IBM

IBM Directory Server for Linux
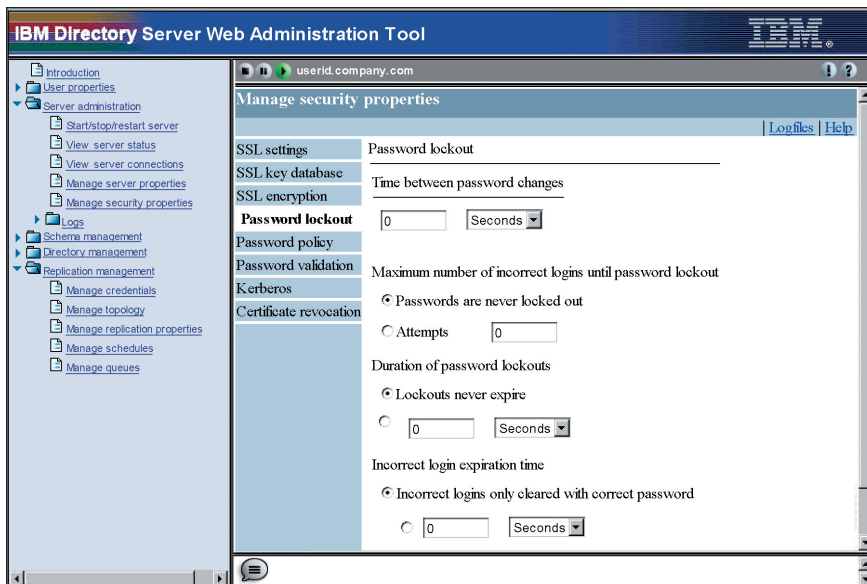

Highlights

■ *Compliant with Lightweight Directory Access Protocol (LDAP) V3 to ensure compatibility with industry-leading applications and tools*

■ *Includes robust replication capabilities to optimize application reliability, including peer-to-peer replication supporting dozens of master servers*

■ *United Linux® and Red Hat Linux distributions for Intel® and IBM @server™ zSeries™ platforms*

■ *Offers significant enhancements over earlier versions, including improved security, advanced replication, easier administration and user accessibility, Web services support and performance improvements*

■ *Based on the IBM DB2® Universal Database™ (UDB) engine, which provides powerful, reliable performance and scalability to tens of millions of entries as well as groups of hundreds of thousands of members*

■ *Offers seamless integration with IBM middleware, including IBM WebSphere® software and IBM Tivoli® identity management and security products*

■ *Eases LDAP deployment by leveraging comprehensive and extensible schema*

A key component of the e-business infrastructure

LDAP directories are becoming a core component of the next generation of e-business infrastructure. Directories are evolving from having limited application-specific and network operating system (NOS) administration roles to being a core universal network service. They are also taking on a greatly expanded role in enterprise computing and are becoming an important repository of the network. The directory is a key integration point, which identity, security, applications, systems and network management and other network services all leverage to store and retrieve data.

With a strong understanding of this enterprise need, IBM offers the Directory Portfolio of solutions, which includes IBM Directory Server V5.1, IBM Directory Integrator V5.1 and optional directory and metadirectory services. IBM Directory Server V5.1 is an LDAP solution that serves as a foundation for deploying comprehensive identity management applications and advanced software architectures. IBM Directory Integrator is an open-architecture, metadirectory solution

IBM Directory Server Web Administration Tool — IBM

Introduction
▶ User properties
▼ Server administration
  Start/stop/restart server
  View server status
  View server connections
  Manage server properties
  Manage security properties
▶ Logs
Schema management
▶ Directory management
▼ Replication management
  Manage credentials
  Manage topology
  Manage replication properties
  Manage schedules
  Manage queues

userid.company.com

Manage security properties

| Logfiles | Help

SSL settings
SSL key database
SSL encryption
Password lockout
Password policy
Password validation
Kerberos
Certificate revocation

Password lockout

Time between password changes

0   Seconds ▼

Maximum number of incorrect logins until password lockout

◉ Passwords are never locked out

○ Attempts   0

Duration of password lockouts

◉ Lockouts never expire

○   0   Seconds ▼

Incorrect login expiration time

◉ Incorrect logins only cleared with correct password

○   0   Seconds ▼

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for synchronizing and exchanging information between directory or database sources.

Leveraging advanced IT capabilities

Security and authentication are top concerns for most firms. The ability to leverage advanced information technology (IT) capabilities such as Web services and grid computing will increasingly depend upon a comprehensive enterprise directory. IBM Directory Server V5.1 adds security authentication, consistency and flexibility to your company's e-business infrastructure. With IBM Directory Server V5.1, you can reliably authenticate your users, allowing greater control across the enterprise and a protected e-business environment as you open up your internal business processes to customers, supply chain partners and automated transaction systems.

The power of IBM Directory Server V5.1

Powered by the IBM DB2 Universal Database solution, Directory Server provides the reliability and stability for your enterprise or e-business LDAP directory. As the central store for data within an enterprise, IBM Directory Server V5.1 is a powerful, security-rich and standards-compliant enterprise directory for corporate intranets and the Internet. A common goal within the enterprise today is to consolidate and unify the management of identity. IBM Directory Server V5.1 provides the foundation for rapid development and deployment of your Web applications as well as improved security features and identity management with role supports, fine-grained access control and entry ownership. For mission-critical enterprise requirements where 24x7 availability and exceptional performance are essential, Directory Server is the right choice.

