



# Tech Info Library

## Mac OS 8: Before Installing OT/PPP

### TOPIC

This article is the Before Installing Open Transport/PPP 1.0.1 Read Me file that comes with Mac OS 8.0.

### DISCUSSION

#### Introduction

This document contains late-breaking information about Open Transport/PPP. For instructions about how to use Open Transport/PPP--including the Modem and PPP control panels--see the Open Transport/PPP User's Manual. Onscreen help is also available in Mac OS Guide. Choose Help from the Help menu. Information about Open Transport/PPP appears in the Telecommunications topic area. Or you can click the question-mark icon that appears in the Modem and PPP control panels.

Additional information about Open Transport/PPP is also available on the Open Transport/PPP home page: <http://devworld.apple.com/dev/opentransport/ppp.html>. Included on this home page is a log of the release notes that describes the changes in each beta release of the Open Transport/PPP software.

#### License Agreement

This release of Open Transport/PPP is subject to the terms and conditions of the license agreement that accompanies the software in the file named License. By using the software you agree to abide by the terms and conditions of the license agreement.

#### System Requirements

Open Transport/PPP 1.0.1 is designed to work on Mac OS-compatible computers with a Motorola 68030- or 68040-family microprocessor, or a PowerPC 601, 603e, 604, or 604e microprocessor.

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You also need Mac OS System 8.0 or later and Open Transport 1.1.2 or later.

IMPORTANT: You must install Open Transport 1.1.2 or later before installing Open Transport/PPP.

Open Transport/PPP 1.0.1 requires a minimum of 500K of RAM (for 68030- or 68040-based computers) or 600K of RAM (for PowerPC-based computers). Open Transport/PPP memory requirements are based on the size of total system memory, including virtual memory, minus the size of any RAM disk or disk cache you are using.

### Apple Software Update Sites

Information about updating Apple software is available online on the World Wide Web and other online servers. On the Web, go to either of the following sites:

[www.info.apple.com](http://www.info.apple.com)

[www.support.apple.com](http://www.support.apple.com)

Both of these sites provide links to the Apple Software Updates page.

These sites also provide links to the Technical Info Library (TIL). By searching for "find apple software updates" in the TIL, you can find Apple Software Updates locations for Internet, America Online, CompuServe, and other online services.

Once you reach an Apple Software Updates site, use the following path to locate the Open Transport software:

Apple SW Updates

US

Macintosh

Networking-Communications

Open Transport

Before You Install Open Transport/PPP 1.0.1

- Make backup copies of the software and documents on your hard disk (especially your System Folder) before installing this software.
- If you already use SLIP or PPP software to access the Internet, make a note of the configuration

information that you entered into your previous SLIP or PPP control panels. Configurations are not automatically converted from third-party SLIP or PPP software.

### What's New In Open Transport/PPP 1.0.1?

- The OpenTpt Serial Arbitrator no longer crashes with extensions that open a serial driver during system startup (such as the Wacom Tablet driver).
- Open Transport/PPP does not display dialog boxes for background-only applications (such as Personal Web Sharing). NOTE: When opening a PPP connection from a background-only application, the machine will appear frozen until the connection is established.

### Known Incompatibilities and Limitations

- Open Transport 1.1.2 or later is required for use with Open Transport/PPP 1.0.1. You should not attempt to use Open Transport/PPP with a previous version of Open Transport.
- ARA 2.x modem CCL scripts can be used with Open Transport/PPP. However, some ARA 2.x scripts do not support modem-based error correction and data compression, so performance may not be optimal. You should try to use one of the modem scripts provided with Open Transport/PPP. If you can't find one that matches your modem, you can modify an existing script to suit your needs.
- If you are using both ARA 2.1 and Open Transport/PPP, be sure to install Open Transport/PPP after ARA 2.1 to get the correct set of modem scripts for both products.
- If you are running Open Transport/PPP on a desktop Macintosh that has sleep capability, your Open Transport/PPP connection will not be automatically terminated when you choose Sleep from the Special menu, because sleeping desktop computers can continue network activity (unlike PowerBook models). If you do not want to remain connected to your PPP server when you put your desktop system to sleep, disconnect manually using the PPP control panel.
- If you have a copy of Open Transport/PPP older than 1.0f1c2 installed, you must discard your old Open Transport/PPP preferences files. To do so, remove the Remote Access folder from the active Preferences folder. Restart your computer and then use the Modem and PPP control panels to customize your configuration.

