

Sun Java™ System Identity Manager Release Notes

Version 7.0 October 2006

Part Number 819-6122-10

These Release Notes contain important information available at the time of release of Sun Java System Identity Manager 7.0. New features and enhancements, known issues and limitations, and other information are addressed here. Read this document before you begin using Identity Manager 7.0.

Third-party URLs are referenced in this document and provide additional, related information.

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Supported Software and Environments

This section lists software and environments that are compatible with Identity product software:

- [Operating Systems](#)
- [Application Servers](#)
- [Browsers](#)
- [Repository Database Servers](#)
- [Sun Identity Manager Gateway](#)
- [Supported Resources](#)
- [Web Servers](#)
- [Discontinued Software](#)

NOTE Because software product developers frequently ship new versions, updates, and fixes to their software, the information published here changes often. Review the release notes for updates before proceeding with installation.

Operating Systems

This release of Identity Manager supports the following operating systems:

- AIX 4.3.3, 5.2, 5L v5.3
- HP-UX 11i v1, 11i v2
- Microsoft Windows 2000 SP3 or above
- Microsoft Windows 2003
- Solaris 8, 9, 10 Sparc and x86
- Red Hat Linux Advanced Server 2.1
- Red Hat Linux Enterprise Server 3.0, 4.0
- Novell SuSE Linux Enterprise Server 9 SP1

Application Servers

The application server you use with Identity Manager must be Servlet 2.2-compliant and installed with the included Java platform (unless noted as follows). Identity Manager requires JDK 1.4.2 or higher.

- Apache® Tomcat
 - Version 4.1.x (with JDK 1.4.2)
 - Version 5.0.x (with JDK 1.4.2)
 - Version 5.5.x (with JDK 1.5)
- BEA WebLogic® Express 8.1 (with JDK 1.4.2 or higher)
- BEA WebLogic® Server™ 8.1 (with JDK 1.4.2 or higher)
- BEA WebLogic® Server™ 9
- IBM WebSphere® 6.0
- IBM WebSphere® Application Server - Express Version 5.1.1 (with JDK 1.4.2)
- JBoss Application Server 4.0.4
- Sun™ ONE Application Server 7
- Sun Java™ System Application Server Platform Edition 8
- Sun Java™ System Application Server Platform Edition and Enterprise Edition 8.1

NOTE If your current application server does not support JDK 1.4.2 or higher, please check with your vendor to examine the implications of upgrading to one that does before installing Identity Manager 7.0

Browsers

Identity Manager supports the following browsers:

- Microsoft Internet Explorer 5.x and later
- Safari v2.0 and later for Mac OS X 10.3.3 and later
- Mozilla 1.78 (with JRE 1.5)
- Firefox 1.04, 1.05, 1.06, 1.5 (with JRE 1.5)

Repository Database Servers

Identity Manager supports the following repository database servers:

- IBM® DB2® Universal Database for Linux, UNIX®, and Windows® (Version 7.x, 8.1, 8.2)
- Microsoft SQL Server™ 2000, 2005
- MySQL™ 4.1, 5.0
- Oracle 9i® and Oracle Database 10g, 10g Release 1 and 10g Release 2®

Sun Identity Manager Gateway

If you plan to set up Windows Active Directory, Novell NetWare, Novell GroupWise, Exchange 5.5, Remedy, Lotus Domino or RSA ACE/Server resources, you should install the Sun Identity Manager Gateway.

Supported Resources

Identity Manager software supports these resources:

- [Customer Relationship Management \(CRM\)](#)
- [Databases](#)
- [Enterprise Resource Planning \(ERP\)](#)
- [Help Desk](#)
- [Message Platforms](#)
- [Message Queue](#)
- [Operating Systems](#)
- [Role Management System](#)
- [Security Managers](#)
- [Web Access Control](#)

Customer Relationship Management (CRM)

- Siebel version 6.2, 7.0.4, 7.7, 7.8 CRM software.

Databases

- Generic database table
- IBM® DB2® Universal Database for Linux, UNIX®, and Windows® (7.x, 8.1, 8.2)

- Microsoft® Identity Integration Server (MIIS) 2003
- Microsoft SQL Server 2000, 2005
- MySQL™ 4.1.x, 5.x
- Oracle 9i®
- Oracle Database 10g Release 1®
- Sybase Adaptive Server® 12.x
- Scripted JDBC

Directories

- LDAP v3
- Microsoft® Active Directory® 2000, 2003
- Novell® eDirectory on Novell NetWare 5.1, 6.0
- Open LDAP
- Sun™ ONE Directory Server 4.x
- Sun Java™ System Directory Server 5 2004Q2, 2005Q1

NOTES

• While Identity Manager is tested on Sun™ ONE Directory Server and Open LDAP, LDAP servers that are v3-compliant may work without any changes to the resource adapter.

• Sun Java™ System Directory Server 5 2005Q1 requires a patch to the Directory Server retro changelog plugin if you are using Active Sync. This patch is required for “regular” replication only (not for MMR replication).

Enterprise Resource Planning (ERP)

- Oracle E-Business Suite on Oracle Applications 11.5.9, 11.5.10
- Peoplesoft® PeopleTools 8.1 through 8.4.2 with HRMS 8.0 through 8.8
- SAP® R/3 v4.5, v4.6
- SAP® R/3 Enterprise 4.7 (SAP BASIS 6.20)
- SAP® NetWeaver Enterprise Portal 2004 (SAP BASIS 6.40)
- SAP® NetWeaver Enterprise Portal 2004s (SAP BASIS 7.00)

Help Desk

- Remedy® Help Desk 4.5, 5.0.

Message Platforms

- Blackberry RIM Enterprise Server 4+ (uses generic Windows script adapter)
- Sun Java System Messaging and Calender Service
- Lotus Notes® 5.0, 6.5, 6.5.4 (Domino)
- Microsoft® Exchange 5.5, 2000, 2003
- Novell® GroupWise 5.x, 6.0

NOTES

- Microsoft Exchange 2000 and 2003 are managed through the Microsoft Windows Active Directory 2000 and 2003 resources.
 - The BlackberryResourceAdapter will not be supported in a future release. Future implementations that require resource adapters for Blackberry Enterprise Server Version 4+ should be based on the ScriptedGatewayResourceAdapter.
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Message Queue

- JMS Message Queue Listener

Operating Systems

- HP OpenVMS 7.2
- HP-UX 11.0, 11i v1, 11i v2
- IBM AIX® 4.3.3, 5.2, 5L, v5.3
- IBM OS/400® V4r3, V4r5, V5r1, V5r2, V5r3, V5r4
- Microsoft Windows® NT® 4.0
- Microsoft Windows® 2000, 2003
- Generic UNIX Shell Script
- Generic Windows Script Adapter (uses Gateway)
- Red Hat Linux 8.0, 9.0
- Red Hat Linux Advanced Server 2.1
- Red Hat Linux Enterprise Server 3.0, 4.0

- Sun Solaris™ 8, 9, 10
- SuSE Enterprise 9

Role Management System

- BridgeStream SmartRoles

Security Managers

- ActivCard® 5.0
- eTrust CA-ACF2® Security
- Natural
- IBM RACF®
- Scripted Host
- INISafe Nexess 1.1.5
- RSA ClearTrust 5.5.2, 5.5.3
- RSA® SecurID® 5.0, 6.0
- RSA® SecurID® 5.1, 6.0 for UNIX
- eTrust CA-Top Secret® Security 5.3

Web Access Control

- IBM Tivoli® Access Manager 4.x, 5.1
- Netegrity® Siteminder® 5.5
- RSA® ClearTrust® 5.0.1
- Sun™ ONE Identity Server 6.0, 6.1, 6.2
- Sun™ Java System Identity Server 2004Q2
- Sun™ Java System Access Manager 6 2005Q1, 7 2005Q4 (Realms supported as of 2005Q4)

Web Servers

NOTE Integration between an application server and Web server is not required for Identity Manager. You may choose to use a Web server for better load balancing and for increased security (through the https protocol).

- Apache 1.3.19
- iPlanet 4.1
- Microsoft Internet Information Server (IIS) 4.0, 5.0
- Sun™ ONE Web Server 6

Discontinued Software

Identity Manager will discontinue support for the following software packages that are used as application servers, database repositories and managed resources. Support will continue until the next major release of Identity Manager. Please contact your Customer Care representative or Customer Support if you have questions about moving to newer versions of these software packages.

Software Category	Software Package
Operating Systems	<ul style="list-style-type: none">• IBM AIX 4.3.3• Microsoft Windows NT 4.0
Application Servers	<ul style="list-style-type: none">• Apache Tomcat 4.1.x• Sun ONE Application Server 7
Repository Database Servers	<ul style="list-style-type: none">• MySQL 4.1
Resources	<ul style="list-style-type: none">• ActivCard 5.0• Lotus Notes (Domino) 5.0• Microsoft Exchange 5.5• Microsoft Windows NT 4.0• MySQL 4.1• Red Hat Linux 8.0• SAP R/3 v4.5, v4.6• Siebel 6.2• Sun ONE Identity Server 6.0

The following dependent software will no longer be supported in Identity Manager 7.0

Software Category	Software Package
Database Servers	<ul style="list-style-type: none"> Oracle 8i IBM DB2 Universal Database for Linux, UNIX, and Windows 7.0
Operating Systems	<ul style="list-style-type: none"> Solaris 7 IBM DB2 Universal Database for Linux, UNIX, and Windows 7.0
Resources	<ul style="list-style-type: none"> Microsoft Exchange 5.5 IBM DB2 7.0

Official Support of the NT4 Resource Adapter

As we continue in our progress to deliver new and improved functionality in our latest releases, please accept this as the End-of-Life (EOL) notice for older versions. Plans for EOL are based on Microsoft's drop of the NT4 operating system support. Sun is discontinuing support of the NT operating system but not the rest of the NT adapter functionality. Sun is committed to continued support for customers using the NT operating system until late 2006.

API Support

The Identity Manager 7.0 Application Programming Interface (API) includes any public class (and any public or protected method or field of a public class) listed in the following table.

API Type	Class Names
Session	<ul style="list-style-type: none"> com.waveset.msgcat.* com.waveset.util.* com.waveset.object.* com.waveset.exception.* com.waveset.expression.* com.waveset.config.* com.waveset.session.SessionUtil com.waveset.session.ScriptSession com.waveset.session.SessionFactory com.waveset.session.Session com.waveset.session.UserViewConstants

Adapter	com.waveset.adapter.* com.waveset.util.Trace
Policy	com.waveset.policy.PolicyImplementation com.waveset.policy.StringQualityPolicy
Report	com.waveset.report.BaseReportTask
Task	com.waveset.task.Executor com.waveset.task.TaskContext
UI	com.waveset.ui.FormUtil com.waveset.ui.util.RequestState com.waveset.ui.util.html.*
Workflow	com.waveset.provision.WorkflowServices com.waveset.session.WorkflowServices com.waveset.workflow.WorkflowApplication com.waveset.workflow.WorkflowContext

Identity Manager SPE additionally includes the public classes listed in the following table.

API Type	Class Names
SPE	com.sun.idm.idmx.api.* com.sun.idm.idmx.txn.TransactionPersistentStore com.sun.idm.idmx.txn.TransactionQuery com.sun.idm.idmx.txn.TransactionSummary

These classes are the only classes that are officially supported. If you are using classes that do not appear in these tables, contact Customer Support to determine whether you will be required to migrate to a supported class.

Deprecated APIs

The [Deprecated API](#) section in these Release Notes lists all Identity Manager Application Programming Interfaces (APIs) deprecated in this release and their replacements (if available).

Upgrade Paths and End of Service Life

This section provides information about the upgrade paths you should follow when upgrading Identity Manager, and describes Identity Manager's End of Service Life (EOSL) policy for the products software support.

Identity Manager Upgrade Paths

Use the following to determine the upgrade path you must follow when upgrading to a newer version of Identity Manager.

Current Version	Target Version			
	5.0	2005Q3M1	2005Q4M3	7.0
Waveset Lighthouse 4.1 SPx	5.0	5.0 > 2005Q3M1	5.0 > 2005Q4M3	5.0 > 2005Q4M3 > 7.0
Identity Manager 5.0 SPx		2005Q3M1	2005Q4M3	2005Q4M3 > 7.0
Identity Manager 2005Q1M3 Identity Auditor 1.0		2005Q3M1	2005Q4M3	2005Q4M3 > 7.0
Identity Manager 2005Q3M1 Identity Manager 5.5			2005Q4M3	2005Q4M3 > 7.0
Identity Manager 2005Q3M3 Identity Manager SPE 1.0			2005Q4M3	2005Q4M3 > 7.0
Identity Manager 2005Q4M3 Identity Manager 6.0				7.0

NOTE

- When upgrading Identity Manager, you do not have to install Service Packs within a major release to upgrade to the next major release. For example, when upgrading from Identity Manager 5.0 to 6.0, you do not have to install any of the 5.0 Service Packs.
- Service Packs for a major release are cumulative. After upgrading to the major release, you can install the latest service pack without having to install all of the service packs for that release. For example, if you upgraded to Identity Manager 5.0, installing SP6 gives you all of the functionality provided in SP1 through SP5.

Updates to the Identity Manager documentation are provided as follows:

- **For Every release** (including Service Packs): Release Notes are provided to describe bug fixes, product enhancements, new functionality, and other important information.
- **For Major releases** (x.0): The complete Identity Manager documentation set is updated and republished.
- **For Minor releases and service packs**: Individual publications are updated and republished or Documentation Addendum are provided.

End of Service Life for Software Support

During the End of Service Life (EOSL) period, Identity Manager software support is offered in two phases:

- *Phase 1: Full Support*
- *Phase 2: Limited Support*

NOTE The length of the Full Support Phase varies by product.

Full Support Phase

During the Full Support Phase, Sun Microsystems, Inc. provides software support in accordance with the customer's support contract with Sun (including the applicable Service Listing) as set forth at:

<http://www.sun.com/service/servicelist/>

However, when a software product's EOL date is announced, customers will no longer have access to software updates and upgrades for that software product.

Limited Support Phase

During the Limited Support Phase, Sun Microsystems, Inc. provides software support in accordance with the customer's support contract with Sun (including the applicable Service Listing) as set forth at:

<http://www.sun.com/service/servicelist/>

However, customers are not entitled to submit bugs or to receive new patches from Sun Microsystems, Inc. As with Full Support Phase, when a software product's EOL date is announced, customers will no longer have access to software updates and upgrades for that software product.

The following table provides information about the EOSL and EOL dates for older versions of Identity Manager.

Product Name	Product Status	Last Ship Date	Phase 1 End Date	Phase 2 End Date (EOSL)	EOL Announcement
Sun Java System Identity Manager 6.0 2005Q4		05/25/2007	05/25/2008	05/2012	11/20/06
Sun Java System Identity Auditor 1.0 2005Q1	Post-RR	02/02/2007	02/2008	02/2012	08/01/06
Sun Java System Identity Manager Service Provider Edition 1.0 2005Q3	Post-RR	02/02/2007	02/2008	02/2012	08/01/06
Sun Java System Identity Manager 5.0 2004Q3	EOL	08/11/2006	08/2007	08/2011	02/07/06
Sun Java System Identity Manager 5.0 SPx 2004Q3	EOL	08/11/2006	08/2007	08/2011	02/07/06
Sun Java System Identity Manager 5.5	EOL	08/11/2006	08/2007	08/2011	02/07/06
Waveset Lighthouse 4.1			03/2006	03/2010	

Redistributable Files

Sun Java System Identity Manager 7.0 does not contain any files that you can redistribute.

How to Report Problems and Provide Feedback

If you have problems with Sun Java System Identity Manager, contact Sun customer support using one of the following mechanisms:

- Sun Software Support services online at <http://www.sun.com/service/sunone/software>

This site has links to the Knowledge Base, Online Support Center, and ProductTracker, as well as to maintenance programs and support contact numbers.

- The telephone dispatch number associated with your maintenance contract

So that we can best assist you in resolving problems, please have the following information available when you contact support:

- Description of the problem, including the situation where the problem occurs and its impact on your operation
- Machine type, operating system version, and product version, including any patches and other software that might be affecting the problem
- Detailed steps on the methods you have used to reproduce the problem
- Any error logs or core dumps

Sun Welcomes Your Comments

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Additional Sun Resources

Useful Sun Java System information can be found at the following Internet locations:

- Documentation for Sun Java™ System Identity Manager
<http://docs.sun.com/app/docs/coll/1514.1>
- Sun Java System Documentation
<http://docs.sun.com/prod/java.sys>

- **Sun Java System Professional Services**
<http://www.sun.com/service/sunps/sunone>
- **Sun Java System Software Products and Service**
<http://www.sun.com/software>
- **Sun Java System Software Support Services**
<http://www.sun.com/service/sunone/software>
- **Sun Java System Support and Knowledge Base**
<http://www.sun.com/service/support/software>
- **Sun Support and Training Services**
<http://training.sun.com>
- **Sun Java System Consulting and Professional Services**
<http://www.sun.com/service/sunps/sunone>
- **Sun Java System Developer Information**
<http://developers.sun.com>
- **Sun Developer Support Services**
<http://www.sun.com/developers/support>
- **Sun Java System Software Training**
<http://www.sun.com/software/training>
- **Sun Software Data Sheets**
<http://www.sun.com/software>

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Identity Manager 7.0 Features

What's New in This Release

Sun Identity Manager 7.0 merges three products: Identity Manager, Identity Manager SPE, and Identity Auditor into the single product Sun Java System Identity Manager 7.0. This integrated solution gives a consistent and scalable means to apply identity-based controls across provisioning and auditing processes.