Implementing a directory server solution with end-to-end Professional Services

In support of Directory Server V5.1, IBM offers Professional Services that span the implementation cycle for directory solutions. The scope of the directory solutions typically involves enterprise directory services, metadirectory services and identity provisioning. IBM metadirectory services provide integration middleware solutions to tie together heterogeneous directories and enable enterprises to create one integrated enterprise directory. This helps to significantly decrease the cost of maintaining disjointed directory services.

Providing a wealth of features to address your directory needs

IBM Directory Server V5.1 offers an enterprise-class solution to help you create a powerful identity infrastructure. When choosing a directory server, you should be sure it meets your current business needs and can scale to meet future needs by asking the following questions:

Is your directory solution open?

Unlike vendors that build proprietary extensions into their directory and "prefer" their own provisioning applications, IBM takes an open approach to our directory technology, ensuring that you have a wide array of operating system and application choices.

Features and Benefits

Feature	Benefit
Secure Sockets Layer (SSL) data encryption	IBM Directory Server V5.1 includes the ability to encrypt data that is transmitted on the wire. By using SSL technology with IBM Directory Server, data can be securely sent from the client to the LDAP server.
DB2 UDB 8.1 Data Store	Proven performance, reliability and data integrity.
Write-through cache	Updates are committed to the back-end data store and will not be lost if the server fails.
Fine-grained access control	Controls access to data down to the individual attribute level, allowing self-service and delegated administration. Allows access to a limited number of attributes within an entry, enabling users to update a specific number of attributes while the rest are read-only. Protects the changing of access control list (ACL) values within the directory, preventing unauthorized users from changing the security assigned to objects within the directory structure.
Entry ownership	Allows not only access, but also entry ownership to be defined, providing a very robust delegated administration model.
Client SDKs	C SDK is provided, including a 64-bit AIX client, allowing fast application development. Java™ access is also supported using a standard J2EE interface.
Logging on server events	Audit, Change and Error logs are provided to allow quick problem detection and prevention. The Change log can be used to allow connection to external data sources and avoid comparison of all data to find changes that occur.
Robust replication	Single-master replication and peer-to-peer replication are supported, enabling the server to be configured to prevent any server outage for either reads or writes. Allows configuration of servers to match the topography of the network to ensure data availability and maximize server response time. Provides flexibility in the deployment of servers by offering subtree and cascaded replication options.
National Language Support (NLS)	Administrative console and documentation are available in many languages.
Comprehensive and extensible schema	The IBM default schema is one of the most complete in the industry. The schema includes not only person objects and attributes, but also the Dynamic Enabled Networking (DEN) schema for devices and support for Java object storage. Using the IBM schema helps avoid the time-consuming design of schemata, which can slow the deployment of the LDAP directory. The schema can be updated dynamically without causing a service interruption or a server restart. All schema updates are replicated.
Management	V5.1 has a redesigned Web browser-based directory administration console. This console can be run remotely and the Web interface simplifies server administration over command line, script or programmatic interfaces. You can quickly add new attributes, modify existing attributes, add object classes, view the directory tree, add entries and modify schemas. You can also easily perform all of the data-administration tasks from a remote client.
Plug-in support	You can add additional server functionality quickly by using the server plug-in framework.
Authentication	There are a number of authentication options for IBM Directory Server. You can use simple user ID and password authentication. Or, you can use more secure digital certificate-based authentication. IBM Directory Server also includes an SASL Challenge-Response Authentication Mechanism MD5 (CRAM-MD5) and Kerberos authentication. The choice of authentication method is left to the user, who can choose a method that is supported or can define an alternative using the SASL interface.
Installation	IBM has consistent GUI-driven cross-platform installation experience.

How does it improve usability?

IBM Directory Server V5.1 supports a number of features that increase administrator usability of the directory and its contents. Groups can be nested or "dynamic," which means that changes in a defined variable can automatically update the group profile. Additionally, IBM Directory Server V5.1 includes a simplified user interface for managing the directory server processes, the directory schema and its entries.

Is it scalable?

Our current offering runs a number of multimillion-entry customer directory implementations. For example, IBM Blue Pages, an extensive employee search tool, was built on our directory, and supports more than 20 million directory operations each day. IBM Directory Server V5.1 also supports groups as large as hundreds of thousands of entries and is built on DB2 database software, which can scale to about one billion database entries.

What security features does it have?

IBM Directory Server V5.1 has enhanced password policy features including pre-expiration, history-keeping and failed-attempt-count as well as additional functionality to filter and protect access control lists. These features can help protect profile information and enable you to create security-rich, customized portals.

How do the replication facilities work?

IBM Directory Server V5.1 includes replication architecture with single-master, peer-to-peer and cascading replication capabilities—enabling Directory Servers to act as hubs for sending replication data to other servers. It can also replicate a partial directory tree (subtree replication). And, the new Web-based administration tool shows the state of replicas and allows for replica administration through a graphical user interface (GUI) tool.

Does it support Web services?

IBM Directory V5.1 includes DSMLv2 functionality—extending the reach of the directory by enabling the directory to be exposed to various Web services through the use of Extensible Markup Language (XML) coding.

How is it offered?

Besides being available as a standalone offering and as a no-charge download from the Web, IBM Directory Server V5.1 is integrated into IBM Tivoli Identity and Access Manager offerings and WebSphere Application and Commerce Servers.

For more information

To learn more about IBM Directory Server V5.1 or the IBM Directory Portfolio, contact your IBM sales representative, or visit:

ibm.com/software/directory