

Contents

Introduction to the TI Connect™ Window	1
TI Connect™ Window	1
Opening the TI Connect™ Window	2
Closing the TI Connect™ Window	4
Connecting and disconnecting TI handheld devices	4
Using Task Shortcuts	5
Using Tool Task List Shortcuts	6
Using Command Task List Shortcuts	6
Available Task Shortcuts	6
Customizing the Toolbar	7
Hiding and showing the toolbar	8
Removing items from the toolbar	8
Adding items to the toolbar	8
Setting the toolbar to the default	9
Changing the display of icons and text	10
Changing the size of toolbar icons	10
Troubleshooting	11
Introduction to TI Device Explorer	13
TI Device Explorer windows	13
Screen Capture windows	15
Device Information windows	17
Distribution List drawer	19
Device Hosts drawer	21
Opening TI Device Explorer	22
Closing TI Device Explorer	24
Switching between merged and normal view	24
Changing the size of window icons	25
Setting preferences	26
Connecting and disconnecting TI graphing calculators	27
Refreshing devices in the window	27
Renaming devices	28
Working with files	28
Opening files	29
Searching for files	29
Copying files to computers	30
Sending files to connected devices	31

Compatibility with graphing calculators	32
Deleting files	34
Backing up device files	35
Working with device screens	36
Capturing device screens	36
Refreshing captured screens	38
Editing captured screens	39
Saving captured screens	39
Saving sections of captured screens	41
Copying captured screens	42
Copying sections of captured screens	43
Changing device screen background color	44
Working with TI-84 Plus C Silver Edition Image screens	46
Converting and Sending Image Vars to a TI-84 Plus C	46
Working with distribution lists	51
Opening and closing the Distribution List drawer	51
Creating normal distribution lists	51
Using error distribution lists	53
Creating dynamic distribution lists	54
Applying distribution lists	56
Editing distribution lists	57
Deleting distribution lists	59
Restoring the Distribution List drawer	60
Working with device hosts	61
Opening and closing the Device Hosts drawer	61
Creating device hosts	61
Creating device host groups	63
Adding device hosts to device host groups	65
Deleting Device hosts and device host groups	66
Connecting to other users	67
Finding device information	69
Finding device information in normal view	69
Finding device information in merged view	69
Managing date and time on TI graphing calculators	70
Synchronizing device date and time with computer	70
Setting the date on TI graphing calculators	73
Setting the time on TI graphing calculators	76
Turning TI graphing calculator clocks on or off	77
Customizing the toolbar	79
Hiding and showing the toolbar	79

Removing items from the toolbar	80
Adding items to the toolbar	80
Setting the toolbar to the default	81
Changing the display of icons and text	82
Changing the size of toolbar icons	83
Troubleshooting	84
Frequently-asked questions	84
Error messages	88
Sending questions to Texas Instruments	89
Glossary	90
Terminology	90
File Types	92
Icons	94
Introduction to TI Data Editor	97
TI Matrix window	97
TI Text window	98
TI List window	98
TI Data window	99
TI Vector window	100
TI Program window and drawer	101
TI String window	102
TI Group window	103
Opening TI Data Editor	104
TI Number window	106
Closing TI Data Editor	106
Creating data variables	107
Creating matrix variables	107
Creating number variables	108
Creating list variables	108
Creating string variables	109
Creating TI data variables	109
Creating vector variables	110
Creating programs	111
Creating text files	113
Creating group files	114
Working with data	115
Opening data files	115
Selecting data	116
Editing data	117

Copying data	117
Moving data	118
Deleting data	118
Adding programming functions to data	119
Inserting special characters into data	121
Saving data	122
Sending Data to TI Graphing Calculators	124
Printing data	126
Troubleshooting	127
Frequently-asked questions	127
System requirements	129
Error messages	129
Sending questions to Texas Instruments	130
Glossary	131
Terminology	131
File types	131
Data types	132
Introduction to TI Software Update	134
TI Software Update window	134
Opening TI Software Update	137
Closing TI Software Update	138
Connecting and disconnecting TI handheld devices	139
Refreshing devices in the window	140
Checking devices	140
Setting the download location	140
Showing and hiding free device software	142
Showing and hiding the log	142
Creating keychains	143
Updating Device Software	144
Updating device operating systems	144
Updating purchased device software	146
Updating free device software	148
Customizing the toolbar	149
Hiding and showing the toolbar	149
Removing items from the toolbar	150
Adding items to the toolbar	150
Setting the toolbar to the default	151
Changing the display of icons and text	152
Changing the size of toolbar icons	152

Troubleshooting	153
Frequently-asked questions	153
System requirements	155
Error messages	156
Sending questions to Texas Instruments	156
Glossary	157
Terminology	157
File Types	159
Introduction to TI OS Restore	160
Opening TI OS Restore	160
Closing TI OS Restore	162
Restoring device operating systems	163
Legal Information	166
Important Information	166
Copyright	166
Trademarks	166
Texas Instruments Support and Service	166
Service and Warranty Information	167
Texas Instruments PC Software License Agreement	167

Introduction to the TI Connect™ Window

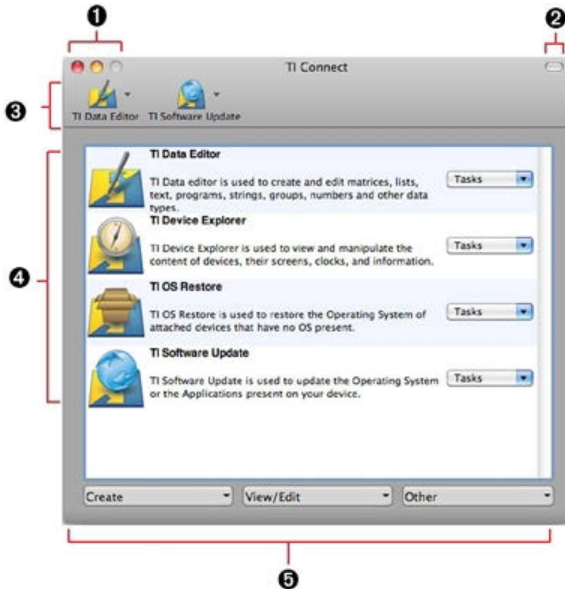
The TI Connect™ window is a tool that you can use to go directly to any of the main tasks in the TI Connect™ software. From the TI Connect™ window, you can access shortcuts to tasks in:

- TI Data Editor
- TI Device Explorer
- TI OS Restore
- TI Software Update

This section describes the TI Connect™ window, information on opening and closing the TI Connect™ window, and information on setting up your devices for use with TI Connect™ software.


TI Connect™ Window

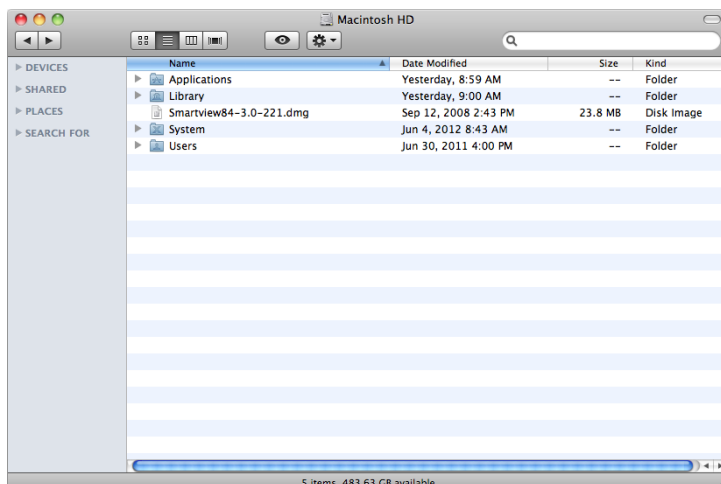
The TI Connect™ window provides shortcuts in several different forms: toolbar icons, software tool drop-down lists, and task drop-down lists.



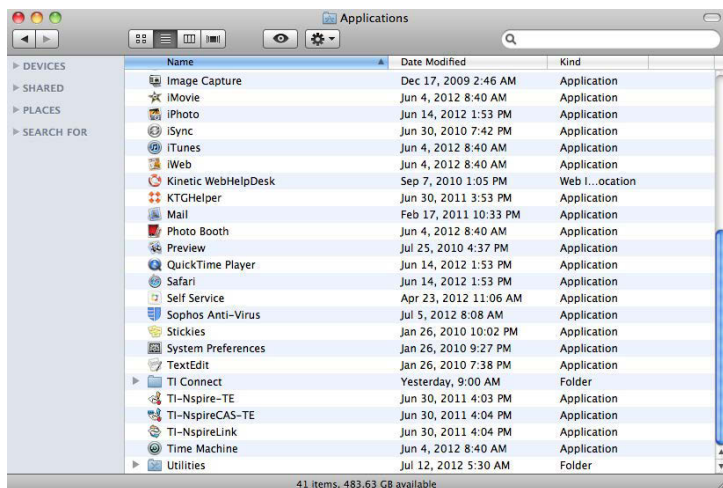
- ❶ **window control buttons** - Buttons used to close, minimize, or expand the window.
- ❷ **toolbar visibility button** - A button used to hide or show the toolbar.
- ❸ **toolbar** - Buttons (icons) that provide shortcuts to the TI Connect™ functions. This toolbar can be customized to suit the user needs. (See "Customizing the Toolbar" on page 7).
- ❹ **tool task lists** - Task drop-down lists grouped by software tool.
- ❺ **command task lists** - Task drop-down lists grouped by command.

Opening the TI Connect™ Window

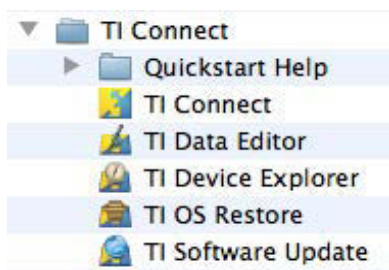
1. On your desktop, double-click **Macintosh HD**  .
The Macintosh® hard drive opens.



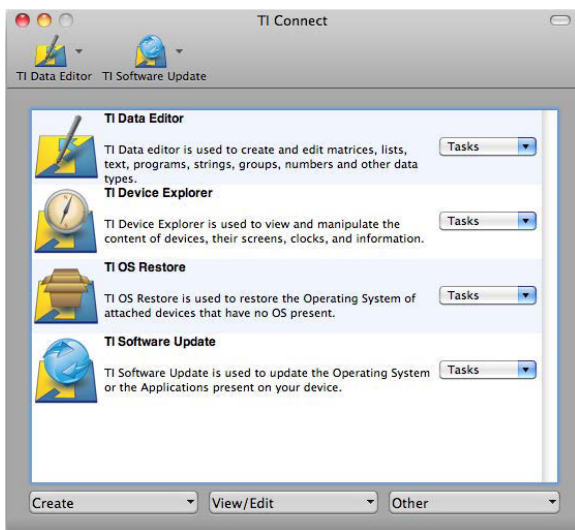
2. Click the arrow ▶ by the **Applications** folder.
A list of applications on your hard drive opens.



- Navigate to the TI Connect folder.
- If the TI Connect folder is not open, click the arrow ► by the folder. A list of TI Connect™ tools and folders opens.



- Double-click **TI Connect**. The TI Connect™ window opens.



Closing the TI Connect™ Window

You must close the TI Connect™ window from the menu bar, rather than the window. If you close the tool from the window, the window closes but the software remains open.

- ▶ In the menu bar, click **TI Connect > Quit TI Connect**.

Connecting and disconnecting TI handheld devices

Connect your TI graphing calculators to your computer using either of the following TI Connectivity Cables:

- USB Silver Edition cable
- USB computer cable (TI-84 Plus Family and TI-89 Titanium devices only)

You should connect your devices each time you start the TI Connect™ software and then disconnect them when you finish. This helps the software to recognize which devices you are using.

To connect TI handheld devices (USB Silver Edition cable)

1. Connect the USB Silver Edition cable to the device I/O port.
2. Connect the USB Silver Edition cable to the computer USB port.

If TI Software Update is running, the device appears in the window.

Note: If TI Software Update is running and the device does not appear in the window, repeat steps 1 and 2.

To connect TI handheld devices (USB computer cable)

1. Connect the USB computer cable to the device USB port.
2. Connect the USB computer cable to the computer USB port.

If TI Software Update is running, the device appears in the window.

Note: If TI Software Update is running and the device does not appear in the window, repeat steps 1 and 2.

To disconnect TI handheld devices (USB Silver Edition cable)

1. Disconnect the USB Silver Edition cable from the computer USB port.
2. Disconnect the USB Silver Edition cable from the device I/O port.

Note: If TI Software Update does not automatically remove disconnected

devices from the window, click **Refresh**



To disconnect TI handheld devices (USB computer cable)

1. Disconnect the USB computer cable from the computer USB port.
2. Disconnect the USB computer cable from the device USB port.

Note: If TI Software Update does not automatically remove disconnected

devices from the window, click **Refresh**



Using Task Shortcuts

The main purpose of the TI Connect™ window is to provide shortcuts to the tasks you are most likely to want to perform in the TI Connect™ software. You can access task shortcuts for TI Data Editor, TI Device Explorer, TI OS Restore, and TI Software Update.

If the tool you want shortcuts for is not in the toolbar, you can add it to the toolbar. (See "Adding items to the toolbar" on page 8.)

To select a task:

1. In the toolbar, click the tool name or tool icon.

A list of tasks for that tool opens.

2. Click the desired task.

The TI Connect™ software opens the appropriate tool and performs the selected task.

Using Tool Task List Shortcuts

The center of the window contains the tool task list. This part of the TI Connect™ window divides the available tasks by their tool (TI Data Editor, TI Device Explorer, TI OS Downloader, and TI Software Update). Each tool task contains its own drop-down list to access the shortcuts available within that tool.

1. Determine the tool the desired task is under. (See [Available task shortcuts](#).)
2. From the drop-down list, select the desired task.

TI Connect™ opens the appropriate tool and performs the selected task.

Using Command Task List Shortcuts

The command task list is located at the bottom of the screen. These task lists sort all available tasks by their command category (Create, View/Edit, and Other) and not by the tool that houses the functionality. The command task list contains all of the task shortcuts that are provided by the TI Connect™ window.

1. Select the command you want (Create, View/Edit, or Other).
2. From the selected command drop-down list, pick the desired task.

The TI Connect™ software opens the appropriate tool and performs the desired task.

Available Task Shortcuts

Shortcuts are accessible from the TI Connect™ window using:

- the toolbar icons,
- each tool's drop-down task list, or
- the command drop-down task lists.

TI Data Editor Task Shortcuts

TI Data Editor task shortcuts include:

- Create a matrix
- Create a text file
- Create a list
- Create a program
- Create a string
- Create a group
- Create a number
- Open file from device

TI Device Explorer Task Shortcuts

TI Device Explorer task shortcuts include:

- View device screenshot
- Set device clock
- View device information
- View device content
- Send files to devices
- Copy files to computers

TI OS Restore Task Shortcut

The TI OS Restore task shortcut:

- Restore device operating system

TI Software Update Task Shortcut

The TI Software Update task shortcut:

- Update my device

Customizing the Toolbar

You can customize the TI Connect™ window toolbar. You can choose from a variety of options, ranging from adding new items to the toolbar to changing the display of the icons.

Hiding and showing the toolbar

To hide the toolbar

- ▶ Click **View > Hide Toolbar**.
The window no longer shows the toolbar.

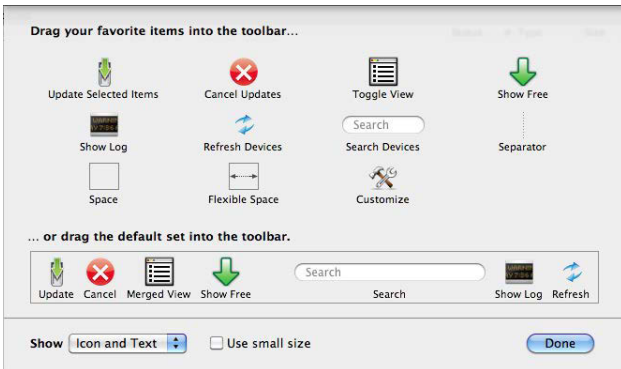
To show the toolbar

- ▶ Click **View > Show Toolbar**.
The window shows the toolbar.

Removing items from the toolbar

To remove items from toolbar

1. Click **View > Customize Toolbar**.

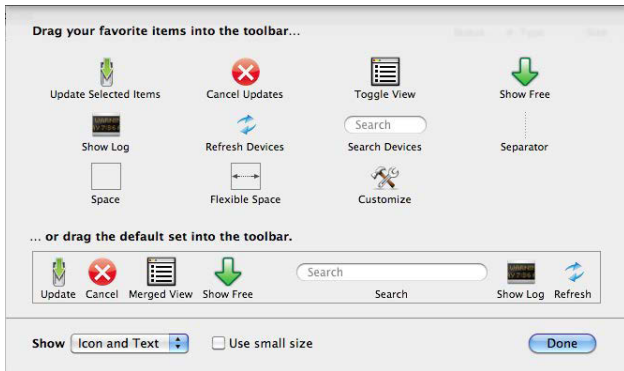


2. Drag the unwanted toolbar item to the Customize Toolbar dialog box.
The software removes the item from the toolbar.
3. Click **Done**.

Adding items to the toolbar

To add items to the toolbar

1. Click **View > Customize Toolbar**.



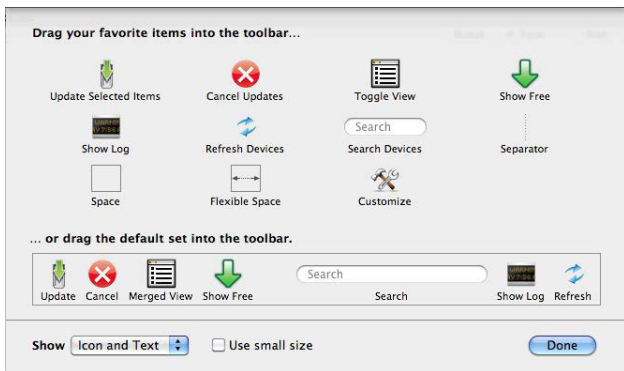
2. Drag the additional item to the toolbar in the main window.
The software adds the item to the toolbar.
3. Click **Done**.

Setting the toolbar to the default

When you first open a tool it shows a default toolbar. If you change the toolbar and decide you do not want to keep the changes, you can always revert back to the default.

To set the toolbar to the default

1. Click **View > Customize Toolbar**.



2. Drag the default set to the toolbar in the main window.
The software reverts back to the default.

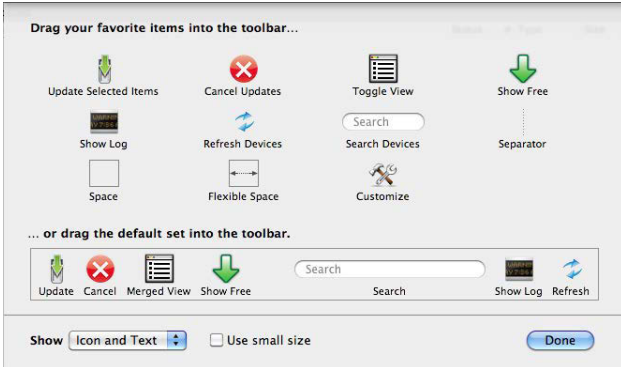
3. Click **Done**.

Changing the display of icons and text

You can choose to display both icons and text, only icons, or only text in the toolbar.

To change the display of icons and/or text

1. Click **View > Customize Toolbar**.



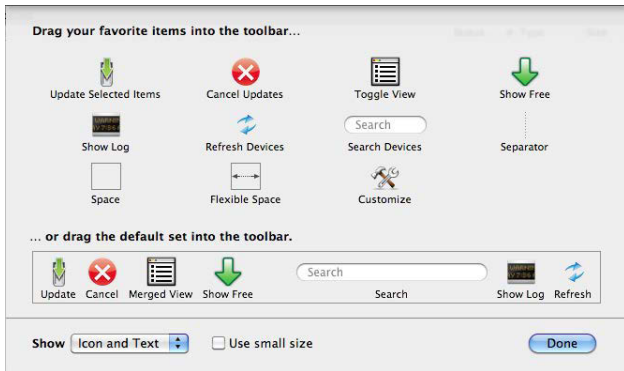
2. From the Show drop-down list, select the option you want.
The toolbar display in the main window changes.
3. Click **Done**.

Changing the size of toolbar icons

Changing the size of the toolbar icons can help you to find and use them more quickly.

To change the size of the icons

1. Click **View > Customize Toolbar**.



2. Select the Use small size check box to decrease the size of the icons. Clear the check box to increase the size.
3. Click **Done**.