- Open Transport/PPP 1.0.1 has some incompatibilities with the Apple Express Modem. If the Internal Modem choice does not appear in the Modem control panel's Port pop-up menu, uncheck the "Use internal modem instead of Modem/Printer port" checkbox in the Express Modem control panel and restart. Then open the Modem control panel again.
- You may experience some difficulty with older application programs that do not use Open Transport and try to use the serial port while PPP is active. The workaround is to disconnect PPP using the PPP control panel before starting up the older application.
- Claris EMailer version 1.1v3 or later is compatible with Open Transport 1.1.1 or later. A problem in the Quit command of earlier versions of Claris EMailer sometimes causes a crash with Open Transport 1.1.x (with or without Open Transport/PPP). For your convenience, the Claris EMailer version 1.1v3 patcher and Claris EMailer Lite version 1.1v3 patcher have been provided in the Open Transport Extras folder.
- You may experience CD and TV sound problems when you are dialing your Internet service provider from a Performa 6300CD computer. The workaround is to launch Megaphone before trying to connect.
- When entering phone numbers for the Motorola BitSURFR Pro 56K and 64K ISDN terminal adapters, do not use dashes or spaces between the numbers. For example, "555-9999" should be entered as "5559999". Entering spaces or dashes may prevent successful connections with the BitSURFR Pro, particularly when two ISDN channels are used.
- If you use PortShare Pro from Stalker GmbH to set up a virtual modem or virtual printer port, the ports appear as Modem or Printer, respectively, in the Modem control panel. They do not appear as Virtual Modem or Virtual Printer. PortShare Pro replaces the serial drivers for the on-board modem/printer ports with its own, so selecting Modem or Printer causes Open Transport/PPP (and any other native Open Transport serial application) to use the replacement drivers.
- Open Transport/PPP will report the single channel speed of 56 Kbps or 64 Kbps. The 112 Kbps or 128 Kbps speeds are used but not displayed when using a second ISDN channel with

multilink

PPP. Use the terminal adapter to find out the speed of the second channel.

#### Compatibility with the Apple Internet Connection Kit

You can install both Open Transport/PPP and the Apple Internet Connection Kit (AICK) on your computer at the same time. Both products enable you to dial with your modem and connect to the Internet.

At the time of this release, AICK does not use the Open Transport/PPP software to dial and connect to the Internet. AICK has its own Dialer, which uses MacPPP software to establish the remote connection. MacPPP is a third-party implementation of the Point-to-Point Protocol.

All of the AICK applications, however, are compatible with Open Transport/PPP 1.0.1. To use Open Transport/PPP with AICK applications, you must configure Open Transport/PPP as described in the Open Transport/PPP User's Manual and in the "Connecting to the Internet" topic area of Mac OS Guide.

The currently active PPP software is selected using the "Connect via" pop-up menu in the TCP/IP control panel. MacPPP is listed as MacPPP. OT/PPP is listed as PPP. MacPPP is controlled by using the ConfigPPP control panel, the Apple Internet Dialer application, or the Apple Internet Status application. Open Transport/PPP is controlled by using the Modem and PPP control panels, which do not modify or change MacPPP configuration information.

If you use both PPP software packages (one at a time), note that launching either the Apple Internet Dialer or Apple Internet Status will make MacPPP active. Furthermore, you will need to switch TCP/IP configurations each time you switch from one PPP software package to the other. (Information about changing TCP/IP configurations appears in the Network topic area of Mac OS Guide.)

#### Modem Support

Scripts that support many popular modems are provided on the Open Transport/PPP installation disks. The scripts include:

3Com Impact Analog 14.4

3Com Impact ISDN 56K

3Com Impact ISDN 56K MLPPP

3Com Impact ISDN 64K

3Com Impact ISDN 64K MLPPP

Apple Personal Modem

AT&T Dataport 288

AT&T KeepInTouch

Best Data Smart One 28.8/33.6

Dayna CommuniCard 28800

Farallon Netopia 56K

Farallon Netopia 56K MLPPP

Farallon Netopia 64K

Farallon Netopia 64K MLPPP

GeoPort/Express Modem

GeoPort/Express Modem CNG

Global Village Gold/Silver/Merc

Global Village Platinum/Gold II

Hayes Accura 288

Hayes Optima 288

Megahertz CruiseCard 14.4

Megahertz CruiseCard 28.8

Metricom Ricochet Wireless

Microcom DeskPorte Fast/288

Microcom QX/4232bis

Motorola BitSURFR 56K

Motorola BitSURFR 56K MLPPP

Motorola BitSURFR 64K

Motorola BitSURFR 64K MLPPP

Motorola ModemSURFR 28.8

Motorola Power/Lifestyle 28.8

Null Modem 9600

Null Modem 19200

Null Modem 57600

Null Modem 115200

Practical Peripherals V.34

Smart One 28.8

Supra 14.4

Supra 28.8/33.6

TDK DF2814

Telebit QBlazer

US Robotics Universal

Zoom V-Series

Apple now installs all modem scripts in the Modem Scripts folder (in the Extensions folder) instead of directly in the Extensions folder. Open Transport/PPP does not recognize modem scripts stored outside the Modem Scripts folder.

