpenLDAP License (see page 105)
AES 2.4 (see page 108)
AIX JRE 1.4.2 (see page 109)
AIX JRE 1.5.0 (see page 109)
ANTLR 2.7.5H3 (see page 110)
CPAN Perl 5.8.8 (see page 111)
CRC32 (see page 112)
Cyrus SASL 2.1.22 (see page 114)
dom4j 1.5 (see page 117)
Hibernate 3.2 (see page 118)
ICU4C 3.4 (see page 119)
JBoss 4.0.1 SP1 (see page 120)
JBoss Application Server v.4.2.3 (see page 121)
JBoss Native v.2.0.6 (see page 122)
JDOM 1.0 (see page 123)
MD5 Message Digest Algorithm (see page 126)
MIT Kerberos v5 r1.5 (see page 128)
nss_ldap 2.62 (see page 151)
OpenSSL 0.9.8.d (see page 158)
Oracle JDBC Driver 10g Release 2 (10.2.0.1.0) (see page 164)
PCRE 6.3 (see page 169)
Rhino 1.6r4 (see page 171)
SAXPath 1 (see page 172)
SHA-1 (see page 175)
Sun JDK 1.4.2_13 (see page 176)
Sun JDK 1.6.0 (see page 187)
Sun JRE 1.5.0_18 (see page 202)
XNTP v.3-5.93 (see page 216)
XScreenSaver (see page 217)
Zlib 1.2.3 (see page 217)
ZThread 2.3.2 (see page 218)

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
- 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 1.04
- Commons Pool 1.3
- Commons Validator 1.2
- 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

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- 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

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Version 2.0, January 2004

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RFC 1321 MD5 Message-Digest Algorithm April 1992

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Kerberos Version 5, Release 1.5.3

Release Notes

The MIT Kerberos Team

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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 zxpf 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 compile and install Kerberos V5 on any platform, you may send mail to 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

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* 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/fixed-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/fixed-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 -I/usr/include

3013 Man pages for fakeka and krb524init

3014 texinfo variable fixes, info dir entries

3030 Bug report: Kinit has no suport 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 kadmin.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 HPUX 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]

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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

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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.

nss_ldap 2.62

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