Other new features include:

- Enhanced Auditor features, including
 - Support for periodic access review
 - Summary and detailed Separation of Duty reports
 - Enhanced interface with single-click access to remediation and access review work items
- Deployment-ready User Interface, including
 - Single-click access to work items
 - A tabbed panel for easy navigation and customization
- Service Provider updates, including
 - Directory-based delegated administration
 - Support for workflow callouts and notifications
- A new Identity Manager Integrated Development Environment built on NetBeans
- Additional features, including
 - Support for SPML 2.0
 - Metrics reporting with tracked events

The [Features Summary](#) section provides additional information about new features provided in Identity Manager 7.0.

Features Summary

This section summarizes the new features in Identity Manager 7.0.

Installation and Update

- Identity Manager now supports Oracle Database 10g Release2® as a repository. (ID-12908)
- `UserEntitlement` objects are now stored in their own table in the database. (ID-13612)

For an upgrade to an existing Identity Manager installation, the appropriate `upgradeto70.*` database script must be run before Identity Manager 7.0 is upgraded. These scripts add the database tables needed to support the Identity Manager Periodic Access Review objects.

- The license structure has been removed from the product. An upgrade to Identity Manager 7.0 will be fully functional for all products. There are no license panels or command-line options for the license. If you attempt to license the product, you will get the “command not found” error. (ID-13632 13501)

Administrator and User Interfaces

- The Identity Attributes page now displays a Passwords section, which describes the status of password generation with respect to the Identity attributes. You can configure Identity Manager to assign passwords to new users based on a default value, a rule, or by assigning an Identity System Account Policy that generates passwords. (ID-10274, 12560)
- The `treetable` component now supports adjustable columns. You can now set column widths in the user list and resource list tables via CSS to a fixed pixel or percentage value. You can also resize the columns using the mouse by clicking and dragging the right border of the column header. (ID-11474)
- The account and resource tree tables now allow sorting of their contents. (ID-12086)
- The menu hierarchy for the end-user pages is now customizable. (ID-12415)
- Identity Manager now includes a default Manager attribute, which provides support for a built manager-employee relationship. This information is stored on the Identity Manager user object. (ID-12416)
- All page-level error and informational messages are now displayed at the top of the page in a box with an error or information icon. Previously, these messages were displayed with either red text for errors or with a small icon for informational messages. (ID-12625)
- A user can now request that access be granted or removed for roles and resources memberships. A manager can also perform this function for a subordinate employee. (ID-13018)

- You can now change the polarity of the alternating gray and white row colors by adding the `rowPolarity` property to EditForm components in XPRESS. A value of true is the default behavior. A value of false inverts the polarity and gives the first form field a white background. (ID-13971)
- The User Interface now supports a Self Discovery link. The “Inform Identity system of other accounts” link has been moved from the end-user home page to the new Self Discovery tab in the navigation bar under Profile. (ID-14698)
- The following table lists how tabs and subtabs have been rearranged in this release:

Tabs in Previous Release		Tabs in This Release		Comments
Approvals		Work Items >	Approvals	
			My Work Items	This new tab displays a summary of all work items and provides a launching point for resolving work items.
			Attestations	This new tab supports the Periodic Access Review feature; allows users to resolve attestation work items
			Other	This new tab allows users to resolve assigned work items other than Approvals, Attestations, or Remediations
			History	This tab displays a report of all approvals, rejections, mitigations, and remediations that have been performed by the user
			Delegate My Work Items	This new tab enables delegation of all work items to another user.
		Compliance >	Manage Policies Manage Access Scans Access Review	These new tabs are used to set up and manage audit policies and access reviews.
Configure >	Reports	Reports >	Configure	This tab change more closely aligns the reporting features.
Configure >	Managed Resources	Resources >	Configure Types	This tab change more closely aligns this function with resources.
Configure >	Admin Roles Capabilities Certificates Login Policies	Security >	Admin Roles Capabilities Certificates Login Policies	The Security tab is new in this release to realign the features related to secure account access and privileges.
Configure >	Meta View	Meta View >	Identity Attributes Identity Events	This tab enables you to directly edit identity attributes and events.
Risk Analysis >	Run Reports Manage Reports	Reports >	Run Risk Analysis View Risk Analysis	This tab change aligns these reports with other reports.
Service Provider Edition	Dashboard Graphs View Dashboards	Reports >	Dashboard Graphs View Dashboards	These new subtabs under Reports represent new features merged from the Service Provider Edition that enable viewing and grouping of graphical reports.

Tabs in Previous Release		Tabs in This Release		Comments
Service Provider Edition		Accounts	Manage Service Provider Users	This tab enables you to manage service provider user types in the Identity Manager interface.
Service Provider Edition >	Search Transactions	Server Tasks	Service Provider Transactions	The Search Transactions tab has been moved from the Service Provider tab in Service Provider Edition to the Service Provider Transactions tab under the Server Tasks tab
Tasks		Server Tasks		This tab is renamed to better reflect that tasks are processes to be run on the server.

Tab changes from Identity Auditor Interface to Identity Manager 7.0 Interface

Compliance >	Users Policy View Resource View Organization View	Accounts	User Actions menu	All user actions are performed from the Accounts tab in Identity Manager. The Policy View, Resource View and Organization View tabs have been removed; their corresponding reports are still available on Reports tab. The "View Compliance Violation Log" and "View Compliance Status" actions are now available in the User Actions.
Controls >	Manage Policies	Compliance >	Manage Policies	
Configure >	Policies	Accounts >	User Actions menu	Edit User Audit Policies Edit Organization Audit Policies
Remediations >	Remediations Pending Completed	Work Items >	Remediations History	Pending and Completed tabs have been removed. Remediations tab displays pending remediations. History tab displays completed remediation work items.
Reports >	Run Reports Manage Reports	Reports >	Run Reports View Reports	All auditor reports are available from the Reports tab by choosing the Auditor Reports type.
Tasks		Server Tasks		

Auditing

- Identity Manager and Identity Manager SPE have merged their two auditing frameworks, with the following changes: (ID-13148)
 - Identity Manager and Identity Manager SPE no longer have separate audit logging frameworks.
 - The audit logging interfaces of Identity Manager SPE have been deprecated.
 - The unified audit logging service allows third parties to develop custom audit publishers to handle Identity Manager as well as Identity Manager SPE related audit events.
 - Javadoc-style documentation of the new public interfaces is available in the reference kit.
 - Sample code demonstrating the pluggable features of the audit logging framework has been added to the reference kit.

Auditor

Periodic Access Review provides the facility to automate the gathering and attestation to user's current access rights to critical systems and applications. This feature allows records to be created that contain the current access a user has to one or more systems and applications. Each of these records can be automatically attested by policy rules, or routed to the appropriate person for manual attestation. (ID-9719)

Access Review is typically performed on a regular basis to ensure that users have not accrued excessive access to critical systems. By keeping user access data for multiple systems and applications in a single record, the reviewers have a complete understanding of the user, which enhances their ability to make an accurate judgement. The automated process is supported by tracking tools that indicate how much work the review has completed, how much is left, and who is responsible for the remaining work. The review process is integrated with traditional audit policy scanning such that reviews can perform both compliance checking (audit policy scanning) and access review (reporting and attestation).

Access Review can be customized to provide additional automation, including:

- Rule-based determination if a user should be attested or not
- Rule-based determination if a user can be automatically attested/rejected
- Rule-based determination for who should perform manual attestation on a specific user
- Workflow-based manual attestation, including forwarding, delegation and escalation
- Attestors do not need to be IdM administrators - any IdM account will work

Separation of Duties reporting is also new to Auditor, providing the means to capture specific access conflicts that allow a user to bypass internal safeguards. (ID-12716) These conflicts are most serious in ERP and Financial systems where a conflict violation can result in financial errors. Auditor captures such conflicts with a violation record that indicates the user, system/application, and specific conflict including exact account settings that infer the conflict. Auditor Separation of Duties can detect conflicts with account settings on a single system/application or across multiple systems.

These conflicts are summarized in a conflict matrix report, with details available as drill-down information behind each cell in the matrix.

Forms

- MultiSelect now supports the new `displayCase` property, which can be set to either “upper” or “lower”. This feature is equivalent to defining a `valueMap` that maps each of the `allowedValues` to their uppercase or lowercase equivalents. (ID-8356)

HTML Display Components

- The `SortingTable` component now respects the `align`, `valign`, and `width` properties of the children components that comprise the table when rendering to HTML. An `InlineAlert` component is also available to display error, warning, success, and informational messages in forms. (ID-12560)

Identity Manager Integrated Development Environment (IDE)

The Identity Manager Integrated Development Environment (Identity Manager IDE) is Java application that enables you to view, customize, and debug Identity Manager objects in your deployment.

Major features of the Identity Manager IDE include:

- Integrated Explorer window that allows project, directory-based, or runtime views of a project
- Action menus for document modification
- Custom editors, including:
 - Object property sheets and graphical value editors for enumerating XML object properties and editing basic object types, XPRESS, and XML objects without typing XML
 - Drag and drop palette for adding workflow services, approvals, users and workflow tasks to XML source without typing XML
 - Registered `waveset.dtd` definition file that enables syntax highlighting and auto-completion for XML elements and attributes

- Integrated debugger for workflows, forms, and rules
- Rule tester for verifying standalone and library rules
- Form previewer for previewing and troubleshooting forms in an external browser
- Checkout View feature allows you to check out, modify, and check in Identity Manager views (such as a user view).
- CVS integration

The Identity Manager IDE is a fully integrated NetBeans plugin that was designed to replace Identity Manager's Business Process Editor (BPE) application. For more information about installing and using the Identity Manager IDE, refer to the chapter titled Using the Identity Manager IDE in *Identity Manager Deployment Tools*.

Identity Manager SPE

- Identity Manager SPE configuration and tracked event data is no longer stored in an LDAP directory server. (ID-12170)

Instead, the Identity Manager SPE components access this data directly from the Identity Manager repository. Therefore, you no longer need to select and export the configuration objects needed by Identity Manager SPE. The Identity Manager installer can be used to update an Identity Manager SPE deployment in place.

If tracked event data is being stored in the Identity Manager SPE configuration directory, it should be exported as XML before the upgrade occurs. After upgrade, the tracked event data can be imported into Identity Manager. Also, after a successful upgrade, you can safely delete the configuration LDAP directory.

- Accessing objects through Identity Manager SPE no longer requires a separate type of context. Identity Manager SPE forms no longer need to set the `needSpeContext` property and refer to this context with `:display.speContext`. (ID-12171)
- Created a public interface to allow customers to invoke custom callouts before provisioning executed and after provisioning has completed. (ID-12173)
- Identity Manager SPE now provides better example end-user JSP pages. (ID-12175)
- Identity Manager now provides a customizable delegated administration and authorization model accessible both from Identity Manager and Identity Manager SPE User Server. This model leverages directory attributes and does not depend on Identity Manager Organizations and Capabilities. (ID-12176)
- You can now run Active Sync and SPE Synchronization on the same Identity Manager server. However, do not run both on the same resource. (ID-12178)

- The Identity Manager SPE User XML attribute can now be stored in a compressed format to reduce the SPE user directory footprint. (ID-12186)
- Identity Manager SPE transactions can now support configurable user update consistency levels. Existing transaction store databases will need to be modified to add an additional column, `userId VARCHAR(N)` where `N` is large enough to contain the maximum length expected for a Identity Manager SPE user DN, plus an additional 8 characters. This database change does not occur automatically when running the upgrade scripts. (ID-13830)

MetaView

- The new Identity Events feature has been added to the MetaView. This option allows you to define a model for determining when events occur on resources and how to appropriately respond to them. This feature also allows you to detect delete, disable, and enable events either natively on the resource or through the evaluation of a rule if the resource does not support detecting the event.

You can respond to events with any combination of deleting, unassigning, unlinking, enabling, and disabling users and resource accounts. Identity events are applied only during Active Sync. As with identity attributes, these events are applied only if Active Sync is selected as an enabled application for the MetaView. (ID-12561)

- In the Administrator interface, the Reports Deleted feature has been added. This feature applies to resource adapters that support Active Sync natively determining whether an account was deleted. (ID-13206)
- The MetaView now supports a new option for setting the values of target fields. Multi-valued attributes can also be merged. (ID-13212)

Reports

- The results of bulk actions can now be downloaded to a file in CSV format. (ID-9297)
- By default, the following reports are automatically scoped to the set of organizations controlled by the logged-in administrator, unless explicitly overridden by selecting one or more organizations against which the report should be run: Admin Role Summary, Administrator Summary, Role Summary, User Questions Summary, and User Summary. The `org` scope component has also been changed from a single select to a multi-select component. (ID-12116)
- Identity Manager now supports monitoring a variety of components using Java Management Extensions (JMX). (ID-12405)
- New reports now support manager-employee relationships: My Direct Reports Summary, My Direct Employee Summary, My Direct and Indirect Employee Summary, and My Direct Reports Individual. (ID-12416, ID-12689)

- A CSV report encoded with the UTF-8 character set and multibyte text can now be customized so it can be displayed in applications that do not support UTF-8 encoding, such as Microsoft Excel. (ID-13574)

Repository

- An administrator can disable an Identity Manager repository's automatic internal connection pooling by setting the `connectionPoolDisable` attribute of the `RepositoryConfiguration` object to `true`. The older method of setting `com.waveset.repository.ConnectionPoolDisable=true` is now deprecated. (ID-10924)
- Identity Manager 7.0 removes the `Repository` method signature `#getLastMod(Type, long)`. Identity Manager 5.0 SP2 deprecated this method signature in favor of `#getLastMod(Type)`. Custom applications should not refer to this method or refer directly to any class or interface in the `com.waveset.repository` package. (ID-11761)
- The default JDBC driver for Microsoft SQL Server is now the Microsoft SQL Server 2005 JDBC Driver. This driver replaces the older Microsoft SQL Server 2000 JDBC Driver. This new default driver changes the JDBC driver class name and the format of SQL Server database URLs. It also removes the requirement to append "SelectMethod=Cursor" to such URLs. (ID-14136)

Resources

- Identity Manager 7.0 includes support for the following resources:
 - Scripted JDBC (ID-7540)
 - BridgeStream SmartRoles (ID-12262)
 - Realm support in Sun Java System Access Manager (ID-12414)
- The SecurId adapters can now retrieve tokens by status (for example, all LOST tokens or all ENABLED tokens). (ID-7646)
- Support is added for OS/400 v4r5, v5r2, v5r3, and v5r4 (5.2, 5.3, and 5.4). (ID-9928, 13122)
- Added multiple attributes to the Oracle ERP adapter to support auditing features. (ID-11725)
- The RACF adapter now includes search filter support for `listAllObjects`. (ID-10895)
- The SAP HR Active Sync adapter now supports mySAP ERP ECC 5.0 (SAP 5.0). (ID-12408)
- The SAP and SAPHR adapters now provide three new resource attributes that provide the parameters for a retry of an SAP operation when a network failure occurs: (ID-12579)

- SAP BAPI Retry Count: number of times to retry the operation.
- SAP Connection Retry Count: number of times to attempt to re-connect to the SAP server.
- SAP Connection Retry Wait Time: number of milliseconds to wait before attempting to re-connect to the SAP server.
- The Oracle ERP adapter now supports set of books (SOB) functionality. (ID-12715)
- A VLV Sort is now configurable. The VLV sort attribute (`vlvSortAttribute`) has been added to the LDAP resource. If the attribute is set, that value is used for the sort, but if it is not set, the “uid” value is used. (ID-13321)

Roles

- Roles and resource groups now provide the ability, both singly and in combination, to assign users multiple accounts on a resource. (ID-6684)

Security

- Users with approver capabilities can now delegate their future approval requests to one or more users who are not Identity Manager approvers for a specified period of time. Users can delegate from three interfaces: (ID-8485)
 - End User Main Menu: Delegate Approvals link
 - Admin Approvals Tab: Delegate My Approvals subtab
 - Admin Create/Edit/View User: Security section

Server

- Identity Manager 7.0 now supports JBoss Application Server. (ID-10620)
- Identity Manager 7.0 now provides the capability to create and maintain a large numbers of similar resources. (ID-11325)

SOAP

- Identity Manager 7.0 now supports Service Provisioning Markup Language (SPML) version 2.0. (ID-12417)

Workflow

- Delegation of work items can now be set up by any user. This option can be configured in both the Admin interface and the new default end-user interface. (ID-14110)

Bugs Fixed in This Release

This section describe the bugs fixed in Identity Manager 7.0.

