



Tech Info Library

WorkStation One for Macintosh (6/93)

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TOPIC -----

I'm look for technical & sales informations on WorkStation One for Macintosh from IBM .

DISCUSSION -----

We were able to get to IBM's InfoLink and we did find an article on WorkStation One for the Macintosh (there is a Windows version as well).

WorkStation One:

- Uses TCP/IP connections to VAX and IBM Hosts.
- Uses Telnet for Terminal emulation.
- Has some IBM scripting language for Autologon.
- Allows keyboard remapping.
- Does TCP/IP FTP file transfers.
- Does back-up and restore to a variety of LAN servers (OS/2, MicroSoft LAN Manager, Novell Netware).
- Runs on Token Ring or Ethernet, so it must depend on MacTCP with Token Ring extension.

A portion of the IBM product document abstract is below:

Workstation One For Macintosh

Abstract

Workstation One for Macintosh is a licensed program which is designed to make it easier for the workstation user to access and run applications residing on certain IBM and DEC host systems. It also includes support to allow file transfers, backup, restore, and local area network (LAN) usage.

All of these functions run under a common, graphic interface. Transparent application access to the IBM or DEC host allows the end user to point-and-click on an application icon in a window without knowing where the application resides. Once an application is selected, the user is automatically logged on to the appropriate host, the correct terminal emulator is loaded, and execution of the application begins. This is accomplished by using a script language which is provided by Workstation One for Macintosh. The product includes a variety of graphic and text emulators as well as an imbedded runtime library for support for Token-Ring and Ethernet protocols. The host system TCP/IP is a prerequisite. The IBM Workstation One product is implemented on multiple vendor operating systems: IBM OS/2, IBM AIX, Microsoft Windows, and Apple Macintosh.

Technical Description

The major functions provided by Workstation One for Macintosh are:

- Application Access - Allows users to access applications on the workstation and hosts running TCP/IP communication software without having to know where the application is or how to invoke it. Application Access provides:
 - Terminal emulation - Users can access TCP/IP hosts and host applications via Telnet terminal sessions. The terminal type and session characteristics are chosen by the user at the start of the terminal session or saved into session profiles (document files) for subsequent use. If the host OS and network allow, the user can connect from the Telnet session to any accessible host (whether or not it is a TCP/IP host), such as with the VM PassThrough facility or the VAX Set Host command.

Users can copy and paste between PC applications and host display areas. Graphics can be copied from a host display to PC application but not vice versa. Text can be copied to and from a host display. The host display window can be printed using the standard window-printing facility.

- Script generation and maintenance - Allows the user to create and compile scripts to used to perform logon sequences (passwords are encrypted), application invocation, application operations, or any combination of these interactions.

The script language consists of commands that an emulator uses to interact with hosts and host applications in the same way that the user would otherwise have to do manually. An executing script program checks the host screen for messages, status, and prompts, and sends strings and keystrokes to the host to navigate through these stages on the host.

Users can invoke scripts either at terminal session connection time or at any time during an existing terminal session.

- Keyboard mapping - At any time during active terminal sessions or

before starting terminal sessions, users can view the current mapping of the keyboard for the three terminal types supported (VTxxx, 3270, and Tektronix). The mapping can be changed and made effective for terminal sessions established after restarting the host access function.

- Workstation/Host File Transfer - Allows the workstation user to upload and download files between the user's workstation and hosts running TCP/IP communications software. This function also provides the capability for users to manage files on the workstation and TCP/IP hosts by renaming or deleting them. File Transfer uses the FTP protocol. Its capabilities are totally independent of terminal emulation and, except for data security aspects particular to the host, can be used without respect to existing terminal sessions with the same hosts accessed for file transfer. Various options can be selected before the session starts and saved into a file transfer session profile, or document file, named by the user. These options include a default transmit data type, file extension translation, and the option to receive confirmations before any operation is performed. This document file can be subsequently used any time the user wants to access data on that host. It can be opened from an icon or folder or from the FILE menu.

The functions available for data on workstations and hosts include:

- Copying (uploading and downloading)
 - Deleting
 - Renaming
 - Explicit FTP commands for which there are no buttons (such as change directory on host or workstation)
- Backup/Restore - The Backup and Restore (BR) functions provide users with mechanisms for storing and retrieving copies of the workstation files to and from LAN server media as protection against local disk failure or unintentional file deletion. The BR functions operate in a graphical user interface.

They support source (backup from or restore to) and destination (backup to or restore from) media accessible by the workstation operating system. The user may back up data from or restore data to the workstation hard disk or a virtual disk (a volume or drive located on a LAN server but visible to the workstation as another disk).

A scheduler or reminder function allows the user to create "profiles" of various types of backups, at differing times or intervals, including differing files, folders, or directories. BR provides the capability to perform:

- full backups, including every file or directory or folder selected
- incremental backups, including only those files modified since the last backup
- differential backups, including all files modified since the date specified, regardless of when they were last backed up
- individual directory, folder, or file backups

Backup operations maintain directory or folder structure where

applicable.

Conversely, there is the means for restoring the data in the forms described for backup. Restore operations also maintain directory structure where applicable.

BR functions log information related to each backup and restore operation, indicating which files have been backed up, when the backups were performed, and where the backup was stored.

Users can also specify that old backup storage files on the LAN server are to be deleted at backup time. Old backup storage files may be overwritten (that is, reused) at backup time.

To the extent allowed by the workstation operating system, BR users can execute other functions while a backup or restore operation is running in the background.

Operating Environment

Machine Requirements

Workstation One for Macintosh is designed to operate on a Macintosh workstation configured with the minimum requirements specified below and communicating with one or more of the following hosts and servers:

Workstation Requirements

- Macintosh SE (68000 processor)
- Network adapter (Apple TokenTalk or EtherTalk or equivalent)
- 4MB of hard disk for Workstation One for Macintosh
- Memory and hard disk sufficient for the required software listed, (minimum 4 MB of RAM recommended)

Server Requirements

- IBM PS/2(R) 80386 processor (or equivalent)
- NDIS- or ODI-compliant network adapter (Token-Ring or Ethernet)
- Memory and hard disk sufficient for the required software listed
- Uninterruptible Power Supply (recommended)

Host Environments

- IBM processor capable of supporting VM TCP/IP or MVS TCP/IP with Token-Ring or Ethernet connection and/or
- DEC VAX Processor with Ethernet connection

Programming Requirements

Workstation Requirements

- Macintosh Operating System 6.0.5

Server Requirements

- OS/2 1.3 Standard Edition (P/N 84F7588) or
- OS/2 1.3 Extended Edition (P/N 15F7195)
- Microsoft LAN Manager 2.0 or 2.1

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- Microsoft LAN Manager Services for Macintosh 1.0 or
- DOS 4.0 (P/N 6024869) or
- DOS 5.0 (P/N 84F9775)
- Novell NetWare 3.11
- Novell NetWare for Macintosh 3.0
- Novell NetWare NFS 1.1

Host Environments:

- IBM Hosts
MVS system which supports:
 - MVS TCP/IP Version 1 (5685-061) or
 - MVS TCP/IP Version 2 (5735-HAL)VM system which supports:
 - VM TCP/IP Version 1 (5798-FAL) or
 - VM TCP/IP Version 2 (5735-FAL)
- DEC Hosts:
VAX VMS system which supports:
 - WIN/TCP Versions 5.1 or 5.2, or
 - VAX/UCX Version 1.2.

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