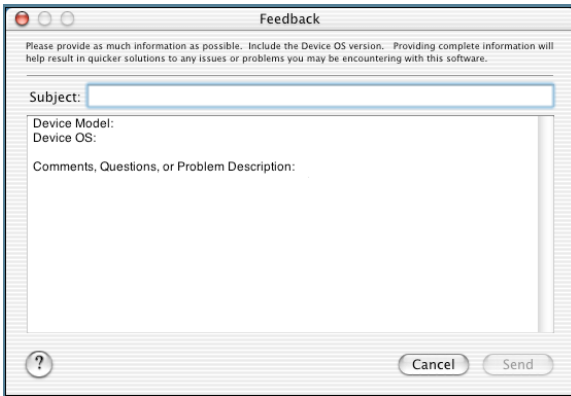
Troubleshooting

If you have trouble using the TI Connect™ window, visit education.ti.com/go/download or send questions to Texas Instruments. If your trouble is with a specific task, see the help for that tool.

If you encounter a problem while using TI Software Update that appears to be an issue with the software, you can alert Texas Instruments to the situation.

To send questions to Texas Instruments

1. Click **TI Software Update > Send Questions to TI...**
The Feedback dialog opens.



2. Type a subject for the feedback.
3. In the main window, type the relevant information.
4. Click **Send**.

Introduction to TI Device Explorer

With the TI Device Explorer tool, you can:

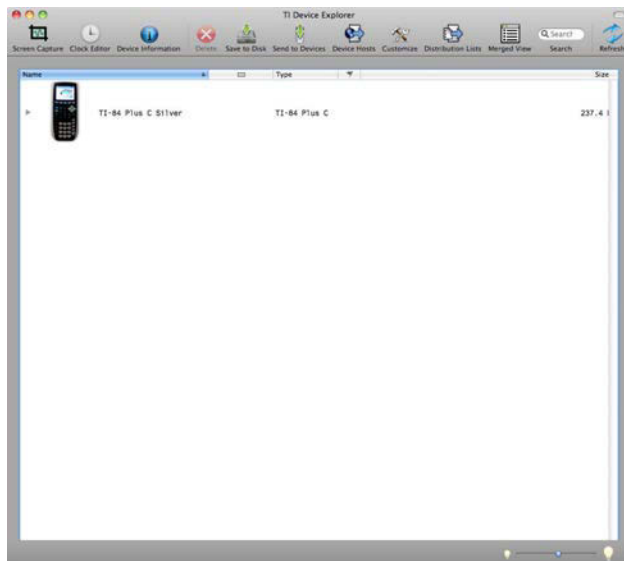
- Exchange information between your device and computer.
- Manage the files on your device.
- Capture screens from any connected TI graphing calculator.
- Create distribution lists to organize or locate the devices connected to your computer.
- Connect to other devices and share information, files, and data with these devices.
- Find information about a connected TI graphing calculator.
- Manage the date and time on connected TI-84 Plus Family devices, TI-89 Family devices, the TI-92 Plus device, and the Voyage™ 200 Personal Learning Tool.

TI Device Explorer windows

The TI Device Explorer window contains tools for you to work with device files, find device information, capture device screens, use distribution lists, and manage device date and time. It has two views, normal view and merged view. Normal view shows the connected devices and files, while merged view shows a combined list of files on the connected devices.

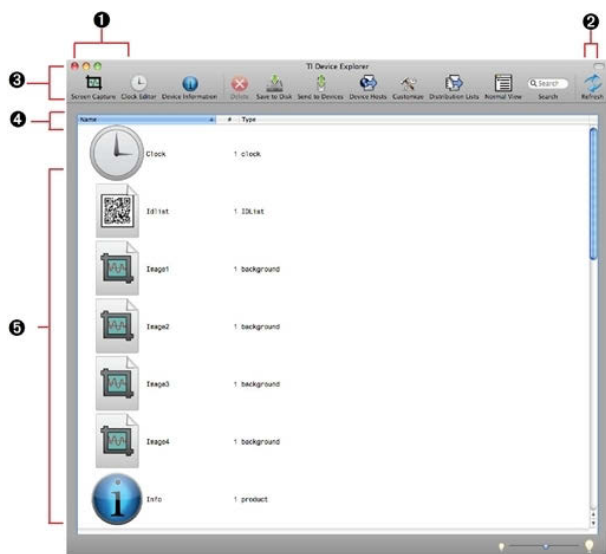
Note: You can connect multiple devices such as several TI-84 Plus C Silver Edition graphing calculators to manage files.

TI Device Explorer window (normal view)



- ❶ **window control buttons** - Buttons used to close, minimize, or expand the window.
- ❷ **toolbar visibility button** - Hides or shows the toolbar.
- ❸ **toolbar** - Contains a set of buttons that provide shortcuts to specific TI Device Explorer functions.
- ❹ **title bar** - Identifies the type of information listed below it, including file name, status, file restrictions, and file type.
- ❺ **device list** - Lists the connected devices.
- ❻ **device directory** - Lists the files on one device.

TI Device Explorer window (merged view)



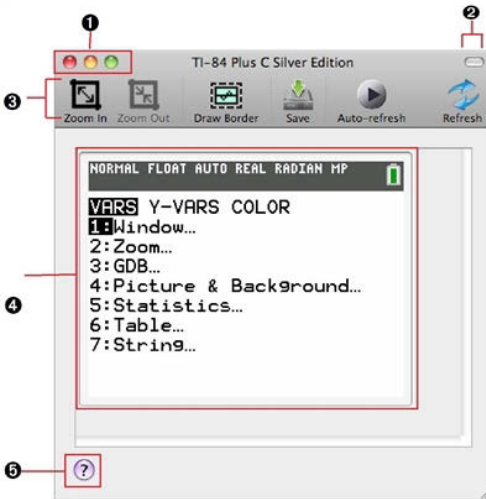
- 1 window control buttons** - Buttons used to close, minimize, or expand the window.
- 2 toolbar visibility button** - Hides or shows the toolbar.
- 3 toolbar** - Contains a set of buttons that provide shortcuts to specific TI Device Explorer functions.
- 4 title bar** - Identifies the type of information listed below it, including file name, status, file restrictions, and file type.
- 5 file directory** - Lists the files on all connected devices.


Screen Capture windows

TI Device Explorer has two windows that show captured screens. The Screen Capture window for normal view shows the captured screen for one device. The Screen Capture window for merged view shows captured

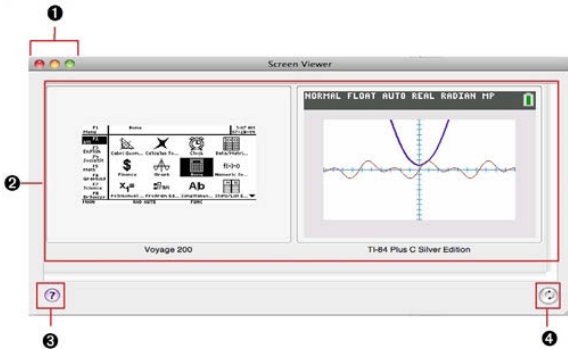
screens for all connected devices.

Screen Capture window (normal view)



- 1 window control buttons** - Buttons used to close, minimize, or expand the window.
- 2 toolbar visibility button** - Hides or shows the toolbar.
- toolbar** - Contains a set of buttons that provide shortcuts to specific TI Device Explorer functions. If the window does not show all of the tools, click the extended toolbar  to expand the options.
- 3**
- 4 image display** - Shows the screen image captured from the connected device.
- 5 help button** - Opens the help documentation for the current feature.

Screen Capture window (merged view)

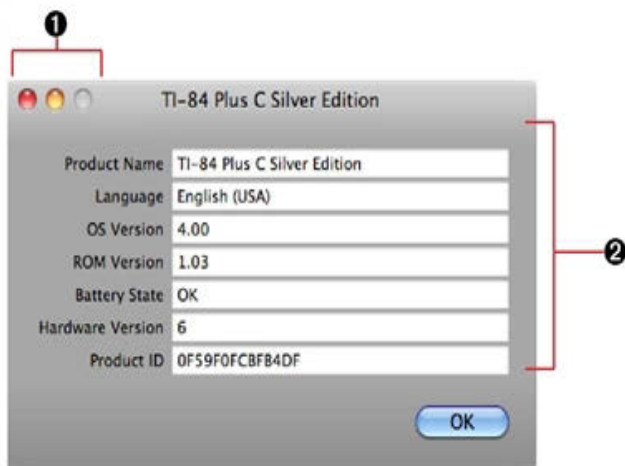


- 1 window control buttons** - Buttons used to close, minimize, or expand the window.
- 2 image display** - Shows the screen images captures from the connected devices.
- 3 help button** - Opens the help documentation for the current feature.
- 4 refresh button** - Refreshes (updates) the screen image.

Device Information windows

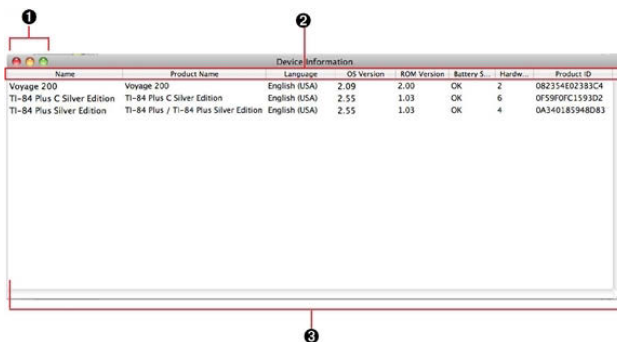
TI Device Explorer has two windows that contain information about your device. The Device Information window for normal view contains device information for a specific device. The Device Information window for merged view contains device information for all connected devices.

Device Information window (normal view)



- 1 window control buttons** - Buttons used to close, minimize, or expand the window.
- 2 main viewing area** - Displays detailed information about your device. The Product ID is the unique number assigned to your device.

Device Information Window (merged view)

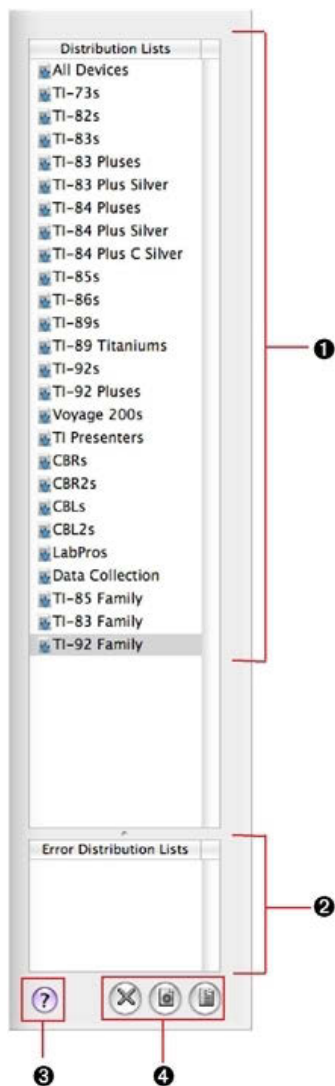


- ❶ **window control buttons** - Buttons used to close, minimize, or expand the window.
- ❷ **title bar** - Names the type of information below it, such as Product Name, Product ID, Language, OS Version, and so on.
- ❸ **main viewing area** - Displays information about the connected device(s).

Distribution List drawer

The Distribution List drawer enables you to create, use, and delete distribution lists. Use distribution lists to filter the devices the TI Device Explorer window displays in the window. In addition, you can use the error distribution lists to resend files when transfers fail.

Distribution List drawer



- 1** distribution lists window - Lists the currently-available

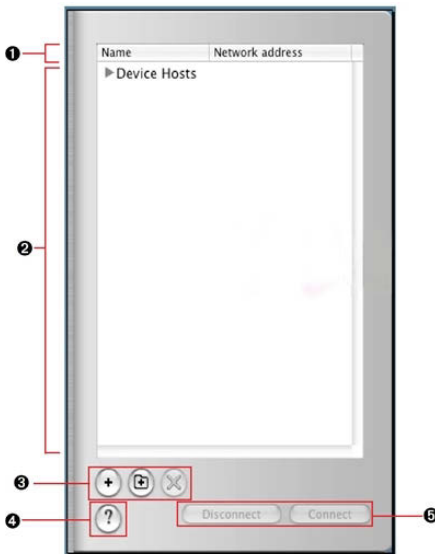
distribution lists.

- ② **error distribution lists window** - Contains the error distribution lists created from failed file transfers.
- ③ **help button** - Opens the help documentation for the current feature.
- ④ **distribution list control buttons** - Control the deletion and creation of distribution lists.

Device Hosts drawer

Use the Device Hosts drawer to view and connect to other computers (and the devices attached to them) on the LAN currently in use. To use other features of Device Explorer, you must first create a device host for each device you want to interact with. This drawer enables you to create these device hosts.

Device Hosts drawer

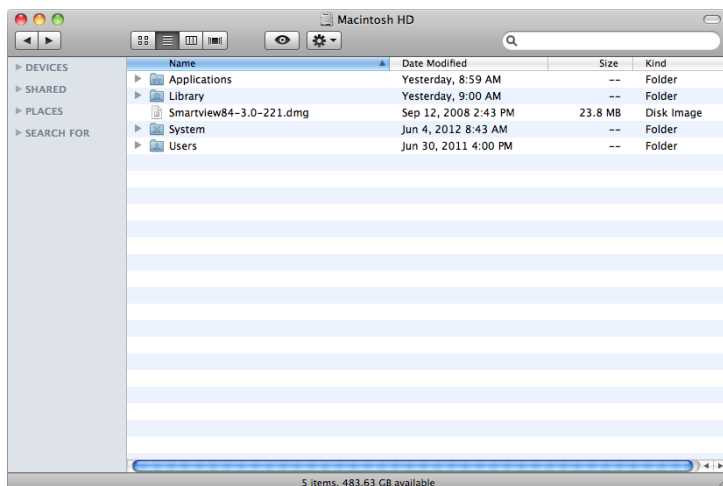



- ❶ **title bar** - Describes the type of information on the window such as device host names.
- ❷ **device host window** - Displays the current device hosts.
- ❸ **device host buttons** - Let you create and delete device hosts.
- ❹ **help button** - Opens the help documentation for the current feature.
- ❺ **connection buttons** - Let you connect or disconnect to TI Connect™ software users for whom you have established device hosts.

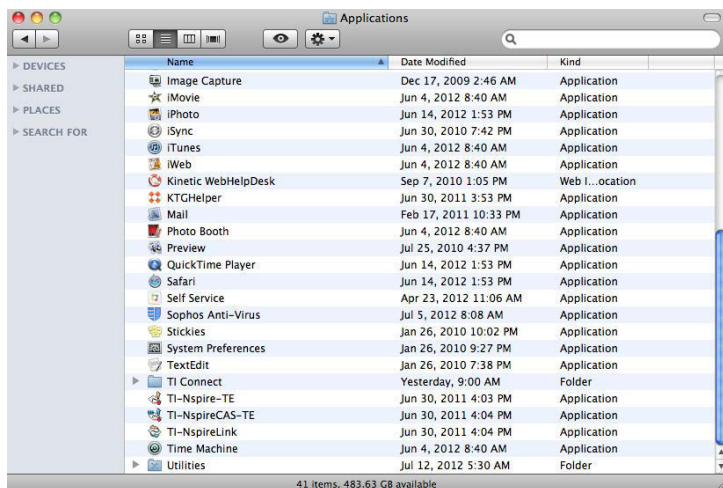
Opening TI Device Explorer

To open TI Device Explorer

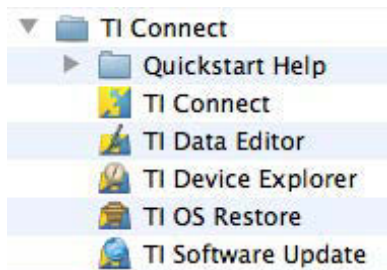
1. On your desktop, double-click **Macintosh HD** .



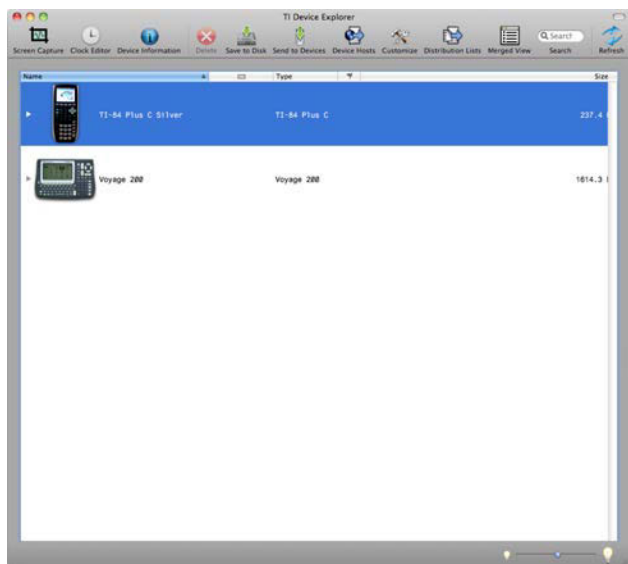
2. Click the arrow  by the **Applications** folder.



3. Navigate to the TI Connect™ folder.
4. If the TI Connect™ folder is not open, click the arrow ► by the folder.



5. Double-click **TI Device Explorer**.



Note: If the TI Device Explorer window does not show the correct device(s), disconnect the TI Connectivity Cable(s), and then reconnect them. It is important that the graphing calculator(s) are turned on.

Closing TI Device Explorer

You must close TI Device Explorer from the menu bar, rather than the window. If you close TI Device Explorer from the window, the window closes but the software remains open.

To close TI Device Explorer

- ▶ In the menu bar, click **TI Device Explorer > Quit TI Device Explorer**.

Switching between merged and normal view

In normal view, the main viewing area contains icons for each device that you have connected to the computer. You can then view the files on each device under the device icons. In merged view, the main viewing area contains a merged list of the files for all connected devices.

To switch from merged view to normal view

- ▶ Click **View > Normal View** or click **Normal View** 

To switch from normal view to merged view

- ▶ Click **View > Merged View** or click **Merged View** 

Changing the size of window icons

Changing the size of the window icons reduces or increases the amount of space that the device name and files use. This can make it easier to locate the device or file you need.



To reduce the size of window icons

- ▶ Click and slide the arrow to the left



To increase the size of window icons

- ▶ Click and slide the arrow to the right



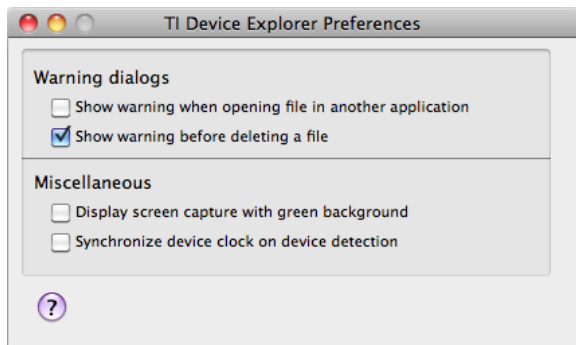
Setting preferences


When you start TI Device Explorer, it starts with certain predetermined settings. You can change some of these settings under TI Device Explorer Preferences. The settings you can change include some of the warning dialog, screen capture, and clock features.

To change TI Device Explorer preferences

1. Click **TI Device Explorer > Preferences**.

The software indicates currently-selected preferences with a check mark.



2. To clear any preferences, click the respective check mark.
3. To select any preferences, click the respective box.
4. Click **Close** .

Connecting and disconnecting TI graphing calculators

You can connect your TI graphing calculators to your computer using either of the following TI Connectivity Cables:

- USB Silver Edition cable
- USB computer cable (TI-84 Plus Family and TI-89 Titanium devices only)

You should connect your devices each time you start the TI Connect™ software, and then disconnect them when you finish. This helps the software to recognize which devices you are using.

Note: It is important that the graphing calculator(s) are turned on.

To connect TI graphing calculators (USB Silver Edition cable)

1. Connect the USB Silver Edition cable to the device's I/O port.
2. Connect the USB Silver Edition cable to the computer's USB port.
If TI Device Explorer is running, the device appears in the window.

To connect TI graphing calculators (USB computer cable)

1. Connect the USB computer cable to the device's USB port.
2. Connect the USB computer cable to the computer's USB port.
If TI Device Explorer is running, the device appears in the window.

To disconnect TI graphing calculators (USB Silver Edition cable)

1. Disconnect the USB Silver Edition cable from the computer's USB port.
2. Disconnect the USB Silver Edition cable from the device's I/O port.

To disconnect TI graphing calculators (USB computer cable)

1. Disconnect the USB computer cable from the computer's USB port.
2. Disconnect the USB computer cable from the device's USB port.

Refreshing devices in the window

Refreshing the window tells the software to detect changes to the connected TI graphing calculators. For instance, this action detects if a device is no longer connected or has new software.

To refresh devices in the window

- ▶ Click **File > Refresh** or click **Refresh** .

