

Nexor Directory 7.0

Electronic directories provide organisations with a centralised source of information on individuals and resources. They can store anything from names, contact information and photographs, to multimedia data references, network information and certificates.

From a directory, users can find the information they need to communicate with each other and applications can access information on user requirements.

Many organisations also gain competitive advantage by making subsets of this information (e.g. sales telephone numbers and e-mail addresses) available to external parties such as customers, prospects and trading partners, via the Web.

Nexor Directory has been developed and enhanced over many years, giving it all the benefits of a tried and tested directory architecture. As the product has been continually developed, a number of key features have been built in, these include scalability, interoperability, performance and data reliability.

Nexor Directory is specifically designed for organisations where the sending and receiving of an email is critical, where the directory is an integral part of the existing infrastructure and high performance is absolutely key. These are environments where a failure in the directory would cause an overall system failure; a failure that could not be tolerated. These applications include PKI backbones, routing systems, e-commerce backbones and identity management infrastructures.

Nexor's Directory products support both the LDAP and X.500 directory standards.

Product Features

Object-Oriented Database

Nexor Directory is a standards conformant LDAP and X.500 directory, build on an object-oriented database management system. This provides three major benefits:

- Consistency of performance
- Scalability
- Robustness.

In addition, Nexor Directory can guarantee:

- Multiple management clients can update a singular directory entry without data corruption taking place
- The database is consistent between transactions; maintains transaction integrity and provides durability through the use of recovery and restoration operations, and online backup.

Replication

A major feature of Nexor Directory is its support for DISP (Directory Information Shadowing Protocol), the X.500 standard replication protocol.

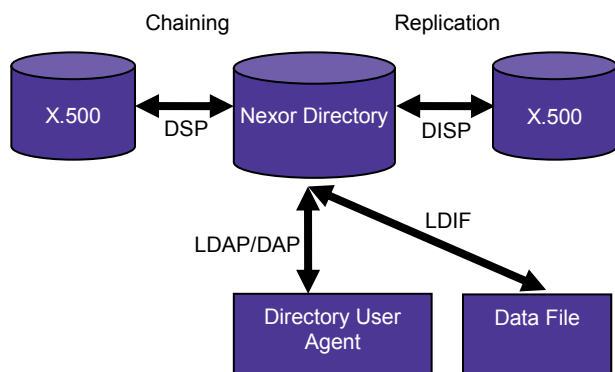
Replication enables the copying of the whole or part of the directory information between directory servers, thus improving directory response times and reducing network usage costs. It also provides resilience against directory server failures and reduces the number of distributed operations.

Specific features within Nexor Directory include:

- Scheduled updates
- Use of different replication models.

Bulk Loading

Nexor Directory provides a bulk data management tool for rapid import and export of data, in either LDIF (LDAP Data Interchange Format) or CSV (Comma Separated Value) format. This facility can be used to import data from and export data to other directory systems to perform directory synchronisation.



Directory Service Architecture

Security Features

Security in Nexor Directory consists of two key components:

Authentication

This controls who can connect to the directory and access directory information. The directory server supports the following modes of authentication:

- Simple Authentication
- Digest-MD5 Authentication
- Strong Authentication
- Anonymous Authentication

Access Control

This determines which data sets can be accessed and potentially modified and by whom.

Nexor Directory provides a full implementation of the X.500 (93) access control mechanism, providing both simple and basic access controls. This is provided down to the attribute value level if required.

Platforms

The latest release of Nexor Directory is available off-the-shelf on :

- Windows 2008 R2

connect transform protect

NEXOR®

Standards

- X.500 - Overview of the Concepts, Models and Services
- X.501 - The Directory: Models
- X.509 - Authentication framework
- X.511 - Abstract service definition
- X.518 - Procedures for distributed operation
- X.519 - Protocol specification
- X.520 - Selected attribute types
- X.521 - Selected object classes
- X.525 - Replication
- RFC2248 - Network Services Monitoring MIB
- RFC2605 - X.500 Directory Monitoring MIB
- RFC2251 - Lightweight Directory Access Protocol (v3)
- RFC2252 - Attribute Syntax Definitions
- RFC2253 - UTF-8 String Representation of Distinguished Names
- RFC2254 - The String Representation of LDAP Search Filters
- RFC2255 - The LDAP URL Format
- RFC2256 - X.500(96) User Schema for use with LDAPv3
- RFC2829 - Authentication methods for LDAP
- RFC2830 - LDAP (V3): Extension for Transport Layer Security
- RFC2831 - Using Digest Authentication as a SASL Mechanism
- RFC2849 - The LDAP Data Interchange Format (LDIF)

Product Features

Audit Logging

Nexor Directory provides a flexible audit log function which when activated, can detail every significant operation within a session (e.g. Operation, Chaining, DSA, Access Control Information and incoming connection events). This has been developed to fulfil audit trail requirements for the US, UK and Canadian military.

It can be set to occur at three distinct levels – debug, trace or notice. At debug level, logging is comprehensive and includes access control audit data. Trace level provides more information when communicating with other directory servers. Most audit logging occurs at notice level.

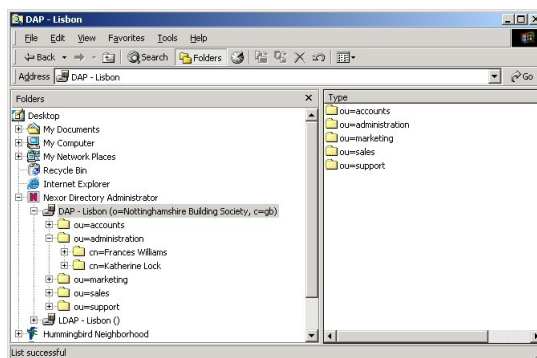
The Nexor Directory incorporates the Nexor Log Management Service which provides automatic archiving of logging information to ensure a full audit trail is maintained.

Referential Integrity

Nexor Directory will report any referential integrity anomalies that occur to ensure the referential integrity of the data held within your Directory Information Base (DIB).

Administration

Nexor Directory Administrator is an administrative directory user agent (ADUA) to facilitate browsing and modification of a directory. It supports both the Lightweight Directory Access Protocol (LDAP) and the Directory Access Protocol (DAP) international standards to access the directory service.



Nexor Directory Administrator is closely integrated into Windows Explorer, and introduces a "Nexor Directory Administrator" that allows access to multiple directory servers. Administrators can then manage the directory information in a similar manner to the files on the local computer's file system.

In addition, users can use Nexor Directory Administrator to search and browse the directory to locate appropriate information, including address information, which can then be passed to Microsoft Outlook.

Features:

- Windows Explorer interface providing familiarity
- ACP133 Compliance
- Support for the complete set of directory operations
- Enables customisation of display information
- Integrates with email applications
- Supports strong authentication and signed operations.

Server Management

Below is a summary of the key management features of the Nexor Directory Manager:

Browser based - authorised users can access the management interface from anywhere on the network. Servers can be managed from one management client.

Management of a distributed directory e.g. if two or more servers are cooperating to provide a distributed directory, the replication agreements and knowledge references can be configured from a single browser.

X.500 access control - designed to allow the ultimate in flexibility, but this can introduce extreme complexity. The Nexor directory manager uses access control templates for quick set-up of common scenarios to aid in taking advantage of the inherent flexibility.

Java-based configuration wizards - used to simplify otherwise complex tasks, such as defining replication agreements.

Schema wizard – this is supplied allowing the user to customise the directory to meet their specific requirements. This allows designers to browse and configure the object classes and attributes used by the system.

A rich suite of application and audit log files - includes detailed operational statistics.