Installation and Update

- Credentials can now be passed to `com.waveset.install.UpgradePostProcess`. This change facilitates the upgrade process, particularly when the Configurator's password has been changed and you are performing a manual upgrade without access to a GUI. (ID-13006)
- The Auditor Login Interface has been removed. (ID-14481)

Considerations for upgrading include:

- Any existing account Policy that has questions defined for the Auditor application will be altered as follows:
 - If the Policy also has questions defined for the Admin and/or default application, then the questions for the Auditor application will be discarded, and the Admin and/or default questions will be respected instead.
 - If the Policy has no questions defined for the Admin or the default application, then the questions for the Auditor application will be re-designated as Admin questions.
- Any authentication answers for a user defined for the Auditor application will be altered as follows:
 - If the user also has answers defined for the Admin and/or default application, then the answers for the Auditor application will be discarded.
 - If the user has no answers defined for the Admin or the default application, then the answers for the Auditor application will be re-designated as Admin answers.
- Upgrades from a previous installation that had a Identity Auditor enabled will now see the Auditor organization in the account/organization table. New installations do not have an Auditor organization. (ID-14636)
- If you wrote a Audit Policy Rule for Separation of Duties in a previous release that caused you to customize the Conflict Violation Details Form, you will need to save that form before upgrading. (ID-14772)

Administrator and User Interfaces

- A meaningful error message is displayed if a user tries to log in while resource the user is defined on is down. (ID-1905)

- Messages for errors that are considered fatal can now be displayed with a configured default message, and additional information can be logged to `syslog`. The UNIX resource adapters have been modified to use this error message display. (ID-5495)
- You can now replace the product name string in the browser title bar with a localizable string of your choice. (ID-10905)
- The Completed Role Synchronization task no longer displays a message that the task is still executing. The task has also been enhanced with a statistics table. Errors and exceptions are now displayed for the completed task. (ID-11181)
- The “Change Answers to Authentication Questions” end-user page now handles a user who does not have authentication questions more gracefully. (ID-11773)
- The inbox link for an anonymous user login now points to the new end-user work item list table. (ID-12816)
- MultiSelect objects now sort the available values when the `noApplet=true` and `sorted=true` properties are set. (ID-12823)
- End users no longer get pop-up dialogs when entering or leaving a secure site. (ID-13054)
- Forms that display an account password policy summary by resource will now wrap the content within the table. Previously, the summary information would scroll off the right side of the browser window. (ID-13109)
- In the `sysconfig` file, the `security.delegation.historyLength` parameter now controls the number of previous delegations that are recorded. (ID-13141)
- The Admin version of `continueLogin.jsp` now displays catalog messages correctly. (ID-13193)
- A null pointer exception that was thrown when a user canceled an edit to a resource after searching or filtering does not occur now. (ID-13434)
- When you create a new role, “Available Resource Groups” no longer appears twice in both the left and right side of the panel. (ID-13573)
- Copying an existing resource by renaming the resource and selecting Create versus Rename now correctly duplicates resource facets, such as whether `ActiveSync` is enabled. (ID-14175)
- Account locking and unlocking now works correctly if the account policy in the Service Provider main configuration is not set. Previously, the lock button worked only on the Service Provider account edit page when an account policy was configured for the Service Provider. (ID-14181)

Forms

- The sort feature of the `SortingTable` display class during a manual action no longer causes an error. (ID-12508)
- Verification rule messages are now displayed in the locale of the client and not the server. (ID-12780)

Identity Auditor

- An Audit Policy can now be configured to scan only a restricted set of resources. (ID-9127)
- Indirectly assigned policies can now be viewed. (ID-11886)
- `UserViewConstants.OP_CALL_VIEW_VALIDATORS` can be set for policy checking during provisioning. (ID-12757)
- Policy checks during user provisioning operations can be performed in the provisioning thread. Previous behavior always used a separate task to perform the check. If the task behavior had been customized, bypassing the task might cause the customizations not to be used. To fix this problem, set the System Configuration `user.view.alwaysUseTask` attribute to true, which will force the old behavior. (ID-14086)

Identity Manager SPE

- The transaction event timer is not restarted during a transaction. Previously, the transaction processing time in Identity Manager SPE did not include the time spent evaluating the account policy. (ID-14416)
- Identity Manager SPE now resumes processing transactions when the service is shutdown ungracefully (for example, the application server exits with an out-of-memory error). (ID-14579)

Localization

- Message keys used as authentication questions now display correctly in the results page. (ID-13076)

Mainframe

- The RACF adapter no longer searches a large string once for every user retrieved in `listAllObjects`, which usually results in better performance in this function for a large number of users. (ID-12829)

Reports

- Old attribute values are now correct in an audit report. (ID-12287)
- The generation of `TaskTemplate` names that were too long (greater than `MAX_NAME_LENGTH`) has been corrected. (ID-13790)

Repository

- When using Oracle 10g as the repository with a high load (for example, more than 100,000 users), a drop in performance for user creates and modifications can sometimes occur. To restore performance, try updating the statistics for the `userobj` table with the following SQL statement: (ID-14605)

```
analyze table waveset.userattr compute statistics;
```

Resources

- The `removeDenyGroupsDuringDelete` resource attribute for the Domino resource adapter specifies if a user is to be removed from Deny Access Group memberships upon deletion through Identity Manager. Setting this attribute to true will indicate the removal from the groups should be processed. The default value for this attribute is false for backward compatibility. (ID-10466)
- The LDAP adapter no longer creates an illegal distinguished name (DN) for a new account. (ID-10951)

The escape method in `com.sun.idm.util.ldap.DnUtil` can now be used in forms to escape values to be inserted into identity templates of resource adapters with the LDAP DN format. Alternatively, an `accountId` policy with the “Required LDAP DN format” option checked can be used to validate LDAP distinguished names entering Identity Manager via input such as user input, ActiveSync, and reconciliation.

- The `normalize` method in `RFC2253Parser` now recognizes and reports an invalid LDAP distinguished name (DN). (ID-10952)
- The `getNextIndex` method of `DblBufferIterator` no longer accesses size information of the supporting arrays outside the object's synchronization. (ID-11129)
- Synchronization status in a clustered environment is improved. (ID-11250)
- The `isPickListAttribute` method within `com.waveset.adapter.SiebelResourceAdapter` is no longer misidentified as `isMVGAttribute` in the tracing system. (ID-11471)
- The default for the **Objectclasses to synchronize** Active Sync attribute on LDAP resources now defaults to `inetorgperson`. (ID-11644)
- The maximum number of Flat File Active Sync logs configured on an Active Sync resource are now created correctly. (ID-11848)

- The `objectClass` attribute mapping is no longer required in an LDAP resource schema map for Active Sync to function. Custom resource adapters extending `com.waveset.adapter.LDAPResourceAdapter` that override both the `poll()` and `getUpdateRows(UpdateRow)` methods should be modified to invoke `LDAPResourceAdapterBase.ensureObjectClassInSchemaMap()` in either method. (ID-11880)
- The Domino Resource Adapter now supports setting the “Store ID in a File” option to false as a resource attribute, which disables the creation of the user’s ID file locally on disk. The ID file must still be provided, however, when creating the user. (ID-12139)
- Solaris and Linux adapters now return a year on the last login information. (ID-12182)
- The Oracle ERP adapter now closes Oracle database cursors. Previously, the adapter failed to close the cursors, which after long periods, resulted in the “ORA-01000: maximum open cursors exceeded” error. (ID-12222)
- Errors for locked accounts or users from Active Sync are now logged. (ID-12446)

If a failure occurs with Active Sync because an account or user that should be updated is locked by another process, the account or user that failed is written to `syslog`, which allows you to re-run the transaction when the account is not locked.

- For the Domino Resource Adapter, concurrent updates of `HTTPPassword` with several users with the `NSFNoteComputeWithForm()` API call no longer result in a “-551” gateway error. (ID-12466)
- Gateway crashes no longer occur for customers using APIs directly without going through Identity Manager. (ID-12481)
- The Flat File Active Sync adapter now provides a warning message in the Active Sync log (if enabled) whenever an error occurs preventing a `diff` action for synchronization. (ID-12484)
- The terminal emulation used to create a Natural resource adapter account has been modified so that an 8-character user name does not use a tab to select the Copy Links attribute. (ID-12503)
- Modifying the `AttrParse` objects do not require a restart for the new values to take effect. (ID-12516)

- The Siteminder LDAP adapter now performs the following operations correctly, even when the Siteminder user is locked due to failed login attempts. (ID-12824)
 - Enable
 - Disable
 - Expire password (with enable/disable)
 - Unexpire password (with enable/disable)
- Changing LDAP group membership now uses single adds and removes instead of rewriting the entire group (that is, replacing the entire `uniqueMember` attribute). (ID-13035)
- Identity Manager now clears Admin privileges, if any, before attempting to delete a Secure ID user. (ID-13053)
- A cursor leak in the Oracle table adapter (`DatabaseTableResourceAdapter`) has been fixed. (ID-13111)
- The `auditorObject` complex attribute syntax for the Oracle ERP resource has been modified to include a namespace to make it easier to fetch information from the `GenericObject`. The syntax of the attribute now includes a top-level “auditorResps” that contains a list of responsibility objects. (ID-13302)
- Performance improvements have been made to `AttrParse`. Normal parsing no longer throws and catches an exception for every character in a parsed buffer. (ID-13384)
- The SecurID for UNIX adapter now performs UTF-8 character encoding and decoding when interoperating with RSA. (ID-13451)
- When creating account on a Windows NT resource through the Windows NT resource adapter, the following error message is no longer displayed in the Create user result page: “Error requiring password: put_PasswordRequired(): 0X80004005:E_FAIL”. (ID-13618)
- The Active Directory `PasswordNeverExpires` attribute can now be set during an update. (ID-13710)
- Identity Manager 7.0 server now notifies waiting threads by calling `notify` after removing a connection over the gateway. (ID-14044)

Security

- A user who has “Organization Administrator” capability for an organization can no longer create organizations in other organizations, even if that user has “Account Administrator” and “Role Administrator” capabilities. (ID-10235)
- Password generation now works correctly for passwords that do not follow a policy. (ID-12275)

- A password expiration warning message is now displayed for the Admin interface. (ID-13236)
- Approver capability no longer has rights to Remediation WorkItems. (ID-14163)

For pre-Identity Manager 7.0 installations, Approver capability has full rights `WorkItem`, `RemediationWorkItem` and `AttestationWorkItem` `authTypes` are extended from `WorkItem`, so therefore Approver has full rights to `RemediationWorkItems`, and possible to other users' `Attestations`.

This problem is fixed in new Identity Manager 7.0 installations and installations upgrading to Identity Manager 7.0. For backward compatibility, pre-Identity Manager 7.0 installations can fix this problem by following these steps:

- a. Any references to Approver capability would need to be changed to the new Approver Administrator. This includes user's admin group references and any rules or workflows that might assign the Approver capability.
 - b. Make sure any workitems getting created in workflows either have a specified `authType`, or it will default to `Approval` `authType`.
 - c. Run `WorkItemUpdater` in `update.xml` to change any workitems with null `authType` to have `Approval` `authType` (actually flexible to set any `authType` required). The statements and instructions are in the file but commented out by default.
- Users without administrator capabilities can now see roles and resources. (ID-14745)

Previously, roles and resources were not available to users that did not have admin rights to organizations, and a user that selected "Update My Roles" or "Update My Resources" would not see any roles or resources available for selection.

Server

- `TaskInstance` subobjects, like approvals, are now deleted properly when terminating the task. (ID-3258)
- In a form, using `<set>` within `<Expansion>` now works correctly. (ID-9617)
- The last audit record is no longer missing when a retry fails after a resource is renamed. (ID-9714)
- In a clustered environment, a failed login on the end-user pages no longer generates a serialization-related exception. (ID-10556)
- A server no longer attempts to detect itself as being non-responsive when it takes long periods of time to process task information. (ID-10920)
- IAPI Configuration migrated to IAPI `XmlData`, which is primarily used by `ActiveSync` resources to store information about the last processed change. (ID-11266)

Loading `update.xml` will cause the ResourceUpdater to migrate existing "high water mark" data from the IAPI Configuration object to an XmlData object with a displayed name of SYNC_resourceName, and remove the original Configuration object.

- References to “session” server and viewers that were deprecated in the Identity Manager 5.0 SP1 release have been removed. (ID-11873)
- Delimiter processing is now suppressed between brackets. Consequently, all characters found within bracket sets will now be treated as either an index or as a filter. Note: there currently isn't a mechanism to escape the closing bracket "]". (ID-12384)
- The `changelog` filename can now contain periods (.) in the prefix. (ID-12470)
- Task instance terminations are now audited as Terminate actions instead of Modify actions. (ID-12791)
- The performance of the creation of Account objects has been improved, which should also result in the improved performance of reconciliations and provisioning. (ID-13341)
- A new server configuration setting under Configure->Servers allows you to set a limit for the maximum number of tasks that a server can run concurrently. (ID-13343)

Workflow

- A nested reference to a rule name located in the same library, but not prepended with the library name, can now be resolved, and an Unresolved Rule error does not occur. (ID-10265)
- If `notification.redirect` is used to redirect messages to a file, that file is now written using the `emailNotifier.contentCharset`, just as the message would, if it were emailed. This allows the file to contain non ISO-8859-1 characters. (ID-10331)
- More information is added to a workflow message when an approver is attempting to approve or reject a workitem that has already been approved or rejected. (ID-11045)
- The debugger is now enabled by default. For production deployments, it is recommended that you disable the debugger by setting the following system configuration property: `serverSettings.default.debugger.enabled=false`. (ID-14076)

Documentation

With the merging of the Identity Auditor features and Service Provider Edition features into Identity Manager for this release, the following publications have been deprecated:

- *Identity Auditor Administration*
- *Identity Manager Service Provider Edition Administration Addendum*
- *Identity Manager Audit Logging*

Bugs Fixed in This Release

These publications have been consolidated with the *Identity Manager Administration* guide.

Additional Defects Fixed

10475, 11052, 12452, 13434, 14178

The following sections list known issues and workarounds for:

- [Identity Manager](#)
- [Service Provider Edition](#)
- [Auditor](#)

Identity Manager

General

- A login prompt is displayed when attempting to visit specific pages if cookies are disabled (ID-158).
- Systems that are running the Sun Identity Manager Gateway should be configured so that Dr. Watson does not produce visual notifications. If this feature is set, then if the gateway encounters an error, the process will hang until the pop-up window is closed.
- The `display.session` and `display.subject` variables are not available to Disable form elements. It is not recommended to create potentially long-running activities in Disable elements due to the fact that these expressions will run each time the form is recalculated. Instead, it is recommended that the calculation be done in another form element that will not run as frequently.
- For best performance when working with the Identity Manager Web Interface, use the OpenSPML toolkit that is bundled with Identity Manager. Using the `openspml.jar` file from the `openspml.org` website may cause memory leaks. (ID-11889)
- If you have a space in the path to the Identity Manager installation directory, you should specify the `WSHOME` environment variable without double quotes (") as shown below.

NOTE Trailing slashes (\) should not be used when specifying the path even if the path contains no spaces.

```
set WSHOME=c:\Program Files\Apache Group\Tomcat 4.1\lighthouse
```

or

```
set WSHOME=c:\Progra~1\Apache~1\Tomcat~1\lighthouse
```

The following will not work:

```
set WSHOME="c:\Program Files\Apache Group\Tomcat 4.1\lighthouse"
```

- Required fields set on the resource schema map are only checked when a user account is created (ID-220). If a field is to be required on user updates, then the user form should be configured to ensure that the field is required.
- No checking is done on organization name, administrator name, account name, user attribute name (left hand side of schema map), or task names for invalid characters (ID-1145, 1206, 1679, 1734, 1767, 2413, 3331). You cannot use a dollar (\$), a comma (,), a period (.), an apostrophe ('), an ampersand (&), a left bracket ([), a right bracket (]), or a colon (:) in the name for these types of objects.
- A misleading error message is given on the account page if you try to perform an action after your session has timed out (ID-1223).
- The calendar object is not fully viewable if the browser is using large fonts (ID-2120).
- The Select All checkbox on the Find Results page and the List Task page does not become un-selected if one of the items in the list is un-selected (ID-5090). The selectAll checkbox is ignored during the resulting action if not all of the members in the list have their checkbox selected.
- If you make a change to a custom message catalog, it is necessary to restart the server in order to see your changes. (ID-6792)
- The sidebar tabs (such as Account List, Find User) do not appear on the confirmation page when enabling or disabling multiple users (ID-6866). Once the page is confirmed and the results are displayed, the tabs re-appear.

- The current mechanism for detecting a failed Server assumes that all the systems in an Identity Manager cluster are synchronized with respect to time. (ID-7064) With the default failure interval of five minutes, if one server is five minutes out of sync with another, the server that is ahead will declare the server that is behind to be dead, causing unpredictable results. The workaround is to maintain better time synchronization, or to increase the failover interval.
- On Windows, if you are logging in as a user whose name contains double-byte characters and the default encoding for the machine only supports single-byte characters, you must set the `USER_JPI_PROFILE` environment variable to an existing directory whose name contains only single byte characters. (ID-8540)

Install and Update

- When installing Identity Manager from the `idm.war` file, the execute bits are not set on the UNIX shell scripts (ID-2371). Workaround is to perform a UNIX `chmod` command on the `idm/bin` directory.
- When Identity Manager is installed in a Tomcat 5.x environment, running reports results in a java error (ID-6652). Workaround is to perform the following:

```
cd $WSHOME\WEB-INF\classes
jar xvf ..\lib\j2ee.jar javax/activation/DataSource.class
```

- The AD Active Sync resource has been deprecated and replaced by the AD resource. Perform the following steps to migrate to the AD Active Sync to newer releases: (ID-11363)
 - Export the existing AD Active Sync resource object to an xml file (either from the command line or debug pages).
 - Delete the existing resource (this will not affect Identity Manager users or resource account users)
 - Create a new AD resource that is Active Sync.
 - Export this new resource object to an XML file.
 - Edit this file and change the value of the `id` attribute and the value of the `name` attribute to match the values from the OLD resource object saved in step 1. These attributes are in the `<Resource id='idnumber' name='AD' ...>` tag.
 - Save the changes to the file.

