IBM Tivoli Identity Manager V4.6 helps enterprises increase efficiency by automating and auditing identity policy

Overview

IBM Tivoli® Identity Manager V4.6 provides a secure, automated, and policy-based solution that helps effectively manage user accounts, access permissions, and passwords from creation to termination across IT environments. It helps automate the processes of creating and provisioning/de-provisioning user privileges across heterogeneous IT resources throughout the entire user lifecycle.

V4.6 can help increase user efficiency, reduce IT administration costs, and manage compliance with your security policy (policy compliance) with centralized user account maintenance (including self-service interfaces), delegated administration, automated approvals processing, documentation of controls, and other standard reports.

IBM Tivoli Identity Manager V4.6 enhancements help accelerate deployment and enforce policy compliance and provide extensions to capabilities such as policy automation and lifecycle management. Key new features in V4.6 include:

- Policy simulation, which provides powerful “what if” scenarios that take the guesswork out of changing security policies
- New pricing structure to provide 20 core adapters with purchase of the product
- New centralized reports on security policy, current access rights, and audit events to better address compliance needs
- Policy compliance intelligence and remediation, which routes complex compliance issues through workflow and provides intelligence and recommended actions on the compliance issues, eliminating the need to manually review policies
- Improved administrator teaming through streamlined notification, bulk to-do items management, and task ownership and delegation
- Policy and configuration import/export capabilities to easily migrate policy and configuration settings between different IBM Tivoli Identity Manager servers or environments, such as quality assurance to production

Key prerequisites

For details, refer to the Hardware requirements and Software requirements sections.

Planned availability dates

- June 28, 2005 (electronic software delivery)
- July 22, 2005 (media and documentation)

At a glance

IBM Tivoli Identity Manager helps you:

- Increase user and IT efficiency and
- Cut elapsed turn-on time for new accounts
- Improve productivity by allowing end users to rapidly reset and synchronize their own passwords
- Reduce error-prone manual entry by automating user submission and approval requests
- Reduce IT administration costs and
- Decrease help desk calls by providing Web self-care interfaces to perform password and personal information changes
- Lower overhead costs by automatically managing accounts, credentials and access rights throughout the user lifecycle
- Simulate policy changes with powerful “what if” scenarios that detail the impact of proposed changes

Address policy compliance needs

- Produce centralized reports on security policy, access rights, and audit events to quickly respond to internal audits and regulatory mandates
- Centralize policy-based access control and audit trails across key information systems
- Obtain intelligence and recommended actions on policy compliance issues, eliminating the need to manually review policies.
Key new features of IBM Tivoli Identity Manager V4.6

Provisioning policy simulation: Understand the impact that changes to provisioning policies will have on your users' account access before committing to changes in production. IBM Tivoli Identity Manager is a leader in its ability to simulate and preview how many accounts will be added, removed, modified, suspended, or become non-compliant with policy. It delivers a powerful “what if” capability to help eliminate user down time that may have resulted from an errant provisioning policy. You can also drill down to view individual people and accounts that are affected or choose to save policy changes in draft mode for future implementation.

Policy and configuration import/export: Save administrative time and reduce error-prone manual configuration by automatically migrating all of your policies and key configuration settings between your development, quality assurance, and production environments. Output your current production policy and configuration settings to an XML file for offline policy versioning or to enable a policy rollback.

Additional predefined policy compliance and audit reports: Improve visibility into your security management operations and quickly produce reports for auditors with new predefined reports and audit events. IBM Tivoli Identity Manager provides comprehensive reports of provisioning and access policies, current access entitlements, and audit events centrally across all managed systems from a Web-based reporting console. Predefined reports are available in Adobe PDF or comma separated value (CSV) formats.

Compliance intelligence and remediation: Route sensitive policy non-compliance issues to an authority via a to-do item for further investigation, in addition to the standard options (flag, suspend, correct) of managing policy violations. IBM Tivoli Identity Manager streamlines this process by presenting the reviewer with the specific reasons that each account is non-compliant and presents a set of recommendations for resolving the issue — eliminating the need for the reviewer to manually look up security policy.

Greater administrator teaming: Improve the productivity and efficiency of your help desk, security administrators, application owners, and other approval authorities with new multi-approval and workload balancing features. Bulk approval items, like granting access for an entire department to a new application, can now be streamlined so that the approver only receives a single e-mail reminder for all related tasks and has the ability to approve all similar requests at once. Approvals and other tasks can be more easily shared across teams by allowing individuals to lock a to-do item and either complete and unlock the item or forward it on to another authority. Native work order to-do items also provide an auditable, workflow-driven, capability to request work items, such as preparing a new employee’s office space, that may not be directly provisioned through IBM Tivoli Identity Manager.

