

New Technical Notes

Macintosh



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Developer Support

AppleTalk Remote Access Protocol Q&As Networking

Revised by: Developer Support Center

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Written by: Developer Support Center

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This Technical Note contains a collection of Q&As relating to a specific topic—questions you've sent the Developer Support Center (DSC) along with answers from the DSC engineers. While DSC engineers have checked the Q&A content for accuracy, the Q&A Technical Notes don't have the editing and organization of other Technical Notes. The Q&A function is to get new technical information and updates to you quickly, saving the polish for when the information migrates into reference manuals.

Q&As are now included with Technical Notes to make access to technical updates easier for you. If you have comments or suggestions about Q&A content or distribution, please let us know by sending an AppleLink to DEVFEEDBACK. Apple Partners may send technical questions about Q&A content to DEVSUPPORT for resolution.

New Q&As for this month:

PBRemoteAccess "error = -17"

ARA Developer's Toolkit documentation fix for variable pb

PBRemoteAccess error = -17

Date Written: 11/19/92

Last reviewed: 3/1/93

We receive an error = -17 from PBRemoteAccess. Why?

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What this means is that the Remote Access Manager hasn't been loaded into memory. Loading the Remote Access Manager into memory takes up valuable RAM space. You should do this only when necessary. Usually, this is done just before calling Connect. You can load the Remote Access Manager into memory yourself using the Load command (see page 7 of the ARA Developer's Toolkit). However, you should really only call Load just before you call Connect. Calling Load before you make the Status call doesn't really buy you anything. If you do this (and currently no connection is established) you'll get the -5833 "PORTDOESNOTEXIST" error. This simply means that the Remote Access Manager is loaded but the user port hasn't been opened—that is, there's no connection (ARA 1.0

supports one connection through the user port).

Keep in mind also that if you do call Load you must eventually balance it out with an Unload call (see page 7 of the ARA Developers Toolkit). Failure to do so could cause problems.

Typically, you'd call Load just before you call Connect, and then after you call Disconnect you'd call UnLoad.

ARA Developer's Toolkit documentation fix for variable pb

Date Written: 11/19/92

Last reviewed: 3/1/93

In the ARA Developer's Toolkit manual, at the bottom of page 12, the variable pb is declared as "TRemoteAccessStatusParam." Shouldn't this read "TRemoteAccessParamBlock"?

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Yes, for this specific example pb should be declared as type TRemoteAccessParamBlock. Thanks for pointing out the error.

AppleTalk Remote Access (ARA) password

Date Written: 1/6/92

Last reviewed: 8/1/92

I often connect to a network via AppleTalk Remote Access (ARA) without mounting an AppleShare server (to print, for example). Do I have to mount an AppleShare volume to change my ARA (network, not server access) password or is there another way? Does changing the password associated with the AppleShare volume I'm mounting affect the ARA network access password?

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Yes, the only way currently to change your AppleTalk Remote Access (ARA) password is via mounting an AppleShare volume or by changing the password as the AppleShare (or FileShare) administrator on the ARA host. The System 7 File Sharing and AppleShare 3.0 file servers, the PPC toolbox, and ARA all share the Users & Groups file, but typically only the AppleShare client gives a way to change the password. Remotely changing the AppleTalk Remote Access password can be accomplished by mounting an AppleShare volume on the ARA host, and changing the password for that specific AppleShare volume. This updates your password in the Users & Groups setup, which is the same one used by ARA (hence the doubly changed password). If you were to mount a volume on a Macintosh other than the ARA Macintosh, this would of course be a separate Users & Groups file, and changing this password would not affect your ARA password.

The Users & Groups libraries in the AppleShare 3.0 Developer's Kit gives developer applications running on the server machine a way to manipulate the Users & Groups file. It sounds like you're mostly interested in manipulating your password from a user perspective (rather than writing an application to do it), however, so this may not be all that pertinent to you.

ARAP and PGetAppleTalkInfo bug workaround

Date Written: 2/6/92

Last reviewed: 8/1/92

After connecting to a remote network via AppleTalk Remote Access (ARA) I can call PGetAppleTalkInfo and it returns the proper zone name. However, after disconnecting,

PGetAppleTalkInfo still returns the remote network's zone name instead of "*" or nothing as I would expect. Is there some period of time I should wait before expecting the zone name and network number to return to zero (no internet)?

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This is, in fact, a bug with ARA version 1.0. Apple is investigating the problem and there will be a fix in a future release. An easy workaround is to check the GetZoneList or GetMyZone call to see if it returns any zones.

Calling ARA Connect without using Remote Access file

Date Written: 4/29/92

Last reviewed: 7/13/92

How can I call Connect in AppleTalk Remote Access without an existing ARA connection file created by the Remote Access application?

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This isn't directly possible, because without the ARA connection file your program becomes tied to the underlying link tool. The file was implemented so that in the future, when there are different link tools for the different link types, the program will know the link type and tool, plus associated link-specific data to use. To connect without the ARA connection file requires knowledge of the link tool data structures used by each individual link tool. Because these may change, your code may break.

However, there's a roundabout way of calling Connect. It requires that you first establish a connection using a document created by the ARA application. Next, make the IsRemote call, setting the optionFlags to ctlir_getConnectInfo (see page 11 of the AppleTalk Remote Access Application Programming Interface Guide). This will cause the information necessary to create the remote connection (connectInfoPtr) to be returned. You would then save this connectInfo data in your application, and when you want to connect sometime later, you would pass this data to the Connect call (in the connectInfo field).