

Windows 2000 Active Directory

Benefits to the System Administrator
and the End-Users

What is a Directory Service?

- A directory service provides a place to store information about network-based entities, such as applications, files, printers, and people.
- It provides a consistent way to name, describe, locate, access, manage, and secure information about these individual resources.

Directory Services, more ...

- A directory service acts as the main switchboard of the network operating system.
- It is the central authority that manages the identities and brokers the relationships between these distributed resources, enabling them to work together.

Even more Directory Services ...

- Directory services play a critical role in an organization's ability to define and maintain the network infrastructure, perform system administration, and control the overall user experience of a company's information systems.

Why Have a Directory Service?

- Simplifies management: Provides a single, consistent point of management for users, applications, and devices.
- Strengthens security: Provides users with a single sign-on to network resources and provides administrators with powerful and consistent tools to manage security services for internal desktop users, remote dial-in users, and external e-commerce customers.

Why Have a Directory Service, cont.

- Extends interoperability: Supplies standards-based access to all Active Directory features as well as synchronization support for popular directories.

What is Active Directory?

- Active Directory is an essential and inseparable part of the Windows 2000 network architecture that improves on the domain architecture of the Windows NT 4.0 operating system to provide a directory service designed for distributed networking environments.

What is Active Directory? cont.

- Active Directory lets organizations efficiently share and manage information about network resources and users.
- Active Directory also acts as the central authority for network security, letting the operating system readily verify a user's identity and control his/her access to network resources.

What is Active Directory? cont.

- Active Directory acts as an integration point for bringing systems together and consolidating management tasks.
- Combined, these capabilities let organizations apply standardized business rules to distributed applications and network resources, without requiring administrators to maintain a variety of specialized directories. Active Directory provides a single point of management for Windows-based user accounts, clients, servers, and applications.

Simplified Management

- Eliminates redundant management tasks: Provides a single-point of management for Windows user accounts, clients, servers, and applications as well as the ability to synchronize with existing directories.
- Reduces trips to the desktop: Automatically distributes software to users based on their role in the company, reducing or eliminating multiple trips that system administrators need to make for software installation and configuration.

Simplified Management cont.

- Better maximizes IT resources: Securely delegates administrative functions to all levels of an organization.
- Lowers total cost of ownership (TCO): Simplifies the management and use of file and print services by making network resources easier to find, configure, and use.

Strengthens Security

- Active Directory improves password security and management: By providing single sign-on to network resources with integrated, high-powered security services that are transparent to the end users.
- Active Directory ensures desktop functionality: By locking-down desktop configurations and preventing access to specific client machine operations, such as software installation or registry editing, based on the role of the end user.

Strengthens Security cont.

- Active Directory tightly controls security:
By setting access control privileges on directory objects and the individual data elements that make them up.

Extends Interoperability

- Active Directory provides a central integration point for bringing diverse systems together and for consolidating directories and management tasks. It does this by exposing all of the Windows 2000 directory features through standards-based interfaces such as LDAP, ADSI, JADSI, and MAPI so companies can consolidate existing directories and develop director-enabled applications and infrastructure.

Overview of Benefits

- The vast majority of the benefits of Active Directory benefit the System Administrator directly.
- The End-User really does not see any of the features of Active Directory but benefit greatly from it with a more secure, robust, reliable, and transparent environment.

Issues for the USGS/WRD

- Placement of Domain Controllers
- NT 4.0 is going away
- Active Directory is geared to organizations that have centralized IT departments. In WRD we are on the opposite side of the spectrum. At some point in time we will need to have some kind of centralized structure to manage the environment and our administrators are going to have to give up some control.