

Active Directory: Design and Implementation

Reducing complexity today while preparing for the future



Highlights

- Increasing productivity for your IT staff
 - Simplifying directory service management and increasing security
 - Delivering comprehensive implementation services using proven methodologies
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The need for an ever more powerful, transparent, and tightly integrated directory service is driven by the explosive growth of networked computing. Because of the scale and complexity found in most school districts, a directory service is a significant component of an educational institution's computing infrastructure.

A properly designed and optimized directory service should simplify management, strengthen security and extend interoperability. Whether you need a new design, an upgrade to a new version or a migration from a different directory to Microsoft's Active Directory, an updated design will lay the infrastructural foundation for existing and future applications and services delivered to administrative staff, teachers and students in the district.

Moving Quickly to Prepare for New Opportunities

Migration can be an intimidating task impacting connectivity and performance. Effectively upgrading your infrastructure can require resources and expertise that you might not have in house. IBM K-12 can provide you with the expertise needed for a successful migration while allowing your IT staff to concentrate on other business-critical tasks and projects.

If you are a two-platform district, it is important to investigate ways to consolidate services for both platforms to minimize your TCO. By extending Active Directory capabilities to support the Apple OS X platform, IT departments can manage all workstations in a single large network with common policies for password control, user id integration, resource management and single sign-on and gain additional productivity for your IT staff.



The **K-12 Active Directory Design** process is composed of six phases:

- 1: Discovery of Existing Environment** - Device & Functionality Needs Assessment via meetings with key IT staff
- 2: Information Completion and Validation Phase**
- 3: Round Table / White Board Sessions** to formulate various design scenarios with a scoring system based on pros and cons.
- 4: Plan / Design** provides more specific details about the design requirements. Hardware specifications will be provided to allow you to map them to your vendor product families.

Analysis includes:

- AD Capacity Planning (server numbers, sizing, location)
- Storage sizing and configuration
- Backup sizing and configuration
- OU layout, Login Scripts, GPOs
- Users and Delegation

5: Solution Assurance Review is conducted where several IBM Architects review the design and provide final comments.

6: A comprehensive report detailing ADS Design, Forest Root Server Design, Masters Operations Design, DNS Design, Naming Convention Scheme, Site Topology Design, Groups and Group Policy Design, Server Capacity Planning and ADS Backup strategy

Active Directory Implementation Services

Now that you have your new Active Directory design, you will want to implement it as soon as possible in order to continue to decrease your total cost of ownership (TCO). A new design will help reduce end-user problems and allow you to provide new functions for these same users.

Implement more quickly with less risk.

An IBM Active Directory Specialist will work with you and your team to develop a plan and an implementation engagement that will include the following key activities:

- Determine hardware requirements (temporary or permanent), staging and associated timelines for the implementation of the new design
- Decide on recommendations for Enterprise Application migration with information regarding directory dependency of each application
- Develop a process and timeline for user migration
- Determine impact of the migration on workstations (domain name change, and joining to new domain)
- Validate the process for migration testing of end users
- Deploy the Network Operating system
- Implement an Active Directory Backup model that supports your Business Security and Resiliency Plan
- Implement AD best practices for Security Tuning (NTFS, Delegation, GPO Placement, Organization Unit Structure and Organization Groups creation)
- Transfer of basic skills on product features through hands-on training for your staff.

Apple Integration (Optional)

To assist with the integration of Apple computers into Active Directory, an IBM K-12 IT architect will meet with you and help you build a plan that maps to your organization's needs.

Why IBM?

An Active Directory implementation for school districts is very different than deployments for corporate or other public sector institutions. The structure of a school district, the variety and nature of users, applications and workstation/mobile/printing devices in schools pose unique challenges and demand tested and proven K-12 design expertise. IBM K-12 AD specialists have the experience required to understand your environment and design your Active Directory configuration tailored to your specific needs, efficiently and competently.

For more information

To learn more about IBM K-12 **Active Directory Design and Implementation**, please contact your IBM Marketing Representative.

For more information on all our IBM K-12 Consulting and Professional Services, visit:

<https://www.ibm.com/industries/education/canada-k-12>



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