- Import the modified object back into Identity Manager using either the Configure->Import Exchange File page or the command line.
- If you update from a 6.x install but want to start using the new end-user pages, you will need to manually change the system configuration `ui.web.user.showMenu` to "true" in order to get the horizontal navigation bar to appear. (ID-14900)

Account Management

- It is possible to create NT accounts that have account names longer than 20 characters and that the NT native tools cannot manage (ID-710).
- An administrator cannot save resources or roles that contain organizations that he does not manage (ID-839).
- Sorting the columns on the Provisioning Results page adds additional empty rows to the results (ID-1105).
- Approvals of several hundred user accounts take a considerable amount of time (ID-1149). Workaround is to approve user account records in smaller groups.
- Approval records owned by an administrator who no longer has approval capability cannot be approved (ID-1150). Workaround is to remove administrator from resources, roles, and organizations in which he has approval rights, then approve any outstanding approval records prior to removing the administrator or the approval capability for that administrator.
- Updating a user without making any modifications does not show detailed results page (ID-2327).
- When creating a new user or adding a resource to an existing user, if the distinguished name for the user is incorrect, the incorrect value is cached until the administrator logs out (ID-2508). Attempts to re-create the user after fixing the distinguished name are not successful until after the administrator logs out.
- Account locked out message does not display on the Identity Manager User Interface login screen on Netscape 4.7 (ID-2680). The error message appears in the page URL.
- The name "name" is a view reserved word and should not be used as a Identity Manager User Attribute on resource schema maps (ID-2918).

- Windows Active Directory requires the gateway to run as an administrator who can create directories (ID-2919). Identity Manager can create home directories on Windows 2000 systems. The home directory account creation is being performed by the user the gateway process is running as, instead of the administrator specified in the resource definition. Workaround is to change the user that the gateway is running as from Local System to an account that has permission to create remote shares and set permissions on those shares. This account will also need Bypass traverse checking and Act as operating system privileges.
- The Windows NT resource incorrectly throws a warning message instead of an error message when errors occur when disabling a user account (ID-3222).
- A `java.lang.NullPointerException` may be seen when removing all the resources from a user via the edit user page (ID-4811). A workaround for this problem is to use the user delete page to either unlink or delete these resource accounts from the user.
- If an Identity Manager user is created and assigned to a Windows Active Directory resource where the user account already exists, the user will be created without a GUID attribute in the resource info (ID-5114). This GUID is used to detect changes to the user's organization or name in the Directory. Running reconcile from the resource will fix this problem.
- When creating a user, a warning is given if you add a Role to the user that contains a resource that is directly assigned (ID-5385).
- A "Forward To" administrator cannot be specified when a user is being created. This option can only be set when editing the user (ID-5695).

Approvals

- When updating a user and selecting to run the update in the background, an approval activity appears on the task results page (ID-3301). This approval can be ignored.
- Approval records for an administrator do not show up after the user is renamed (ID-3386). Workaround is to resolve all outstanding approvals before renaming the user.
- Previously approved or previously rejected approval records cannot be viewed by an administrator if the user being approved belongs to an organization that the approver does not control (ID-3494).

- Resource retries tasks appear in the pending approval list for Configurator (ID-3508).

Integrated Development Environment (IDE)

- Most nodes have an associated property sheet in the Properties windows, and most of these nodes have a Name property for managing the value of the name. If you rename a particular object via its node, either by right-clicking and selecting Rename, or by clicking the node and typing text over the label, the node's label is updated and the XML changes. However, the property sheet fails to update. You can click another node and then relick the renamed node and the property sheet updates to reflect the new name. You can also click the title of the property sheet to update to the correct values. (ID-13696)
- Renaming objects using Identity Manager IDE should be done through the right-click context menu in the Projects explorer, instead of editing the XML using the editor. (ID-13828)
- The XML Navigator has been disabled in IDM IDE. Windows ->Navigator opens the Navigator panel and <No view available> is displayed. (ID-13390)
- Project delete functionality is not supported. (ID-14013)
- Rule Libraries are not currently supported other than to perform basic XML editing and testing in the rule tester. Navigation and property support is not currently implemented. (ID-14093)
- Form property values cannot be set with the property editor if the data type is Integer or Boolean. (ID-14128)

Workaround: Edit the value to the property directly in the XML.

- Downloading, uploading or reloading an object causes a lock to be placed on the object in the repository. Consequently, attempts to access the object by users other than the one given in the project settings within the lock's time of expiration may fail. (ID-14132)
- To avoid display problems with the design tab and the workflow toolbar, keep the Show ToolBar advanced option checked. (ID-14138)
- When closing a project, the "Discard All" option does not work properly. If you wish to discard your changes to an object, you must close the editor window and select "Discard". This is a known issue with NetBeans (bug 84236) . (ID-14164)

- Renaming an object from the context menu in NetBeans requires the change to be saved. After making the change, the user can save the change from File ->Save without opening the file. If the file is open, use File ->Save, or close the file and select to save the changes when prompted. (ID-14420)
- When setting the displayClass for a field to InlineAlert, if the field has a name the value property of the InlineAlert will not display. (ID-14456)
- Checking out a user view in Identity Manager IDE puts a lock on the object. Checking in the view or closing the view does not release the lock. The lock will be released automatically after 5 minutes. You can also release the lock by logging in to Identity Manager as the administrator that checked the view out in IDM IDE and viewing the user. (ID-14797)

Login Configuration

- Pass-through authentication module does not work for the Domino resource (ID-1646).
- Changes made to the Administrator Login Setup and User Login Setup pages are not visible to other administrators logged in (ID-3487). To see the changes, the other administrators will need to log out of the Administrator Interface and log back in.
- If an Administrator logs in and selects “Change My Password” and then selects another tab, their account is locked until the lock expires. (ID-3705)

If another Administrator attempts to edit that locked Administrator, the “com.waveset.util.WavesetException: Unable to access account #ID#Configurator at this time. Please try again later.” message is displayed. If they click on the "OK" button, the workflow process diagram from the last action is displayed.

Organizations

- When deleting multiple organizations, if the delete fails on one organization, all the remaining organizations are not deleted (ID-517).
- Renaming an organization when there are provisioning requests pending that have users belonging to the organization will cause the provision request to fail (ID-564). Workaround is to ensure there are no outstanding requests before renaming an organization.

- When creating a new organization, if the User Member Rules option is selected before specifying an org name, when the page is refreshed, an organization ID will appear in the Organization name field (ID-6302). The name can still be set prior to saving the new organization.

() - Warning: Parenthesized values in field 'Approvers' do not match any of the allowed values.

Policies and Capabilities

- The Identity Manager account policy attribute Reset Notification Option has a value option of “administrator” that has no effect (ID-944). The only viable options are “immediate” and “user”.
- When deleting multiple roles, if an error is encountered, the entire operation will stop instead of continuing to the other roles (ID-1168).
- The minimum number of questions a user must answer can be set to a value greater than the number of defined questions (ID-1834). If this situation occurs, the user will not be able to log in using the “Forgot My Password” option.
- The Default Lighthouse Account Policy cannot be cloned by editing the policy, changing the name, and selecting to create a new object (ID-5147). Workaround is to create a new account policy.

Reconcile and Import Users

- Importing users from a CSV file does not update resource attributes if the user already exists in Identity Manager (ID-2041).
- Comma-separated-value (CSV) file that is loaded with single quotes (') in the account IDs are translated to question marks (?) (ID-2100).
- Scheduled tasks will not show up in a search on the "Find Tasks" page when using the "Is Scheduled" option (ID-5001).
- Reconciliation fails when run against a Red Hat version 8 resource (ID-6087).
- Reconciliation of an Oracle ERP resource will complete with errors if connection pooling on the resource is enabled (ID-6386). Workaround is to turn off connection pooling during reconciliation.

Reports

- Security administrators cannot run or create reports (ID-1217). Workaround is to give administrators Report Administrator capability.
- Risk analysis reports can be viewed by administrators other than report administrators (ID-1224).
- Report results that are emailed with the plain text option are not formatted (ID-2191). Workaround is to use HTML option for the email.
- Audit Log entries may not be recorded for large results (ID-5050).
- The ticker will not display when selected if there are organizations with apostrophes (') in their name (ID-5653).
- If you attempt to run an Administrator Report and select to Report only Administrators which belong to a specific organization which has no administrators, a java.lang.NullPointerException error is returned (ID-5722).

Resources

- Resource test button does not test all fields (ID-51).
- Resource port assignments can be set to values greater than 65535 (ID-59).
- Bad error message displayed when setting incorrect Active Directory group name (ID-393). If you attempt to set an Active Directory group name to “groupname” instead of “cn=groupname,cn=builtin,dc=waveset,dc=com” an error message stating “array index out of bounds” is displayed.
- Required account attributes are sometimes ignored if there is another resource with the same account attribute name that does not have the required flag set (ID-1161).
- If an administrator attempts to add an organization to a resource that he does not have rights over, an error will appear. The edit of the resource must then be canceled and the resource edited again to make any other changes to the resource (ID-1274).
- The error message when a resource account password or username is not correct on a PeopleSoft resource is not clear (ID-2235). The error message states:

```
bea.jolt.ApplicationException: TPESVCFAIL - application level service failure
```

- Windows Active Directory resource actions that use the exit status `%DISPLAY_INFO_CODE%` cause the action to fail with errors (ID-2827).
- Windows NT resource actions that return a non-zero exit code do not cause the action to fail (ID-2828).
- Setting a user's primary group ID on Active Directory cannot be done when creating the user (ID-3221). Workaround is to create the user without setting the primary group ID, then edit the user and set the value. The primary group ID is also set by number and not by the distinguished name (DN) of the group.
- Resource IP addresses are cached in the JVM after the hostname is resolved to an IP address. If a resource IP address is changed, the application server will need to be restarted for Identity Manager to detect the change (ID-3635). This is a setting in the Sun JDK (version 1.3 and higher) and can be controlled with the `sun.net.inetaddr.ttl` property which is typically set in `jre/lib/security/java.security`.
- You cannot create multiple accounts for a single user on Oracle resources (ID-3832).
- End-users cannot use the self-discovery feature for Domino resource accounts (ID-4775).
- If a user is moved from or to a sub-container within the Active Directory organization, the Active Sync adapter will detect the change, but when you view the user on the edit page, (or make a change and view the confirmation page) the user's `accountId` is still displayed as the original DN (distinguished name) (ID-4950). Because we use GUID to modify the user, this will not cause any operational problems. Running a reconcile against the resource will fix the problem.
- If a user is moved from an Organization (OU) to a sub-organization, the LDAP ChangeLog adapter will not recognize the change and assumes the user has been deleted. The user object is then locked in Identity Manager (if that is the current setting), and a "new" account is not created for the moved account (ID-4953).
- The pooled connections used by the UNIX resource adapters can be left in an undetermined state if an error occurs while executing a command or script (ID-5406).
- NDS organizations can be created in the top level of the tree only by setting the Base Context for the resource to "[ROOT]" (ID-5509).

- On NDS, if you edit a field (such Grace Login Limit) on the initial provision, and do not provide values for the boolean fields, all the boolean fields are set to false (ID-6770). This prevents you from setting the other fields on the restriction tab which require certain check box values to be true. To avoid this, always ensure all your boolean fields are true when you expect them to be, so they are properly pushed when editing other fields.
- If you change the password for a UNIX machine using the Manage Connection --> Change Resource Password feature, the task name that appears is:

```
_FM_PASSWORD_CHANGING_TASK null:null
```

A user-friendly name should be displayed. (ID-6947)

- You cannot use the manage connection feature for UNIX resources that use NIS (ID-6948). An error is thrown because the password you are trying to change is for root, but NIS does not manage the root account.
- When updating users by selecting update from an Identity Manager organization, users with a Sun One ID Server account will get an error if those users were created natively and loaded into Identity Manager (ID-7094). The work around is to update those users individually.
- Identity Manager still contains the following deprecated classes:
 - com.waveset.object.IAPI
 - com.waveset.object.IAPIProcess
 - com.waveset.object.IAPIUser

Custom adapter classes should no longer refer to these classes, and should instead refer to the corresponding classes in package com.waveset.adapter.iapi. (ID-8246)

- An error occurs when trying to delete a user who has an account on the PeopleSoft Component Interface resource. This resource currently does not support account deletions. (ID-9000)

Resource Object Management

- A Windows Active Directory object (Group, Organizational Unit, or Container) cannot be renamed on the List Resources page (ID-3329).
- Cannot create new LDAP groups if there are users with multi-valued CNs (ID-3848). Workaround is to manage the members of the group by DN instead of CN which is configured in the LDAP Create Group Form.

Resource Groups

- Using the return key on the Create or Edit Resource Group page clears the changes made on the page (ID-3430).
- Resource Group reports cannot be saved as a CSV file. (ID-8001)

Security

- If you import an object containing any encrypted data and the data was encrypted with a encryption key that is not in the repository in which the data is being imported, the object will still be imported, but you will get a warning message stating that the data cannot be decrypted since the server encryption key is missing. (ID-12143)

Server

Views cannot be created via the RemoteSession interface out-of-the box. The deployment descriptor (web.xml) needs to be updated. (ID-14756)

1. Add the following servlet definition to the deployment descriptor

```
<servlet>
  <servlet-name>rpcrouter3</servlet-name>
  <display-name>OpenSPML SOAP Router</display-name>
  <description>no description</description>
  <servlet-class>
    org.openspml.server.SOAPRouter
  </servlet-class>

  <init-param>
    <param-name>handlers</param-name>
    <param-value>com.waveset.rpc.PasswordSyncHandler</param-value>
  </init-param>

  <init-param>
    <param-name>spmlHandler</param-name>
    <param-value>com.waveset.rpc.SpmlHandler</param-value>
  </init-param>
```

```

    <init-param>
      <param-name>rpcHandler</param-name>
      <param-value>com.waveset.rpc.RemoteSessionHandler</param-value>
    </init-param>
  </servlet>

```

2. Add the following servlet mapping to the deployment descriptor:

```

<servlet-mapping>
  <servlet-name>rpcrouter3</servlet-name>
  <url-pattern>/servlet/rpcrouter3</url-pattern>
</servlet-mapping>

```

To use `createView` with `RemoteSession`, you need to use the `rpcrouter3` servlet. To access the `rpcrouter3` servlet, you need to use the `RemoteSession(URL, String, EncryptedData)` constructor.

Sun Identity Manager Gateway

- The Sun Identity Manager Gateway occasionally will not stop when the Stop button is pressed on the NT Services screen (ID-590). Workaround is to cancel the stop service request (if it is still hanging) and stop the service again, or exit the NT services dialog and re-enter and attempt the stop operation again.
- Users cannot be added to groups in an NT domain if the gateway is in a remote trusted domain (ID-711).
- The gateway occasionally will not stop when using 'net stop "Sun Identity Manager Gateway"' (ID-2337).

Tasks

- Administrators with Identity Manager Administrator privileges cannot view the manage tasks page if there is a Risk Analysis task in the list of tasks (ID-1225).
- Administrators who do not control Top cannot create Discovery or ResourceScanner scheduled tasks (ID-1414).
- The Find Task page does not display the number of tasks matching the search criteria (ID-5152).
- When editing a scheduled task, the start date must be re-entered using MM/DD/YYYY format (ID-5675).

- Delegated administrators who do not control Top can schedule tasks and view the task results, but cannot view the task after it has been created (ID-6659). The scheduled task was placed in Top and the delegated administrator does not have rights to view the object.
- A field named Deferred Tasks was added to the library. It provides the ability to list deferred tasks on a user. To implement this field, the following line must be added to the Tabbed User Form and Tabbed View User Form (ID-7660).

```
<FieldRef name='Deferred Tasks' />
```

Workflow, Forms, Rules, and XPRESS

- XPRESS `<eq>` function cannot be used to compare Boolean values to the strings TRUE or FALSE or the integers 1 or 2 (ID-3904). Workaround is to use:

```
<cond>
  <isTrue><ref>Boolean_variable</ref></isTrue>
  <s>True action</s>
  <s>False action</s>
</cond>
```

- Path expressions do not work when iterating a list of generic objects via a dolist (ID-4920).

```
<dolist name='genericObj'>
  <ref>listOfGenericObjects</ref>
  <ref>genericObj.name</ref>
</dolist>
```

The workaround is to use `<get>` / `<set>` as shown:

```
<dolist name='genericObj'>
  <ref>listOfGenericObjects</ref>
  <get><ref>genericObject</ref><s>name</s>
</dolist>
```

- If you use `global.attrname` variables for fields in your user form, and the attribute is shared among more than one resource, you should also define a Derivation rule (ID-5074). Otherwise, if the attribute has been changed natively on one of the resources, the attribute may or may not be picked up and propagated to the other resources.
- Cannot use special strings beginning with `&` in HTML components of forms. For example, ` ` will no longer appear as a space. This issue was introduced because of a change to support special characters (`&\<>`) in Select lists (ID-5548).