TI Device Explorer connects to the attached device(s), determines any changes, and refreshes the information in the window.

Note: If this step does not refresh the devices in the window, disconnect the TI Connectivity Cable(s) from the computer and then reconnect them. It is important that the graphing calculator(s) are turned on.

Renaming devices

Renaming devices makes it easier for you to distinguish between connected devices.

To rename devices

1. If TI Device Explorer is not in normal view, click **View > Normal View** or

click **Normal View**



2. Click the device you want to rename.
3. Press **Enter**.

The device name moves to a blue box under the Name field.



4. Type the new device name.
5. Click in the main window outside of the blue box.

TI Device Explorer renames the device.

Working with files

The TI Device Explorer tool enables you to manage device-related files on your TI graphing calculator as well as on your computer. With this tool, you can exchange information and files between your calculator and computer, share information and files with other TI Connect™ software users, and directly manage the files residing on your calculator.

Opening files

You can open any data variable file in the TI Device Explorer window, as well as the TI Device Explorer tool files. This helps you determine the information available on your device and or choose the files that you want to use.

To open files

1. In TI Device Explorer, navigate to the file you want to open.
2. Click the file.
3. Click **File > Open**.



Notes:

- The content of the Alert dialog box varies depending on the type of file.
 - This warning dialog is not displayed if you clear it under Preferences. (See "Setting preferences" on page 26.)
4. Click **Choose Application**.
Choose an application that opens the appropriate window or tool.
 5. Click **Open**.

Searching for files

Locating a specific file on your device to work with can be difficult if your device contains a large number of files.

Before you start

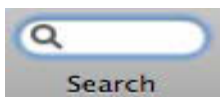
Make sure the TI Device Explorer toolbar contains the search icon. (See "Adding items to the toolbar" on page 80.)

To search for files

1. Click **Search**



TI Device Explorer outlines the icon with blue.



2. Type the name of the file.

In the main viewing area, TI Device Explorer shows a list of matching files.

Copying files to computers

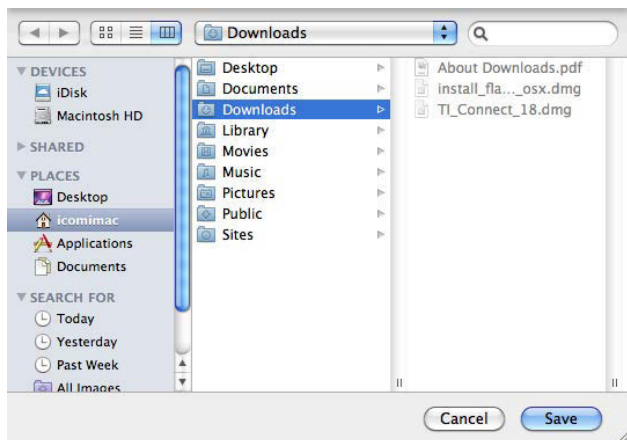
Copying device files to your computer creates backup files that you can use in the future.

Warning: Do not disconnect a device during a transfer.

To copy files to the computer

1. In TI Device Explorer, navigate to the file you want to copy.
2. Click the file.

3. Click **File > Save Selected Items to Disk** or click **Save to Disk**



4. Navigate to the location where you want to save the copied file.
5. Click **Save**.

TI Device Explorer copies the file to your computer.

Note: If you are using a TI-82 or TI-85 device, the Alert dialog opens. Follow the additional steps in the dialog to complete the copy. (See “If you have a TI-82 or TI-85 device” below.)

If you have a TI-82 or TI-85 device

If you have a TI-82 or TI-85 device, you must follow some additional steps after you complete step 5 of “Copying files to computers”.

1. On your device, press **2nd Link**.
2. Select the files you want to send.
3. In the dialog, click **Proceed**.
4. On your device, select TRANSMIT, and then press **Enter**.

Sending files to connected devices

Sending files to connected devices enables you to install software, send data variables, and restore backed-up (copied) files. You can send files from the hard drive or the desktop.

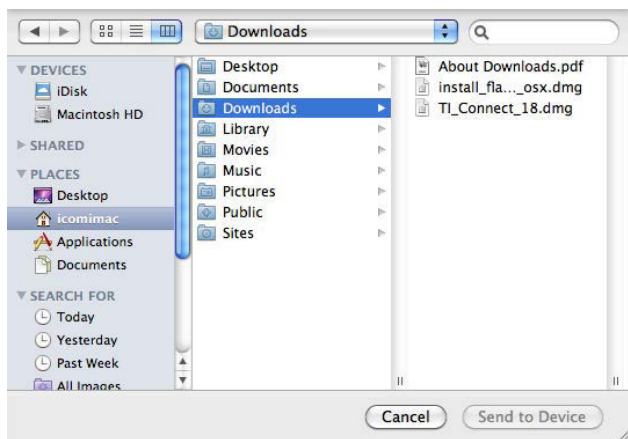
Warning: Do not disconnect a device during a transfer.

Note: The software may not support all characters. During the send operation, the software converts unsupported characters into question marks.

To send files to connected devices

1. Click **File > Send File to Selected Devices > Send** or click **Send to**

Devices  .



2. Navigate to the file you want to send.
3. Click the file.
4. Click **Send to Device**.

TI Device Explorer sends the file to the connected device.

If a Panel window appears, type a name or select a name from the drop-down list, and then click **OK**.

Note: If you are using a TI-82 or TI-85 device, the Alert dialog opens. Follow the additional steps in the dialog to complete the send.

If you are using a TI-82 or TI-85 device

If you have a TI-82 or TI-85 device, you must follow some additional steps after step 4 in “Sending files to connected devices”.

1. On your device, press **2nd Link**.
2. Select **RECEIVE**.
3. Press **Enter**.
4. In the dialog, click **Proceed**.

Compatibility with graphing calculators

Note: Not all TI-84 Plus C Silver Edition graphing calculator files are compatible with other TI-84 Plus Family graphing calculator files because of the high resolution of the TI-84 Plus C Silver Edition color screen. In general,

numeric files (not limited to lists, variables, matrices, and functions) are shared between these graphing calculators but Apps are not shared between these graphing calculators even if they have the same title. When incompatible, the computer file extensions for the TI-84 Plus C Silver Edition are different from a similar variable from the TI-84 Plus/TI-84 Plus Silver Edition graphing calculators.

File Type	Link from TI-84 to TI-84 Plus C	Link from TI-84 Plus C to TI-84	84P computer file type	84PC computer file type
Operating System	No	No	8xu	8cu
Apps	No	No	8xk	8ck
AppVar*	Yes	Yes	8xv	8xv
Programs - TI Basic*	Yes	Yes	8xp	8xp
Assembly Programs*	Yes	No	8xp	8xp
Pictures	No	No	8xi	8ci
Background Images	N/A	No	N/A	8ca
Group Files	Yes	Yes	8xg	8xg
User Zoom	Yes	Yes	8xz	8xz
String	Yes	Yes	8xs	8xs
Table	Yes	Yes	8xt	8xt
Function file	Yes	Yes	8xy	8xy
GDB*	Yes	Yes	8xd	8xd

File Type	Link from TI-84 to TI-84 Plus C	Link from TI-84 Plus C to TI-84	84P computer file type	84PC computer file type
List	Yes	Yes	8xl	8xl
Matrix	Yes	Yes	8xm	8xm
Number	Yes	Yes	8xn	8xn
Complex	Yes	Yes	8xc	8xc
Window Setup	Yes	Yes [*]	8xw	8xs
Certificate	No	No	8xq	8cq
Backup	No	No	8xb	8cb

* Programs created using commands available only in the latest OS version will not transfer to graphing calculators with an earlier OS version.

* App Vars and Programs should be reviewed for use after the transfer between the TI-84 Plus Family and the TI-84 Plus C Silver Edition graphing calculators. Some App Vars may not setup an App as expected. Some Programs will need to be modified due to the difference in screen resolution and new commands.

** You may receive a version error if you used DOT-THIN line style. Change the line style to avoid the error.

Deleting files

You can use TI Device Explorer to delete files from your TI graphing calculator.

Warning: You cannot undo the deletion of a file.

To delete files from a device

1. In TI Device Explorer, navigate to the file you want to delete.
2. Click the file.

3. Click **Edit > Delete** or click **Delete** 

Note: This alert is not displayed if you clear the respective option in Preferences. (See "Setting preferences" on page 26.)

4. Click **OK** in the confirmation window.

TI Device Explorer deletes the file from the device.

Backing up device files

A backup folder contains copies of the files currently on your TI graphing calculator. You should perform an occasional backup to ensure that you do not lose any important files.

Warning: Do not disconnect a device during a transfer.

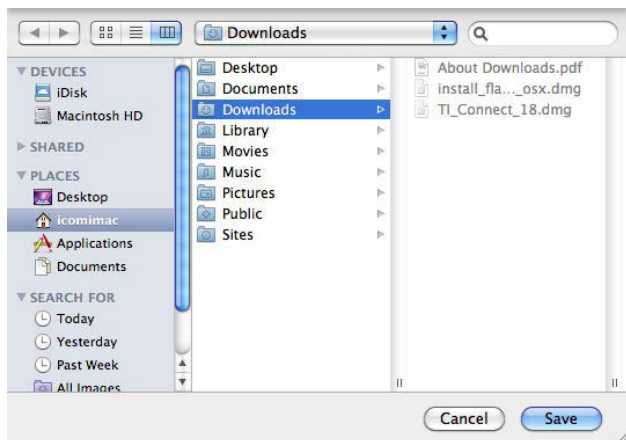
Before you start

- Make sure your device is turned on and properly connected.
- Make sure the TI Device Explorer screen is in normal view.

To back up device files

1. Click the device you want to back up.

2. Click **File > Save Selected Items to Disk** or click **Save to Disk** 



3. Navigate to the location where you would like to save the backup folder.
4. Click **Save**.

TI Device Explorer downloads the device files and stores them in a backup folder on the computer.

Note: To view the download progress, click **Window > History**.

Working with device screens

The TI Device Explorer tool enables you to capture screens from any connected TI graphing calculator. Once you capture a screen, you can save it and or use it with other applications on your computer. This gives you the ability to place accurate representations of a device screen into any document.


Capturing device screens

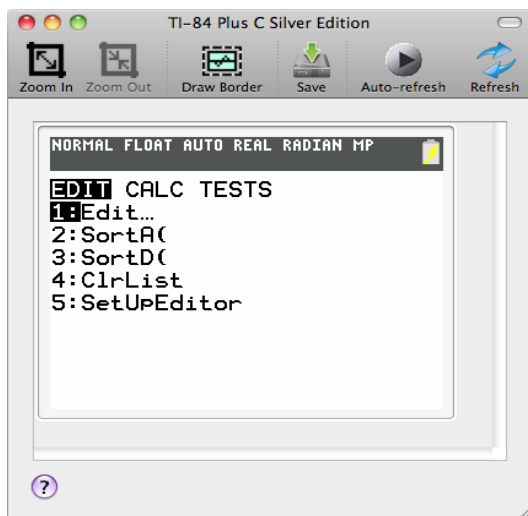
You can capture a device screen from any TI graphing calculator connected to your computer. The captured screen appears in the Screen Capture window. You have the ability to use it as-is, add a border, or save just selected portions of the screen.

Before you start


Make sure your device(s) are turned on and properly connected to your computer.

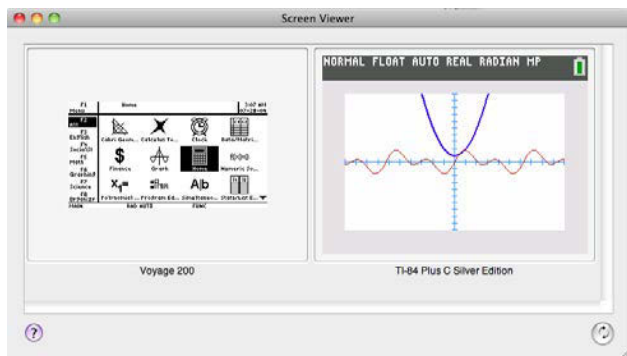
To capture device screens (normal view)


1. On a connected device, display the screen you want to capture.
2. In the TI Device Explorer window, click the device whose screen you want to capture.
3. Click **Device > Capture screens** or click **Screen Capture** .



To capture device screens (merged view)

1. On the connected device(s), display the screen(s) you want to capture.
2. Click **Device > Capture screens** or click **Screen Capture** .




Note: If you cannot see all of the captured screens, click **Expand** .

Refreshing captured screens


When the image on your device changes, you can refresh the captured screen shown in the image display of the Screen Viewer window. You can refresh the captured screen image after you make the change on your device, or you can have the software continuously refresh the captured screen image.

Note: To continuously refresh the captured screen, you must capture the original screen in normal view.


To refresh the captured screen after a change (normal view)

- ▶ In the Screen Viewer window, click **Extended Toolbar** >> > click  **Refresh**. The software refreshes the captured screen image to the newest image on your device.


To refresh the captured screen after a change (merged view)

- ▶ In the Screen Viewer window, click . The software refreshes the captured screen image to show the newest images on your device(s).

To refresh the captured screen continuously (normal view only)

- ▶ In the Screen Viewer window, click **Extended Toolbar** >> > click  **Auto-Refresh**. The software refreshes the captured screen image whenever the image changes on your device.

To stop refreshing the captured screen continuously in both normal view and merged view:



- ▶ In the Screen Viewer window, click **Extended Toolbar** >> > click  **Stop Refreshing**. The software refreshes the captured screen image whenever the image changes on your device.

Editing captured screens



For images captured in normal view, you can resize the captured screens and add borders to them. If you need to edit a captured screen in any other way, then copy the screen into an image editor and make the changes there.

Note: You cannot resize or add borders to images captured from merged view.

To resize captured screens (normal view only)

- ▶ To increase the captured screen's size, click **View > Zoom Out** or click **Zoom Out** .
- ▶ To decrease the captured screen's size, click **View > Zoom In** or click **Zoom In** .

To add or remove borders (normal view only)

- ▶ To add a border, click **Edit > Draw Screen Border** or click **Draw Border** .
- ▶ To remove a border, click **Edit > Remove Screen Border** or click **Remove Border** .

To edit captured screens in an image editor

1. Open the image editor.
2. Drag the captured screen to the image editor.
3. Use the image editor's tools to edit the image.
4. (Optional) In the image editor, save the captured screen.

Saving captured screens

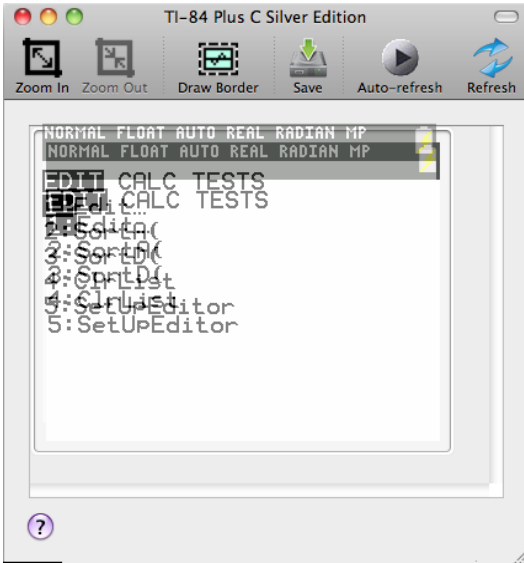
Saving a captured screen gives you the ability to use it in other documents or send it to other people. TI Device Explorer can also save screens in different image formats.

Note: If you want to save a border to the screen, you must capture and save the screen in normal view.

To save captured screens (normal view)

1. If necessary, edit the captured screen.
2. Click the captured screen and hold down the mouse button.

The cursor becomes a closed hand. A transparent copy of the captured screen appears.



3. Drag the transparent copy to the desktop.

TI Device Explorer creates a picture clipping file and puts it on the desktop.

4. Click the name of the picture clipping file.
5. Type a new name and press **Enter**.

To save captured screens (merged view)

1. Drag the captured screen to the desktop.

TI Device Explorer creates a picture clipping file and puts it on the desktop.

2. Click the name of the picture clipping file.
3. Type a new name and press **Enter**.

Note: To save picture clipping files to your hard drive, open the Macintosh HD to the desired location and drag the picture clipping file there.

Saving sections of captured screens

TI Device Explorer gives you the option of saving only selected sections of captured screens. You may want to save selected parts of captured screens when you only need a small part of the screen for a document.

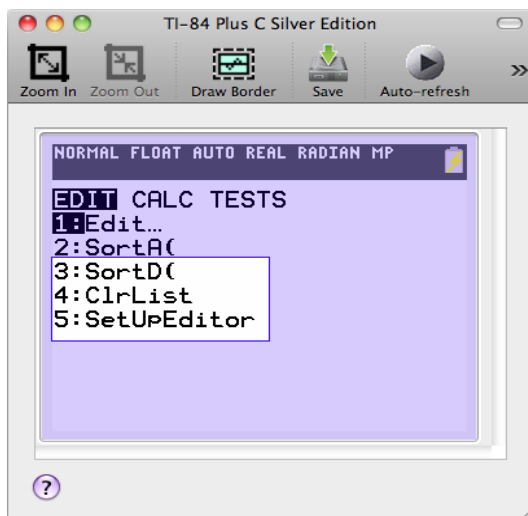
Before you start

Make sure you captured the screen in normal view.

To save sections of captured screens

1. If necessary, edit the captured screen. (See "Editing captured screens" on page 39.)
2. Click the captured screen and drag your cursor over the section you want to capture.

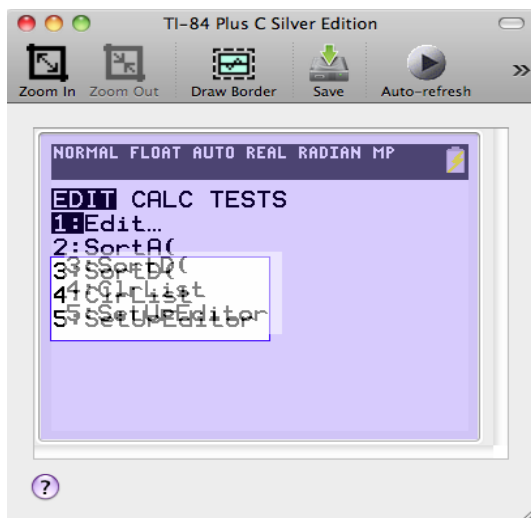
A box forms around the selected section.



Note: If necessary, you can adjust the size of the selection. Hold your cursor over any corner of the box until an arrow appears, then drag the corner to the needed size.

3. Click the selected section and hold down the mouse button.

The cursor becomes a closed hand. A transparent copy of the selected section may appear.



4. Drag the image to the desktop.

TI Device Explorer creates a picture clipping file and puts it on the desktop.

5. Click the name of the picture clipping file.
6. Type a new name and press **Enter**.

Note: To save the picture clipping file to your hard drive, open the Macintosh HD to the desired location and drag the picture clipping file there.

Copying captured screens

Once you capture a screen, you may want to use it in various projects. You can copy your captured screens and import them into other documents. TI Device Explorer enables you to copy captured screens from either normal view or merged view.

Note: If you want the captured screen to have a border, then you must copy it from normal view.

To copy captured screens into documents (normal view)

1. If necessary, edit the captured screen. (See "Editing captured screens" on page 39.)

Note: Resized images return to the default size when you paste them in the document. If you want a resized image to retain its size, drag the image to the document.

2. Click **Edit > Copy**.

TI Device Explorer copies the captured screen and places it on the clipboard.

3. Open the document into which you want to copy the captured screen.
4. Place your cursor in the location where you want the copied screen to appear.
5. Click **Edit > Paste**.

The software puts a copy of the captured screen in the document.

To copy captured screens into documents (merged view)

1. Open the document.
2. Place your cursor in the location where you want the copied screen to appear.
3. Drag the captured screen to the document.

The software puts a copy of the captured screen in the document.

Copying sections of captured screens

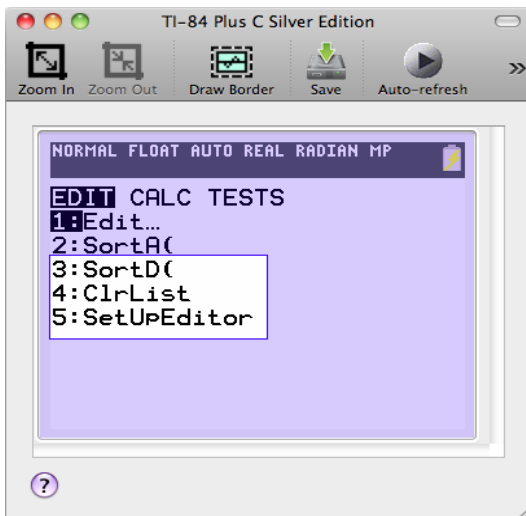
TI Device Explorer enables you to copy selected sections of captured screens into other documents. This may help you if you need a small portion of the captured screen in your document. You can only copy selected sections from screens captured in normal view.