Enhanced internationalization support: Customize many aspects of IBM Tivoli Identity Manager in a user's native language, in addition to previously supported features such as translated user interface and documentation.

Performance and workload balancing: Prioritize workload requests with an engine that ensures high-priority requests, like a password reset, even while a major process is currently running. This replaces the functional clustering concept introduced in IBM Tivoli Identity Manager V4.5.

Other new features
- Reuse of existing personal password for new accounts
- Support of name changes across managed systems
- Greater flexibility in customizing e-mails and notification events
- Account adoption via JavaScript algorithms
- Auditing of administrator actions
- Ability to log authentication attempts
- Mutual Secure Sockets Layer (SSL) between server and adapters
- Mutual SSL between server and directory
- Upgrade from V4.5.1 to V4.6

Overall features and benefits

Dynamic policy management engine
- Helps increase efficiency and speed of policy-based provisioning by defining policy-based privileges and quickly assigning users to their roles
- Helps free IT staff from access rights administration tasks through automation
- Allows an organization to enforce a consistent set of business rules for the creation of user access privileges, account IDs, and passwords on provisioned resources
- Applies role-based access control (RBAC) through association of user roles with policies, enabling them to be effectively applied to groups of users
- Dynamically detects the changes and automatically modifies user access privileges to help ensure that the latest policies are correctly enforced

Access request management
- Centralizes and controls internal and external user access rights in a unified repository
- Monitors enterprise-wide access rights across all platforms and business resources, constantly enforcing policy

Password self-service
- Allows new or existing users to synchronize and reset their own passwords
- Frees help desk to pursue other initiatives

Intelligent approval routing
- Creates streamlined, accurate, automated workflow
- Helps eliminate archaic paper trail methods
- Can quickly identify security breaches and unauthorized access
Access rights reconciliation
• Can automatically load and reconcile account data from existing sources; for example, Windows™ and Oracle
• “Closed loop” reconciliation can automatically detect and repair access policy violations which occur due to erroneous changes made directly on a managed resource’s administrative console

Broad support for system adapters
• Delivers broad support of system adapters, which facilitates the provisioning of user accounts to computing resources
• Supports many system adapters which provides the ability to add, delete, change, suspend, restore, and reconcile user accounts
• Promotes SSL-based, Internet-friendly adapter-server communications to help protect against “man in the middle” attacks on the system

Audit and history tracking
• Helps simplify auditing and reporting with automated report generation
• Maintains records of changes, deletions, additions, and other information related to access rights for auditing purposes

Scalable, fault tolerant architecture
• Based on application server technology that provides a highly scalable and fault-tolerant platform for our enhanced provisioning technology
• Can be deployed on redundant servers in a software cluster that supports failover and load balancing for scalability
• Delivers scalability for large communities, extending the reach of IBM Tivoli Identity Manager to the virtual enterprise that can include not only employees, but also contractors and business partners

Graphical workflow designer
• Allows a graphical drag-and-drop workflow designer to organize quickly and easily develop workflow processes to support the organization’s provisioning policies
• Supports the creation of both parallel and serial approval processes, and also checkpoints in a workflow process to allow the input of additional provisioning information

Product positioning

IBM Tivoli Identity Manager is an integral part of IBM’s identity management solution. It provides policy based automation to manage user identities and their access to heterogeneous information resources throughout the user lifecycle, while supporting key policy compliance and audit readiness requirements. IBM Tivoli Identity Manager integrates with IBM Tivoli Access Manager, IBM Tivoli Federated Identity Manager and IBM Tivoli Directory Integrator and IBM Tivoli Directory Server, which are the other key parts of the IBM identity management solution:

• Identity lifecycle management (user self-care, enrollment and provisioning) — IBM Tivoli Identity Manager
• Identity control (access and privacy control, single sign-on and auditing) — IBM Tivoli Access Manager
• Identity federation (sharing user authentication and attribute information between trusted Web services applications) — IBM Tivoli Federated Identity Manager
• Identity foundation (directory, directory integration, and workflow) — IBM Tivoli Directory Integrator and IBM Tivoli Directory Server

The above solutions support IBM’s IT Service Management strategy to help customers automate and standardize the way they design and integrate information technology management processes and the underlying management products that support them across separate departments within their enterprises.