- Form, workflow and rule comments contained in <Comment> tags have
 strings in them representing the line feed character (ID-6243). These characters are only seen when viewing the XML for these objects; the Identity Manager server and Business Process Editor will process these characters properly.
- If you use the Resource Table User Form for editing users, when editing a user's resource, the resource attributes are not fetched when the form first appears. The work around is to click the "Refresh" button, which will fetch the attribute data. (ID-10551)

Service Provider Edition

- Identity Manager SPE and Sun Java System Portal Server may not be compatible; there is a problem related to the encrypted libraries. (ID-10744)

This problem may be corrected by setting the following values in Portal Server's `/etc/opt/SUNWam/config/AMConfig.properties` file, and then restarting the web container:

```
com.ipplanet.security.encryptor=com.ipplanet.services.util.JCEEncryption
com.ipplanet.security.SSLSocketFactoryImpl=netscape.ldap.factory.
    JSSESocketFactory
com.ipplanet.security.SecureRandomFactoryImpl=com.ipplanet.am.util.
    SecureRandomFactoryImpl
```

- When working with SPE dashboards: If graphs take several minutes to load the first time, then you should verify that your browser is not configured to use the Microsoft Java Virtual Machine (MSJVM). Identity Manager SPE does not support using MSJVM to run browser applets. (ID-10837)
- Some configuration options that appear in the Identity Manager Administrator interface are not used with Identity Manager SPE. (ID-10843). Among these are:
 - Resource options: exclude accounts rule, approvers, and the organization that the resource is assigned to.
 - Role attributes
- By default, auditing is not performed when using the `checkinObject` and `deleteObject` `IDMXContext` API calls. Auditing has to be explicitly requested by setting the `IDMXContext.OP_AUDIT` key to true in the option map passed to these methods. The `createAndLinkUser()` method in the `ApiUsage` class shows how to request auditing. (ID-11261)

- When upgrading from 6.0, the main configuration page of Service Provider Edition may display warnings about invalid values for certain parameters (for example: SPE User Directory) even though these parameters show up as valid settings in the corresponding drop-down list. The workaround is to select the same value without parenthesis from the drop-down list and save the configuration. (ID-14818)
- The default Service Provider login module group expects the Service Provider resource to be named 'SPE End-User Directory'. If the name of the resource is different, then the Service Provider end-user login page will not function properly. The page will not show the login related fields. (ID-14891)

To workaroud this problem, the resource name in the UI_LOGIN_MOD_GRP_DEFAULT_SPE_PWD LoginModGroup object needs to be updated to reference the correct resource name.

Auditor

Administrative Interface

- The Completed subtab of the Remediations tab does not change color when selected. (ID-9149)
- The application server's locale setting might cause two languages to be displayed when localization is enabled. (ID-9468)
Workaroud: Setting the locale value to "C" might resolve this problem.
- The help page for the Create and Edit Audit Policy page is missing. (ID-13040)

Audit Policies

- During a scan, there is no support for retrying user accounts that could not be fetched from resources, or where other failures occur. These failures are reported when the scan is complete, but there is no automated way to rescan the accounts. (ID-9112)

- Auditor attempts to keep users in compliance between policy scans by enforcing policy whenever the user is edited. If editing a user that has assigned audit policies and also is in violation of a policy, you cannot save changes to the user, even if the change is as simple as moving a user to another organization. (ID-9504)

Workaround: Use the right-click move (or find then move) functionality on the user applet, or temporarily disable the audit policy checks.

To disable the auditor policy checks, edit the system configuration and remove `userViewValidators` property. This property which has a value of a List of strings is added during the import of `init.xml` or `upgrade.xml`.

- The Audit Policy wizard GUI allows the specification of 3 remediators, and an escalation period between them. If you specified the period, you must specify the remediator. Otherwise, the remediation will be deleted. (ID-14198)

Reports

- In the AuditPolicy, Resource and Organization Violation History reports, implementing logarithmic scaling for a STACK chart type may result in unusual display behavior. (ID-9522)
- The **User Compliance Violation Log** should not be displayed in the Reports dropdown under the Auditor Reports selector. This is the **Default Compliance Audit Report** task and should be hidden. (ID-14721)
- If you customized the form Conflict Violation Details Form in an earlier release, you should export the form before upgrading to 7.0. Re-import the saved form if you prefer after upgrade. (ID-14772)
- An Auditor Access Scan Report Administrator cannot schedule an Audit Policy Scan. (ID-14713)

Workaround is to assign the create privilege on TaskSchedule, or schedule the report with at least Auditor Administrator or Waveset Administrator capabilities.

- If you have created Audit Policy Scan reports in previous versions of Identity Auditor, these reports will not be visible when you upgrade to Identity Manager 7.0. To correct this, an administrator with the Auditor Report Administrator capability (or higher) can edit these specific reports and change the visibility to **run**. (ID-14881)

Periodic Access Reviews

- After launching a periodic access review, if you go to the access review page, you will not see your scan displayed on the list until you click the refresh button. (D-14169)
- An error is displayed when you edit an Access Review Detail Report in which the specified access review target has been deleted. (ID-14805)

Workaround: Delete the report and create a new one.

- It is not possible to perform an Audit Scan or Access Review with the user scope set to a dynamic org. This is due to a flaw in the scanning code, where the evaluation of the dynamic org rule fails because the scanning Subject has not been defined. (ID-14886)

The workaround (for Access Review) is to create a user scoping rule that has the same logic as the dynamic org rule, and use that rule for scoping of an Access Review.

Work Items

- When an Attestation WorkItem is forwarded, any comments provided by the forwarding Attestor are included in WorkItem such that when the WorkItem is finally attested, the comments from other Attestors will be included. (ID-14643)

Installation and Update Notes

This section provides information related to installing or updating Identity Manager.

NOTE Refer to the *Sun Java™ System Identity Manager Upgrade* and *Sun Java™ System Identity Manager Installation* publications for detailed product installation instructions.

Installation Notes

The following information relates to the product installation process:

- You must manually install Identity Manager on HP-UX.
- The Identity Manager installation utility can now install or update to any installation directory name. You must create this directory prior to starting the installation process, or select to create the directory from the setup panel.
- To run Identity Manager under Tomcat 4.1.x, download the JSSE jar files from Sun Web site, <http://java.sun.com/products/jsse/index-103.html>, and place them in the `idm\WEB-INF\lib` directory.
- Running the Sun Identity Manager Gateway on a Windows NT system requires the Microsoft Active Directory Client extension. The DSClient can be found at the following location:

<http://support.microsoft.com/default.aspx?scid=kb/en-us/Q288358>

Upgrade Notes

This section summarizes the tasks you must perform to upgrade Identity Manager from version 6.0 to version 7.0. (See “[Identity Manager Upgrade Paths](#)” on [page 11](#) for information about which versions can be upgraded to Identity Manager 7.0.)

For more detailed information and instructions, see *Sun Java™ System Identity Manager Upgrade*.

NOTES

- When upgrading Identity Manager, be sure to review the installation section for your application server in *Sun Java™ System Identity Manager Installation* for application server-specific instructions.
- If your current Identity Manager installation has a large amount of custom work, you should contact Sun Professional Services to assist in planning and executing your upgrade.

Using the Identity Manager Upgrade Program

This section describes the steps for upgrading Identity Manager using the Identity Manager installation and upgrade program.

NOTES

- A schema change occurs with most major Identity Manager releases. You must update your schema before upgrading to a new Identity Manager version.
 - In some environments, including on HP-UX, you may be required or prefer to follow the alternate, manual update procedures. If so, skip to [“Upgrading Manually” on page 59](#).
 - For UNIX environments, make sure that the `/var/opt/sun/install` directory exists and that you can write to it.
 - During update, you will need to know the location where your application server is installed.
 - Any previously installed hotfixes will be archived to the following directory:
`$WSHOME/patches/HotfixName`
 - Commands shown in the following steps are specific to a Windows installation and Tomcat application server. The commands you use may differ depending on your specific environment.
-

To upgrade Identity Manager:

1. Shut down the application server.
2. If you are upgrading to Identity Manager 6.0 or Identity Manager 7.0, you must upgrade the repository database schema, as follows:
 - **Identity Manager 6.0** introduces a schema change that provides new tables for tasks, groups, orgs, and the syslog table. You must create these new table structures and move your existing data.
 - Identity Manager 6.0 stores user objects in two tables. You can use the sample scripts provided in the `db_scripts` directory to make schema changes. Refer to the `db_scripts/upgradeto2005Q4M3.DatabaseName` script to upgrade your repository tables.

-
- NOTE**
- Before updating your repository schema, make a full backup of your repository tables.
 - The upgrade of MySQL databases is highly involved. Refer to `db_scripts/upgradeto2005Q4M3.mysql` for more information.
-

- **Identity Manager 7.0** introduces new tables for user entitlements. You must create these new table structures and move your existing data. You can use the sample scripts provided in the `db_scripts` directory to make schema changes.

-
- NOTE**
- Before updating the repository schema, make a full backup of your Repository tables.
 - Refer to the `db_scripts/upgrade7.0.DBMSName` script for more information.
-

3. If you are running Sun Identity Manager Gateway on the Identity Manager server, use the following command to stop the Gateway service:

```
net stop "Sun Identity Manager Gateway"
```

4. Use either of the following methods to start the installer:

- To use the GUI installer, run the `install.bat` (for Windows) or `install` (for UNIX).

The installer displays the Welcome panel.

- To activate the installer in `nodisplay` mode, change to the directory where the software is located, and enter the following command:

```
install -nodisplay
```

The installer displays the Welcome text, and then presents a list of questions to gather installation information in the same order as the GUI installer.

-
- NOTE**
- If no display is present, the installer defaults to the `nodisplay` option.
 - The installer will not install an older version of the software over a newer version. In this situation, an error message displays and the installer exits.
-

5. On the Welcome panel, click Next.
6. On the Install or Upgrade? panel, select Upgrade, and then click Next.
7. On the Select Installation Directory panel, select the directory where the earlier Identity Manager version is located and click Next.

The installer displays progress bars for the pre- and post-upgrade processes and then proceeds to Installation Summary panel.

8. For detailed information about the installation, click Details, view the log file, and click Close to exit the installer.
9. Remove all of the compiled Identity Manager files from the work directory of the application server.
10. If you are running Gateway on a remote system, upgrade it by using the following steps.
 - a. Log in to the Windows system, and change to the directory where Gateway is installed.
 - b. Stop the Gateway service by running the command:

```
gateway -k
```
 - c. If using Windows 2000 or later, exit all instances of the Services MMC plug-in.
 - d. Use the following command to remove the Gateway service:

```
gateway -r
```
 - e. Back up and delete the existing Gateway files.
 - f. Extract the new Gateway files.

If you are installing the newly upgraded Gateway on a system that is not the Identity Manager server, then copy the `gateway.zip` file from the Identity Manager Installation CD.

- g. Unpack the `gateway.zip` file into the directory where Gateway was installed.
- h. Run the following command to install the Gateway service:

```
gateway -i
```
- i. Run the following command to start the Gateway service:

```
gateway -s
```

Upgrading Manually

In some environments, you might want to perform the upgrade steps manually instead of using the Identity Manager installation and upgrade program.

-
- NOTE**
- Be sure you set the `JAVA_HOME` environment variable.
 - Make sure that the `bin` directory in the `JAVA_HOME` directory is in your path.
 - Any previously-installed hotfixes will be archived to the `W$SHOME/patches/HotfixName` directory.
-

On a Windows Platform

Use the following steps to upgrade Identity Manager manually on a supported Windows platform:

1. Stop the application server and Sun Identity Manager Gateway.
2. Update the Identity Manager database. (See [Step 2 on page 56](#) for detailed instructions.)
3. Enter the following commands to set your environment:

```
set ISPATH=Path to install software
set W$SHOME=Path to Identity Manager Installation OR Staging Directory
set TEMP=Path to Temporary Directory
```

4. Run pre-process:

```
mkdir %TEMP%
cd /d %TEMP%
jar -xvf %ISPATH%\IDM.WAR \
WEB-INF\lib\idm.jar WEB-INF\lib\idmcommon.jar
set TMPLIBPTH=%TEMP%\WEB-INF\lib
set CLASSPATH=%TMPLIBPTH%\idm.jar;\
%TMPLIBPTH%\idmcommon.jar;
java -classpath %CLASSPATH% -Dwaveset.home=%W$SHOME% \
com.waveset.install.UpgradePreProcess
```

5. Install software:

```
cd %W$SHOME%
jar -xvf %ISPATH%\IDM.WAR
```

6. Run post-process:

```
java -classpath %CLASSPATH% -Dwaveset.home=%W$SHOME%
com.waveset.install.UpgradePostProcess
```

NOTE The installer supports upgrading installations that have renamed, deleted, or disabled the default Configurator account.

The installer prompts you for user name and password to import the `update.xml` during the upgrade post process. If the user or password is entered incorrectly, you will be prompted (up to three times) to enter the correct password. The error will be displayed in the text box behind it.

For manual installation you must provide the `-U username -P password` flags to pass the credentials to the `UpgradePostProcess` procedure.

7. If you installed into a staging directory, create a `.war` file for deployment to your application server.
8. Remove the Identity Manager files from the application server work directory.
9. If the upgrade process did not do so already, move any hotfix class files from the `WEB-INF\classes` directory to the `$WSHOME\patches\HotfixName` directory.
10. Start the application server.
11. Upgrade and then restart Sun Identity Manager Gateway. (See [Step 10 on page 58](#) for detailed instructions.)

On a Unix Platform

Use the following steps to upgrade Identity Manager manually on a supported Unix platform:

1. Stop the application server and Sun Identity Manager Gateway.
2. Update the Identity Manager database. (See [Step 2 on page 56](#) for instructions.)
3. Enter the following commands to set your environment:

```
export ISPATH=Path to Install Software
export WSHOME=Path to Identity Manager Installation OR Staging Directory
export TEMP=Path to Temporary Directory
```

4. Run pre-process:

```
mkdir $TEMP
cd $TEMP
jar -xvf $ISPATH/idm.war \
WEB-INF/lib/idm.jar WEB-INF/lib/idmcommon.jar
CLASSPATH=$TEMP/WEB-INF/lib/idm.jar:\
$TEMP/WEB-INF/lib/idmcommon.jar:
java -classpath $CLASSPATH -Dwaveset.home=$WSHOME \
com.waveset.install.UpgradePreProcess
```

5. Install software:

```
cd $WSHOME
jar -xvf $ISPATH/idm.war
```

6. Run post-process:

```
java -classpath $CLASSPATH -Dwaveset.home=$WSHOME
com.waveset.install.UpgradePostProcess
```

NOTE The installer supports upgrading installations that have renamed, deleted, or disabled the default Configurator account.

The installer prompts you for user name and password to import the `update.xml` during the upgrade post process. If the user or password is entered incorrectly, you will be prompted (up to three times) to enter the correct password. The error will be displayed in the text box behind it.

For manual installation you must provide the `-U username -P password` flags to pass the credentials to the `UpgradePostProcess` procedure.

7. Change directory to `$WSHOME/bin/solaris` or `$WSHOME/bin/linux`, and then set permissions on the files in the directory so that they are executable.
8. If you installed into a staging directory, create a `.war` file for deployment to your application server.
9. Remove the Identity Manager files from the application server work directory.
10. If the upgrade process did not do so already, move any hotfix class files from the `WEB-INF/classes` directory to the `$WSHOME/patches/HotfixName` directory.
11. Start the application server.
12. Upgrade and then restart Sun Identity Manager Gateway. (See [Step 10 on page 58](#) for instructions.)

Deprecated API

This chapter lists all Identity Manager Application Programming Interfaces (APIs) deprecated since Identity Manager 6.0 2005Q4M3 and their replacements (if available). This chapter is divided into the following sections:

- Deprecated Constructors (on page 2-63)
- Deprecated Methods and Fields (on page 2-64)

Deprecated Constructors

The following table lists the deprecated constructors and the replacement constructors, when available.

Deprecated Constructor	Replacement
<code>com.sun.idm.idmx.IDMXContext</code>	<code>com.waveset.object.LighthouseContext</code>
<code>com.sun.idm.idmx.IDMXContextFactory</code>	<code>com.waveset.session.SessionFactory</code>
<code>com.waveset.adapter.ActiveDirectoryActiveSyncAdapter</code>	<code>com.waveset.adapter.ADSIResourceAdapter</code>
<code>com.waveset.adapter.AD_LDAPResourceAdapter</code>	<code>com.waveset.adapter.LDAPResourceAdapter</code>
<code>com.waveset.adapter.AttrParse</code>	<code>com.waveset.object.AttrParse</code>
<code>com.waveset.adapter.ConfirmedSync</code>	
<code>com.waveset.adapter.DblBufIterator</code>	<code>com.waveset.util.BufferedIterator</code> <code>com.waveset.util.BlockIterator</code> <code>com.waveset.adapter.AccountIteratorWrapper</code>
<code>com.waveset.adapter.DominoActiveSyncAdapter</code>	<code>com.waveset.adapter.DominoResourceAdapter</code>
<code>com.waveset.adapter.LDAPChangeLogActiveSyncAdapter</code>	<code>com.waveset.adapter.LDAPResourceAdapter</code>
<code>com.waveset.adapter.NDSActiveSyncAdapter</code>	<code>com.waveset.adapter.NDSResourceAdapter</code>
<code>com.waveset.adapter.PeopleSoftResourceAdapter</code>	
<code>com.waveset.adapter.RemedyActiveSyncResourceAdapter</code>	<code>com.waveset.adapter.RemedyResourceAdapter</code>
<code>com.waveset.adapter.TopSecretActiveSyncAdapter</code>	<code>com.waveset.adapter.TopSecretResourceAdapter</code>

Deprecated Constructor	Replacement
com.waveset.exception.ConfigurationError	com.waveset.util.ConfigurationError
com.waveset.exception.IOException	com.waveset.util.IOException
com.waveset.exception.XmlParseException	com.waveset.util.XmlParseException
com.waveset.object.IAPI	com.waveset.adapter.iapi.IAPI
com.waveset.object.IAPIProcess	com.waveset.adapter.iapi.IAPIFactory
com.waveset.object.IAPIUser	com.waveset.adapter.iapi.IAPIUser
com.waveset.object.RemedyTemplate	
com.waveset.object.ReportCounter	
com.waveset.object.SourceManager	com.waveset.view.SourceAdapterManagerView
com.waveset.security.authn.LoginInfo	com.waveset.object.LoginInfo
com.waveset.security.authn.SignedString	com.waveset.util.SignedString
com.waveset.security.authn.Subject	com.waveset.object.Subject
com.waveset.security.authz.Permission	com.waveset.object.Permission
com.waveset.security.authz.Right	com.waveset.object.Right
com.waveset.util.Debug	com.sun.idm.logging.Trace
com.waveset.util.HtmlUtil	com.waveset.ui.util.html.HtmlUtil
com.waveset.util.ITrace	com.sun.idm.logging.Trace

Deprecated Methods and Fields

The tables in this section list all methods and fields that were deprecated in this release. The methods and fields are sorted by class name.

