

Termy

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Introduction

Termy is a terminal emulation application and more that utilizes the Macintosh Communications Toolbox (CTB). The CTB allows Termy to be written for a single communications standard, and then used for any and all extensions written by other developers. A fantastic approach to solving the communications problem.

Termy used to be named *uATerminal*. Its name was changed because, well, to be honest uATerminal is a dull name. Termy seems more endearing.

Termy was created by taking the terminal emulation software from the commercial product **uAccess** and making a stand alone application. We have done this because we derive our living from the Internet, and feel compelled to give back as much as we

possibly can.

The most difficult aspect of using Termy for most people is simply the installation of the CTB. It is different for System Six and System Seven. It is also more complicated than most application installations. However, once you have passed this hurdle, the remainder of the application is surprisingly straight forward.

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Basics

Communications Toolbox

The Communications Toolbox (CTB) is founded on a very simple principal -

most data communications are based on the three basic functions of *connection*, *transfer* of data, and *display* of data.

The novelty of the CTB is that previously each application had to write code that dealt specifically with each type of connection that it made, and each application had this redundant code contained within it.

Thus, if an application wanted to send data through the Serial Port via modem to another Macintosh, **and** also wanted to send data over AppleTalk to another Macintosh, then the application would have to contain code to handle the serial port, as well as code to handle the AppleTalk network.

Intelligent software designers thought - why doesn't someone write the AppleTalk code *once* and then everyone can use it.

Thus, the CTB was designed. With the CTB, the application developer writes code to **one** interface, the CTB interface. Then, the user selects from CTB *tools* to determine what the CTB interface actually does. Thus, the application never really knows where its data comes from, or how it is sent, it simply receives and sends data via the CTB. The CTB tools handle the task of getting the data physically moved from place to place.

The CTB goes beyond standardizing the data *connection*, it also standardizes the *terminal interface*, or the *display* of your data, and it standardizes the *transfer* interface, or the sending of files between computers. The three parts of the CTB are called the *Connection Manager*, *Terminal Manager*, and *Transfer Manager*.

Each manager has *tools*. These tools are files that you place in your System Folder. The files have icons that look like little puzzle pieces. These files contain code and resources that provide the

CTB with functionality.

For example, the Serial Tool is a communication tool that provides data communication via the Macintosh built in serial port. The AppleTalk ADSP Tool provides data communications via the AppleTalk network. The VT102 Tool is a terminal tool that provides vt102 terminal emulation in a window. The XMODEM Tool is a transfer tool that provides file transfers via the XMODEM protocol, which is popular for modem based connections.

The beauty of the CTB is that anyone can develop a new tool and it will be usable by the CTB and therefore by Termy. For instance, if you suddenly

needed to connect to an SNA network, then a communications tool could be developed that knew how to communicate with SNA.

Getting Started

Installing The CTB

Users of **System Seven** do not need to install the CTB, since the CTB is built into System Seven. Please skip to the *Installing the CTB Tools* section.

Users of **System Six** have a much more difficult prospect when it comes to installing the CTB. In order to install the CTB, you need a CTB Installation Floppy. This contains the Installer program and an install script. Without this floppy, you will not be able to get started.

Most CTB based commercial applications (uAccess for instance) come with a CTB installation floppy. ICE Engineering will ship you one, but it costs \$15. However, most public data sites, such as the Internet, CompuServe, and others, have the CTB installation floppy on-line for downloading.

Once you have acquired a CTB Installation floppy, you must boot the Macintosh from the floppy. Once the Finder is available, double click on the *Installer Script* file. This will launch the Installer application. Once the Installer application has been launched, select your hard disk for the installation location, and click the Easy Install button.

Once the installation is complete, you must reboot from your hard disk in order to use the CTB.

Installing The CTB Tools

Since the CTB is really only a frame work, you must install CTB Tools to be able to actually perform any communications.

NOTE: If you get an error #8 starting Termy, you did not perform this step correctly!

Again, the installation of the CTB Tools is different between System Six and System Seven.

System Seven users must install the CTB Tools in the "Extensions" folder inside the "System Folder". Copy all of the CTB Tools that you intend to use into your Extensions folder inside the System Folder.

System Six users must install the CTB Tools in the "Communications Folder" folder inside the "System Folder". Copy all of the CTB Tools that you intend to use into your Extensions folder inside the System Folder.

There must be at least one of each type of tool (connection, terminal, transfer), or Termy will complain at startup time. Termy will not work

without a connection tool and a terminal tool, but can work without any transfer tools.

Installing Termy

Installing Termy is very simple. Copy Termy to your hard disk.