Adapters in IBM Tivoli Identity Manager V4.6

To provision and maintain user accounts in systems, IBM Tivoli Identity Manager relies on its adapters (formerly referred to as “agents”). The adapters use vendor provided APIs to remotely manage user accounts in systems such as operating systems, relational databases, PKI registration authorities, enterprise resource planning packages, and other security systems.

IBM is now including core adapters with IBM Tivoli Identity Manager server at no additional charge to help increase customer time to value and decrease deployment times. These adapters work with some of the most common IT infrastructure components including:

• IBM AIX® V5.1, V5.2, and V5.3
• Cisco Access Control Server (ACS) 3.2
• Entrust PKI 6, 7
• HP-UX 11i thru 11iv2
• HP-UX NIS 11iv2
• Informix™ Dynamic Server 9.2
• LDAP Directories
• Red Hat Enterprise Linux™ 2.1, 3.0
• SUSE LINUX Enterprise Server 8
• IBM Lotus Notes® 6.0, 6.5
• Novell eDirectory (NDS) 8.7
• Oracle Database 8i, 9i, 10g
• RSA ACE Server 5.2
• Sun Solaris 8, 9
• Sun Solaris NIS 8, 9
• Sybase Adaptive Server Enterprise 12
• IBM Tivoli Access Manager 4.1, 5.1
• IBM DB2® UDB 8.1
• Microsoft™ Windows Active Directory 2000, 2003
• Microsoft Windows Local Account 2000, 2003, XP

These adapters can be downloaded from the Passport Advantage® Web site.

IBM Tivoli Identity Manager also has two other groups of adapters that customers can purchase to provision and maintain user accounts on additional applications and systems.

The first group contains adapters that interface with common enterprise resource planning applications and other commercial off-the-shelf applications and adapters that enable the development of customized adapters for homegrown applications. These are downloadable adapters. The name and part number are Identity Manager Application Value Units License & SW Maintenance 12 Months (D52EHLL).

The second group of adapters provision and maintain user accounts on systems such as IBM RACF® and IBM AS/400®. These are downloadable adapters. The name and part number are Identity Manager Host Edition Value Units License & SW Maintenance 12 Months (D52ELLH).
Due to the constantly changing nature of these systems, adapters are updated frequently and are available through download only. For a current list of available adapters go to:


IBM reserves the right to add or remove adapters from a group, move adapters between groups, and add or remove adapter groups at any time without prior notice.

Services with IBM Tivoli Identity Manager

IBM Software Group offers two types of consulting services for IBM Tivoli Identity Manager. IBM Global Services also offers identity management services that include IBM Tivoli Identity Manager.

Trademarks

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Linux is a trademark of Linus Torvalds in the United States, other countries or both.
Other company, product, and service names may be trademarks or service marks of others.
Offering Information

Product information is available via the Offering Information Web site

http://www.ibm.com/common/ssi

Also, visit the Passport Advantage® Web site

http://www.ibm.com/software/passportadvantage

Publications

English and translated publications will be available at

http://publib.boulder.ibm.com/tividd/td/tdprodlist.html

English publications will be available at general availability. National language publications will be available by August 19, 2005.

Server publications

English

- IBM Tivoli® Identity Manager V4.6
  - Planning for Deployment Guide
  - Server Installation and Configuration Guide for WebSphere® Environments
  - Database and Schema Reference
  - Problem Determination Guide
  - Release Notes®

Adapter publications

English

- IBM Tivoli Identity Manager
  - Novell Netware Adapter Installation and Configuration Guide
  - Oracle Database Adapter for Windows™ Installation and Configuration Guide
  - Sybase Adapter for Windows Installation and Configuration Guide
  - RACF® Adapter Installation and Configuration Guide
  - Active Directory Adapter Installation and Configuration Guide
  - OS/400® Adapter Installation and Configuration Guide
  - Lotus Notes® Adapter Installation and Configuration Guide
  - Solaris Adapter Installation and Configuration Guide
  - DB2 Universal Database® Adapter Installation and Configuration Guide
  - Tivoli Access Manager Adapter for Windows Installation and Configuration Guide
  - HP-UX Adapter Installation and Configuration Guide
  - Tivoli Access Manager Global Sign On Adapter for Windows Installation and Configuration Guide
  - Linux™ Adapter Installation and Configuration Guide
  - AIX® Adapter Installation and Configuration Guide

Publications for other adapters will be included with the download of the respective adapter code.