Before you start

Make sure you captured the screen in normal view.

To copy sections of captured screens into documents

1. If necessary, edit the captured screen. (See "Editing captured screens" on page 39.)
2. Click the captured screen and drag your cursor over the section you want to copy.



Note: If necessary, you can adjust the size of the selection. Hold your cursor over any corner of the box until an arrow appears, then drag the corner to the needed size.

3. Click **Edit > Copy**.

TI Device Explorer copies the selected section and places it on the clipboard.

4. Open the document into which you want to copy the selected section.
5. Place your cursor in the location where you want the copy to appear.
6. Click **Edit > Paste**.

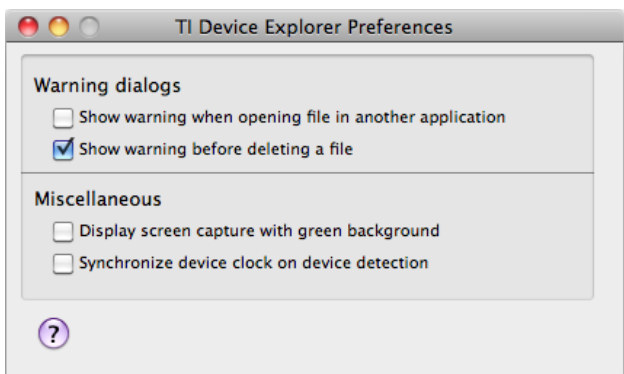
The software puts a copy of the selected section in the document.


Changing device screen background color

When you capture screens, you have the option of capturing them with a white or a green background color. Note that you must decide upon and select the background color prior to capturing a screen.

To capture screens with white backgrounds

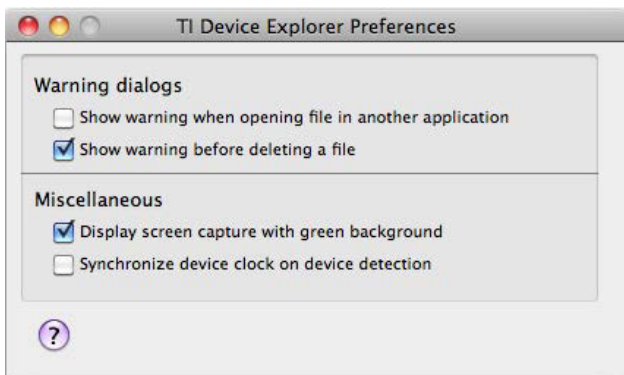
1. Click **TI Device Explorer > Preferences**.




2. If **Display screen capture with green background** is checked, click the checkmark to clear the box.
3. Click **Close** .

To capture screens with green backgrounds

1. Click **TI Device Explorer > Preferences**.



2. If **Display screen capture with green background** is not checked, click the box to select this option.
3. Click **Close** .

Working with TI-84 Plus C Silver Edition Image screens

The TI Device Explorer tool enables you to manage Image Vars and Pic Vars to display on a TI-84 Plus C Silver Edition.

Converting and Sending Image Vars to a TI-84 Plus C

The TI-84 Plus C has the ability to display background images (Image Vars) as well as the familiar Pic Vars functionality of the TI-84 Plus. These variables display in the graph area. TI-84 Plus C Image and Pic Vars will not link to a TI-84 Plus given the difference in the screen resolution of the two graphing calculators.

Image Vars

A TI-84 Plus C Image Var is created by converting your picture (gif, tif, png, jpg, or bmp) to 83 x 133 pixels (width by height) using the TI Connect™ software. You can then send the Image Var to your TI-84 Plus C or save it to your computer as an *.8ca file. An Image Var can also be loaded into the TI-84 Plus C emulator view in TI-SmartView™ software.

Your picture may not display in the graph area as expected given the conversion to the pixel dimensions of 83 x 133. The conversion to the Image Var uses 16-bit color.

On the TI-84 Plus C, an Image Var displays as the background in the graph area only. An Image Var will display scaled for the MODE screen settings of Full, Horizontal, and Graph-Table preserving any mathematical modeling done on an Image Var. Image Vars cannot be edited while working on the TI-84 Plus C. Image Vars run and are stored in Archive memory.

Note: A screen capture of the graph area includes the full screen of the TI-84 Plus C, status bar, graph border, and the graph area. TI Connect™ software allows you to crop the graph size area only to create an Image Var if desired.

Pic Vars

Pic Vars are created and modified on the TI-84 Plus C. Pic Vars are 266 x 166 pixels and use the 15 colors available on the TI-84 Plus C. Pic Vars display as an overlay on the graph screen area exactly as on the TI-84 Plus. Pic Vars display from the upper left corner of the graph area and do not scale for the MODE screen settings Full, Horizontal, and Graph-Table. Pic Vars can be opened to view in the TI Connect™ Screen Capture software.

They can be saved as computer files with the file extension *.8ci. Pic Vars run and are stored in Archive memory. Note that Pic Vars on the TI-84 Plus run and are stored in RAM memory but also can be stored in Archive memory. Please note this difference when clearing RAM.

Note: TI Connect™ software will not convert a Pic Var (*.8ci) to an Image Var (*.8ca).

Creating and Sending Image Vars to your TI-84 Plus C

Background Image Vars are created, sent, or saved using either:

- TI Connect™ software for the Mac® using Device Explorer or Create a Group
- TI Connect™ software for the PC using Device Explorer or Screen Capture

Creating and Sending an Image Var to a Connected TI-84 Plus C

The following steps show you how to create an Image Var if you have a TI-84 Plus C graphing calculator connected to your computer. You can create the Image Var, save it to your computer, and display it in the graph area of the TI-84 Plus C.

1. Choose the image you want to convert. Allowed picture file types are tif, gif, png, jpg, or bmp.



2. Open TI Connect™ software.
3. Using the USB Computer Cable, connect the TI-84 Plus C to the computer. Turn on the TI-84 Plus C.
4. Open Device Explorer.
5. Drag the picture to the Device Explorer.

6. Select an Image# name from the drop-down menu, such as Image0 - Image9. This will be the name of the image on the TI-84 Plus C.

Note: Since this Image# name is internal to the conversion process, it is important to remember what Image# name you assigned. It is recommended that you keep this information in the filename so you know where the Image Var will be stored on the TI-84 Plus C if you send or share this file in the future.

7. Click OK.

You can preview the Image Var, save it on your computer, and display it in the graph area of the TI-84 Plus C.

- To preview the Image Var:
 - On a PC, open **Background** and double-click the Image#. The Image Var preview opens in the Screen Capture window.
 - On a Mac®, expand the calculator directory and double-click the Image#. The Image Var preview opens in a Preview window.
- To save the Image Var on your computer, drag the Image# from the TI Connect™ Device Explorer to your desktop, or to the folder where you want to save it.
- To display your new Image Var in the graph area of the TI-84 Plus C, press **2nd FORMAT**, change the Background setting to the Image# you just sent to the device (example: Image5), and press **GRAPH**.



TI Connect™ software for the PC: Creating an Image Var Without a Connected Device

The following steps show you how to create an Image Var if you do not have a TI-84 Plus C graphing calculator connected to your PC. You can create the Image Var, save it to your computer, and load it into TI-SmartView™ software to view.

1. Choose the image you want to convert. Allowed picture file types are tif, gif, png, jpg, or bmp.
2. Open TI Connect™ software.
3. Open Screen Capture.
4. Drag the picture to Screen Capture.
5. Click File > Save As.
6. Choose the directory where you want to save the file.
7. Choose TI-84 Plus C Image (.8ca) as the file type.
8. Click Save.
9. Select an Image# name from the drop-down menu, such as Image0 - Image9. This will be the name of the image on the TI-84 Plus C.

Note: Since this Image# name is internal to the conversion process, it is important to remember what Image# name you assigned. It is recommended that you keep this information in the filename so you know where the Image Var will be stored on the TI-84 Plus C if you send or share this file in the future.

10. Click OK to convert the image to a TI-84 Plus C (.8ca) file.

See the steps below for loading the Image Var into the TI-SmartView™ software.

TI Connect™ software for the Mac®: Creating an Image Var Without a Connected Device

The following steps show you how to create an Image Var if you do not have a TI-84 Plus C graphing calculator connected to your Mac®. The Create a group feature is used to convert an image without a connected device. You can create the Image Var, save it to your computer, and load it into TI-SmartView™ software to view.

1. Choose the image you want to convert. Allowed picture file types are tif, gif, png, jpg, or bmp.
2. Open TI Connect™ software.
3. Click the Create drop-down menu at the bottom of the TI Connect™ window and choose Create a group.
4. Drag the picture from your desktop to the Group window.
5. Select the calculator you want to use.
6. Select an Image# name from the drop-down menu, such as Image0 - Image9. This will be the name of the image on the TI-84 Plus C.

Note: Since this Image# name is internal to the conversion process, it is important to remember what Image# name you assigned. It is recommended that you keep this information in the filename so you know where the Image Var will be stored on the TI-84 Plus C if you send or share this file in the future.

7. Click **OK** to convert the image to a TI-84 Plus C (.8ca) file.
8. To save the Image Var on your computer, drag the Image# from the Group window to your desktop, or to the folder where you want to save it.

See the steps below for loading the Image Var into the TI-SmartView™ software.

Loading an Image Var into the TI-SmartView™ software for the TI-84 Plus C Emulator View

Once you create and save an Image Var (.8ca) file using TI Connect™ software, you can load that file into the TI-84 Plus C emulator view in TI-SmartView™ software, similar to any calculator file.

1. Select **File > Load File** in TI-SmartView™ software.
2. Select **All Calculator Files (*.8c?)**.
3. Locate your Image Var. Remember that the internal image name of Image# is in the file. In this example, the file was named BRIDGE_IMAGE5.8ca. You will receive no prompt to pick a new Image# calculator name.
4. Select **Open** and the file will load to the emulator.

5. To display your new Image Var in the graph area of the TI-84 Plus C emulator, press **2nd FORMAT**, change the **Background** setting to the Image# you just sent to the device (example: Image5), and press **GRAPH**.

Working with distribution lists

Distribution lists help you organize or locate the devices that are connected to your Local Area Network (LAN) and also running TI Connect™ software. For example, with a distribution list you can easily locate all connected TI-83 Plus Silver Editions. Distribution lists are especially helpful when you have a large number of different devices connected to your LAN and you want to share data files with these devices.

Opening and closing the Distribution List drawer

You can open and close the Distribution List drawer from the menu bar or the toolbar.

To open the Distribution List drawer

- ▶ Click **View > Toggle Distribution List Drawer** or click **Distribution Lists**



To close the Distribution List drawer

- ▶ Click **View > Toggle Distribution List Drawer** or click **Distribution Lists**



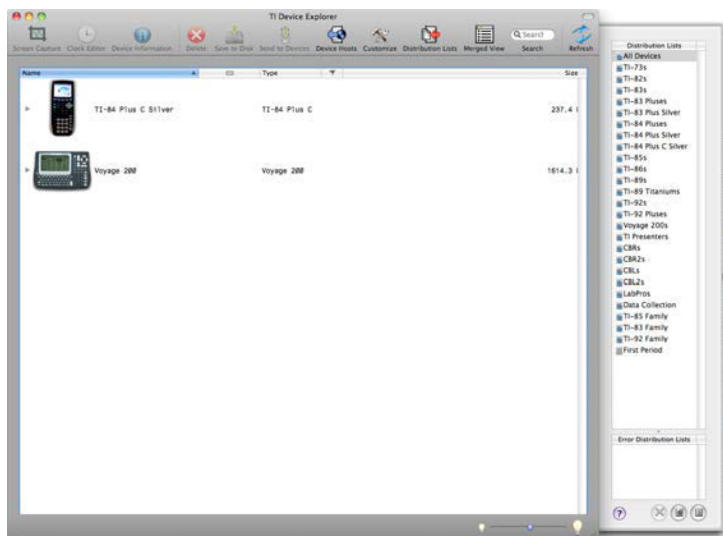
Creating normal distribution lists

If the available distribution lists do not meet your needs, you can create new distribution lists.

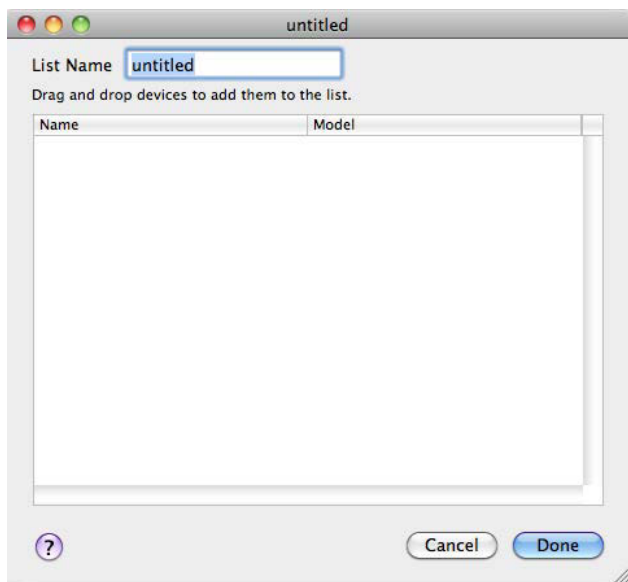
To create normal distribution lists

1. If the distribution list drawer is not open, click **View > Toggle Distribution List Drawer** or click **Distribution Lists**



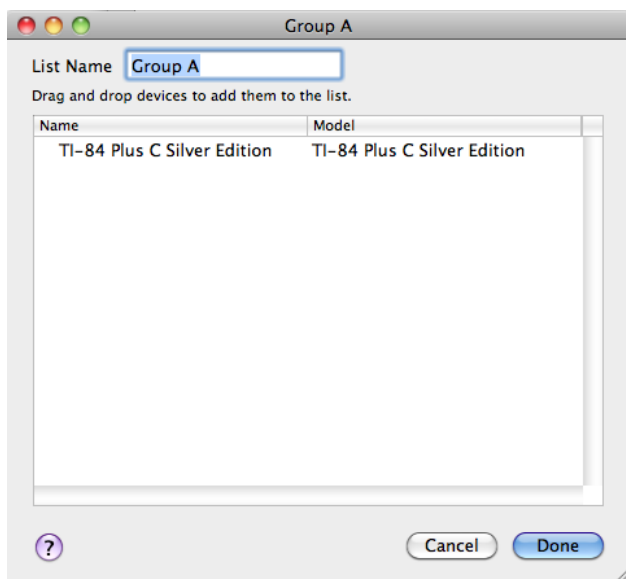


2. Click **New distribution list** .



3. Type a List Name.

4. Drag the devices you want in the distribution list from the TI Device Explorer window to the new distribution list dialog.



5. Click **Done**.

TI Device Explorer creates the new distribution list and adds it to the distribution list drawer.

Using error distribution lists

TI Device Explorer creates an error distribution list when an error occurs during a send operation. TI Device Explorer names the error distribution list based on the file that did not send correctly. In the error distribution list, you can find all of the devices to which the software did not send the file. You can then use the error distribution list to resend the file once you resolve the problem that caused the send failure.

Notes:

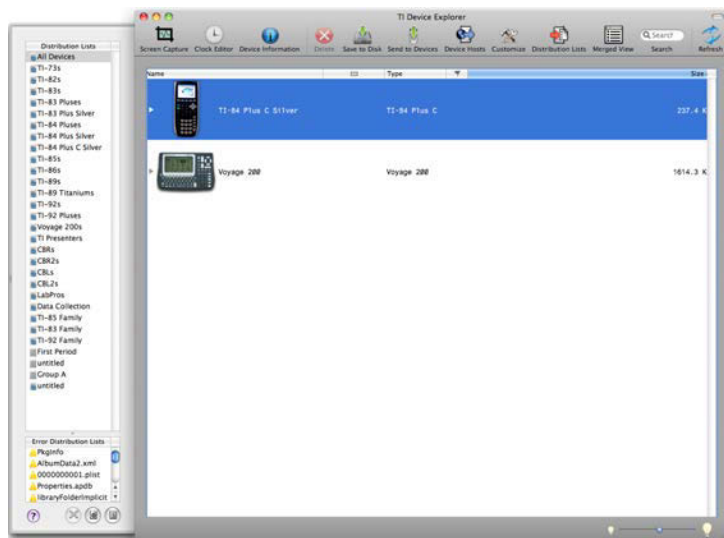
- Although the error distribution list is named based on the sent file, it does not contain the file.
- You cannot edit or intentionally create an error distribution list.

To use error distribution lists

1. Resolve the error that caused the software to not send the file.
Note: You can determine the error using the history window. Click **Window > History** and locate the explanation for why the send failed.
2. If the distribution list drawer is not open, click **View > Toggle Distribution**



List Drawer or click **Distribution Lists**



3. Click the error distribution list for the file you want to resend.
The main window displays the devices to which the software did not send the file.
4. Select the devices.
5. Resend the file. (See "Sending files to connected devices" on page 31.)

Creating dynamic distribution lists

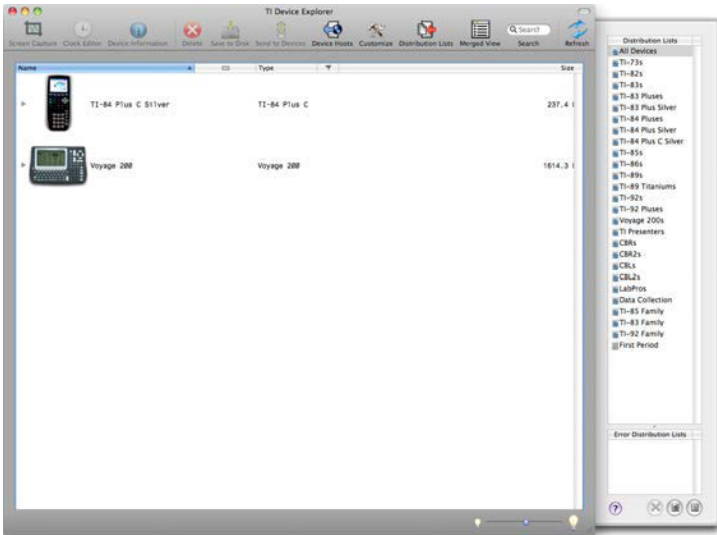
If the available distribution lists do not meet your needs, you can create a new distribution list. A dynamic distribution list differs from a normal list in the

way devices are included on the list. For dynamic distribution lists, TI DeviceExplorer searches for devices that satisfy specific criteria instead of requiring you to manually locate each device you want included on the list.

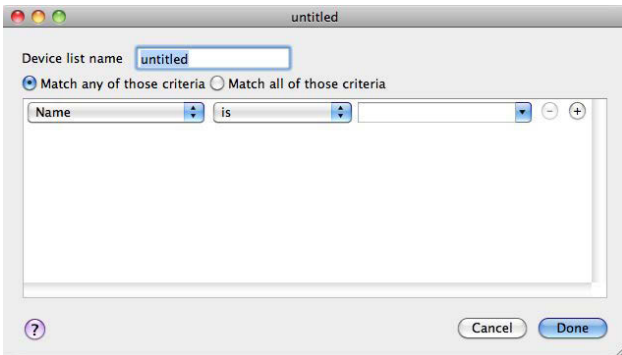
To create dynamic distribution lists

1. If the distribution list drawer is not open, click **View > Toggle Distribution**

List Drawer or click **Distribution Lists**



2. Click **New dynamic distribution list**




3. Type a Device list name.
4. Click either **Match any of those criteria** or **Match all of those criteria**.
5. Click the first criteria box and select a field from the drop-down list.
6. Click the second criteria box and select a field from the drop-down list.
7. Double-click the third criteria box and type the search data.

Note: If you selected Model or Family in step 5, you can click the arrow



by the third criteria box and select a field from the drop-down list.

8. If you want to add more criteria, click **Add Criteria**  and repeat steps 5 - 7 for the new line of criteria boxes.
9. Click **Done**.

TI Device Explorer creates a dynamic distribution list and adds it to the distribution list drawer.

Applying distribution lists

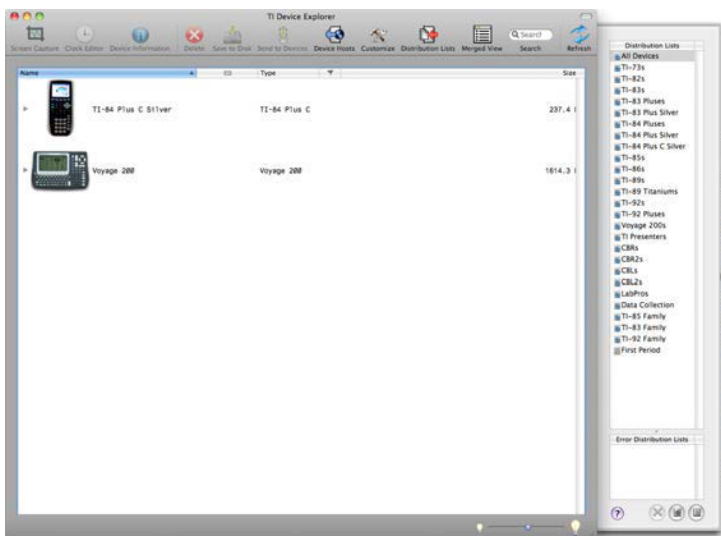
You can apply any distribution list to the list of devices in the TI Device Explorer window. The selected distribution list limits the display of devices to only those that match the criteria specified by the distribution list.

