Microsoft created Active Directory (AD), a directory service, for Windows domain networks. It offers a central area for controlling network assets such user accounts, computers, printers, and software. Network administrators can use AD to establish and manage user accounts, implement security guidelines, and manage user access to network resources.

The ease with which AD makes it possible to manage user accounts and access permissions is one of its main advantages. Administrators have the ability to set up user accounts, specify their responsibilities and access rights, and control user passwords and authentication procedures. This makes it possible for businesses to enforce security policies and limit user or group rights-based access to network resources.

Moreover, AD provides group policy administration, which lets administrators create and apply policies to the whole network. These regulations may cover user configurations, security-related settings, and procedures for installing and updating software. Group policies allow administrators to maintain uniformity and compliance across the network by applying them to specific users, groups of users, or computers.

The DNS resolution services offered by AD are another helpful feature. Computers and other devices may locate network resources thanks to DNS resolution, which converts domain names into IP addresses. A DNS server is part of AD and offers name resolution services to network clients.

Moreover, AD is capable of offering certificate services, which let administrators create and control digital certificates. Digital certificates are used to create secure connections between people, devices, and programs on the network and to confirm their identities. Email, web traffic, and other network applications can all be secured using certificate services.

Overall, Active Directory is essential to many commercial IT settings, assisting businesses in securing their networks and streamlining resource and user access management. AD is a flexible and effective tool that can be tailored to satisfy the particular requirements of any organization.

Iainfoulds. “Active Directory Domain Services Overview.” *Microsoft Learn*, https://learn.microsoft.com/en-us/windows-server/identity/ad-ds/get-started/virtual-dc/active-directory-domain-services-overview.