The data in the **Replacement** column may contain the following types of information:

- If the column is blank, then there is no replacement for the deprecated method or field.
- If no class name is listed, then the replacement method or field is defined in the same class as the deprecated method or field.

- If the replacement method or field is defined in a different class as the deprecated method or field, the replacement is listed using Javadoc syntax. For example, the `getBaseContextAttrName()` method in the `com.waveset.adapter.ADSIResourceAdapter` class has been deprecated. Its replacement is listed as `com.waveset.adapter.ResourceAdapter#ResourceAdapter()`

where:

- `com.waveset.adapter` is the package name.
- `ResourceAdapter` is the class name.
- `ResourceAdapter()` is the method and argument list.

com.waveset.adapter.AccessManagerResourceAdapter

Deprecated Method	Replacement
<code>handlePDException(Exception)</code>	<code>handlePDException(PDException)</code>

com.waveset.adapter.ACF2ResourceAdapter

Deprecated Method	Replacement
<code>getAccountAttributes(String)</code>	

com.waveset.adapter.ActiveSync

Deprecated Method	Replacement
<code>RA_UPDATE_IF_DELETE</code>	

com.waveset.adapter.ActiveSyncUtil

Deprecated Method	Replacement
<code>getLogFileFullPath()</code>	

com.waveset.adapter.ADSIResourceAdapter

Deprecated Method	Replacement
buildEvent(UpdateRow)	com.waveset.adapter.iapi.IAPIFactory#getAPI(Map,Map,ResourceAdapterBase)
getBaseContextAttrName()	com.waveset.adapter.ResourceAdapter#getBaseContexts()
RA_UPDATE_IF_DELETE	com.waveset.adapter.ActiveSync#RA_DELETE_RULE

com.waveset.adapter.AgentResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	

com.waveset.adapter.AIXResourceAdapter.BlockAcctlter

Deprecated Method	Replacement
BlockAcctlter(AIXResourceAdapter,CaptureList)	BlockAcctlter(CaptureList)
BlockAcctlter(int,CaptureList)	BlockAcctlter(CaptureList)

com.waveset.adapter.AuthSSOResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	

com.waveset.adapter.ClearTrustResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	

com.waveset.adapter.DatabaseTableResourceAdapter

Deprecated Method	Replacement
RA_PROCESS_NAME	com.waveset.adapter.ActiveSync#RA_PROCESS_RULE

com.waveset.adapter.DB2ResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	

com.waveset.adapter.DominoResourceAdapter

Deprecated Method	Replacement
buildEvent(UpdateRow)	com.waveset.adapter.iapi.IAPIFactory#getIAPI(Map,Map,ResourceAdapterBase)
RA_UPDATE_IF_DELETE	com.waveset.adapter.ActiveSync#RA_DELETE_RULE

com.waveset.adapter.DominoResourceAdapterBase

Deprecated Method	Replacement
getAccountAttributes(String)	

com.waveset.adapter.ExampleTableResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	

com.waveset.adapter.GenericScriptResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	

com.waveset.adapter.GetAccessResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	

com.waveset.adapter.HostConnectionPool

Deprecated Method	Replacement
getConnection(HostAccessLogin)	com.waveset.adapter.HostConnPool#getAffinityConnection(HostAccessLogin)
releaseConnection(HostAccess)	com.waveset.adapter.HostConnPool#releaseConnection(HostAccess)

com.waveset.adapter.HostConnPool

Deprecated Method	Replacement
getConnection(HostAccessLogin)	getAffinityConnection(HostAccessLogin)
putFree()	

com.waveset.adapter.iapi.IAPIFactory

Deprecated Method	Replacement
getIAPIDProcess(Map,Map,String,Resource)	getIAPI(Map,Map,String,ResourceAdapterBase)
getIAPIDProcess(Element)	
getIAPIUser(Element)	

Deprecated Method	Replacement
getAPIUser(Map,Map,String,Map)	getAPI(Map,Map,String,ResourceAdapterBase)
getAPIUser(Map,Map,String,Resource)	getAPI(Map,Map,String,ResourceAdapterBase)

com.waveset.adapter.IDMResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	

com.waveset.adapter.INISafeNexessResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	

com.waveset.adapter.LDAPResourceAdapterBase

Deprecated Method	Replacement
addUserToGroup(LDAPObject,String,String)	addUserToGroup(String,String,String)
buildBaseUrl()	
buildBaseUrl(String)	
buildEvent(UpdateRow)	
getAccountAttributes(String)	
getBaseContextAttrName()	com.waveset.adapter.ResourceAdapter#getBaseContexts()
getGroups(Name,String,Vector,Vector)	getGroups(String,String,Vector,Vector)
getLDAPAttributes(String,DirContext[],String)	getLDAPAttributes(String,DirContext,String,String[])
getLDAPAttributes(String,DirContext[])	getLDAPAttributes(String,DirContext,String,String[])
RA_PROCESS_NAME	com.waveset.adapter.ActiveSync#RA_PROCESS_RULE
removeNameFromAttribute(DirContext,Name,Attribute)	removeNameFromAttribute(DirContext,String,boolean,Attribute)

Deprecated Method	Replacement
removeUserFromAllGroups(Name,String,WavesetResult)	removeUserFromAllGroups(String,boolean,String,WavesetResult)
removeUserFromGroup(DirContext,Name,String,String,Attributes)	removeUserFromGroup(DirContext,String,boolean,String,String,Attributes)
removeUserFromGroups(Name,Vector,String,WavesetResult)	removeUserFromGroups(String,boolean,Vector,String,WavesetResult)

com.waveset.adapter.MySQLResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	

com.waveset.adapter.NaturalResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	

com.waveset.adapter.NDSResourceAdapter

Deprecated Method	Replacement
buildEvent(UpdateRow)	
getBaseContextAttrName()	com.waveset.adapter.ResourceAdapter#getBaseContexts()

com.waveset.adapter.ONTDirectorySmartResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	

com.waveset.adapter.OS400ResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	

com.waveset.adapter.PeopleSoftComponentActiveSyncAdapter

Deprecated Method	Replacement
DEFAULT_AUDIT_STAMP_FORMAT	
DEFAULT_AUDIT_STAMP_START_DATE	
getAccountAttributes(String)	
getUpdateRows(UpdateRow)	getUpdateRows(UpdateRow)
RA_AUDIT_STAMP_FORMAT	

com.waveset.adapter.RACFResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	

com.waveset.adapter.RASecureConnection

Deprecated Method	Replacement
ExchangeAuth(boolean)	ExchangeAuth(boolean,byte[])

com.waveset.adapter.RedHatLinuxResourceAdapter.BlockAcctlter

Deprecated Method	Replacement
BlockAcctlter(int,CaptureList)	BlockAcctlter(SVIDResourceAdapter,CaptureList)

com.waveset.adapter.RequestResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	

com.waveset.adapter.ResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	
getBaseContextAttrName()	getBaseContexts()

com.waveset.adapter.ResourceAdapterBase

Deprecated Method	Replacement
getAccountAttributes(String)	
getAdapter(Resource,LighthouseContext)	getAdapterProxy(Resource,LighthouseContext)
getAdapter(Resource,ObjectCache,WSUser)	getAdapterProxy(Resource,ObjectCache)
getAdapter(Resource,ObjectCache)	getAdapterProxy(Resource,LighthouseContext)
getBaseContextAttrName()	getBaseContexts()
isExcludedAccount(String,Rule)	com.waveset.adapter.ResourceAdapterProxy#isExcludedAccount(String, Map,ResourceOperation,Rule)
isExcludedAccount(String)	com.waveset.adapter.ResourceAdapterProxy#isExcludedAccount(String, Map,ResourceOperation,Rule)

com.waveset.adapter.ResourceAdapterProxy

Deprecated Method	Replacement
getAccountAttributes(String)	
getBaseContextAttrName()	getBaseContexts()

com.waveset.adapter.ResourceManager

Deprecated Method	Replacement
getResourceTypes()	getResourcePrototypes() getResourcePrototypes(ObjectCache,boolean)
getResourceTypeStrings()	getResourcePrototypeNames(ObjectCache)

com.waveset.adapter.SAPHRActiveSyncAdapter

Deprecated Method	Replacement
RA_PROCESS_NAME	com.waveset.adapter.ActiveSync#RA_PROCESS_RULE

com.waveset.adapter.SAPResourceAdapter

Deprecated Method	Replacement
unexpirePassword(String,WavesetResult)	unexpirePassword(String, String,String,WavesetResult)
unexpirePassword(WSUser,WavesetResult)	unexpirePassword(String, String,String,WavesetResult)

com.waveset.adapter.ScriptedConnection

Subclass	Deprecated Method	Replacement
Script	hasNextToken()	
Script	nextToken()	
ScriptedConnection	disconnect()	com.waveset.adapter.ResourceConnection#disconnect()
ScriptedConnection Factory	getScriptedConnection(String,HashMap)	com.waveset.adapter.ScriptedConnectionPool#getConnection(HashMap,String,long,boolean)
SSHConnection	disconnect()	disconnect()
TelnetConnection	disconnect()	disconnect()

com.waveset.adapter.ScriptedHostResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	

com.waveset.adapter.SkeletonResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	

com.waveset.adapter.SMEResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	

com.waveset.adapter.SQLServerResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	

com.waveset.adapter.SunAccessManagerResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	
getBaseContextAttrName()	com.waveset.adapter.ResourceAdapter#getBaseContexts()

com.waveset.adapter.SVIDResourceAdapter.BlockAcctIter

Deprecated Method	Replacement
BlockAcctIter(int,CaptureList)	BlockAcctIter(CaptureList)
BlockAcctIter(SVIDResourceAdapter,CaptureList)	BlockAcctIter(CaptureList)

com.waveset.adapter.SybaseResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	

com.waveset.adapter.TestResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	

com.waveset.adapter.TopSecretResourceAdapter

Deprecated Method	Replacement
hasError(String,String)	hasError(String,String,String)
login(HostAccess hostAccess)	login(HostAccess,ServerAffinity)

com.waveset.adapter.VerityResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	

com.waveset.adapter.XMLResourceAdapter

Deprecated Method	Replacement
getAccountAttributes(String)	

com.waveset.msgcat.Catalog

Deprecated Method	Replacement
getMessage(String, Object[], Locale)	format (Locale, String, Object[])
getMessage(Locale, String, Object[])	format (Locale, String, Object[])
getMessage(Locale, String)	format (Locale, String)
getMessage(String, Locale)	format (Locale, String)
getMessage(String, Object[])	format (Locale, String, Object[])

com.waveset.object.Account

Deprecated Method	Replacement
getUnowned()	hasOwner()
setUnowned(boolean)	setOwner(WSUser)

com.waveset.object.AccountAttributeType

Deprecated Method	Replacement
getAttrType()	getSyntax()
setAttrType(String)	setSyntax(String)
	setSyntax(Syntax)

com.waveset.object.Attribute

Deprecated Method	Replacement
BLOCK_SIZE	BLOCK_ROWS_GET BLOCK_ROWS_LIST
EVENTDATE	EVENT_DATETIME
EVENTTIME	EVENT_DATETIME
getDbColumnLength()	
getDbColumnName()	
STARTUP_TYPE_AUTO	com.waveset.object.Resource#STARTUP_TYPE_AUTO
STARTUP_TYPE_AUTO_FAILOVER	com.waveset.object.Resource#STARTUP_TYPE_AUTO_FAILOVER
STARTUP_TYPE_DISABLED	com.waveset.object.Resource#STARTUP_TYPE_DISABLED
STARTUP_TYPE_MANUAL	com.waveset.object.Resource#STARTUP_TYPE_MANUAL
STARTUP_TYPER	com.waveset.object.Resource#STARTUP_TYPER
STARTUP_TYPER_DISPLAY_NAMES	com.waveset.object.Resource#STARTUP_TYPER_DISPLAY_NAMES

com.waveset.object.AttributeDefinition

Deprecated Method	Replacement
AttributeDefinition(String,String)	AttributeDefinition(String,Syntax)
setAttrType(String)	setSyntax(Syntax)

com.waveset.object.AuditEvent

Deprecated Method	Replacement
setAttributeMap(Map)	setAuditableAttributes(Map)
addAuditableAttributes(AccountAttributeType[],WSAttributes)	setAuditableAttributes(Map)

Deprecated Method	Replacement
getAttributeMap()	getAuditableAttributes()
getAttributeValue(String)	getAuditableAttributes()
setAccountAttributesBlob(Map)	setAccountAttributesBlob(Map,Map)
setAccountAttributesBlob(WSAttributes,List)	setAccountAttributesBlob(WSAttributes,WSAttributes,List)

com.waveset.object.CacheManager

Deprecated Method	Replacement
getAllObjects(Type,AttributeCondition[])	listObjects(Type,AttributeCondition[])
getAllObjects(Type,WSAttributes)	listObjects(Type,WSAttributes)
getAllObjects(Type)	listObjects(Type)

com.waveset.object.Constants

Deprecated Method	Replacement
MAX_SUMMARY_STRING_LENGTH	

com.waveset.object.EmailTemplate

Deprecated Method	Replacement
setToAddress(String)	setTo(String)
getFromAddress()	getFrom()
getToAddress()	getTo()
setFromAddress(String)	setFrom(String)
VAR_FROM_ADDRESS	VAR_FROM
VAR_TO_ADDRESS	VAR_TO

com.waveset.object.Form

Deprecated Method	Replacement
EL_HELP	com.waveset.object.GenericObject#toMap(int)
getDefaultDataType()	getDefaultSyntax()
getType()	getSyntax()
setType(String)	setSyntax(Syntax)

com.waveset.object.GenericObject

Deprecated Method	Replacement
toMap(boolean)	toMap(String,int)
toMap(String,boolean)	

com.waveset.object.LoginConfig

Deprecated Method	Replacement
getApp(String)	getLoginApp(String)

com.waveset.object.MessageUtil

Deprecated Method	Replacement
getActionDisplayKey(String)	
getEventParmDisplayKey(String)	
getResultDisplayKey(String)	
getTypeDisplayKey(String)	com.waveset.ui.FormUtil#getTypeDisplayName(LightHouseContext,String)

com.waveset.object.RepositoryResult

Deprecated Method	Replacement
get(int)	
getId(int)	
getName(int)	
getObject(int)	
getRowCount()	
getRows()	
seek(int)	hasNext() next()
sort()	

com.waveset.object.RepositoryResult.Row

Deprecated Method	Replacement
getSummaryAttributes()	getAttributes()

com.waveset.object.ResourceAttribute

Deprecated Method	Replacement
setType(String)	setSyntax(Syntax)

com.waveset.object.TaskInstance

Deprecated Method	Replacement
DATE_FORMAT	com.waveset.util.Util#stringToDate(String, String) com.waveset.util.Util#getCanonicalDate(Date) com.waveset.util.Util#getCanonicalDate(Date, TimeZo ne) com.waveset.util.Util#getCanonicalDate(long)

Deprecated Method	Replacement
VAR_RESULT_LIMIT	setResultLimit(int) getResultLimit()
VAR_TASK_STATUS	

com.waveset.object.TaskTemplate

Deprecated Method	Replacement
setMode(String)	setExecMode(String)
setMode(TaskDefinition.ExecMode)	setExecMode(TaskDefinition,ExecMode)

com.waveset.object.Type

Deprecated Method	Replacement
AUDIT_CONFIG	
AUDIT_PRUNER_TASK	
AUDIT_QUERY	
DISCOVERY	
getSubtypes()	getLegacyTypes()
NOTIFY_CONFIG	
REPORT_COUNTER	
SUMMARY_REPORT_TASK	
USAGE_REPORT	
USAGE_REPORT_TASK	

com.waveset.object.UserUIConfig

Deprecated Method	Replacement
getCapabilityGroups()	
getAppletColumns()	getAppletColumnDefs()

Deprecated Method	Replacement
getCapabilityGroup(String)	
getCapabilityGroupNames()	
getFindMatchOperatorDisplayNameKeys()	
getFindMatchOperators()	
getFindResultsColumns()	
getFindResultsSortColumn()	
getFindUserDefaultSearchAttribute()	
getFindUserSearchAttributes()	
getFindUserShowAttribute(int)	
getFindUserShowCapabilitiesSearch(int)	
getFindUserShowDisabled(int)	
getFindUserShowOrganizationSearch(int)	
getFindUserShowProvisioningSearch(int)	
getFindUserShowResourcesSearch(int)	
getFindUserShowRoleSearch(int)	

com.waveset.object.ViewMaster

Deprecated Method	Replacement
ViewMaster()	ViewMaster(LighthouseContext)
ViewMaster(String,String)	ViewMaster(LighthouseContext)
ViewMaster(Subject,String)	ViewMaster(LighthouseContext)

com.waveset.session

Subclass	Deprecated Method or Field	Replacement
Session	listApprovers()	getAdministrators(Map)
	listControlledApprovers()	getAdministrators(Map)
	listSimilarApprovers(String adminName)	getAdministrators(Map)