National language publications

No publications are shipped with this product.

Technical information

Hardware requirements: IBM Tivoli Identity Manager V4.6 requires a minimum of:

- 2 GB RAM
- 20 GB disk storage

Software requirements: IBM Tivoli Identity Manager V4.6 requires one of the following operating systems:

- AIX V5.2 (with maintenance level 3) or V5.3
- Sun Server Solaris 9
Planning information

IBM Services

IBM Software Group offers two types of consulting services for IBM Tivoli Identity Manager: IBM Assessment and Architecture Offering for IBM Tivoli Identity Manager (18 days). Customer Assessment and Architecture Document including:

- Business case
- Network topology and proposed architecture
- Compatibility matrix and sizing estimates
- Logical component view
- Summary of custom development requirements
- Task list for detailed solution design and implementation phase
- Risks and risk mitigation
- Skills gap analysis

IBM Assessment, Architecture and Solution Design for IBM Tivoli Identity Manager (30 days)

- Full assessment of the customer environment and business case
- Documentation of management objectives for identity management
- IBM recommended architecture for the Tivoli infrastructure
- High-level solution design
- High-level task list for a multi-phased approach to the deployment of Tivoli products
- Next steps and recommendations to move forward with next phase

IBM Global Services (IGS) also offers identity management services that include IBM Tivoli Identity Manager V4.6. The IGS Services offerings include Security Identity Workshops, Security Identity Assessments and Identity Management Solution Design, as well as strategic outsourcing solutions

Software Maintenance, previously referred to as Software Subscription and Technical Support, is included in the Passport Advantage Agreement. Installation and technical support is provided by the Software Maintenance offering of the IBM International Passport Advantage Agreement. This fee service enhances customer productivity, with voice and electronic access into IBM support organizations.

Packaging: IBM Tivoli Identity Manager V4.6 is distributed with:

- International Program License Agreement (Z125-3301)
- IBM Tivoli Identity Manager 4.6 Read Me First (GI11-4159)
- Multiple CD-ROMs
- Read This First card

Note: IBM DB2 UDB Enterprise Edition V8.2 Fixpack 1 for AIX, Solaris, and Linux is not included on the product CD-ROM, but is available via electronic download from Passport Advantage.

- Red Hat Linux Enterprise for Intel® (x86) 3.0 for IA32 with update 3 or above

Prerequisite releases for optional databases and servers

Databases

- IBM DB2® UDB 8.2 with fix pack 1 (equivalent to DB2 8.1 with fix pack 8)
- Oracle Database 9i Release 2
- Microsoft® SQL Server 2000 SP™ 3a

Directory servers

- IBM Tivoli Directory Server V5.2 (with fixpack 2) or V6.0
- Sun ONE Directory Server 5.2

Application server: IBM WebSphere Application Server 5.1.1 with cumulative fix 3.

The following products are included with IBM Tivoli Identity Manager V4.6 for use restricted to Identity Manager:

- IBM Tivoli Directory Server V6.0
- IBM Tivoli Directory Integrator V6.0
- IBM WebSphere Application Server V5.1
- IBM WebSphere Deployment Manager V5.1
- IBM DB2 UDB Enterprise Edition V8.2 for Windows, AIX, Solaris, and Linux

Supported Web browsers

- Mozilla 1.7.3
- Internet Explorer 6.0 with SP 1

IBM Tivoli Identity Manager V4.6 no longer operates on these operating systems:

- AIX V4.3.3 and V5.1
- Sun Server Solaris 8
- Windows 2000 Advanced Server
- HP-UX 11i
- Red Hat Linux Enterprise for Intel (x86) AS 2.1 (kernel 2.4 only)

IBM Tivoli Identity Manager V4.6 no longer supports the following databases, servers, and browsers:

- Databases:
  - DB2 Universal Database 7.2
  - Oracle 8i
- Web application servers:
  - WebSphere Application Server 5.0.x
  - BEA WebLogic Server
- Directory servers:
  - IBM Tivoli Directory Server 4.1, 5.1
  - Sun ONE Directory Server 5.1
- Browsers: Netscape, any previously-supported version

Note: The IBM Tivoli Identity Manager V4.5 product currently includes WebSphere Application Server V5.0, IBM Tivoli Directory Server V5.1, and IBM Tivoli Directory Integrator V5.1. However, to support Red Hat Application Server V3.0, WebSphere Application Server V5.1, IBM Tivoli Directory Server V5.2, and IBM Tivoli Directory Integrator V5.2 are being added to Identity Manager V4.5.
Security, auditability, and control

IBM Tivoli Identity Manager uses the security and auditability features of the operating system software.