Termy requires a preference file. This file is placed in the "Preferences" folder in the "System Folder" for System Seven users. The preference file is placed in the "System Folder" for System Six users. The preference file is named "Termy Preferences".

Termy will automatically create a preference file if one is not found.

Using Termy

Terminals

There is a basic concept in Termy. Terminals. Terminals are windows that allow you to communicate with other computers. You must define each terminal that you use. Fortunately, most people use only one terminal.

Termy provides you with a *default terminal*. This is the first terminal you should configure, since it is always available.

You may create new terminals with the *New Terminal* command in the *Config* menu. Terminals are identified by a name.

You open a terminal via the *Terminals* submenu in the *Terminal* menu. The first item on the terminals submenu is *Default Terminal*. If you define other terminals, their names will appear below the default terminal.

Selecting one of the names in the terminals submenu will open a window that uses the Terminal Tool configured for the selected terminal, and communicates with the Connection Tool configured for the selected terminal. File transfers will be performed with the Transfer Tool configured for the selected terminal.

Closing the terminal window will cause its communications connection to be closed. This is why you are asked first before closing a terminal window.

Configuring a Terminal

To configure a terminal, you must first define the terminal's name. This is done with the *New Terminal* command in the *Config* menu. This command will prompt you for a name for the new terminal. Of course, the default terminal is always defined, so you do not need to use the new terminal command to create it.

Configuring a terminal is a two step process. Since the configuration of a terminal's terminal tool and transfer tool require a connection and a window, you must first configure the connection tool for the terminal. This is why the *Terminal* and

Transfer commands are dim in the *Config* menu.

Select a terminal name from the *Connection* submenu in the *Config* menu. For now, use the *Default Terminal*. This will display a large dialog box that is the CTB Connection Tool Configuration Dialog. This dialog box will allow you to select any connection tool and configure it for use.

Configuring The Terminal Connection

Once you have displayed the connection tool configuration dialog by selecting a terminal name from the *Connection* submenu in the *Config* menu, you will need to select a connection tool.

You select a connection tool from the popup menu in the upper left area of the dialog box. This popup menu should have choices such as Serial Tool, AppleTalk ADSP Tool, and Apple Modem Tool. These names depend upon the tool files that you installed in your System Folder.

The Serial Tool is used to communicate directly with the serial port and any device attached to it, such as a modem or other computer. The Apple Modem Tool also communicates using the serial port, but it also performs the functions of dialing the modem and hanging up. The AppleTalk ADSP Tool communicates with other Macintosh computers over the AppleTalk network.

Describing the details of each tool's configuration is beyond the scope of this manual, but documentation for these tools is available from several sources, including your bookstore.

Selecting a tool in the popup menu will display the tool's specific configuration information. This configuration is usually fairly straight forward.

Configuring The Terminal Terminal

Once you have configured the terminal's connection, you must open the terminal to configure its terminal and transfer tools.

You open a terminal using the *Terminals* submenu in the *Terminal* menu. Select the default terminal and it will open a window for the terminal and attempt to open its connection tool.

If the connection is successfully opened, the terminal window will be displayed and should contain a blinking cursor.

Once the terminal window is open, you may configure its terminal tool and transfer tool using the *Terminal* and *Transfer* commands in the *Config* menu. You can also configure the terminal tool via the *Configure* command in the *Terminal* menu, and the transfer tool via the *Configure* command in the *Transfers* submenu in the *Terminal* menu.

Again, configuring the terminal tool or transfer tool will cause the CTB to display a dialog box with a popup menu in the upper left area for selecting the desired tool and information specific to the tool in the lower area of the dialog.

Termy Features

File Conversion Utilities

Because the world of data communications frequently requires that data be mapped from one computer's representation to another's, Termy includes a list of file conversion utilities.

The conversions provided by Termy are all contained in the *Tools* menu. The tools allow you to convert text from UNIX or PC systems for use on the Mac and vice-versa. The other tools provided are MacBinary, BinHex, and uuencode.

NOTE, Termy can not convert a file *in place*. This means that the data resulting from a file conversion must be placed in a file other than the one being converted.

Text Editor

Termy provides a text editor. This editor is driven by the commands in the top part of the *File* menu and the commands in the *Edit* menu.

Termy windows can display text of any length, but perform best when displaying data from a file, as opposed to text pasted into a Termy text window.

Termy text windows, **do not** work like regular Macintosh windows. Termy text windows automatically wrap lines, but in so wrapping they insert a carriage return, making the wrap "permanent". The little arrow at the lower left of the Termy text windows indicates if lines are wrapped or not. If the arrow is straight, lines are not wrapped, otherwise they are.

The commands in the *Selection submenu* in the *Edit* menu, will operate on the currently selected text in the front most text window.