To apply distribution lists

1. If the distribution list drawer is not open, click **View > Toggle Distribution**

List Drawer or click **Distribution Lists**





2. Click the distribution list you want to apply.

TI Device Explorer locates devices that match the criteria specified in the distribution list and shows them in its window.

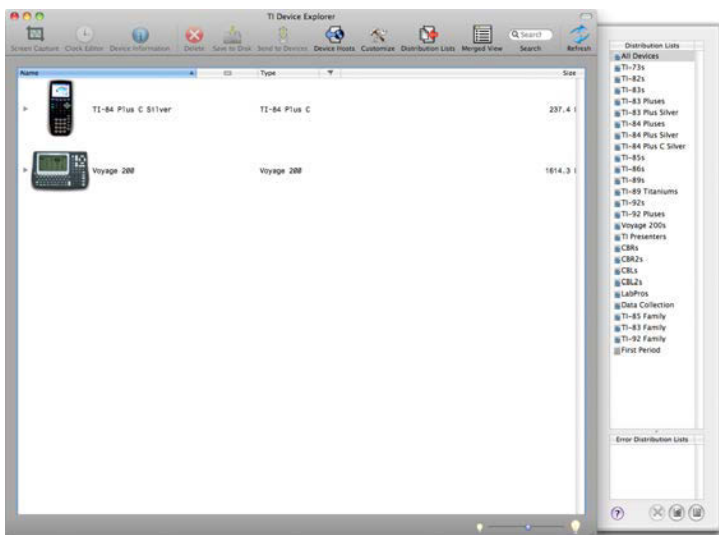
Editing distribution lists

You may, on occasion, need to change a distribution list. For instance, you may need to add another device or change the criteria. TI Device Explorer lets you edit both normal and dynamic distribution lists.

To edit distribution lists

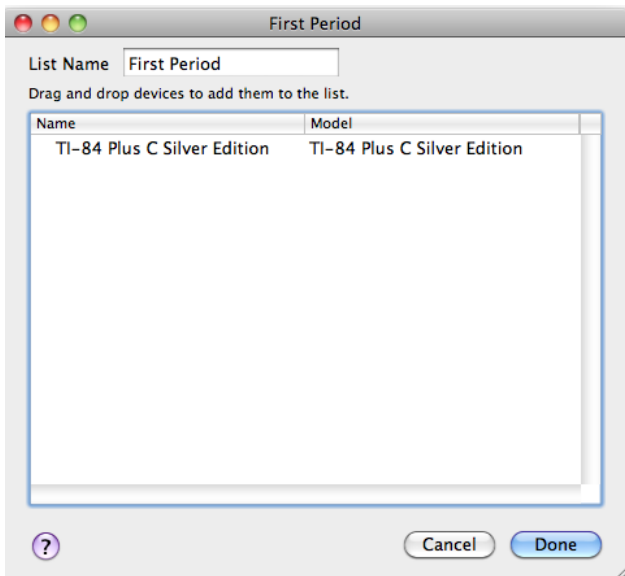
1. If the distribution list drawer is not open, click **View > Toggle Distribution**

List Drawer or click **Distribution List** .

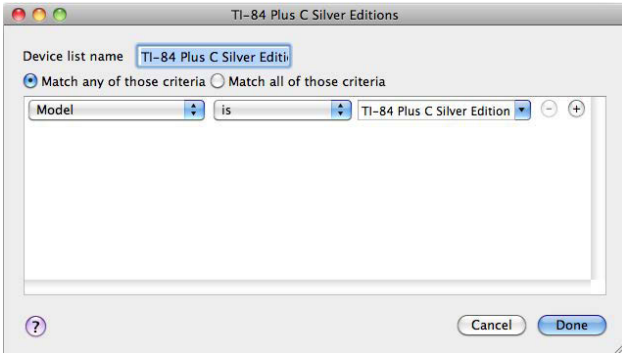


2. Double-click the distribution list you want to edit.

If the list is a normal distribution list, the normal distribution list window opens.



If the list is a dynamic distribution list, the dynamic distribution list window opens.



3. Make the necessary changes to the distribution list.
4. Click **Done**.
TI Device Explorer saves the changes to the distribution list.

Deleting distribution lists

If you decide that you no longer want a distribution list, you can delete it from the distribution lists drawer.

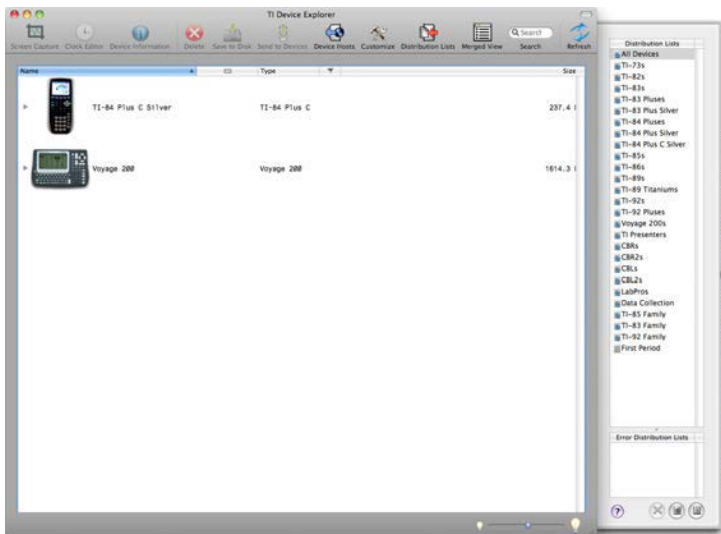
Warning: You cannot undo the deletion of a distribution list.

To delete distribution lists

1. If the distribution list drawer is not open, click **View > Toggle Distribution**

List Drawer or click **Distribution Lists**





2. Click the distribution list you want to delete.

3. Click **Delete** .

TI Device Explorer removes the distribution list from the distribution list drawer.

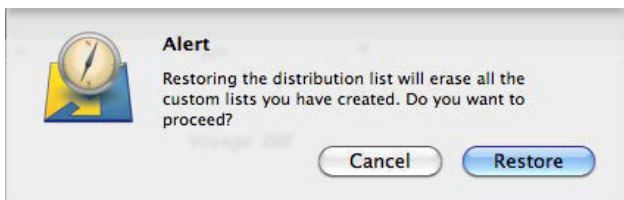
Restoring the Distribution List drawer

You can restore the Distribution List drawer to its default lists. By restoring the distribution list drawer, you erase all of the lists you created.

Warning: You cannot undo the restoration of the distribution list drawer.

To restore the Distribution List drawer

1. Click **Edit > Restore Distribution Lists**.



2. Click **Restore**.

TI Device Explorer restores the Distribution List drawer to its default lists.

Working with device hosts

With the Device Hosts drawer, you can connect yourself to the devices of other people with TI Connect™ software on your Local Area Network (LAN). Connecting yourself to the devices of other people lets you find information on their devices and share information, files, and data with them.

To connect to the device of another person, you must have a device host for them, and they must currently have the TI Connect software running.

Opening and closing the Device Hosts drawer

You can open and close the Device Hosts drawer from the menu bar or the toolbar.

To open the Device Hosts drawer

- ▶ Click **View > Toggle Device Hosts Drawer** or click **Device Hosts**



To close the Device Hosts drawer

- ▶ Click **View > Toggle Device Hosts Drawer** or click **Device Hosts**



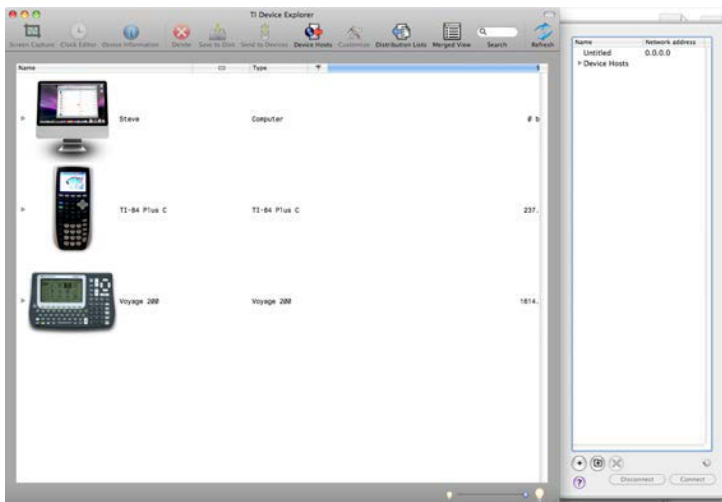
Creating device hosts

The Device Hosts drawer automatically creates device hosts to connect you to anyone on your local area network using the TI Connect™ software. If you want to connect to someone who is not on the local area network, create your own device host.

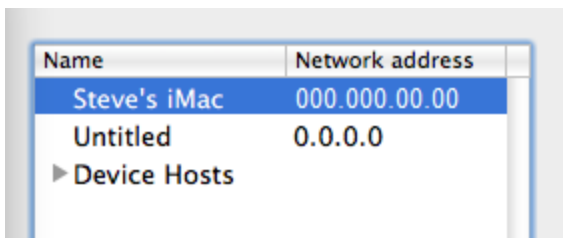
To create device hosts

1. If the Device Hosts drawer is not open, click **View > Toggle Device Hosts**

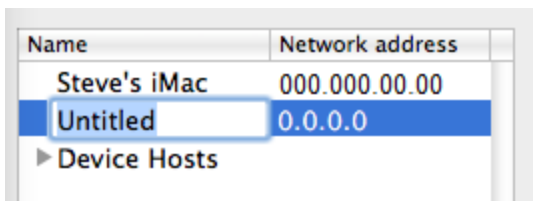
Drawer or click **Device Hosts** 



2. Click **Create a new device host** .



3. In the new device host, double-click the word **Untitled**.



4. Type a name for the device host.
 5. Press **return**.

TI Device Explorer sets the name of the device host to the typed name. The new device host may change positions in the list.

6. In the new device host, double-click the Network address.

A blue box forms around the Network address.

Name	Network address
Steve's iMac	000.000.00.00
Susan's iMac	0.0.0.0

▶ Device Hosts

7. Type the Network address.

8. Click the name of the device host.

TI Device Explorer sets the address of the device host to the typed Network address.

Creating device host groups

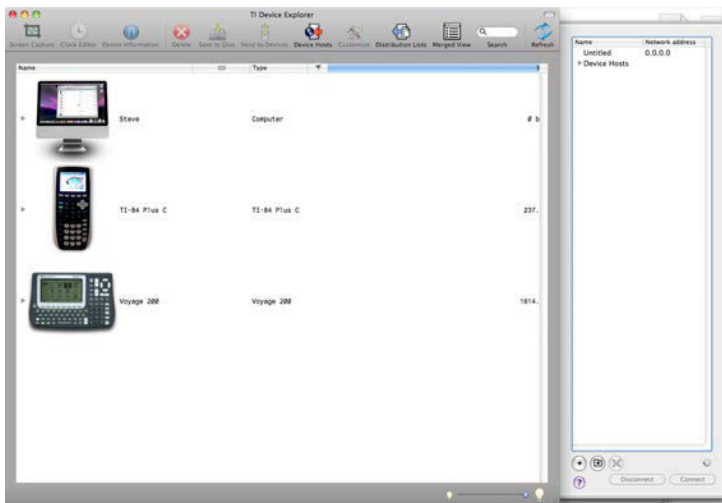
To connect with a large number of TI Connect™ users, create a device host group. This makes your device hosts easier to find and use.

To create device host groups

1. If the Device Hosts drawer is not open, click **View > Toggle Device Hosts**

Drawer or click **Device Hosts**





2. Click **Create new device host group**



Name	Network address
Steve's iMac	000.000.00.00
Susan's iMac	0.0.0.0
▶ Untitled Group	
▶ Device Hosts	

3. In the new device host group, double-click the words **Untitled Group**.

Name	Network address
Steve's iMac	000.000.00.00
Susan's iMac	0.0.0.0
▶ New Group Test	
▶ Device Hosts	

4. Type a name for the device host group.
 5. Click the highlighted section of the device host group.

TI Device Explorer sets the name of the device host group to the typed name. The new device host group may change positions in the list.

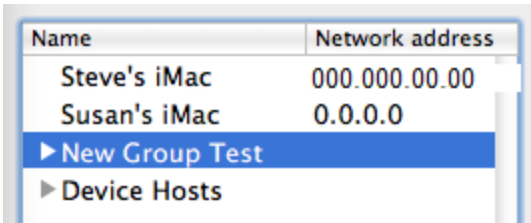
6. Add device hosts to the device host group. (See "Adding device hosts to device host groups" on page 65.)

Adding device hosts to device host groups


Once you create a device host group, you need to add device hosts to it. You can add device hosts to your device host groups at any time.

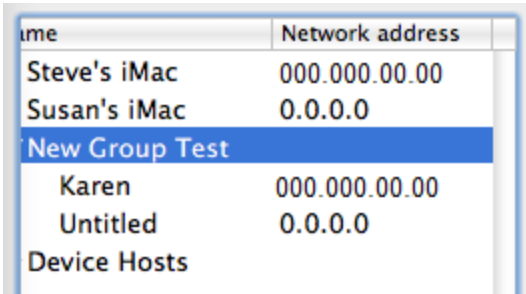
To add device hosts to device host groups

1. Click the device host group.



Name	Network address
Steve's iMac	000.000.00.00
Susan's iMac	0.0.0.0
▶ New Group Test	
▶ Device Hosts	

2. Click **Create a new device host** .
3. Click the arrow ▶ to the left of the group.



Name	Network address
Steve's iMac	000.000.00.00
Susan's iMac	0.0.0.0
New Group Test	
Karen	000.000.00.00
Untitled	0.0.0.0
Device Hosts	

4. In the list of device hosts, locate the device host named **Untitled**.
5. Double-click the word **Untitled**.

Name	Network address
Steve's iMac	000.000.00.00
Susan's iMac	0.0.0.0
▼ New Group Test	
Karen	000.000.00.00
Untitled	0.0.0.0
▶ Device Hosts	

6. Type a name for the device host .
7. Press **tab**.
TI Device Explorer sets the name of the device host to the typed name.
A blue box forms around the Network address.
8. Type the Network address.
9. Click the device host name.
10. TI Device Explorer sets the device host address to the typed Network address.

Deleting Device hosts and device host groups

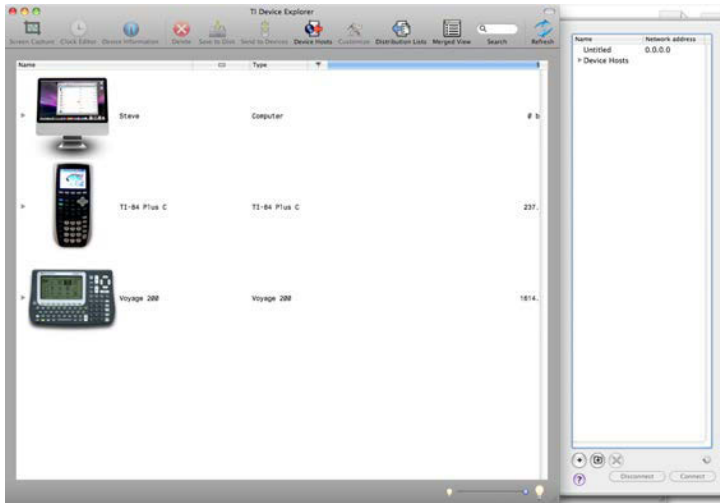
If you decide you no longer want a device host or device host group, you can delete it from the Device Hosts drawer.

Warning: You cannot undo a deletion.

To delete device hosts and device host groups

1. If the Device Hosts drawer is not open, click **View > Toggle Device Hosts**

Drawer or click **Device Hosts**  .



2. Locate the device host or device host group you want to delete.
3. Click the device host or device host group.

4. Click **Delete** .

TI Device Explorer removes the device host or device host group from the list.

Connecting to other users

The Device Host drawer enables you to connect to the devices of other people currently using the TI Connect™ software. Once you connect to the devices, you can use TI Device Explorer to exchange information with them. For instance, you can send files to the devices and copy files from the devices.

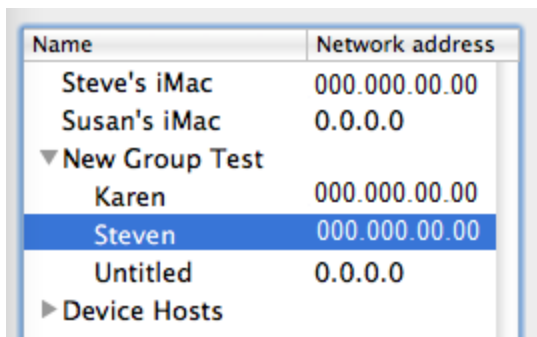
Before you begin

- Make sure Remote Apple Event Sharing is turned on. (System Preferences: Sharing)
- Make sure you have an account username and password.
- Make sure the user with whom you need to connect is currently running TI Connect Manager. That is, make sure that the Device Hosts drawer

lists a device host for them. If necessary, create a device host for the user. (See "Creating device hosts" on page 61.)

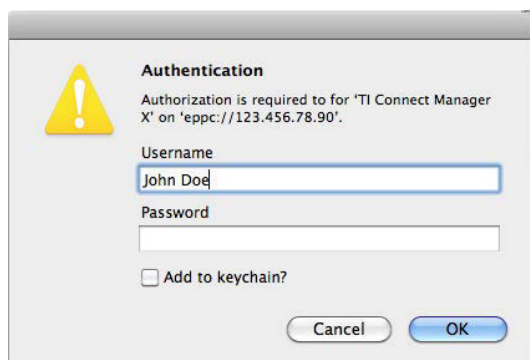
To connect to other TI Connect™ users

1. Click the user's device host.



Name	Network address
Steve's iMac	000.000.00.00
Susan's iMac	0.0.0.0
▼ New Group Test	
Karen	000.000.00.00
Steven	000.000.00.00
▶ Device Hosts	
Untitled	0.0.0.0

2. Click **Connect**.



Authentication

Authorization is required for 'TI Connect Manager X' on 'epcc://123.456.78.90'.

Username
John Doe

Password

Add to keychain?

Cancel OK

3. Type your username.
4. Type your password.
5. Click **OK**.

TI Device Explorer connects you to the other TI Connect™ user. The TI Device Explorer main window shows the user's connected device(s).

If the remote computer is not running the TI Connect Manager software, an error is displayed and no connected devices are shown in the main window.

Finding device information


You can use the TI Device Explorer tool to find information about a connected TI handheld device. When you find device information, its display depends on the view of the TI Device Explorer window.

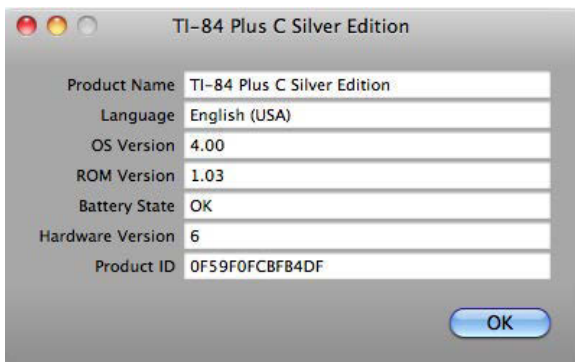
- In merged view, the device information window displays information about all of the connected devices.
- In normal view, the device information window displays information about a single connected device.

Finding device information in normal view

In normal view, the device information window shows information about a single connected device. The information includes the device's product ID, language, OS version, ROM version, battery state, hardware version, and connection ID (Device Serial Number).

To find device information in normal view

1. In the main window, click a device.
2. Click **Device > Device Information** or click **Device Information** 



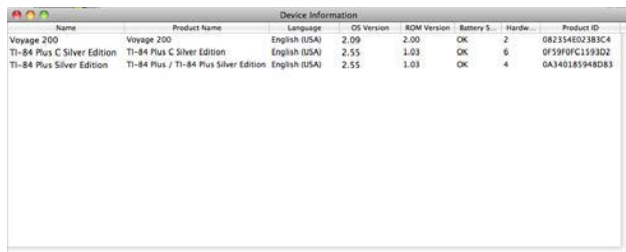
Finding device information in merged view

In merged view, TI Device Explorer shows the device information of all connected devices in one window. The information in this window includes the device's name, product ID, language, OS version, ROM version, battery

status, hardware version, and connection ID (Device Serial Number.)

