Penrose Virtual Directory is an identity integration platform that gives you a single consolidated view of an identity, regardless of where and how it is stored. All available attributes of an identity are managed and made available through a centralized virtual directory service with Penrose Server. Penrose Studio tools easily discover and link identity information from multiple resources as if it were a single identity store.

**WHAT DOES IT DO?**

Penrose Virtual Directory centralizes and reduces the number of directories needed without actually migrating the data. The platform handles identity queries on a case-by-case basis, drawing the required authorized data in real time from native repositories and presenting it to an enterprise application. There's no need for complex synchronization of data between identity stores. Penrose Virtual Directory provides a lightweight and direct method of exposing multiple data sources using LDAP. To best address current identity management requirements, this platform delivers synchronization, replication (high availability and fault tolerance), and dynamic access features for its virtual directories solution.

**WHY SHOULD I CARE?**

The Penrose Virtual Directory platform simplifies the implementation of identity management for enterprise applications, which often need aggregated identity information. Human resource management systems (HRMS), customer relationship management (CRM), employee portals, and similar systems often require information from a variety of identity stores. Organizations with multiple identity stories due to acquisitions and growth may also need a single virtualized directory. Penrose Virtual Directory allows you to simply and easily present disparate identity resources with a customized identity security model.

**PENROSE SERVER**

The proliferation of directories on the market now requires a different directory strategy. Existing solutions, which are based on meta-directories, have failed to address this issue since it requires data migration and introduces ownership issues. Penrose Virtual Directory platform provides the best of both worlds: distributed management of identity stores along with a consolidated view. The Penrose Virtual Directory platform is easy to use, flexible, and customizable for any environment. Whether your identity information is stored in Active Directory, LDAP directories, SQL databases, or flat files, this platform can present it all as one identity store.

**Benefits**

- Simplifies the implementation and lowers technical barriers of Identity Management
- Reduces cost and complexity by allowing applications to access identity information across a heterogeneous systems
- Increases the business value of IT investments like existing directories and databases
- Facilitates regulatory compliance through the implementation of comprehensive security, audit, and access policies
Features

- **Query optimizer:** The run-time environment for running and optimizing queries where Penrose selects the most efficient and cost-effective queries from multiple query plans.

- **Namespace handling and intelligent LDAP queries routing:** A repository for storing and maintaining the metadata of all data sources with a built-in auditing feature.

- **Data source management:** Multiple data source handling that supports JDBC/ODBC databases, SOAP/WSDL, LDAP, NIS, and flat files.

- **Join and cache engine:** Supports both event-driven and scheduled refresh with a hybrid of memory/disk usage for an optimal performance.

- **Security:** Multiple layers of securities on both the data level and the network level to safeguard your identities data.
Penrose Studio is an integrated environment for modeling, administration, and management of Penrose Server. With Penrose Studio, you can easily create directory mappings and preview them from your desktop. The easy-to-use interface makes it simple to connect, integrate, and transform your identity information.

Features:

- Point-and-click mapping interface to quickly and easily design a unified directory structure
- Configuration wizards to configure Proxy/Firewall to your existing Active Directory or Relational Databases
- Fine-grain Access Control Information Editor
- Support for plug-in modules such as Identity Linking and NIS migration
- Built-in mapping preview and directory browser
- Automated mapping validation and error checking
- Top down modeling allows design of a logical directory structure without first defining data sources
- Bottom up modeling allows you to design views by combining data from disparate systems
SUPPORTED OPERATING SYSTEMS AND REQUIREMENTS

Hardware
- 256 MB RAM
- 100 MB Disk Space
- 400 Mhz x86 CPU or greater

Software
- Penrose Virtual Directory is 100% pure Java and interoperable with most operating systems capable of running Java Virtual machine:
  - Red Hat Enterprise Linux
  - UNIX
  - Windows
  - other Linux distributions
  - JDK 1.4 or higher, JDK 1.5 or higher

SUPPORTED DATABASES

Any JDBC compliant version of the following databases are supported:
- IBM DB2
- Sybase
- PostgreSQL
- MySQL
- Microsoft