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

IBM Tivoli Enhanced Value-Based Pricing terminology

IBM Tivoli Environment-managed Licensing Model: IBM Tivoli products are priced using IBM Tivoli Enhanced Value-based Pricing. The Enhanced Value-Based Pricing system is based upon the IBM Tivoli Environment-managed Licensing Model, which uses a managed-environment approach, whereby price is determined by what is managed rather than the number and type of product components installed. For example, all servers (including, but not limited to, file servers, print servers, and application servers) monitored with IBM Tivoli Monitoring require licensing sufficient for those servers. Other Tivoli products may manage clients, client devices, agents, network nodes, or other items, and are licensed and priced accordingly.

Refer to the relevant product announcement document for more information on licensing and pricing for specific products.

Unlike typical systems management licensing models that require licensing of specific software components to specific systems, the IBM Tivoli Environment-managed Licensing Model provides the customer flexibility to deploy its Tivoli products within its environment in a manner that can address and respond to the customer’s evolving architecture. That is, as the architecture of a customer’s environment changes, the customer’s implementation of Tivoli software can be altered as needed without affecting the customer’s license requirements (as long as the customer does not exceed its entitlements to the software).

Under Enhanced Value-Based Pricing, licensing and pricing of server-oriented applications are determined based upon the server’s use in the customer’s environment. Typically, such applications are licensed and priced in a manner that corresponds to each installed and activated processor of the server managed by the Tivoli application to help correlate price to value while offering a simple, scalable solution.

Where a server is physically partitioned, this approach is modified. This partitioning technique is the approach used with systems that have either multiple cards or multiple frames, each of which can be configured independently. For servers capable of physical partitioning (for example, IBM POWERparallel® Scalable POWERparallel Systems servers, Sun Ultra servers, and HP Superdome servers), licensing is required for each processor in the physical partition being managed by the Tivoli application. For example, assume that a server has 24 processors installed in aggregate. If this server is not partitioned it requires licensing for all 24 processors.

If, however, it is physically partitioned into three partitions each containing eight processors, and Tivoli products were managing only one of the three partitions, then licensing would be required for the eight processors on the physical partition managed by the Tivoli application.

For servers with virtual or logical partitions, licensing is required for all installed and activated processors on the server. For clustered environments, licensing is based on the cumulative number of installed and activated processors on each server in the cluster for each Tivoli application managing the cluster. Where the cluster includes physically partitioned servers, the considerations described above concerning physically partitioned servers apply as well.

Value-Based Pricing recognizes the convergence of RISC/UNIX® and Microsoft Windows/Intel technologies, in order to simplify the customer’s licensing requirements, and to provide a smoother, more scalable model. Pricing and licensing does not differentiate between non-zSeries® server platforms or operating systems. For some products, this platform neutrality extends to zSeries and other host servers as well. Refer to the relevant product announcement document for more information.

Charge metrics definitions

Registered user

A registered user is one and only one individual, machine, program, or device with a specific identity (ID), within or outside your enterprise, which is recorded in a registry (table, directory). A Proof of Entitlement (PoE) is required for each user accessing the program or any program component either directly or indirectly through any means on behalf of the user. An example of “indirect” access would be through a multiplexing program, device, or application server.

The program can be accessed by multiple users provided that a user authorization has been obtained for each individual user.

Notes

1. Access to the program is restricted to Users recorded in the registry.
2. Users have a unique specific identity and IDs cannot be shared.
3. When multiple, unique registries exist, the registries will be additive for charging purposes even if a specific ID exists in both registries.
4. An ID can establish one or more connections and count as a single user.

Adapter

An adapter is code that enables the IBM Tivoli Identity Manager to communicate with a computer system to manage account definitions on the computer system and/or to receive notification of password changes from the computer system.

“Per processor” charging under Full Capacity

In Full Capacity charging — where charges are based on a capacity based metric, such as a processor, PoEs must be acquired for all capacity that is active on the server where the Program or a component of the Program is run.

As an example, a customer has ordered a server with four (4) processors. The server is shipped with six processors, but two (2) of them are “inactive.” Thus, four processors are active for the customer.

Notes

1. IBM defines a physical processor in a computer as a functional unit that interprets and executes instructions. A physical processor consists of at least
an instruction control unit and one or more arithmetic and logic units.

