



# Tech Info Library

## ARA 2.0 MultiPort Server Specifications (11/93)

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TOPIC -----

This article describes the technical specifications for Apple Remote Access MultiPort Server.

DISCUSSION -----

Administrator control and monitoring

- Ability to monitor and manage server activity by port and user
- Ability to broadcast messages or send them to selected users
- Ability to adjust connection time by user
- Ability to disconnect any single user or all users
- Built-in Simple Network Management Protocol (SNMP), enabling you to monitor the server from any SNMP-based network management station

Security

- User name and password authentication
- Adjustable password length
- Filtering of network services by account
- Ability to disallow client use of Save Password option
- Account disable after specified number of password failures
- Password aging
- External security architecture (for example, for providing challenge-and-response authentication through a third-party security module)
- Callback feature that verifies the user's identity by returning calls to a predetermined phone number
- Activity log for recording user and server activities
- Administrative password option

Modem support and scripts

- Supports any Hayes-compatible 9600-bps or higher-speed modem with the appropriate script. Modem scripts for many popular modems are included:
  - V.fast modems: Motorola Codex 3260 Fast
  - V.32bis modems (14,400 bps): Hayes Ultra 144, Motorola Codex 3260, US Robotics Courier V.32bis
  - V.32 modems (9,600 bps): Hayes Ultra 96, Telebit T1600, UDS/Motorola

3225, UDS/Motorola 3227, US Robotics Sportster, US Robotics Worldport

- ISDN support: Hayes ISDN adapter
- 9600-bps or higher-speed scripts included with the Apple Remote Access Client for Macintosh can also be used with the Apple Remote Access MultiPort Server.
- Additional scripts may be available. Contact your modem manufacturer or an authorized Apple dealer or representative for more details.
- Administrators or other programmers familiar with connection control languages (CCLs) can also write the necessary scripts, using the Apple Remote Access Modem Scripting Guide and Modem Workshop software, which are included with the Apple Remote Access MultiPort Server.

#### Network types supported

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- Support for any AppleTalk network; the most common network choices include:
  - LocalTalk
  - Ethernet
  - Token Ring

#### Connection types supported

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- Support for a range of connection types:
  - Standard telephone
  - Cellular\*
  - X.25\*
  - ISDN\*

#### Error detection/Data compression

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- Support for several built-in components that allow for error-free and optimized delivery of data
  - Smart buffering (developed by Apple Computer) for data-transfer optimization
  - MNP, an industry standard for error detection
  - V.42bis, an industry standard for data compression

#### Specifications

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- Maximum number of simultaneous connections:16
- User name maximum length: 31 characters
- Password maximum length: 8 characters
- Total number of user records: 8,192
- Maximum connect time: selectable
- Maximum number of activity log entries: 32,767

#### Licensing information

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- Comes with license to install Apple Remote Access MultiPort software on a single Macintosh and to install Apple Remote Access Client for Macintosh software on up to four systems
- Additional client software must be purchased or licensed separately; consult your authorized Apple reseller or representative for information

## Operating requirements

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### For the server side:

- A Macintosh computer with one or more NuBus slots and at least 5MB of RAM (for configurations with more than four ports, additional memory is required, and a high-performance system is recommended)\*\*
- Macintosh system software version 7.0 or later (version 7.1 or later recommended)
- A hard disk drive and an Apple SuperDrive floppy disk drive
- One Apple Remote Access Serial Card and Apple RS-232 Cable for each Apple Remote Access MultiPort Server package and each MultiPort Server 4-Port Expansion Kit
- One or more Apple or other Hayes-compatible modems (9600 bps/V.32 or higher speed recommended)

### For the client side:

- A Macintosh Plus or later model with at least 4MB of RAM
- Macintosh system software version 7.0 or later
- A hard disk drive
- An Apple or other Hayes-compatible modem (2400 bps minimum; 9600 bps recommended) and appropriate modem cable, if needed

## Ordering Information

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### Apple Remote Access MultiPort Server

Order No. M5214Z/A

- Apple Remote Access MultiPort Server software and installer (includes support for four ports)\*\*\*
- Apple Remote Access Client for Macintosh software and installer (with license to install software on up to four client systems); additional client software can be purchased separately
- Apple Remote Access Serial Card
- Apple RS-232 Cable
- Apple Remote Access MultiPort Server Administrator's Guide
- Apple Remote Access Modem Scripting Guide
- Apple Remote Access Client for Macintosh User's Guide (four copies)

### Apple Remote Access MultiPort Server 4-Port Expansion Kit

(Includes Apple Remote Access Serial Card and Apple RS-232 Cable.)

Order No. M2384Z/A

Expands your Apple Remote Access MultiPort Server by four ports up to a maximum of 16 ports\*\*\*

### Apple Remote Access Serial Card

Order No. M2511Z/A

(This is a full length NuBus card and does not fit in the Centris 610, Quadra 610, Centris 660AV, and Quadra 660AV which only accommodate 7 inch NuBus cards.)

### Apple RS-232 Cable

Order No. M0128LL/A

Apple Remote Access MultiPort Server X.25 Extension  
Order No. M1998Z/A

Apple Remote Access Client for Macintosh (single-pack)  
Order No. M5227Z/A

Apple Remote Access Client for Macintosh 10-Pack  
Order No. M2692Z/A

Apple Remote Access Client for Macintosh (Volume Licensing)  
Contact your authorized Apple reseller or representative for purchasing information or contact Apple's Volume Licensing group on AppleLink at VOL.LICENSE

\* X.25 support requires purchase of Apple Remote Access MultiPort Server X.25 Extension; ISDN or cellular support requires additional third-party products.

\*\* Support for Macintosh computers that use 7-inch NuBus cards may not be available at this time; consult your authorized Apple reseller or representative.

\*\*\* The Apple Remote Access MultiPort Server includes support for 4 ports. Support for 8, 12, or 16 ports requires purchase of 1, 2, or 3 Apple Remote Access MultiPort Server 4-Port Expansion Kits (respectively) and additional Apple Remote Access Serial Cards and Apple RS-232 cables.  
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