Auto-routing of modem scripts has been disabled by the Installer. Once Open Transport/PPP is installed, a modem script will not be routed to the Extensions folder if it is dragged into an active System Folder.

The Easy Install mode of the Installer copies all of the Open Transport/PPP modem scripts on your disk. You can choose Custom Install to limit the installation to only the scripts you choose.

NOTE: You can delete any unneeded scripts from the Modem Scripts folder, which is located inside the Extensions Folder. To recognize scripts, look for files of the kind "Modem Link Tool Personal document."

## Additional (Unsupported) Modem Scripts

User-contributed scripts are available online. New modems are regularly introduced and Apple is willing to help publish scripts donated by users to aid in making Apple Remote Access and Open Transport/PPP work easily with as many modems as possible.

IMPORTANT: User-contributed scripts are not tested or supported by Apple Computer, Inc., so you should contact the script's author rather than Apple if you run into difficulty using a script downloaded from the unsupported folder. User-contributed modem scripts are provided on an as-is basis as a convenience to Apple customers. They are not warranted to be complete or free from errors, although Apple may choose to review and fully test some user-contributed scripts and include them in future versions of Apple software. If you want to provide Apple with feedback about particular user-contributed scripts, send electronic mail to the following address: [msg@apple.com](mailto:msg@apple.com)

To find these scripts, go to any Apple Software Updates location and use the following path:

Apple SW Updates

US

Macintosh

Unsupported

CCL

If you want to contribute a modem script, please use the following procedure:

1. Download the sample Read Me file from the User-contributed scripts folder. The file is named

CCL\_README\_TEMPLATE.

2. Customize the sample Read Me as appropriate for the script you want to submit.

3. Send electronic mail to [msg@apple.com](mailto:msg@apple.com) and enclose the script in BinHex format.

Scripts will only be posted if they are accompanied by a Read Me explaining the script's purpose and how to contact the author.

(See "Apple Software Updates Sites" near the beginning of this Read Me for information on how to find Apple Software Updates locations.)

#### Modem Cable Requirements

Most modems require a cable that supports the data terminal ready (DTR) signal. In addition, certain modems require a cable that supports CTS/RTS hardware flow control. To support DTR, the cable must connect pin 20 on the DB-25 connector to pin 1 on the Mini DIN-8. To support CTS/RTS, the cable must connect pin 5 on the DB-25 connector to pin 2 on the Mini DIN-8 and pin 4 on the DB-25 connector to pin 1 on the Mini DIN-8. Contact your modem vendor or Apple-authorized dealer to obtain the necessary cable.

#### Open Transport/PPP and Apple Remote Access Compatibility

Open Transport/PPP and ARA versions 1.0, 2.0, 2.0.1, and 2.1 are fully compatible and can be used on the same system. Only one can be used at a time.

Versions of ARA before 2.1 install modem scripts directly in the Extensions folder. To make sure that these scripts appear as choices in the Modem control panel, move them to the Modem Scripts folder in the Extensions folder.

ARA 2.1 installs its scripts in the Modem Scripts folder in the Extensions folder. If you are using ARA 2.1, you must install Open Transport/PPP 1.0.1 after ARA 2.1 to get a set of scripts in the Modem Scripts folder that works optimally with both products. The Open Transport/PPP scripts support certain modem-based features, such as error correction and data compression, that improve PPP performance. The ARA 2.x scripts may not support these features.

Also, some scripts included with ARA 2.1 are no longer installed with Open Transport/PPP. These scripts are left on your disk by the Open Transport/PPP installer. They may be usable with Open Transport/PPP, but have not been tested for compatibility by Apple.

#### Registered User or Guest?

If your PPP server does not require a user name and password, or if the server requires only that you enter a name and password in a terminal window, you can select the Guest mode button in the

PPP control panel. This will hide the Name and Password fields and will cause the Connect button to be enabled as soon as you enter a phone number.

If your server requires a PPP user name and password instead of, or in addition to, a terminal server login, you must use the Registered User mode of the PPP control panel. In this mode, you must enter something in the Name and Number fields to enable the Connect button. If you leave the Password field blank, and "Save password" is not checked, you will be prompted to confirm that you want to connect without a password.

#### Connect Scripts

The following varStrings have been added to the CCL scripting language for the user name and password:

Name: ^11 or ^U

Password: ^12 or ^P

When the connect script is executed, these varStrings are replaced by the strings stored in the Name and Password fields of the PPP control panel.

When you record a connect script, and you have entered your name and password in the PPP control panel, the connect script that is recorded by the terminal window will replace those strings with the appropriate varStrings.

The ^U and ^P varStrings are provided as mnemonics for the user name and password, but they cannot be used as parameters of some CCL commands like IFSTR. With those commands, use the ^11 and ^12 varStrings instead.