2. Multi-core technology allows two or more processors (commonly called “cores”) to be active on a single silicon chip. With multi-core technology, IBM considers each “core” to be a physical processor. For example, in a dual-core chip, there are two physical processors residing on the single silicon chip.

3. In the zSeries Integrated Facility for Linux (IFL) environment, each IFL engine is considered a single “physical processor.”

4. Threading, a technique which makes a single processor seem to perform as two or more, does NOT affect the count of physical processors.

5. Where “blade” technology is employed, each “blade” is considered a separate server and charging is based upon the total number of processors on the blade on which the program is run.

Refer to the License Information documents for product-specific extensions to this basic definition. These documents are packaged with all IBM Tivoli products and are also available from


**Passport Advantage (PA):** Through the PA Agreement, customers may receive discounted pricing based on their total volume of eligible products, across all IBM brands, acquired worldwide. The volume is measured by determining the total PA points value of the applicable acquisitions. PA points are used only for calculating the entitled PA discount.

To determine the required Tivoli product configuration under PA, the IBM Tivoli Enhanced Value-Based Pricing Model applies. The customer’s environment is evaluated on a per-product basis.

Use the following two-step process to determine the total “Passport Advantage points value”:

1. Analyze the customer environment to determine the number of Tivoli Management Points or other charge unit for a product. The quantity of each product’s part numbers to be ordered is determined by that analysis.

2. Order the PA part number. A PA point value, which is the same worldwide for a specific part number regardless of where the order is placed, is assigned to each Tivoli product part number. The PA point value for the applicable part number multiplied by the quantity for that part number will determine the PA points for that Tivoli product part number. The sum of these PA points determines the PA point value of the applicable Tivoli product authorizations which then may be aggregated with the point value of other applicable PA product acquisitions to determine the total PA points value.

The discounted pricing available through PA is expressed in the form of Suggested Volume Prices (SVPs), which vary depending on the SVP level. Each SVP level is assigned a minimum total PA point value, which must be achieved, to qualify for that SVP level.

Media packs and documentation packs do not carry PA points and are not eligible for SVP discounting.

For additional information on PA, refer to the following Web site

http://www.ibm.com/software/passportadvantage

The following PA part number categories may be ordered:

- License and Software Maintenance 12 Months — Product authorization with maintenance for 12 months.
- Annual Software Maintenance Renewal — Maintenance renewal for an additional 12 months when a customer renews existing coverage period prior to the date upon which it expires.
- License and Software Maintenance Reinstate 12 Months — For customers who have allowed their Software Maintenance to expire, and later wish to reinstate their Software Maintenance.
- Media packs — Physical media, such as CD-ROMs, that deliver the product code.

**Exceptions to the environment-managed licensing model:** IBM Tivoli products are priced based on the environment managed and follow the definitions laid out in the terminology definitions section of this announcement, with the following exception:

IBM Tivoli Identity Manager — Count either the number of registered users or the number of processors in the servers on which IBM Tivoli Identity Manager runs, but not both.

**Scalable usage model table**

All three part numbers for IBM Tivoli Identity Manager will use the following scalable usage table to determine the required value units per 1000 users. The price per value unit will be different for each part number.

<table>
<thead>
<tr>
<th>Users</th>
<th>1,000</th>
<th>500</th>
<th>300</th>
<th>200</th>
<th>150</th>
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<tr>
<td>Value</td>
<td>1,000</td>
<td>500</td>
<td>300</td>
<td>200</td>
<td>150</td>
</tr>
<tr>
<td>Units per 1,000 users</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
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</tbody>
</table>

**Pricing model examples:** The licensing of IBM Tivoli Identity Manager V4.6 has changed. Customers licensed to IBM Tivoli Identity Manager V4.6 will be entitled to adapters (referred to as agents in Identity Manager V4.5) that were classified in the V4.5 Infrastructure category and the Lotus® Notes adapter. The pricing of the base part number has been adjusted based on these changes.

**Scenario 1:** Customer ABC wants to initially secure access for the following users and adapters through one 4-way server for its 12,000 users:

- 12,000 users of LDAP
- 12,000 users of Lotus Notes
- 12,000 users of SAP R3
- 2,000 users of RACF

First, total the users for the class of adapters within a part number. A current list of adapters is available at

Transaction 1

In this example, LDAP and Lotus Notes are no longer separately priced and are included in the purchase price of the base part number. SAP R3 is in the Application class and RACF is in the Host adapter class. Therefore, the environment is 12,000 users of Base, 12,000 users of Application, and 2,000 users of Host.