To find device information in merged view

- ▶ Click **Device > Device Information** or click **Device Information**

A screenshot of a software window titled "Device Information". The window contains a table with the following data:

Name	Product Name	Language	OS Version	ROM Version	Battery S...	Hardw...	Product ID
Voyage 200	Voyage 200	English (USA)	2.09	2.00	OK	2	082354E02183C4
TI-84 Plus C Silver Edition	TI-84 Plus C Silver Edition	English (USA)	2.55	1.03	OK	6	0F39F0FC1193D2
TI-84 Plus Silver Edition	TI-84 Plus / TI-84 Plus Silver Edition	English (USA)	2.55	1.03	OK	4	0A340185948083

Managing date and time on TI graphing calculators

You can use TI Device Explorer to manage the date and time on connected TI-84 Plus Family devices, TI-89 Family devices, TI-92 Plus devices, and Voyage™ 200 Personal Learning Tools. This feature makes setting the date and time on your TI graphing calculators easier and more convenient.

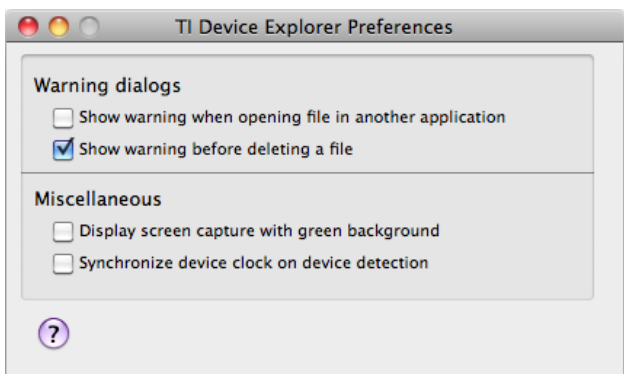
Note: TI-89 and TI-92 Plus devices with a hardware version of 1.0 and/or an operating system lower than 2.08 do not support the date and time feature.

Synchronizing device date and time with computer

The quickest way to set your device date and time is to synchronize connected devices with your computer. You can synchronize your TI-84 Plus Family devices, TI-89 Family devices, TI-92 Plus devices, and Voyage™ 200 Personal Learning Tools. TI Device Explorer has automatic and manual date and time synchronization.

To synchronize the device date and time automatically (normal or merged view)


1. Click **TI Device Explorer > Preferences**.

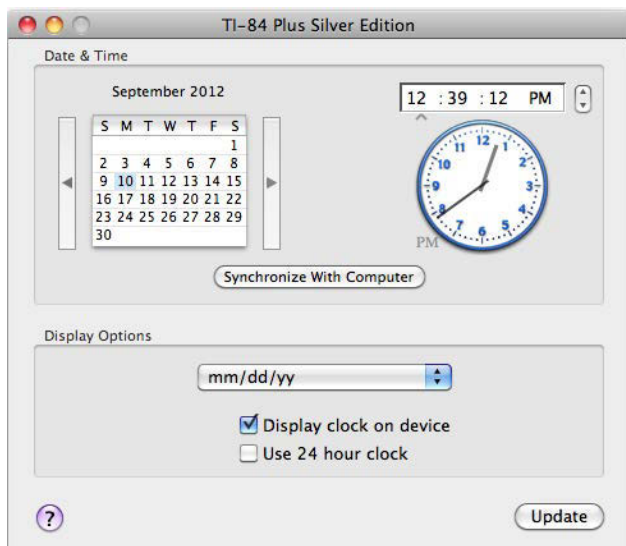


2. Select **Synchronize device clock on device detection**.
3. Click **Close** .

Each time you connect a device, TI Device Explorer automatically synchronizes its date and time with the computer.

To synchronize device date and time with the computer manually (normal view)

1. In the main window, click the device whose date and time you want to synchronize.
2. Click **Device > Edit Clock** or click **Clock Editor** .

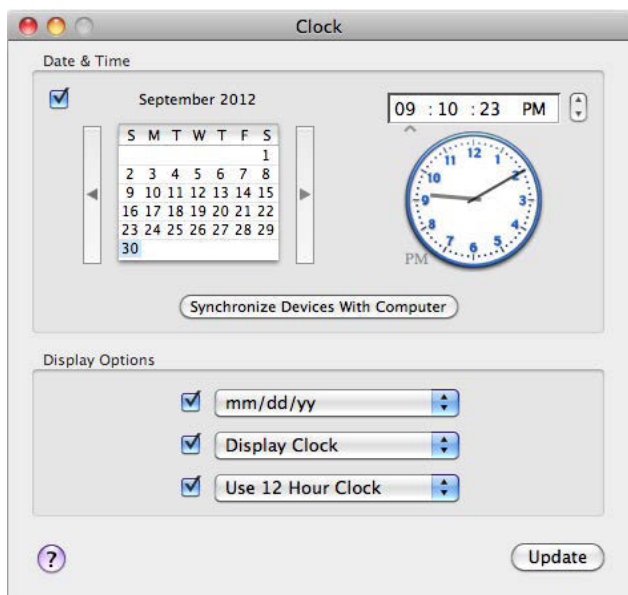


3. Click **Synchronize With Computer**.

TI Device Explorer synchronizes the device date and time with your computer.

To synchronize device date and time with the computer manually (merged view)

1. Click **Device > Edit Clock** or click **Clock Editor**  .



2. Click **Synchronize Devices With Computer**.

TI Device Explorer synchronizes the date and time of all connected devices with the date and time on your computer.

Setting the date on TI graphing calculators

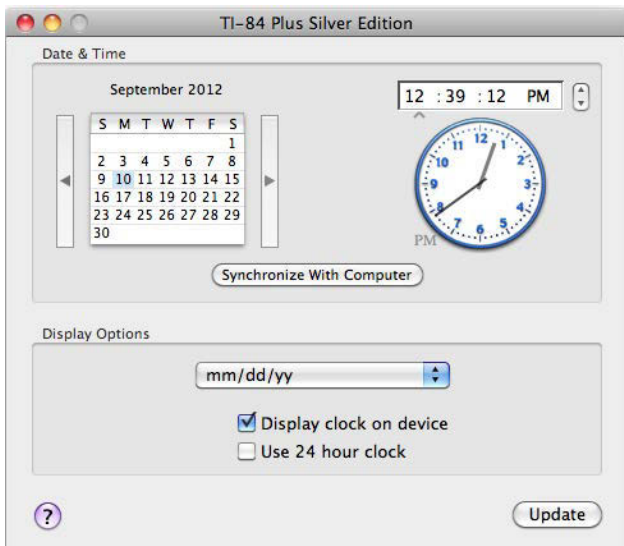
With TI Device Explorer, you can set the date on your TI-84 Plus Family devices, TI-89 Family devices, TI-92 Plus devices, and Voyage™ 200 Personal Learning Tools.



To set the date on devices (normal view)

1. Click the device whose date you want to set.

2. Click **Device > Edit Clock** or click **Clock Editor**



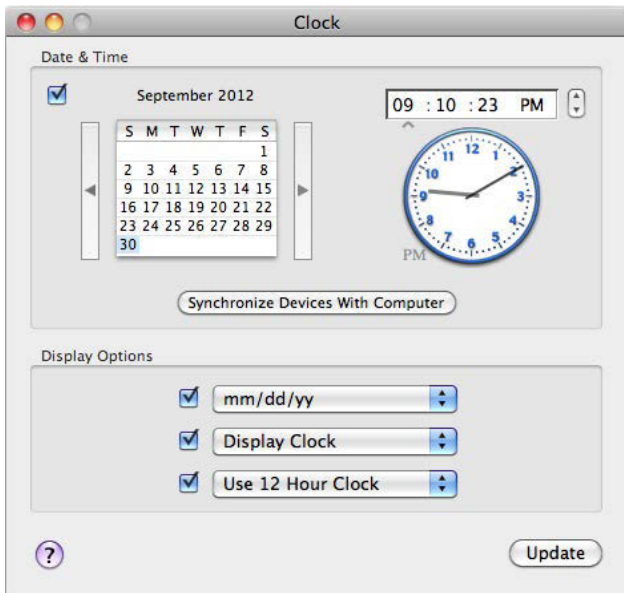


3. Click **Next Month**  to go forward a month or click **Previous Month**  to go back a month.
4. Continue to click **Next Month** or **Previous Month** until you reach the correct month and year.
5. In the calendar, click the correct day.
6. Under Display Options, use the date format drop-down list to select the date format you want to use. Only valid formats for the device are listed.
7. Click **Update**.

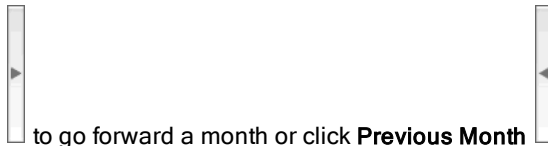
TI Device Explorer sets the date on the selected device.

To set the date on devices (merged view)

1. Click **Device > Edit Clock** or click **Clock Editor** .



2. Make sure the Date & Time field has a check mark in it. If it does not, click the box in the upper left corner of the Date & Time field.



3. Click **Next Month** to go forward a month or click **Previous Month** to go back a month.
4. Continue to click **Next Month** or **Previous Month** until you reach the correct month and year.
5. In the calendar, click the correct day.
6. Under Display Options, use the date format drop-down list to select the date format you want to use. Only valid formats for the device are listed.
7. Make sure that the box by the Date Format drop-down list has a check mark in it. If it does not, click the box next to the Date Format drop-down list.
8. Click **Update**.

TI Device Explorer sets the date on the selected device.

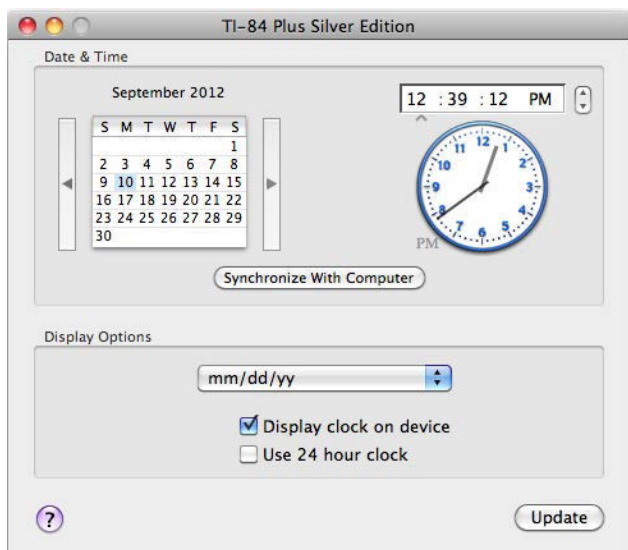
Setting the time on TI graphing calculators

Using TI Device Explorer, you can set the time and clock type on your TI-84 Plus Family devices, TI-89 Family devices, TI-92 Plus devices, and Voyage™ 200 Personal Learning Tools.

To set the time on devices (normal view)

1. Click the device whose time you want to set.

2. Click **Device > Edit Clock** or click **Clock Editor**



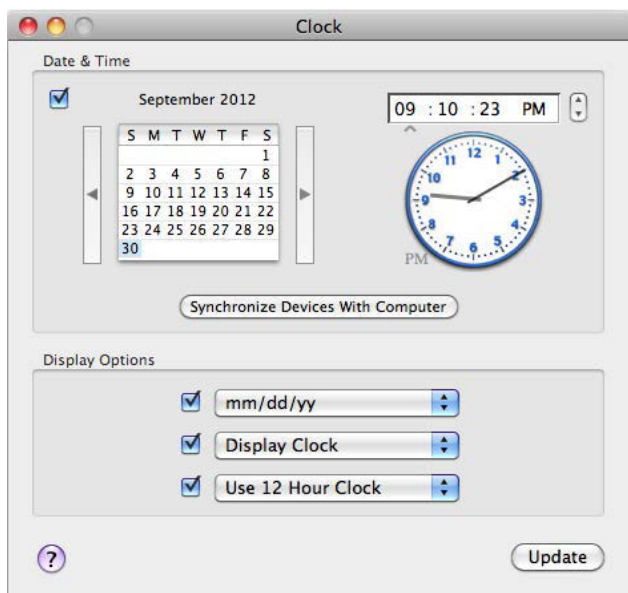
3. Click the hour, minute, and second and make any necessary changes. If you are using a 12-hour clock, select the AM/PM designator. If you want to use a 24-hour clock, select **Use 24 hour clock**.
4. Click **Update**.

TI Device Explorer sets the time on the selected device.

To set the time on devices (merged view)

1. Click **Device > Edit Clock** or click **Clock Editor**






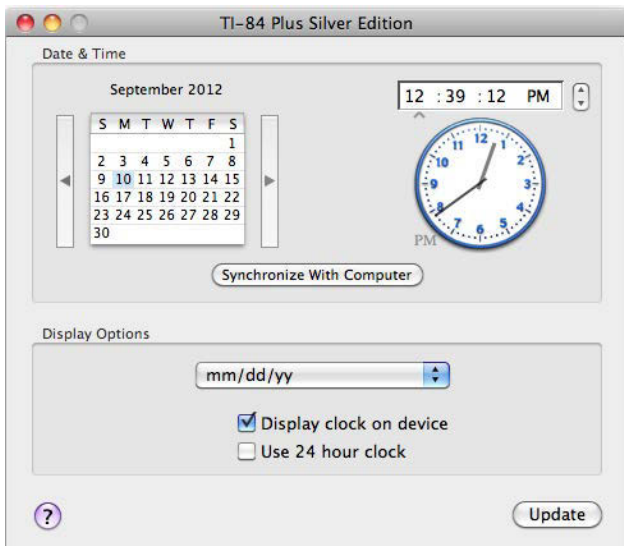
2. Make sure the Date & Time field has a check mark in it. If it does not, click the box in the upper left corner of the Date & Time field.
3. Click the hour, minute, and second and make any necessary changes. If you are using a 12-hour clock, select the **Use 12 Hour Clock** option from the drop-down list. If you want to use a 24-hour clock, select the **Use 24 hour Clock** option.
4. Click **Update**.
TI Device Explorer sets the time on the selected device.

Turning TI graphing calculator clocks on or off

You can choose whether or not you want the clock to display on your TI-84 Plus Family devices, TI-89 Family devices, TI-92 Plus devices, and Voyage™ 200 Personal Learning Tools.

To turn device clocks on or off (normal view)

1. Click the device whose clock you want to turn on or off.
2. Click **Device > Edit Clock** or click **Clock Editor** .



3. Click **Display clock on device**.

If you are turning the clock on, a check mark appears in the box by **Display clock on device**.

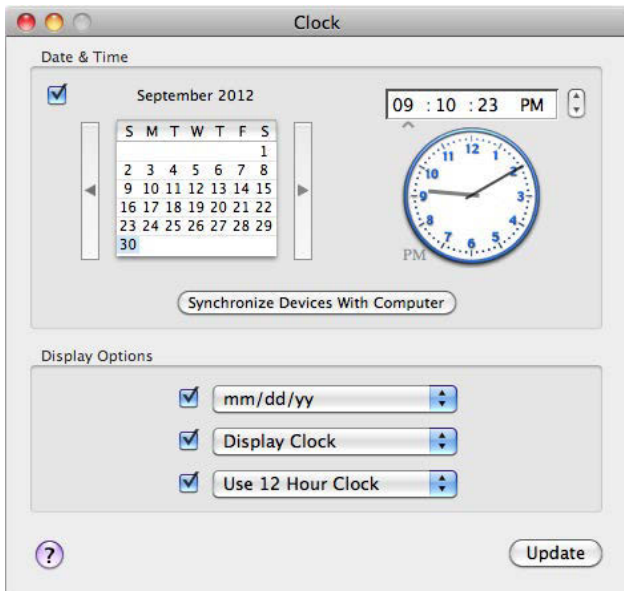
If you are turning the clock off, the software removes the check mark in the box by **Display clock on device**.

4. Click **Update**.

TI Device Explorer turns the clock of the selected device on or off.

To turn device clocks on or off (merged view)

1. Click **Device > Edit Clock** or click **Clock Editor** .



2. Make sure that the Clock Display drop-down list has a check mark by it. If it does not, click the box by the Clock Display drop-down list.
3. Click **Update**.
TI Device Explorer turns the clock of the connected devices on or off.

Customizing the toolbar

When you customize the toolbar, you can choose from a variety of options, ranging from adding new items to the toolbar to changing the display of the icons. Customizing the toolbar makes the TI Device Explorer more convenient and easier for you to use.

Hiding and showing the toolbar

You can choose whether or not you want to show the toolbar in the window.

To hide the toolbar

- ▶ Click **View > Hide Toolbar**.

The window no longer shows the toolbar.

To show the toolbar

- ▶ Click **View > Show Toolbar**.

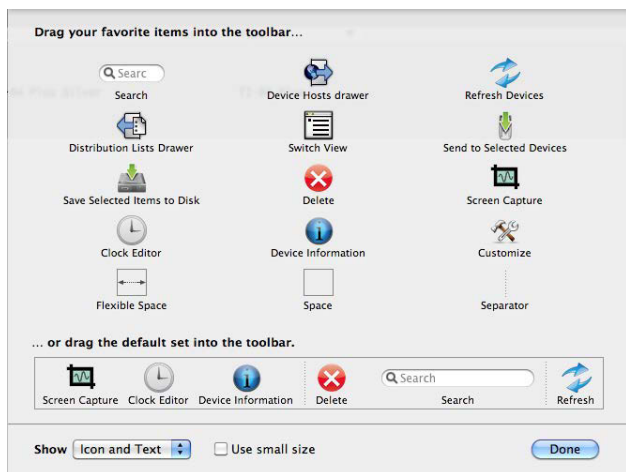
The window shows the toolbar.

Removing items from the toolbar

You can remove tools, separators, and spaces from the toolbar.

To remove items from toolbar

1. Click **View > Customize Toolbar**.



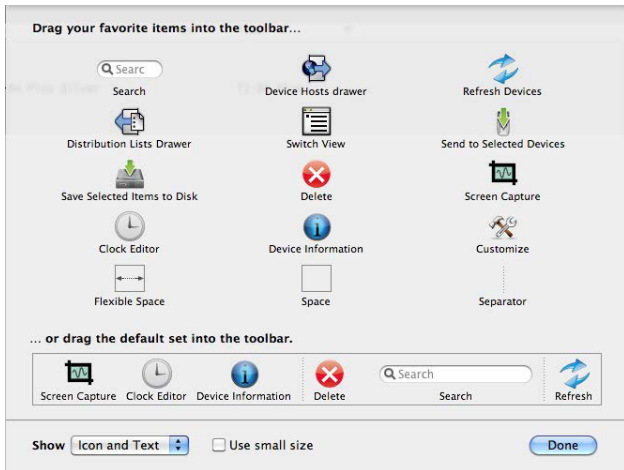
2. Drag the unwanted item to the Customize Toolbar sheet.
The software removes the item from the toolbar.
3. Click **Done**.

Adding items to the toolbar

You can add tools, separators, and spaces to the toolbar.

To add items to the toolbar

1. Click **View > Customize Toolbar**.



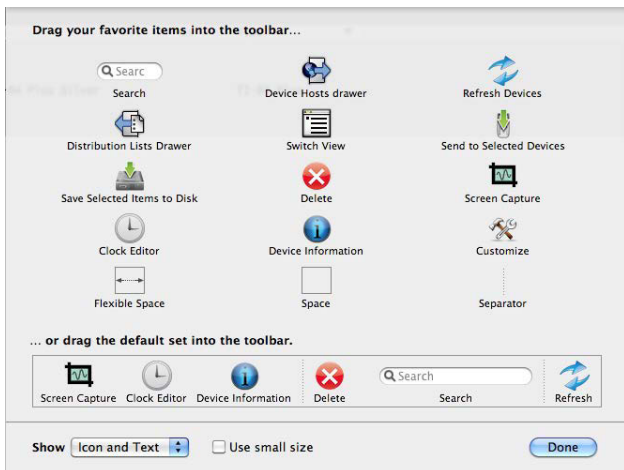
2. Drag the additional item to the main window's toolbar.
The software adds the item to the toolbar.
3. Click **Done**.

Setting the toolbar to the default

When you first open a tool it shows a default toolbar. If you change the toolbar and decide you do not want to keep the changes, you can always revert back to the default.

