



# Tech Info Library

## Macintosh On Microsoft NetBEUI/NetBIOS Networks (3/97)

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TOPIC -----

Is there software available for my Macintosh that would allow it to participate in Microsoft NetBEUI/NetBIOS networks with file, print and message services?

DISCUSSION -----

Yes. Thursby Software Systems offers one such solution, named DAVE.

DAVE is a software solution that enables Apple Macintosh users to participate in Microsoft networks with file, print and message services. DAVE is installed directly on the Macintosh computer and provides Macintosh users the ability to mount shared directories on Windows NT (Server and Workstation), Windows 95 and Windows for Workgroups computers.

DAVE performs all communications using the industry standard protocol TCP/IP with a NetBIOS driver that is fully RFC 1001/1002 compliant and supports Windows Internet Name Server (WINS). All services are implemented using the Common Internet File System (CIFS) protocol. CIFS is an enhanced extension of the desktop cross-platform protocol for distributed file sharing called Server Message Block (SMB).

Utilizing CIFS and X/Open protocol standards, DAVE gives Macintosh users simultaneous read and write access to files stored on remote computers without first requiring users to download or copy the files to a local drive. Using the Chooser, users mount systems and browse for resources both in their own workgroup and in other workgroups. Mounting is very similar to AppleShare but uses no AppleTalk protocols.

DAVE negotiates dialects up to and including NT LM 0.12. It provides direct integration with Services for Macintosh and NTFS by using the same format for storing Apple resource and finder information on NT servers. By using DAVE with Remote Access Services (RAS), Macintosh users can access NT servers from remote dial-up locations, sharing files and accessing numerous applications over an

organization's intranet and the internet.

DAVE is implemented as a modular set of Macintosh drivers, extensions and applications that can be tailored to the needs of the individual Macintosh user. The NetBIOS driver can be configured using DHCP for simpler network management.

#### FILE AND PRINT SERVICES

DAVE provides the Macintosh user with the interface environment they are accustomed to. Downloading or copying files to a local drive is not necessary when running DAVE. Using the Macintosh Chooser, users can mount multiple shared directories on Windows NT, Windows 95 and Windows for Workgroups computers. Macintosh applications can then manipulate files directly over the network.

The print gateway works with PostScript print drivers and spools print jobs on Windows systems that are configured to share printers. Printers appear in the Macintosh user's Chooser window. The gateway supports Adobe compliant PPD configurations and handles PostScript query jobs that conform to Adobe document structuring conventions.

#### MESSAGE SERVICE

The Message Tool gives users the ability to compose and send messages. The Message Listener is an 'init' which loads at startup to receive messages. Message reception can be disabled and enabled by the user. The Message Listener is useful for notifying users of changes in server status and print job completion. NT administrators can use this service to broadcast messages to their users.

#### SECURITY

DAVE uses encrypted passwords and works with both LanManager and Windows NT passwords.

Begin\_Table

#### DAVE FEATURES

- \* Client file services
- \* Client print services
- \* Message Tool
  - o User controlled
  - o Pop-up message windows for the SMB messaging service
  - o Compose and send messages
- \* Internet and intranet access
- \* NetBIOS Driver
  - o Control Panel to configure and monitor operation of NetBIOS driver
  - o Fully RFC 1001/1002
  - o WINS compatible and configurable with DHCP
- \* Supports 68K and PPC Macintosh, Mac OS 7.5.x
- \* Supports at least 10 mounts
- \* Supports FAT and NTFS file systems

- \* Uses the Apple File System Manager
- \* Supports aliases
- \* Supports browsing for resources in Chooser
- \* Integration with Services for Macintosh
- \* Supports encrypted passwords
- \* Provides Unicode names for Windows NT
- \* Apple Open Transport Native
- \* Compatible with MacTCP
- \* Supports multiple remote printers
- \* RAS support for mobile access via PPP
- \* RAS connection only utilized when user accessing remote files

#### MACINTOSH SYSTEM REQUIREMENTS

- \* Any Macintosh with a 68020 or higher processor
- \* MacOS 7.5.x with a minimum of 8 megabytes of RAM
- \* Apple's MacTCP or Open Transport TCP/IP
- \* Any hardware required to run TCP/IP

#### MICROSOFT NETWORK REQUIREMENTS

- \* At least one of the following systems
  - o Windows NT Server or Workstation V3.51 or later
  - o Windows 95
  - o Windows for Workgroups V3.11 with a Microsoft TCP/IP driver

End\_Table

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