<table>
<thead>
<tr>
<th>Pricing Metric</th>
<th>Customer Value Units per REQUIRED (A)*</th>
<th>Value Units Required (A)*</th>
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<tbody>
<tr>
<td>Identity Manager</td>
<td>5,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Tier 1</td>
<td>5,000</td>
<td>1,000</td>
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<tr>
<td>Tier 2</td>
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<td>500</td>
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<td>Total value units</td>
<td>12,500</td>
<td></td>
</tr>
</tbody>
</table>

Note: There is a minimum order quantity of 250 users, for under 1,000 users in the scalable usage model, for both IBM Tivoli Identity Manager and each adapter.

Transaction 2

After the initial purchase, Customer ABC wants to secure access for 1,000 additional users with LDAP, Notes and SAP R3 and 112,000 additional Internet users using the LDAP and Access Manager adapters — an increase of 113,000 users of Identity. The new environment for ABC’s 125,000 base users would look as follows:

- 125,000 users of LDAP
- 113,000 users of Access Manager
- 13,000 users of Lotus Notes
- 13,000 users of SAP R3
- 2,000 users of RACF

The LDAP, Access Manager, and Lotus Notes adapters are counted in the base and no longer separately priced. For the remaining adapters, the incremental value units are calculated taking advantage of the scalable user table and Customer ABC’s previous purchase.

Scenario 2: Assume Customer ABC prefers unlimited user access and unlimited adapters for their environment.

The customer will require the following licensing:

IBM Tivoli Identity Manager — Unlimited user option

The unlimited user option applies only to the 12 processors licensed. If the customer installs IBM Tivoli Identity Manager on a 16-way server, an additional 4 processors would be required. This licensing is based on the server in which IBM Tivoli Identity Manager runs.

Note: There is a minimum order quantity of 12 processors for the IBM Tivoli Identity Manager Unlimited User Option.
This product is only available via Passport Advantage. It is not available as shrinkwrap.

**Product information**

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<thead>
<tr>
<th>Licensed function title</th>
<th>Product group</th>
<th>Product category</th>
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<td>IBM Tivoli Identity Manager</td>
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<td>Tivoli Identity Mgr</td>
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<td>Tivoli Security</td>
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<td>Value Units</td>
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**Passport Advantage customer: Media Pack entitlement details**

Customers with active Maintenance or subscription for the products listed below are entitled to receive the corresponding media pack.

<table>
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<tr>
<th>Entitled maintenance offerings description</th>
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</table>

**Basic license**

Customers with active Maintenance or subscription for the IBM Tivoli Identity Manager for Applications and IBM Tivoli Manager for Host Edition are entitled to receive these classes of adapters as downloadable images. Customers with active Maintenance or subscription for IBM Tivoli Identity Manager for Infrastructure will be entitled under the IBM Tivoli Identity Manager 4.6 product to continue receiving these classes of adapters as downloadable images.

**New licensees:** Orders for new licenses will be accepted now.

Shipment will begin on the planned availability date.

**Ordering information for Passport Advantage:** Passport Advantage allows you to have a common anniversary date for Software Maintenance renewals, which can simplify management and budgeting for eligible new versions and releases (and for related technical support) for your covered products. The anniversary date, established at the start of your Passport Advantage Agreement, recurs on an annual basis while your Passport Advantage Agreement remains in effect. However, regardless of when Software Maintenance is acquired, the coverage period for Software Maintenance is always up to the anniversary date specified in the acquisition.

Refer to the IBM International Passport Advantage Agreement and to the IBM Software Maintenance Handbook for specific terms relating to, and a more complete description of, technical support provided through Software Maintenance.

**Current customers** migrating from IBM Tivoli Identity Manager V4.3 or V4.4 automatically receive an equivalent IBM Tivoli Identity Manager V4.6 license provided they are current on maintenance.

During the maintenance term, IBM Tivoli Identity Manager V4.3 and V4.4 customers will be licensed for IBM Tivoli Identity Manager V4.6 under the new “user per adapter” metric as follows:

- The amount of Identity Manager V4.3 or V4.4 users will be converted to the same number of Identity Manager V4.6 server users.
- If Identity Manager V4.3 or V4.4 entitlement documents the agents (adapters) licensed, then the same adapter entitlement will apply under V4.6.
- If the agents (adapters) are not specified, the customer will be licensed for all adapters for the maintenance term.
- IBM Tivoli Identity Manager 4.5 customer entitlement will remain as is.