To set the toolbar to the default

1. Click **View > Customize Toolbar**.



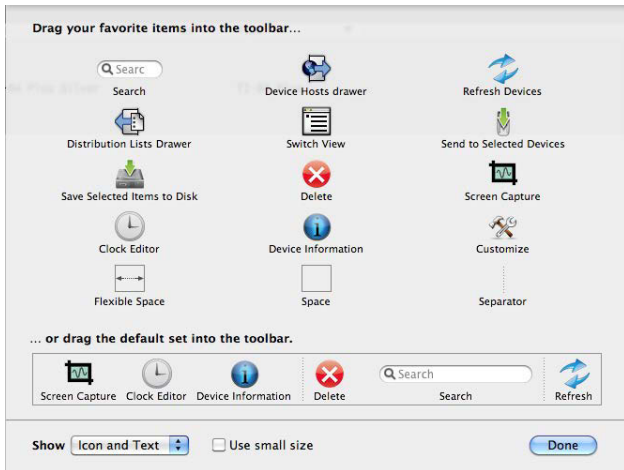
2. Drag the default set to the main window's toolbar.
The software reverts back to the default.
3. Click **Done**.

Changing the display of icons and text

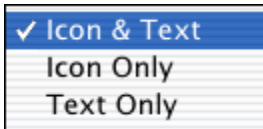
TI Device Explorer lets you change the icons and the text that are displayed in the toolbar. You can choose to display both icons and text, only icons, or only text.

To change the display of icons and/or text

1. Click **View > Customize Toolbar**.



2. Click the **Show** pop-up menu.



3. Click the option you want.

TI Device Explorer changes the display of icons and/or text in the toolbar.

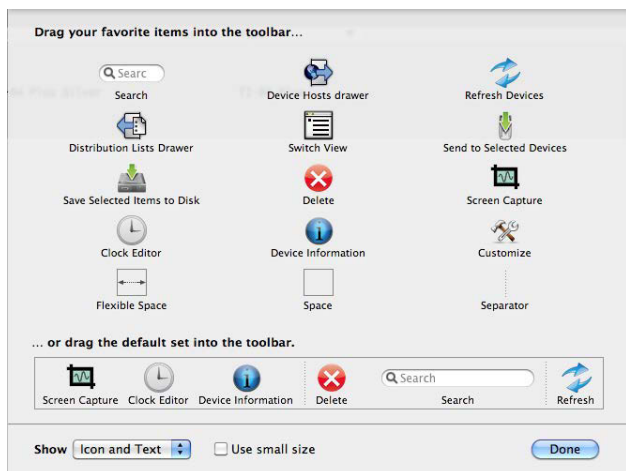
4. Click **Done**.

Changing the size of toolbar icons

Changing the size of the toolbar icons helps you find and use them more quickly.

To change the size of the icons

1. Click **View > Customize Toolbar**.



2. Click **Use Small Icons**.

If Use Small Icons is off, TI Device Explorer turns it on. A check mark appears and the icons in the toolbar become smaller.

If Use Small Icons is on, TI Device Explorer turns it off. The check mark disappears and the icons in the toolbar become larger.

3. Click **Done**.

Troubleshooting

This section contains information to help you quickly solve any problems you may encounter while using TI Device Explorer. If you are unable to find an answer to your question here or in other sections of the help, visit the education.ti.com/go/download.

Frequently-asked questions

To make this section easier to use, the questions are separated into the following categories:

- See "General " on page 85
- See "Screen Capture" on page 86
- See "Clock Editor" on page 87
- See "Device Information" on page 87

- See "Distribution List" on page 87
- See "Device Host drawer" on page 88

General

Q: *What can I do when the software shows the wrong devices in the window?*

You can do either of the following:

- Click **Refresh**.
- Disconnect the TI Connectivity Cable(s) from the computer and then reconnect them.
- It is important that the graphing calculator is turned on.

Q: *How do I send a photo or picture to the TI-84 Plus C Silver Edition graphing calculator?*

- See "Working with TI-84 Plus C Silver Edition Image screens" on page 46.
- Drag your picture to the Device Explorer from your desktop when the TI-84 Plus C Silver Edition graphing calculator is connected.

Q: *What types of files can I open with TI Device Explorer?*

You can open any data variable file, including matrices, text, list, program, string, group, and number files.

Q: *What is the difference between merged and normal view?*

In merged view, TI Device Explorer contains a merged list of the files for all connected devices. In normal view, TI Device Explorer sorts the files by connected device.

Q: *I have trouble getting my TI Presenter to appear in the device directory. How can I fix this?*

Try the following:

1. Disconnect the TI Connectivity Cable from both the TI Presenter and the computer.
2. Connect the TI Connectivity Cable to the TI Presenter.
3. Connect the TI Connectivity Cable to the computer.

You may need to do this several times to get the TI Presenter to appear in the device directory.

Q: *Why can't I open TI Device Explorer by clicking the icon at the bottom of the screen?*

You have minimized the TI Device Explorer window. Click its minimized icon to open TI Device Explorer.

Q: *How can I find out if my file downloaded/uploaded correctly?*

In the TI Device Explorer menu bar, click **Window > History** to open the History window. If your file downloads/uploads correctly, a blue check mark appears. If your file does not transfer correctly, a yellow exclamation point appears with an explanation.

Q: *Why doesn't TI Device Explorer show all of the files on my TI-82 / TI-85 device?*

The TI-82 and TI-85 devices do not support a directory. The only files TI Device Explorer shows for these devices are Screen and VarLink.

Q: *Why does the file I sent to my device contain missing or inaccurate data?*

The file you sent contains unsupported characters.

Q: *When I try to create a backup folder on my hard drive, the process stalls and I have to force quit TI Device Explorer. What causes this and how do I fix it?*

The device has an older operating system. If you update the operating system, you should no longer have this problem.

Screen Capture

Q: *Why does my screen capture appear distorted?*

The device you tried to capture a screen for is not connected (or is improperly connected) to your computer. Reconnect your device to the computer, click **Refresh** in the TI Device Explorer window, and try again.


Q: *Why does the Screen Capture window show a question mark instead of a screen capture?*

The device you tried to capture a screen for is not connected (or is improperly connected) to your computer. Reconnect your device to the computer, click **Refresh** in the TI Device Explorer window, and try again.

Q: *Why can I not see all of the screens I captured in merged view?*

The window is not big enough. Click **Expand**  or click the **Arrows** .

Q: *Can I add a border to my captured screen?*

Yes. You can add a border to an image captured in normal view. Click **Draw Border**  before you copy or save the captured screen.

Clock Editor

Q: *Why doesn't TI Device Explorer have a clock option for my TI-89/TI-92 Plus device?*

Your device has a hardware version of 1.0 and/or an operating system of 2.08 or lower. TI-89/TI-92 Plus devices with hardware version 1.0 and/or operating systems 2.08 or lower do not support the clock feature.

Q: *Can I send just one Clock Editor field to my device?*

No. When you send a Clock Editor field (such as date or time) to your device, the software sends all the other fields as well. Make sure the other fields are correct before you send a new setting to your device.

Q: *What date formats can I choose from?*

You can choose any of the following formats: mm/dd/yy, dd/mm/yy, mm.dd.yy, dd.mm.yy, yy.mm.dd, mm-dd-yy, dd-mm-yy, yy-mm-dd.

Note: Some devices may not have all of these options.

Q: *What is the difference between a 12-hour clock and a 24-hour clock?*

A 12-hour clock gives the time as AM/PM. For example, the time reads 6:30 AM in the morning and 6:30 PM at night. A 24-hour clock gives military time. For example, the time reads 6:30 in the morning and 18:30 at night.

Device Information

Q: *Can I save the device information as a file?*

No, TI Device Explorer does not let you save device information as a file.

Distribution List

Q: *What is a distribution list?*

A distribution list is simply a way to locate devices. Each distribution list contains a set of search criteria that TI Device Explorer uses to determine which connected devices to show in the window.

Q: *Why are the distribution lists I created not in the distribution list drawer?*

You may have restored the distribution lists. When you restore distribution lists, TI Device Explorer removes any distribution lists you created.

Q: *Can I change my distribution list after I create it?*

Yes. You can change both normal and dynamic distribution lists. Double-click the distribution list you want to change, make the changes in the window, and click **Done**.

Device Host drawer

Q: *What can I use the Device Host drawer to do?*

With the Device Hosts drawer, you can connect yourself to the devices of other people with TI Connect™ software. Connecting yourself to the devices of other people or a classroom set of calculators lets you find information on their devices and share information, files, and data with them.

Q: *Why can't I connect to other users in the Device Host drawer?*

There are several reasons why this may happen:

- The user with whom you want to connect is not running TI Connect Manager.
- You do not have Remote Apple Event Sharing turned on.
- You are not using the correct user name and/or password.

Q: *Can I connect to someone who is not in my local area network?*

Yes. To connect with someone who is not in your local area network, you must create a device host for them. (See "Creating device host groups" on page 63.)

Error messages

Error Message	Possible causes or solutions
This screen could not be retrieved.	TI Device Explorer cannot capture the screen from your device. Make sure TI Connectivity Cable is securely connected to the device and computer, refresh the TI Device Explorer window, and then try again.

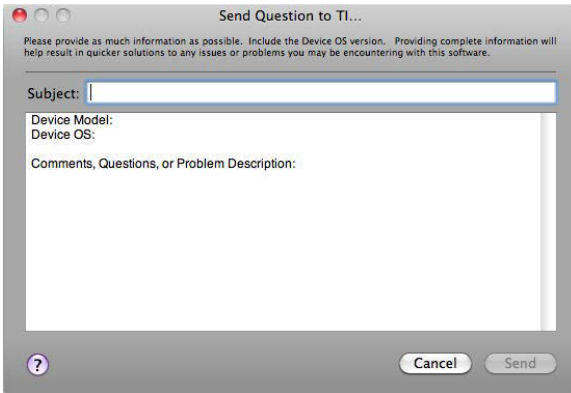
Error Message	Possible causes or solutions
<p>The device <i>device name</i> got an error while trying to refresh. Please check the connections.</p>	<p>This may be caused by either of the following:</p> <ul style="list-style-type: none"> • The device is not connected properly. Check to make sure your device is properly connected and then try again. • The device has an older operating system. Update the device operating system and try again.
<p>TI Communication Manager quit. Would you like to restart it or quit TI Device Explorer?</p>	<p>An error occurred during the communication process. To relaunch TI Device Explorer, click Launch.</p>
<p>The clock could not be updated.</p>	<p>TI Device Explorer cannot update the clock for the specified device. Make sure TI Connectivity Cable is securely connected to the device and computer, refresh the TI Device Explorer window, and then try again.</p>

Sending questions to Texas Instruments

If you encounter a problem while using TI Device Explorer that appears to be an issue with the software, you can alert Texas Instruments to the situation.

To send questions to Texas Instruments

1. Click **TI Device Explorer > Send Questions to TI...** .



2. In the subject line, type a subject for the feedback.
3. In the main window, type the relevant information.
4. Click **Send**.

Glossary

This section provides reference material that you may find helpful while using TI Device Explorer. In it, you can find terminology, file type explanations, and icon explanations.

Terminology

12 hours format - Format that gives the time as AM/PM. For example, the time reads 6:30 AM in the morning and 6:30 PM at night.

24 hours format - Format that gives military time. For example, the time reads 6:30 in the morning and 18:30 at night.

application - 1: Software designed to run on a TI handheld device, such as TI CellSheet™ Converter. Also called an App. 2: Software you can use with a TI handheld device, such as TI Device Explorer. More commonly called a tool.

archive - Storage of data, programs, and variables so that you cannot edit, delete, or execute them.

battery state - Indicates whether or not the battery needs replacement.

backup folder - A folder that contains all of a device's backed up files.

border - A black box placed around an image.

capture To copy a device screen into the Screen Capture window and open it as an image.

clock type - The type of clock on the connected device, either 12 hours clock or 24 hours clock.

clock state - Indicates whether the clock is on or off.

connection ID - The identification number of the connected device.

copy - To make a duplicate of a file and move that duplicate to a new location.

data variable - A group of variables you can create for a TI graphing calculator, including matrix, list, string, and number variables.

date format - The format of the date on the connected device.

device - One of the following TI graphing calculators: TI-73, TI-82, TI-83, TI-83 Plus, TI-83 Plus Silver Edition, TI-84 Plus, TI-84 Plus Silver Edition, TI-84 Plus C Silver Edition, TI-85, TI-86, TI-89, TI-89 Titanium, TI-92, TI-92 Plus, Voyage™ 200 PLT, TI Presenter, CBL 2.

device host - One of the other TI Connect™ users currently using the TI Connect™ software.

distribution list - A list that contains a set of search criteria TI Device Explorer can use to determine which connected devices to show in the window.

download - To transfer a file to a computer.

drag-and-drop - A process of transferring files where you click on a file, drag the file to the new location, and drop the file there.

edit 1: To make changes to file data. **2:** To make changes to an image using an image editor.

hardware version - Indicates the version of the hardware installed on the connected device.

image - A screen captured from a connected device.

image editor - A graphics program where you can make changes to an image.

image var - A TI-84 Plus C Silver Edition image variable.

language - The language on the device. For example, English (USA).

merged view - TI Device Explorer window view that shows the files of all connected devices merged together.

normal view - TI Device Explorer window view that shows files under a device name folder.

OS version - The version of the operating system on the connected device.

picture clipping - A copy of a captured screen stored as a file.

product ID - The type of connected device.

refresh - To update TI Device Explorer with any changes made to the device files, or to load the files of a new device into TI Device Explorer.

ROM version - The version of the read-only (built in) memory on the connected device.

screen capture - A screen captured (copied) from a connected TI handheld device.

tool - A computer software application you can use with a TI handheld device.

upload - To transfer a file to a TI handheld device.

File Types

Application (App) (*.XXk) - A handheld software application file (such as TI CellSheet™ Converter, TI StudyCards™ Creator, TI NoteFolio™ Creator, TI LearningCheck™ Creator, etc.) Examples: calctool.89k, areaform.8xk.

Application Variable file (AppVar) (*.XXv, *.XXc, *.XXy) - A file that contains data for specific TI graphing calculators. Also called an AppVar. Examples: var01.8xv, var01.89c.

Data file (*.TIData) - A file that contains spreadsheet data for a TI graphing calculator.

Equation file (*.XXy) - A file that contains an equation (function) stored in the Y= editor of a graphing calculator. Examples: Y1.8xy, Y3.73y.

Expression file (*.XXe) - A file containing a mathematical expression (numbers, variables, operators, and so on) that evaluates a single number. Related to a Number file. Examples: Folder1.express.9Xe, main.differ.V2e.

Group file (*.XXg) - A collection of files stored together as one file.

Examples: NEWGROUP.8xg, TI92Lists.9Xg.

Group file (8xo) - A collection of files stored together as one file. The 8xo file is unique to the Mac. The 8xo file is not compatible with the TI Connect PC version. Example: NEWGROUP.8xo.

Graphing Calculator Software Application file (App) (*.XXk) - A file that contains an application created for specific TI graphing calculators.

Examples: speller.8xk, timlin.9xk.

List file (*.TIList, *.XXI) - A file that contains a List variable for a TI graphing calculator. Examples: L2.73I, L3.TIList.

Matrix file (*.TIMatrix, *.XXm) - A file that contains a Matrix variable for a TI graphing calculator. Examples: A.TIMatrix, Matrix.V2m.

Number file (*.TINumber, *.XXn) - A file that contains a Number variable for a TI graphing calculator. Examples: A.TINumber, Q.8Xn.

Pic Vars on TI-84 Plus (.8xi) - The Pic Vars are created and stored in RAM or Archive. . Example: picture.8xi.

Pic Vars on TI-84 Plus C Silver Edition (8ci) - The Pic Vars are created and modified on the device, but can not be shared with a TI-84 Plus. Pic Vars live in archive memory only in the TI-84Plus Silver Edition. Example: picture 8ci.

Image Vars on the TI-84 Plus C Silver Edition (.8ca) - Image Vars are created by converting a picture which can then be displayed in the graph area. Examples: image.8ca.

Picture file (*.tiff, gif, jpg, and png) - A graphic file that contains a saved captured screen. Examples: HomeScreen.tiff, TI83Pict.tiff.

Picture clipping file (*.pictClipping) - A graphic file that contains a saved captured screen. Examples: MyPicture.pictClipping; Picture clipping 1.pictClipping.

Program file (*.TIProgram, *.XXp) - A file that contains a program created for a TI graphing calculator. Examples: MyProgram.TIProgram, Circle.8xp.

QuickTime™ file (*.mov) - A file that contains a QuickTime movie file. Examples: SetDate.mo, Graph1.mo.



















Screenshot file (*.XXi) - A graphic file for a specific TI graphing calculator. Example: Screen.73i.







String file (*.TIString) - A file that contains a string variable for a TI graphing calculator. Examples: B.TIString, Hello.TIString.

Text file (*.TIText, *.txt) - A file that contains text data for a TI graphing calculator. Examples: Schedule.TIText, Assignments.txt.

Vector file (*.TIVector, *.86v) - A file that contains a vector variable for a TI graphing calculator. Example: Vector1.TIVector, v1.86v.

Icons

Name	Icon		Name	Icon
Application			List	
Application Variable			Locked File	
Archived File			Matrix	
Clock			Number	
Data			Picture	
Device Information			Program	
Device Settings			Range	
Equation			Screenshot	
Expression			String	

Folder			Table	
Group			Text	
ID List			Vector	

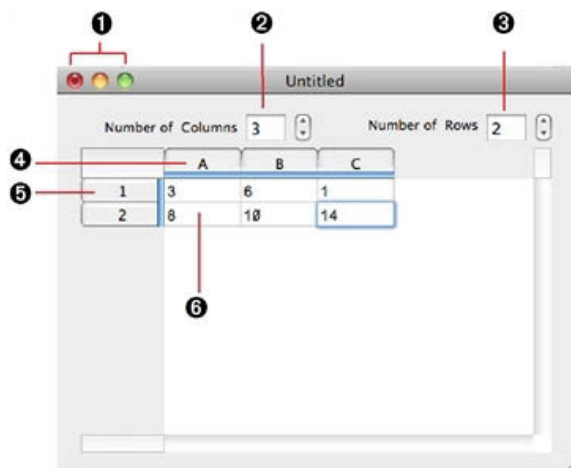
Introduction to TI Data Editor

TI Data Editor is a tool in the TI Connect™ software that you can use to create and work with data for TI graphing calculators.

Once you create the data, you can then use TI Data Editor to edit it or share it with your computer and TI graphing calculator.

TI Matrix window

In the TI Matrix window, you can create and edit matrix variables.



- 1 window control buttons** - Buttons used to close, minimize, or expand the window.
- 2 column control** - Used to add or remove columns.
- 3 row control** - Used to add or remove rows.
- 4 column letter** - The letter that identifies the column.
- 5 row number** - The number that identifies the row.
- 6 cell** - The Matrix variable table where you type data.

TI Text window

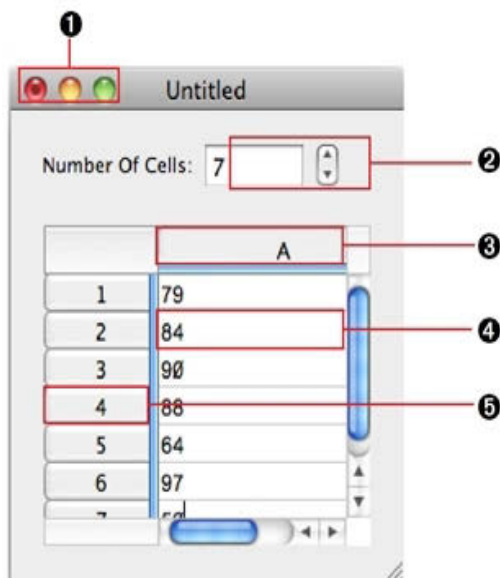
In the TI Text window, you can create text files for the TI-89 Family, TI-92 and TI-92 Plus devices, and the Voyage™ 200 Personal Learning Tool.



- 1 window control buttons** - Buttons used to close, minimize, or expand the window.
- 2 main viewing area** - Window where you type text.

TI List window

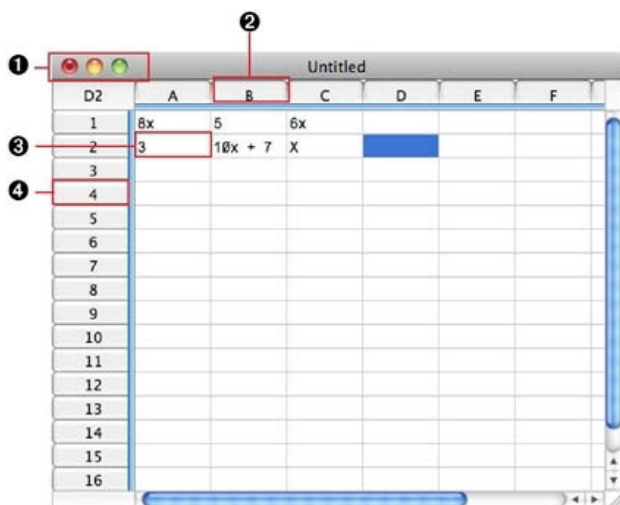
In the TI List window, you can create and edit list variables for TI graphing calculators.