Subclass	Deprecated Method or Field	Replacement
SessionFactory	getApp(String)	getLoginApp(String)
	getApps()	getLoginApps()
WorkflowServices	ARG_TASK_DATE	com.waveset.object.Attribute#DATE

com.waveset.task.TaskContext

Deprecated Method	Replacement
getAccessPolicy()	
getRepository()	

com.waveset.ui.util.FormUtil

Deprecated Method	Replacement
getAdministrators(Session,List)	getUsers(LighthouseContext,Map)
getAdministrators(Session,Map)	getUsers(LighthouseContext,Map)
getApplications(LighthouseContext,List)	getApplications(LighthouseContext,Map)
getApplications(LighthouseContext)	getApplications(LighthouseContext,Map)
getApproverNames(Session,List)	getUsers(LighthouseContext,Map)
getApproverNames(Session)	getUsers(LighthouseContext,Map)
getApprovers(Session,List)	getUsers(LighthouseContext,Map)
getApprovers(Session)	getUsers(LighthouseContext,Map)
getCapabilities(LighthouseContext,List,Map)	getCapabilities(LighthouseContext,Map)
getCapabilities(LighthouseContext,List)	getCapabilities(LighthouseContext,Map)
getCapabilities(LighthouseContext,String,String)	getCapabilities(LighthouseContext,Map)
getCapabilities(LighthouseContext)	getCapabilities(LighthouseContext,Map)
getObjectNames(LighthouseContext,String,List,Map)	getObjectNames(LighthouseContext,String,Map)
getObjectNames(LighthouseContext,String,List)	getObjectNames(LighthouseContext,String,Map)
getObjectNames(LighthouseContext,String,String,String,List,Map)	getObjectNames(LighthouseContext,String,Map)

Deprecated Method	Replacement
<code>getObjectNames(LighthouseContext,String,String,String,List)</code>	<code>getObjectNames(LighthouseContext,String,Map)</code>
<code>getObjectNames(LighthouseContext,Type,String,String,List,Map)</code>	<code>getObjectNames(LighthouseContext,String,Map)</code>
<code>getObjectNames(LighthouseContext,Type,String,String,List)</code>	<code>getObjectNames(LighthouseContext,String,Map)</code>
<code>getOrganizations(LighthouseContext,boolean,List)</code>	<code>getOrganizationsDisplayNames(LighthouseContext,Map)</code>
<code>getOrganizations(LighthouseContext,boolean)</code>	<code>getOrganizationsDisplayNames(LighthouseContext,Map)</code>
<code>getOrganizations(LighthouseContext,List)</code>	<code>getOrganizationsDisplayNames(LighthouseContext,Map)</code>
<code>getOrganizations(LighthouseContext)</code>	<code>getOrganizationsDisplayNames(LighthouseContext,Map)</code>
<code>getOrganizationsDisplayNames(LighthouseContext,boolean,List)</code>	<code>getOrganizationsDisplayNames(LighthouseContext,Map)</code>
<code>getOrganizationsDisplayNames(LighthouseContext,boolean)</code>	<code>getOrganizationsDisplayNames(LighthouseContext,Map)</code>
<code>getOrganizationsDisplayNames(LighthouseContext)</code>	<code>getOrganizationsDisplayNames(LighthouseContext,Map)</code>
<code>getOrganizationsDisplayNamesWithPrefixes(LighthouseContext,List)</code>	<code>getOrganizationsDisplayNames(LighthouseContext,Map)</code>
<code>getOrganizationsDisplayNamesWithPrefixes(LighthouseContext)</code>	<code>getOrganizationsDisplayNames(LighthouseContext,Map)</code>
<code>getOrganizationsWithPrefixes(LighthouseContext,List)</code>	<code>getOrganizationsDisplayNames(LighthouseContext,Map)</code>
<code>getOrganizationsWithPrefixes(LighthouseContext)</code>	<code>getOrganizationsDisplayNames(LighthouseContext,Map)</code>
<code>getSimilarApproverNames(Session,String)</code>	<code>getUsers(LighthouseContext,Map)</code>
<code>getSimilarApproverNames(Session)</code>	<code>getUsers(LighthouseContext,Map)</code>
<code>getUnassignedOrganizations(LighthouseContext,List)</code>	<code>getOrganizationsDisplayNames(LighthouseContext,Map)</code>
<code>getUnassignedOrganizations(LighthouseContext)</code>	<code>getOrganizationsDisplayNames(LighthouseContext,Map)</code>
<code>getUnassignedOrganizationsDisplayNames(LighthouseContext,List)</code>	<code>getOrganizationsDisplayNames(LighthouseContext,Map)</code>

Deprecated Method	Replacement
getUnassignedOrganizationsDisplayNames(LighthouseContext,Map)	getOrganizationsDisplayNames(LighthouseContext,Map)
getUnassignedOrganizationsDisplayNames(LighthouseContext)	getOrganizationsDisplayNames(LighthouseContext,Map)
getUnassignedOrganizationsDisplayNamesWithPrefixes(LighthouseContext,List)	getOrganizationsDisplayNames(LighthouseContext,Map)
getUnassignedOrganizationsDisplayNamesWithPrefixes(LighthouseContext)	getOrganizationsDisplayNames(LighthouseContext,Map)
getUnassignedOrganizationsWithPrefixes(LighthouseContext,List)	getOrganizationsDisplayNames(LighthouseContext,Map)
getUnassignedOrganizationsWithPrefixes(LighthouseContext)	getOrganizationsDisplayNames(LighthouseContext,Map)
getUnassignedResources(LighthouseContext,List,List)	getUnassignedResources(LighthouseContext,Map)
getUnassignedResources(LighthouseContext,String,List)	getUnassignedResources(LighthouseContext,Map)
getUnassignedResources(LighthouseContext,String)	getUnassignedResources(LighthouseContext,Map)

com.waveset.ui.util.html

Subclass	Deprecated Method	Replacement
Component	isNoWrap()	
	setHelpKey(String)	
	setNoWrap(boolean)	
HtmlHeader	NORMAL_BODY	
MultiSelect	isLockhart()	
	setLockhart(boolean)	
WizardPanel	setPreviousLabel(String)	setPrevLabel(String)

com.waveset.util.JSSE

Deprecated Method	Replacement
installIfAvailable()	

com.waveset.util.PdfReportRenderer

Deprecated Method	Replacement
render(Element,boolean,String,OutputStream)	render(Element,boolean,String,OutputStream,String,boolean)
render(Element,boolean,String)	render(Element,boolean,String,String,boolean)
render(Report,boolean,String,OutputStream)	render(Report,boolean,String,OutputStream,String,boolean)
render(Report,boolean,String)	render(String,boolean,String,String,boolean)

com.waveset.util.Quota

Deprecated Method	Replacement
getQuota()	

com.waveset.util.ReportRenderer

Deprecated Method	Replacement
renderToPdf(Report,boolean,String,OutputStream)	renderToPdf(Report,boolean,String,OutputStream,String,boolean)
renderToPdf(Report,boolean,String)	renderToPdf(Report,boolean,String,String,boolean)

com.waveset.util.Trace

Deprecated Method	Replacement
data(long,Object,String,byte[])	com.sun.idm.logging.trace.Trace#data(long,String,byte[])
entry(long,Object,String,Object[])	com.sun.idm.logging.trace.Trace#entry(long,String,Object[])
entry(long,Object,String,String)	com.sun.idm.logging.trace.Trace#entry(long,String)
entry(long,Object,String)	com.sun.idm.logging.trace.Trace#entry(long,String)
exception(long,Object,String,t)	com.sun.idm.logging.trace.Trace#throwing(long,String,Throwable) com.sun.idm.logging.trace.Trace#caught(long,String,Throwable)

Deprecated Method	Replacement
exit(long, Object, String, boolean)	com.sun.idm.logging.trace.Trace#exit(long, String, boolean)
exit(long, Object, String, int)	com.sun.idm.logging.trace.Trace#exit(long, String, int)
exit(long, Object, String, long)	com.sun.idm.logging.trace.Trace#exit(long, String, long)
exit(long, Object, String, Object)	com.sun.idm.logging.trace.Trace#exit(long, String, Object)
exit(long, Object, String)	com.sun.idm.logging.trace.Trace#exit(long, String)
getTrace()	com.sun.idm.logging.trace.TraceManager#getTrace(String)
getTrace(Class)	com.sun.idm.logging.trace.TraceManager#getTrace(String)
getTrace(String)	com.sun.idm.logging.trace.TraceManager#getTrace(String)
level1(Class, String)	com.sun.idm.logging.trace.Trace#level1(String)
level1(Object, String)	com.sun.idm.logging.trace.Trace#level1(String)
level2(Class, String)	com.sun.idm.logging.trace.Trace#level2(String)
level2(Object, String)	com.sun.idm.logging.trace.Trace#level2(String)
level3(Class, String)	com.sun.idm.logging.trace.Trace#level3(String)
level3(Object, String)	com.sun.idm.logging.trace.Trace#level3(String)
level4(Class, String)	com.sun.idm.logging.trace.Trace#level4(String)
level4(Object, String)	com.sun.idm.logging.trace.Trace#level4(String)
variable(long, Object, String, String, boolean)	com.sun.idm.logging.trace.Trace#variable(long, String, String, boolean)
variable(long, Object, String, String, int)	com.sun.idm.logging.trace.Trace#variable(long, String, String, int)
variable(long, Object, String, String, long)	com.sun.idm.logging.trace.Trace#variable(long, String, String, long)
variable(long, Object, String, String, Object)	com.sun.idm.logging.trace.Trace#variable(long, String, String, Object)
void info(long, Object, String, String)	com.sun.idm.logging.trace.Trace#info(long, String, String)

com.waveset.util.Util

Deprecated Method	Replacement
DATE_FORMAT_CANONICAL	stringToDate(String, String) getCanonicalDate(Date) getCanonicalDate(Date, TimeZone) getCanonicalDate(long)

Deprecated Method	Replacement
debug(Object)	
getCanonicalDateFormat()	stringToDate(String,String) getCanonicalDate(Date) getCanonicalDate(Date,TimeZone) getCanonicalDate(long)
getOldCanonicalDateString(Date,boolean)	getCanonicalDateString(Date)
rfc2396URLPieceEncode(String,String)	com.waveset.util.RFC2396URLPieceEncode#encode(String,String)
rfc2396URLPieceEncode(String)	com.waveset.util.RFC2396URLPieceEncode#encode(String)

com.waveset.workflow.WorkflowContext

Deprecated Method	Replacement
VAR_CASE_TERMINATED	com.waveset.object.WFProcess#VAR_CASE_TERMINATED

Documentation Additions and Corrections

This section contains new and corrected information that was required after the Identity Manager 7.0 documentation set was published. This information is organized as follows:

- [Identity Manager Installation](#)
- [Identity Manager Upgrade](#)
- [Identity Manager Administration Guide](#)
- [Identity Manager Resources Reference](#)
- [Identity Manager Technical Deployment Overview](#)
- [Identity Manager Workflows, Forms, and Views](#)
- [Identity Manager Deployment Tools](#)
- [Identity Manager Tuning, Troubleshooting, and Error Messages](#)
- [Identity Manager Service Provider Edition Deployment](#)
- [Using helpTool](#)

Identity Manager Installation

This section provides new information and documentation corrections related to *Sun Java™ System Identity Manager Installation*.

What's New?

The following new information was added to *Identity Manager Installation*:

- Because Identity Auditor and Identity Manager SPE have been merged into Identity Manager, the installation procedures for these former products have been removed.
- Added a chapter that describes how to install Identity Manager on a JBoss application server.

Updates

This section provides corrected information for *Identity Manager Installation*:

- In Chapter 1, “Before You Install”, MySQL 5.0 should be listed as a supported repository. Tomcat 5.5 should be listed as a supported application server.
- In Chapter 12, “Uninstalling Applications”, step 3 of the section titled “On UNIX” should read as follows:
 3. Enter the following command:

```
JAVA uninstall_Sun_Java_System_Identity_Manager
```

Identity Manager Upgrade

This section provides new information and documentation corrections for *Sun Java™ System Identity Manager Upgrade*.

What's New?

The following new information was added to the *Identity Manager Upgrade*:

- Instructions for upgrading Identity Manager 6.0 and 7.0 repository schemas are provided in the “Deploying the Upgrade in a Test Environment” section of Chapter 3, “Upgrading Identity Manager in a Test Environment.”
- Instructions for upgrading TaskDefinition objects in a production environment are provided in the “Changing TaskDefinition Objects in Production” section of Chapter 4, “Upgrading Identity Manager in the Production Environment.”
- Updated information describing recommended upgrade paths and the End of Service life policy for Identity Manager software products is provided in the “Upgrade Paths and End of Service Life” section of Chapter 1, “Overview of the Upgrade Process.”

Identity Manager Administration Guide

This section provides new information and documentation corrections for *Sun Java™ System Identity Manager Administration*.

What's New?

With the merging of several publications (*Identity Auditor Administration*, *Identity Manager Service Provider Edition Administration Addendum*, and *Identity Manager Audit Logging*) into the *Identity Manager Administration* guide several new chapters have been added in this edition.

The following information is new in the *Identity Manager Administration* guide:

- **Chapter 4: Configuration**
A new section was added to describe the new Bulk Resource Actions and to describe the Global Resource Policy.
- **Chapter 5: Administration**
Information about understanding and managing admin roles and capabilities has moved from the Configuration chapter to the Administration chapter.
- **Chapter 7: Reporting**
New information about using dashboards to group and view graphical reports (previously available in the *Identity Manager Service Provider Edition Administration Addendum*) has been added to this chapter. Also the types of reports is updated to include Auditor Reports.
- **Chapter 11, Identity Auditing**
This new chapter describes the identity auditing features now available in Identity Manager. This chapter explains how to conduct identity audits and access reviews, and manage user compliance.
- **Chapter 12, Audit Logging**
The Audit Logging information is now included in the *Identity Manager Administration* guide. Also, the tables listing supported data schema values in the Audit Log have been moved to Appendix C, Audit Log Database Schema.
- **Chapter 13, Service Provider Administration**
This new chapter describes how to configure the Service Provider features in Identity Manager and administer service provider users (a new type of user in Identity Manager).

- Appendix D, Active Sync Wizard

The Active Sync Wizard is deprecated in version 7.0. The instructions for using the Active Sync Wizard to configure synchronization have moved to Appendix D. Synchronization is now configured using the synchronization policy, as described in *Configuring Synchronization* in Chapter 6, *Data Synchronization and Loading*.

Updates

This section provides corrections to the *Identity Manager Administration* documentation:

- Identity Manager now provides several new events that can be tracked and displayed as graphs or charts:
 - **Provisioner Execution Counts:** Tracks how many Provisioner operations occurred (by operation type).
 - **Provisioner Execution Duration:** Tracks the duration of each Provisioner operation (by operation type).
 - **Resource Operation Count:** Tracks the number of resource operations.
 - **Resource Operation Duration:** Tracks the duration of a resource operation.
 - **Workflow Duration:** Tracks how long it took to execute a workflow.
 - **Provisioner Execution Duration:** Tracks the number of times each workflow is executed.

You select these events from the Tracked Event menu that displays on the Dashboard Graph page when you create a Dashboard Graph:

- a. From the Identity Manager administrative interface, select Reports > Dashboard Graphs.
- b. Scroll to the bottom of the Dashboard Graphs and click New to create a new dashboard graph.
- c. Enter a name in Graph Name field, and then select IDM from the Registry menu.
- d. When the Tracked Event menu displays, you can select one of these events from the menu.

Different parameters are required for each of these tracked events. Provide the required parameters and then select Save.

- e. Start some workflows and verify that the expected information is reflected in the Dashboard Graph.

Chapter 2, Getting Started

The Requests option described in the Identity Manager User Interface section should read as follows:

Requests — Submit requests for updates to user account resource assignments and role assignments.

Chapter 3, User and Account Management

Two new User Actions are now available from the Accounts > List Accounts tab related to identity auditing:

- View Compliance Violation Log — view compliance violations logged in the audit log for a selected user.

You can select a timeline or specify a date or date range for the log entries you want to view. You can also specify an email report. However, be aware that sensitive information, such as account IDs or account history may be exposed in the email. If preferred, you can override the default PDF options for the report.

- View Compliance Status — view information about the current status of compliance activities for a selected user. This action reports the data and time of the last audit policy scan, the assigned audit policies, and details about policy exemptions and violations for the user.

These options were previously available in Identity Auditor from the Compliance > User tab.

Chapter 6, Data Synchronization and Loading

You can now apply Identity Attributes during a load operation.

To enable the ability to apply identity attributes during a load operation, add Load from File or Load from Resource to the list of enabled applications for the Identity Attributes.

When enabled, the load operation does not display the following options:

- User Form
- Update Attributes
- Merge Attributes

If you select the Update Accounts option, then all identity attributes are processed fully and accounts are reprovisioned. Otherwise, only attributes that are sourced from the file, or from the resource, being loaded and that flow to the Identity user are processed.

Chapter 9, Password Sync

Configuring a JMS Listener Adapter for Password Sync is now done through the Meta View, instead of using the Active Sync Wizard.

To configure a JMS Listener Adapter for Password Sync, do the following:

1. Log in to the Identity Manager Administrative Interface.
2. Click Meta View > Identity Attributes.
3. Add the following attributes:
 - accountID — Select this attribute in the Attribute Name field and then select the IDMAccountid attribute from the JMS resource.
 - password — Select this attribute in the Attribute Name field and then select the password attribute from the JMS resource.
4. Set the Attribute Properties as appropriate. For more information about setting attribute properties, see “Adding and Editing Identity Attributes” in Chapter 3 of the *Identity Manager Administration* guide.
5. Specify Targets as appropriate. For example, you can add LDAP targets if desired, or edit the conditions for the target attributes.
6. Click OK to return to the Identity Attributes page.
7. In the Enabled Applications area, select the Active Sync application.
8. Click Save.
9. Follow the instructions in “Configuring Synchronization” for Active Sync adapters in Chapter 6 of *Identity Manager Administration* to configure synchronization for the JMS Listener adapter.