Connection CCL scripts that use the password varString (^12) in WRITE commands do not log the password in clear text. The password is logged as bullets. This is true whether the user records the script or types it in.

More detailed information about the syntax of the CCL language used for both modem scripts and connect scripts is in the ARA Modem Scripting Guide.PDF file in the OT/PPP Extras folder. This file is in Adobe Acrobat format.

#### Manual Dialing

Procedures for establishing an Open Transport/PPP connection with manual dialing vary according to the type of modem you are using. To ensure that you can make a connection while using manual dialing, you may need to experiment with pressing the Connect button slightly before or after you hear the remote modem answer the phone.

#### Using an Express Modem or GeoPort Telecom Adapter

If you are using Express Modem software with either an Express Modem or a GeoPort Telecom Adapter, you must turn on 32-bit addressing in the Memory control panel. Using 24-bit addressing may result in incorrect behavior.

#### Using Global Village PC Card Products

The Global Village software included with your modem adds an entry to the "Connect via" pop-up menu of the Modem control panel called "PowerPort PC Card". Under some circumstances, an entry for the actual slot your PC Card is plugged into will show up as well ("Upper-slot," "Lower-slot"). These slot-specific items should not be used and the "PowerPort PC Card" item should be used instead or the port will be erroneously reported as busy.

#### Using an ISDN Terminal Adapter

Both Open Transport/PPP 1.0.1 and ARA 2.1 support serial connection speeds of 115,200 and 230,400 bps. By doing so, Apple enables Macintosh users to make ARA and PPP connections over ISDN lines at 64 kbps or even 112 kbps if the ISDN terminal adapters at both ends support channel bonding and proper modem scripts are used.

NOTE: The "Connected at" line of the PPP control panel status box may not accurately reflect the connection speed of ISDN connections. A slower speed may be indicated because ISDN terminal adapter hardware does not report the establishment of second channel connections to the CCL script engine. This will usually happen if you use the Multilink PPP (MLPPP) version of an ISDN script.

Connection speeds of 115,200 and 230,400 bps are not supported by the serial ports on most older Macintosh computers. Here is a partial list of Macintosh models that have fast serial port support:

- Macintosh Centris 660AV, Macintosh Quadra 660AV and Macintosh Quadra 840AV models
- Macintosh Performa 6100CD series
- Power Macintosh 6100, 7100, 7200, 7500, 7600, 8100, 8500, and 9500 models
- Workgroup Server 6150, 7250, 8150, 8550, and 9150 models

To set the built-in serial ports at 115,200 or 230,400 bps, a new serial driver called SerialDMA must be installed to replace the standard Macintosh serial device driver. SerialDMA is provided by Apple, and the current version is 2.0.2. It is highly recommended that the file Serial (Built-in) be installed in the Extensions folder as well on Macintosh models with PCI slots to support these high speeds (38,400 bps and above). System 7.5.3 or later includes the latest version of SerialDMA and the file Serial (Built-in).

NOTE: In general, ISDN terminal adapters have more configuration options than conventional modems. At this time it is not possible for Apple to support all combinations of these options for all the ISDN terminal adapters that are supported. We have attempted to write scripts that work with the most common ISDN configurations. You may have to get a revised script from your Internet service provider or network administrator if your server uses different options. You can also modify a script yourself using the Modem Script Generator or by editing the script text directly.

#### How to Turn Off or Remove Open Transport/PPP

To disable and remove Open Transport/PPP software by using the Custom Remove option in the Installer, follow these steps:

1. Open the Installer application included with Open Transport/PPP 1.0.1.

The Welcome to the Apple Installer screen appears.

2. Click the Continue button.

The Open Transport PPP Installation screen appears

3. Choose Custom Remove from the pop-up menu in the upper-left corner.

4. In the list that appears, select the files you would like to remove by

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clicking the box next to each file so that an "X" appears in it. To completely remove

Open Transport/PPP, you should select all the files listed.

5. Click the Remove button.

If a window appears asking you whether to quit any open applications, click Continue.

A window will appear telling you to restart your computer.

6. Click the Restart button.

7. Reinstall and configure your previous SLIP/PPP software as required.

To disable Open Transport/PPP without using the Installer, follow these steps:

NOTE: Although the PPP and Modem control panels appear in the Extensions Manager, there is no component in the Extensions Manager that lets you disable Open Transport/PPP. To disable Open Transport/PPP without using the Installer, you must follow the instructions given here.

1. Move the OpenTpt Remote Access, OpenTpt Modem, and OpenTpt Serial Arbitrator shared libraries from the Extensions folder in the active System Folder.

2. Move the PPP Commands file from the Scripting Additions folder in the Extensions folder.

3. Move the PPP and Modem control panels from the Control Panels folder in the active System Folder.

4. Restart your computer.

It is not necessary to move the Modem Scripts folder from the Extensions folder.

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