At maintenance renewal, the customer will need to determine the amount of users needed for each option (Identity Manager, which now contains Infrastructure adapters, Application adapters, and Host adapters).
For new customers, the quantity to be specified for the Passport Advantage part numbers in the following table is per number of required Value Units. To order for Passport Advantage, specify the desired part number and quantity.

The license part numbers are described in the Product positioning section.

<table>
<thead>
<tr>
<th>Part number</th>
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<th>Program number</th>
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</table>

Terms and conditions

This product is only available via Passport Advantage. It is not available as shrinkwrap.

Agreement: IBM International Program License Agreement. Proofs of Entitlement are required for all authorized use.

Part number products only, offered outside of Passport Advantage, where applicable, are license only and do not include Software Maintenance.

This software license includes Software Maintenance, previously referred to as Software Subscription and Technical Support.

License information form numbers

<table>
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<tr>
<th>Program name</th>
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<th>Form number</th>
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<td>L NSTL 6878D</td>
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Limited warranty: Yes

Program services

Warranty: This program has warranty for a minimum of one year from acquisition from IBM or authorized IBM Business Partner. The warranty provided to the customer, for at least one year from acquisition, is access to databases (read Web sites) for program information and FAQs, including any known fixes to defects, which the customer can download or obtain otherwise and install at leisure.
**Program technical support:** Technical support of a program product will be available for a minimum of three years from the general availability date, as long as your Software Maintenance is in effect. This technical support allows you to obtain assistance (via telephone or electronic means) from IBM for product-specific, task-oriented questions regarding the installation and operation of the program product. Software Maintenance also provides you with access to updates, releases, and versions of the program.

Customers will be notified, via announcement letter, of discontinuance of support with 12 months’ notice. If you require additional technical support from IBM, including an extension of support beyond the discontinuance date, contact your IBM representative or IBM Business Partner. This extension may be available for a fee.

**Money-back guarantee:** If for any reason you are dissatisfied with the program and you are the original licensee, return it within 30 days from the invoice date to the party (either IBM or its reseller) from whom you acquired it for a refund.

For programs acquired under the IBM International Passport Advantage offering, this term applies only to your first acquisition of the program.

**Copy and use on home/portable computer:** No

**Volume orders (IVO):** No

**Passport Advantage applies:** Yes, and through the Passport Advantage Web site at

http://www.ibm.com/software/passportadvantage

**Usage restriction:** Yes. Usage for each Value Units part number is limited to the quantity of Value Units purchased for that part number. Usage for each Unlimited Usage Option part number is limited to the quantity of processors licensed.

**Software maintenance applies:** Yes.

Software Maintenance, previously referred to as Software Subscription and Technical Support, is included in the Passport Advantage Agreement. Installation and technical support is provided by the Software Maintenance offering of the IBM International Passport Advantage Agreement. This fee service enhances customer productivity, with voice and electronic access into IBM support organizations.

IBM includes one year of Software Maintenance with the initial license acquisition of each program acquired. The initial period of Software Maintenance can be extended by the purchase of a renewal option that is available.

While your Software Maintenance is in effect, IBM provides you assistance for your routine, short duration installation and usage (how-to) questions; and code-related questions. IBM provides assistance via telephone and, if available, electronic access, only to your information systems (IS) technical support personnel during the normal business hours (published prime shift hours) of your IBM support center. (This assistance is not available to your end users.) IBM provides Severity 1 assistance 24 hours a day, every day of the year. For additional details, consult your IBM Software Support Guide at

http://techsupport.services.ibm.com/guides/handbook.html

Software Maintenance does not include assistance for the design and development of applications, your use of programs in other than their specified operating environment, or failures caused by products for which IBM is not responsible under this agreement.

For more information about the Passport Advantage Agreement, visit the Passport Advantage Web site at

http://www.ibm.com/software/passportadvantage

**iSeries™ Software Maintenance applies:** No

**Educational allowance available:** Not applicable

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**Prices**

Information on charges is available at Web site

http://www.ibm.com/support

In the Electronic tools category, select the option for “Purchase/upgrade tools.”

**Passport Advantage**

For Passport Advantage information and charges, contact your IBM representative or authorized IBM Business Partner. Additional information is also available at

http://www.ibm.com/software/passportadvantage

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