Chapter 11, Identity Auditing

- The following note was omitted from the Attestation Security section of the Identity Auditing chapter:

Note: If security on Attestations is set to organization controlled, then the Auditor Attestor capability is also required to modify another user's attestations.

- The correct value for the escalation timeout default value, stated in the section titled “Adjust Escalation Timeouts,” is 7 days.

Identity Manager Resources Reference

This section contains new information and documentation corrections for the *Sun Java™ System Identity Manager Resources Reference*:

What's New?

The following new information was added to the *Identity Manager Resources Reference*:

- BridgeStream SmartRoles adapter
- Scripted JDBC adapter
- Realm support in Sun Java System Access Manager

Updates

The Provisioning Notes table for the Shell Script adapter should state that enabling and disabling accounts is supported.

Identity Manager Technical Deployment Overview

This section contains new information and documentation corrections for *Sun Java™ System Identity Manager Technical Deployment Overview*:

What's New?

The following new information was added to *Identity Manager Technical Deployment Overview*:

- Discussion of how to handle multiple accounts for a single Identity Manager user on a resource (Appendix C, Assigning Multiple Accounts per User to a Resource)
- Updates to the procedures for private labelling of the product interfaces. (Chapter 5., Private Labelling of Identity Manager)

- Discussion of how to create a link on the login page for each available language (Appendix B, Enabling Internationalization)

Updates

This section provides corrections to *Identity Manager Technical Deployment Overview*:

- You can use CSS to set column widths in the User list and Resource list tables to a fixed pixel or percentage value. To do so, add the following style classes (commented out by default) to `customStyle.css`. You can then edit the values to meet the user's requirements.

```
th#UserListTreeContent_Col0 {
    width: 1px;
}
th#UserListTreeContent_Col1 {
    width: 1px;
}
th#UserListTreeContent_Col2 {
    width: 50%;
}
th#UserListTreeContent_Col3 {
    width: 50%;
}
th#ResourceListTreeContent_Col0 {
    width: 1px;
}
th#ResourceListTreeContent_Col1 {
    width: 1px;
}
th#ResourceListTreeContent_Col2 {
    width: 33%;
}
th#ResourceListTreeContent_Col3 {
    width: 33%;
}
th#ResourceListTreeContent_Col4 {
    width: 33%;
}
```

You can also resize table columns by clicking and dragging the right border of the column header. If you mouse over the right border of the column header, the cursor will change to a horizontal resize arrow. Left-click and drag the cursor will resize the column. (Resizing ends when you release the mouse button.)

- The System Configuration object now contains the `security.delegation.historyLength` attribute, which controls the number of previous delegations that are recorded.
- The Access Review Dashboard and Access Review Detail Report both show instances of reviews that are recorded in the audit logs. Without database maintenance, the audit logs are never trimmed, and the list of reviews grows. Identity Manager provides the ability to limit the reviews shown to a certain age range. To change this limit, you must customize `compliance/dashboard.jsp` (for the dashboard) and `sample/auditortasks.xml` (for the Details report). (The default is to show only reviews that are less than 2 years old.)

To restrict the reviews included in the Access Review Dashboard, customize `compliance/dashboard.jsp` as follows:

- Open `compliance/dashboard.jsp` in either the Identity Manager IDE or editor of your choice:
- Change the line: `form.setOption("maxAge", "2y");` to `form.setOption("maxAge", "6M");` to limit the list to reviews run in the last 6 months. The qualifiers are:
 - m - minute
 - h - hour
 - d - day
 - w - week
 - M - month
 - y - year

To show all reviews that still exist in the audit logs, comment out this line.

To restrict the reviews included in the Access Review Detail Report,

- Open `sample/auditortasks.xml` in either the IDE or editor of your choice.
- Change the following line as indicated:

```
<s>maxAge</s>
  <s>2y</s>
```

to

```
<s>maxAge</s>
  <s>6M</s>
```

to limit reviews to the last 6 months. The same qualifiers as above apply.

Each Periodic Access Review includes a set of UserEntitlement records that were created when the review was run. These records, which accumulate over time, provide valuable historical information about accounts. However, to conserve database space, consider deleting some records. You can delete a record by executing **Server Task > Run Task > Delete Access Review**. Deleting a review adds new audit log entries that indicate the review is deleted, and deletes all UserEntitlement records associated with the review, which conserves database space.

- In the section “ Changing Background Image on the Login Page”chapter 5, the third line of code should read:

```
url(../images/other/login-backimage2.jpg)
```

- Code Example 5-5 contains information that should appear in Code Example 5-4. Code Example 5.4 should be as follows:

Code Example 5.4 Customizing Navigation Tabs

```
/* LEVEL 1 TABS */
.TabLvl1Div {
    background-image:url(../images/other/dot.gif);
    background-repeat:repeat-x;
    background-position:left bottom;
    background-color:#333366;
    padding:6px 10px 0px;
}
a.TabLvl1Lnk:link, a.TabLvl1Lnk:visited {
    display:block;
    padding:4px 10px 3px;
    font: bold 0.95em sans-serif;
    color:#FFF;
    text-decoration:none;
    text-align:center;
}
table.TabLvl1Tbl td {
    background-image:url(../images/other/dot.gif);
    background-repeat:repeat-x;
    background-position:left top;
    background-color:#666699;
    border:solid 1px #abab5;
}
table.TabLvl1Tbl td.TabLvl1TblSelTd {
    background-color:#9999CC;
    background-image:url(../images/other/dot.gif);
    background-repeat:repeat-x;
    background-position:left bottom;
    border-bottom:none;
}

/* LEVEL 2 TABS */
.TabLvl2Div {
```

Code Example 5.4 Customizing Navigation Tabs *(Continued)*

```

        background-image:url(../images/other/dot.gif);
        background-repeat:repeat-x;
        background-position:left bottom;
        background-color:#9999CC;
        padding:6px 0px 0px 10px
    }
    a.TabLvl2Lnk:link, a.TabLvl2Lnk:visited{
        display:block;
        padding:3px 6px 2px;
        font: 0.8em sans-serif;
        color:#333;
        text-decoration:none;
        text-align:center;
    }
    table.TabLvl2Tbl div.TabLvl2SelTxt {
        display:block;
        padding:3px 6px 2px;
        font: 0.8em sans-serif;
        color:#333;
        font-weight:normal;
        text-align:center;
    }
    table.TabLvl2Tbl td {
        background-image:url(../images/other/dot.gif);
        background-repeat:repeat-x;
        background-position:left top;
        background-color:#CCCCFF;
        border:solid 1px #abab5;
    }
    table.TabLvl2Tbl td.TabLvl2TblSelTd {
        border-bottom:none;
        background-image:url(../images/other/dot.gif);
        background-repeat:repeat-x;
        background-position:left bottom;
        background-color:#FFF;
        border-left:solid 1px #abab5;
        border-right:solid 1px #abab5;
        border-top:solid 1px #abab5;
    }

```

Code Example 5.5 should be as follows:

Code Example 5.5 Changing Tab Panel Tabs

```

table.Tab2TblNew td
{background-image:url(..images/other/dot.gif);background-repeat:repeat-x;background-positi
on:left top;background-color:#CCCCFF;border:solid 1px #8f989f}
table.Tab2TblNew td.Tab2TblSelTd
{border-bottom:none;background-image:url(..images/other/dot.gif);background-repeat:repeat-
x;background-position:left bottom;background-color:#FFF;border-left:solid 1px
#8f989f;border-right:solid 1px #8f989f;border-top:solid 1px #8f989f}

```

Identity Manager Workflows, Forms, and Views

This section contains new information and documentation corrections for *Sun Java™ System Identity Manager Workflows, Forms, and Views*.

What's New?

The following new information was added to *Identity Manager Workflows, Forms, and Views*:

- Discussion about the `getSubordinates` `FormUtil` method (Chapter 4, `FormUtil` Methods).
- Improved discussion of the `<set>` XPRESS function and related functions (Chapter 6, XPRESS Language).
- Discussion of the `inlineAlert` HTML display component (Chapter 8, HTML Display Components).
- Discussion of how to turn off the automatic linking of existing accounts (Chapter 3, Identity Manager Forms).

Updates

This section provides corrections to the *Identity Manager Workflows, Forms, and Views* documentation:

- You can turn off policy checking in your user form by adding the following field to the form:

```

<Field name='viewOptions.CallViewValidators'>
  <Display class='Hidden' />
  <Expansion>
    <s>>false</s>
  </Expansion>
</Field>

```

This field overrides the value in the `OP_CALL_VIEW_VALIDATORS` field of `modify.jsp`.

- The Identity Manager User Interface pages include a second XPRESS form that implements the navigation bar. As a result, the rendered page contains two `<FORM>` tags, each with a different name attribute:

```
<form name="endUserNavigation"> and <form name="mainform">
```

To avoid potential confusion between these two `<FORM>` elements, make sure you use the name attribute as follows to distinguish which `<FORM>` you are referencing: `document.mainform` or `document.endUserNavigation`.

- The discussion of the `Field` element in Chapter 3, Identity Manager Forms, should contain the following description of the `confirm` attribute.

`confirm` - Use to ensure that the values of two fields match when the form is submitted. The value of this attribute should be the name of another field defined in the form whose value this field is expected to match.

Identity Manager Deployment Tools

This section contains new information and documentation corrections for the *Sun Java™ System Identity Manager Deployment Tools*:

What's New?

The following new information was added to the *Identity Manager Deployment Tools*:

- Added several new rules, related to Periodic Access Review, to the “Working with Rules” chapter.

- Moved instructions for creating and editing rules using the BPE from Chapter 2, “Working with Rules” into a new “Creating and Editing Rules” section in Appendix A, “Using the Identity Manager BPE.”
- New Chapter 1, “Using the Identity Manager IDE” describes how to install and use the new Identity Manager Integrated Development Environment (Identity Manager IDE).

This Java application is a fully integrated NetBeans plugin that enables you to view, customize, and debug Identity Manager objects in your deployment. The Identity Manager IDE was designed to replace Identity Manager’s Business Process Editor (BPE) application.

- Changed existing “Using the Identity Manager BPE” chapter into an appendix.
- New Chapter 8, “Using SPML 2.0 with Identity Manager Web Services” describes the new SPML 2.0 support in Identity Manager; including which features are supported and why, instructions for configuring SPML 2.0 support, and how to extend support in the field.

Identity Manager Tuning, Troubleshooting, and Error Messages

This section provides new information and documentation corrections for *Sun Java™ System Identity Manager Tuning, Troubleshooting, and Error Messages*.

What’s New?

The following new information was added to the *Identity Manager Tuning, Troubleshooting, and Error Messages*:

- Information about tracing authorization flows when listing or accessing Service Provider Users and when assigning AdminRoles during Service Provider User login. See the new “SPE Delegated Administration Tracing” section in Chapter 2, “Troubleshooting and Tracing.”
- Instructions explaining how to view SystemLog reports are provided in the “Viewing SystemLog Reports” section of Chapter 3, “Errors and Exceptions.”
- Information about new error messages format/presentation are provided in the “Overview” section of Chapter 3, “Errors and Exceptions.”

Updates

Some tasks have been moved from the adapter to the task package. Update these paths if you have tracing enabled for any of the following tasks, or if you have customized task definitions referencing these packages.

Old package name	New package name
com.waveset.adapter.ADSyncFailoverTask	com.waveset.task.ADSyncFailoverTask
com.waveset.adapter.ADSyncRecoveryCollectorTask	com.waveset.task.ADSyncRecoveryCollectorTask
com.waveset.adapter.SARunner	com.waveset.task.SARunner
com.waveset.adapter.SourceAdapterTask	com.waveset.task.SourceAdapterTask

Identity Manager Service Provider Edition Deployment

This section provides new information and documentation corrections for *Sun Java™ System Identity Manager SPE Deployment*.

What's New?

- Identity Manager and Identity Manager SPE now use the same auditing system. As a result, discussions about auditing have been moved to *Identity Manager Deployment Tools*.
- Identity Manager SPE now uses the LighthouseContext instead of the IDMXContext. As a result, chapter about the IDMXContext has been replaced.

Using helpTool

With the Identity Manager 6.0 release, a new feature has been added that allows you to search the online help and documentation files, which are in HTML format. The search engine is based on the SunLabs “Nova” search engine technology.

There are two stages to using the Nova engine: *indexing* and *retrieval*. During the indexing stage, the input documents are analyzed and an index is created which is used during the retrieval stage. During retrieval, it is possible to pull “passages” that consist of the context in which the query terms were found. The passage retrieval process requires the original HTML files to be present, so these files must exist in a location in the file system accessible by the search engine.

helpTool is a Java program that performs two basic functions:

- Copies the HTML source files into a location known to the search engine
- Creates the index used during the retrieval stage

You execute helpTool from the command line, as follows:

```
$ java -jar helpTool.jar
usage: HelpTool
  -d      Destination directory
  -h      This help information
  -i      Directory or JAR containing input files, no wildcards
  -n      Directory for Nova index
  -o      Output file name
  -p      Indexing properties file
```

Rebuilding/Re-Creating the Online Help Index

The HTML files for online help are packaged in a JAR file. You must extract these files to a directory for the search engine. Use the following procedure:

1. Unpack the helpTool distribution to a temporary directory. (Details TBD)

In this example, we will extract the files to `/tmp/helpTool`.

2. In a UNIX shell or Windows command window, change directory to the location where the Identity Manager application was deployed to your web container.

For example, a directory for Sun Java System Application Server might look like the following:

```
/opt/SUNWappserver/domains/domain1/applications/j2ee-modules/idm
```

3. Change your current working directory to the `help/` directory.

NOTE It is important to run helpTool from this directory or the index will not build correctly. In addition, you should remove the old index files by deleting the contents of the `index/help/` subdirectory.

4. Gather the following information for your command line arguments:

- **Destination directory** — html/help/en_US

NOTE Use the locale string appropriate for your installation.

- **Input file** — ../WEB-INF/lib/idm.jar
- **Nova index directory** — index/help
- **Output file name** — index_files_help.txt

NOTE The name of the file is not important — but the tool will exit if this file already exists.

- **Indexing properties file** — index/index.properties

5. Run the following command:

```
$ java -jar /tmp/helpTool/helpTool.jar -d html/help/en_US -i ../
WEB-INF/lib/idm.jar -n index/help -o help_files_help.txt -p index/index.properties
```

Extracted 475 files.

[15/Dec/2005:13:11:38] PM Init index/help AWord 1085803878

[15/Dec/2005:13:11:38] PM Making meta file: index/help/MF: 0

[15/Dec/2005:13:11:38] PM Created active file: index/help/AL

[15/Dec/2005:13:11:40] MP Partition: 1, 475 documents, 5496 terms.

[15/Dec/2005:13:11:40] MP Finished dumping: 1 index/help 0.266

[15/Dec/2005:13:11:40] IS 475 documents, 6.56 MB, 2.11 s, 11166.66 MB/h

[15/Dec/2005:13:11:40] PM Waiting for housekeeper to finish

[15/Dec/2005:13:11:41] PM Shutdown index/help AWord 1085803878

Rebuilding/Re-Creating the Documentation Index

Use the following procedure to rebuild or re-create the documentation index:

1. Unpack the helpTool distribution to a temporary directory. (Details TBD)

In this example, we will extract the files to `/tmp/helpTool`.

2. In a UNIX shell or Windows command window, change directory to the location where the Identity Manager application was deployed to your web container.

For example, a directory for Sun Java System Application Server might look like:

```
/opt/SUNWappserver/domains/domain1/applications/j2ee-modules/idm
```

3. Change your current working directory to the `help/` directory.

NOTE You must run helpTool from this directory or the index will not build correctly. In addition you should remove the old index files by deleting the contents of the `index/docs/` subdirectory.

4. Gather the following information for your command line arguments:

- o **Destination directory** — `html/docs`
- o **Input files** — `../doc/HTML/en_US`

NOTE The tool will copy the `en_US/` directory and subdirectories to the destination.

- o **Nova index directory** — `index/docs`
- o **Output file name** — `index_files_docs.txt`

NOTE The name of the file is not important – but the tool will exit if this file already exists.

- o **Indexing properties file** — `index/index.properties`

5. Run the following command:

```
$ java -jar /tmp/helpTool/helpTool.jar -d html/docs -i ../doc/HTML/en_US -n index/docs  
-o help_files_docs.txt -p index/index.properties
```

Copied 84 files.

Copied 105 files.

Copied 1 files.

Copied 15 files.

Copied 1 files.

Copied 58 files.

Copied 134 files.

Copied 156 files.

Copied 116 files.

Copied 136 files.

Copied 21 files.

Copied 37 files.

Copied 1 files.

Copied 13 files.

Copied 2 files.

Copied 19 files.

Copied 20 files.

Copied 52 files.

Copied 3 files.

Copied 14 files.

Copied 3 files.

Copied 3 files.

Copied 608 files.

[15/Dec/2005:13:24:25] PM Init index/docs AWord 1252155067

[15/Dec/2005:13:24:25] PM Making meta file: index/docs/MF: 0

[15/Dec/2005:13:24:25] PM Created active file: index/docs/AL

[15/Dec/2005:13:24:28] MP Partition: 1, 192 documents, 38488 terms.

[15/Dec/2005:13:24:29] MP Finished dumping: 1 index/docs 0.617

Using helpTool

[15/Dec/2005:13:24:29] IS 192 documents, 14.70 MB, 3.81 s, 13900.78 MB/h

[15/Dec/2005:13:24:29] PM Waiting for housekeeper to finish

[15/Dec/2005:13:24:30] PM Shutdown index/docs AWord 1252155067