- 1 window control buttons** - Buttons used to close, minimize, or expand the window.
- 2 row control** - Used to add or remove rows.
- 3 column letter** - The letter that identifies the column.
- 4 cell** - The space in the List variable table where you type data.
- 5 row number** - The number that identifies the row.

TI Data window

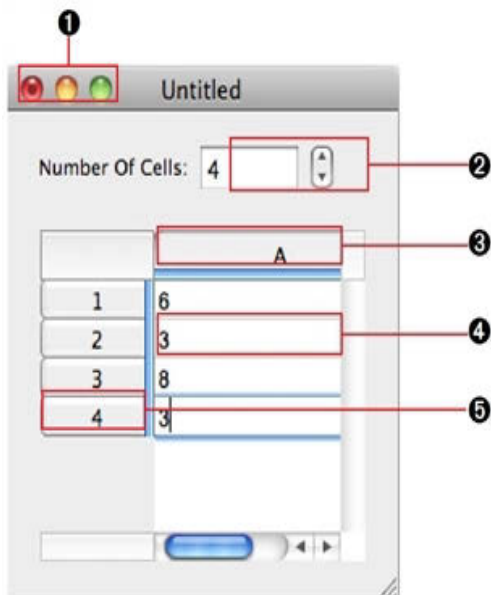
In the TI Data window, you can create and edit TI data variables for TI-84 Plus Family, TI-89 Family, TI-92, and TI-92 Plus devices and the Voyage™ 200 Personal Learning Tool.



- ❶ **window control buttons** - Buttons used to close, minimize, or expand the window.
- ❷ **column letter** - The letter that identifies the column.
- ❸ **cell** - TI Data variable table where you type the data.
- ❹ **row number** - The number that identifies the row.

TI Vector window

In the TI Vector window, you can create and edit vector variables for the TI-85 and TI-86 devices. Note that only these devices have a separate vector category for data. In other devices, vectors are a subset of the list data file.

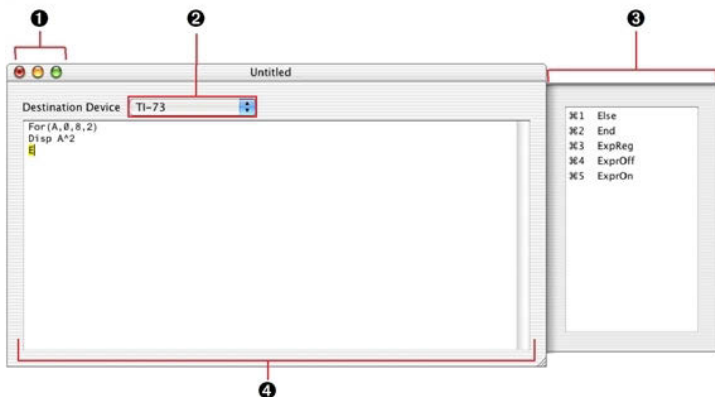


- ❶ **window control buttons** - Buttons used to close, minimize, or expand the window.
- ❷ **row control** - Used to add or remove rows.
- ❸ **column letter** - The letter that identifies the column.
- ❹ **cell** - The space in the Vector variable table where you type the data.
- ❺ **row number** - The number that identifies the row.

TI Program window and drawer

In the TI Program window, you can create and edit programs for TI graphing calculators. This example shows the TI Program window with its auto-complete drawer open.

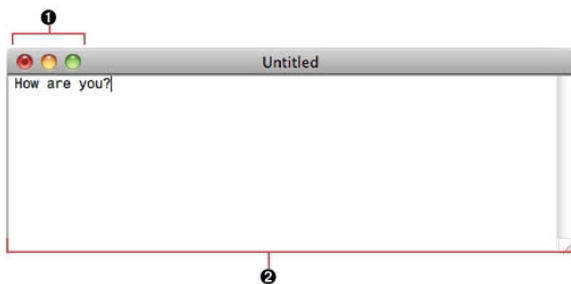
Note: When you open the window, the auto-complete drawer may not be open. Use the View menu to open and close this drawer.



- ❶ **window control buttons** - Buttons used to close, minimize, or expand the window.
- ❷ **device control** - Open the drop-down list to select the device type for the program.
- ❸ **auto-complete drawer** - The drawer that shows shortcuts for entering functions. These shortcuts open in the drawer as you type the program.
- ❹ **main viewing area** - Area where you type the program.

TI String window

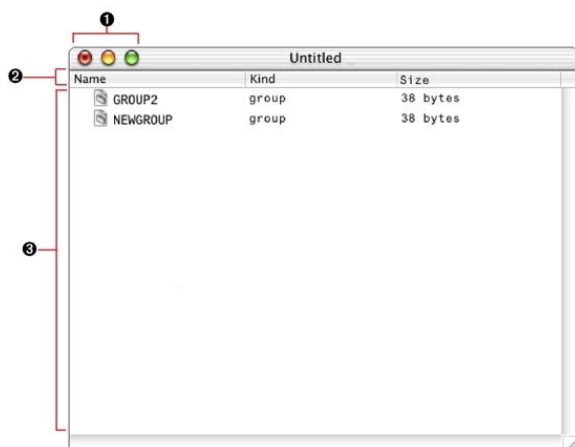
In the TI String window, you can create string variables for TI graphing calculators.



- ❶ **window control buttons** - Buttons used to close, minimize, or expand the window.
- ❷ **main viewing area** - Area where you type a string variable.

TI Group window

In the TI Group window, you can create group files. Use a group file to send a large number of files to your device at one time.



- ❶ **window control buttons** - Buttons used to close, minimize, or expand the window.
- ❷ **title bar** - Identifies the type of information displayed. Clicking the names in the title bar changes the way the TI Group window shows the files.
- ❸ **main viewing area** - Area where you can view the files.

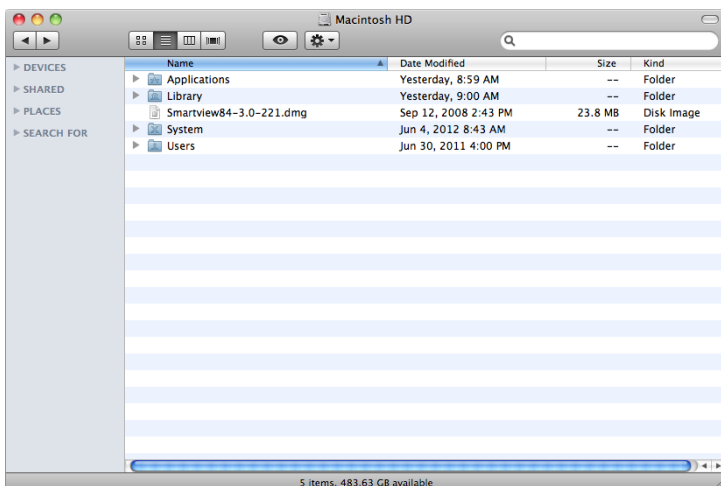
Opening TI Data Editor

Unlike the other TI Connect™ tools, TI Data Editor does not have a home screen. Instead, TI Data Editor opens to a special dialog called the New Document Chooser. This dialog enables you to select the type of data with which you want to work.

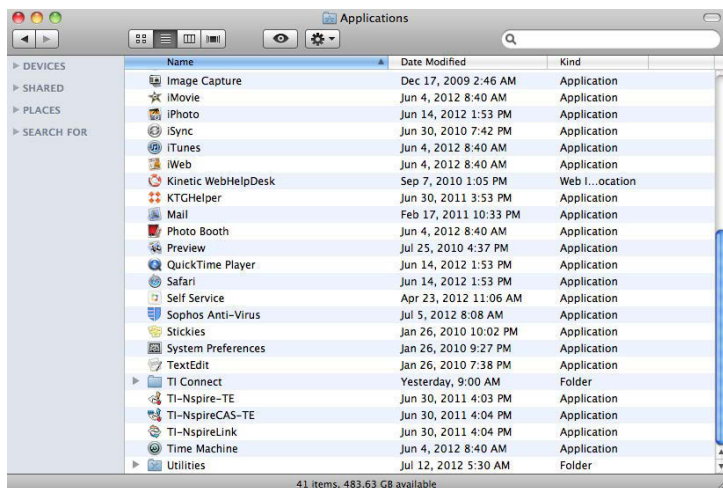
To open TI Data Editor



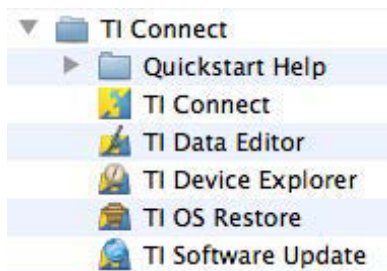
1. On your desktop, double-click **Macintosh HD**.



2. Click the arrow ► by the **Applications** folder.



3. Navigate to the TI Connect folder.
4. If the TI Connect folder is not open, click the arrow ► by the folder.

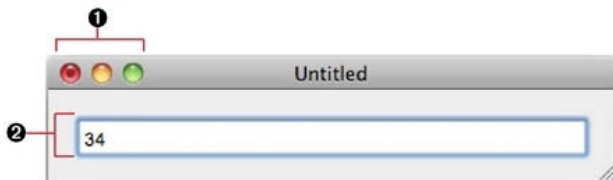


5. Double-click **TI Data Editor**.
The New Document Chooser dialog box opens.



TI Number window

In the TI Number window, you can create and edit number variables.



- 1 window control buttons** - Buttons used to close, minimize, or expand the window.
- 2 main viewing area** - Area where you type the number variable.

Closing TI Data Editor

You must close TI Data Editor from the menu bar, rather than the window. If you close TI Data Editor from the window, the window closes but the software remains open.

To close TI Data Editor

- ▶ In the menu bar, click **TI Data Editor > Quit TI Data Editor**.

TI Data Editor and its data type windows close.

Creating data variables

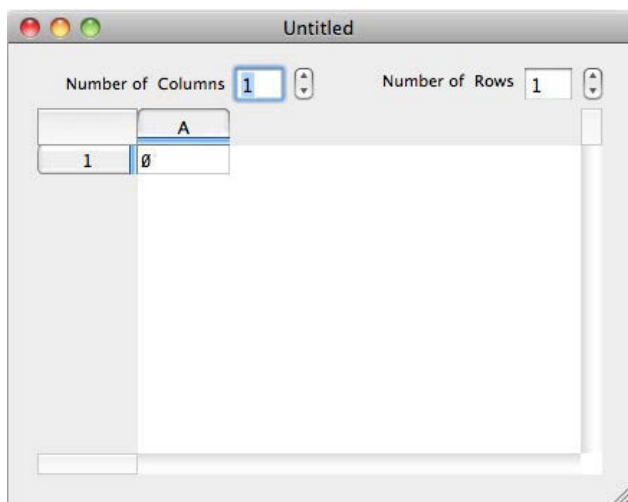
TI Data Editor has four types of data that are considered data variables: matrix variables, number variables, list variables, and string variables.

Creating matrix variables

Matrix variables contain numeric data stored in a two-dimension format with one number per cell.

To create matrix variables

1. In the TI Data Editor menu, click **File > New > TI Matrix**.



2. Type the number of columns and press **tab**.
3. Type the number of rows and press **tab**.
4. Type the matrix data into the appropriate cells.

Note: Do not put commas, semi-colons, spaces, or tabs in the matrix data.

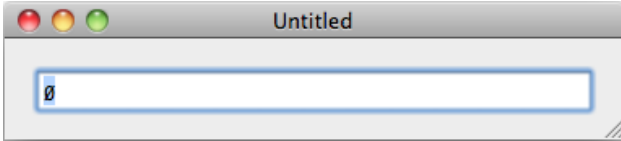
5. Save the matrix variable. (See "Saving data" on page 122.)

Creating number variables

Number variables contain numeric data stored in a single-number format with one number per file.

To create number variables

1. In the TI Data Editor menu, click **File > New > TI Number**.



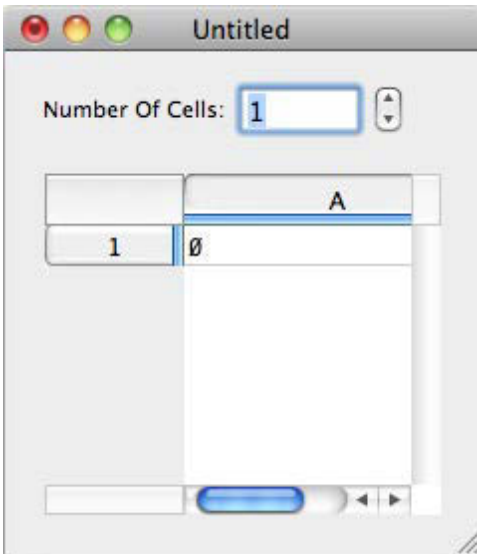
2. In the TI Number window, type the number.
3. Save the number variable. (See "Saving data" on page 122.)

Creating list variables

List variables contain numeric data stored in a single-column list.

To create list variables

1. In the TI Data Editor menu, click **File > New > TI List**.



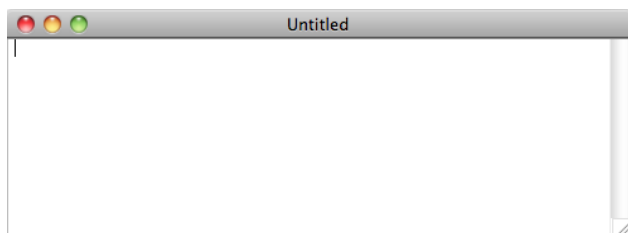
2. Type the number of cells and press **Enter**.
3. Type the list data into the appropriate cells.
Note: Do not put commas, semi-colons, spaces, or tabs in the list data.
4. Save the list variable. (See "Saving data" on page 122.)

Creating string variables

String variables are character sequences that define the text a program shows or accept input from the keyboard in a program.

To create string variables

1. In the TI Data Editor menu, click **File > New > TI String**.



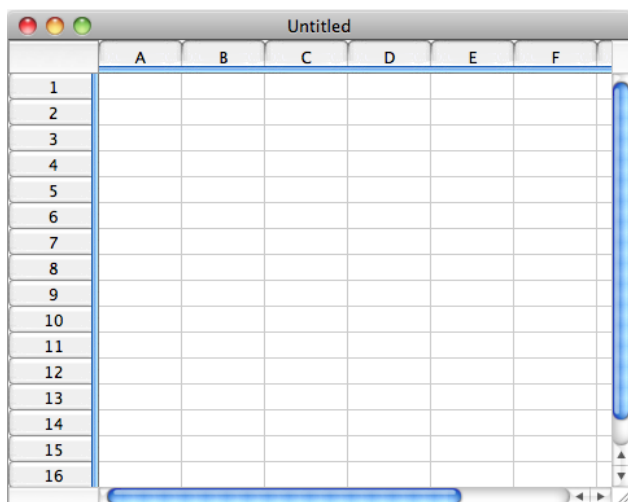
2. Type the string.
3. Save the string variable. (See "Saving data" on page 122.)

Creating TI data variables

While all of the variables you can create in TI Data Editor are technically data variables, TI Data Editor also includes a specific TI data variable. The TI data variable is similar to a spreadsheet. TI data variables can contain both numeric and alphabetic data stored in a two-dimensional format. The cells in TI data can contain entries of one or more numbers and letters.

To create TI data variables

1. In the TI Data Editor menu, click **File > New > TI Data**.



2. Type the data into the appropriate cells.

Note: Use the character palette to enter special characters. (See "Inserting special characters into data" on page 121.)

3. Save the data variable. (See "Saving data" on page 122.)

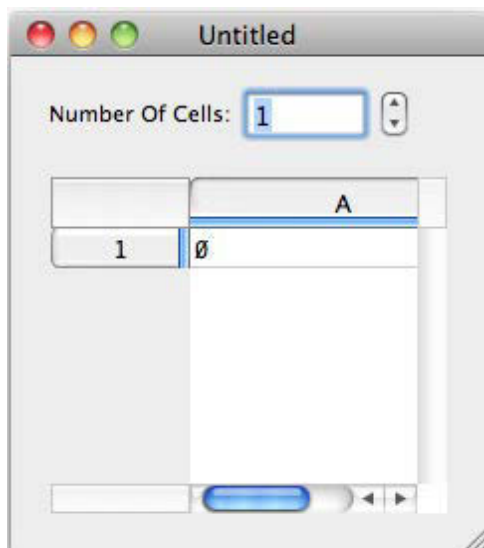
Creating vector variables

Vector variables are single-row matrices used to store data.

Note: Only the TI-85 and TI-86 consider vectors as a separate data type. For other devices, vectors are treated as lists.

To create vector variables

1. Click **File > New > TI Vector**.



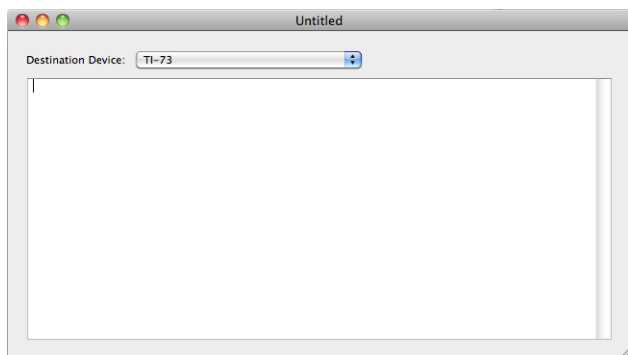
2. Type the number of cells and press **Enter**.
3. Type the vector data into the appropriate cells.
Note: Do not put commas, semi-colons, spaces, or tabs in the vector data.
4. Save the vector variable. (See "Saving data" on page 122.)

Creating programs

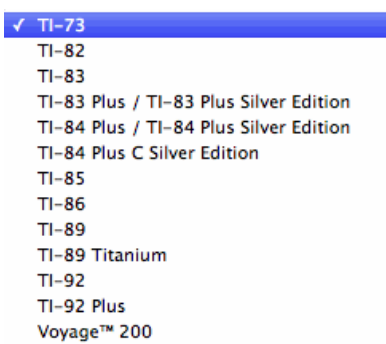
Programs are sets of commands that the TI graphing calculator carries out as if you had typed them on the device. You can create programs using the TI Program tool of TI Data Editor. Before you use TI Program to create a program, you may want to become familiar with the catalog palette and the auto-complete drawer. (See "Adding programming functions to data" on page 119.)

To create programs

1. In the TI Data Editor menu, click **File > New > TI Program**.

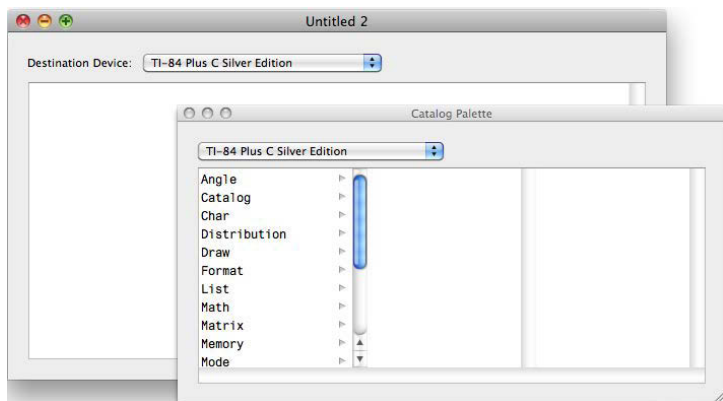


2. Click the Destination Device box.
A device type drop-down list opens.



3. Select the device type that will run the new program.
4. Type the program.

Note: You can select program functions from the catalog palette or complete functions using the shortcuts in the auto-complete drawer. Click **View > Show Catalog Palette**.



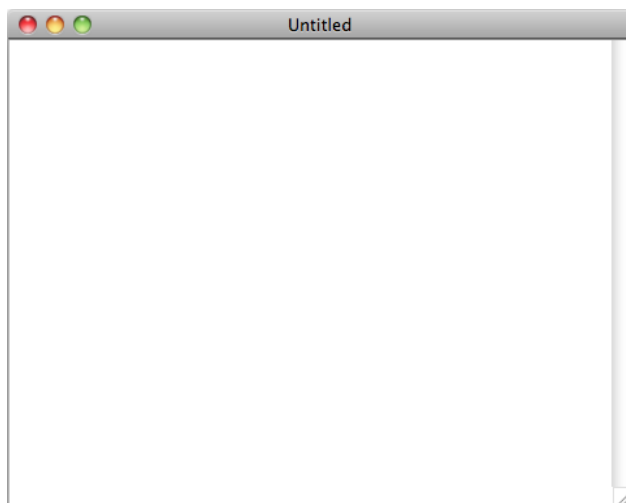
5. Save the program. (See "Saving data" on page 122.)

Creating text files

A text file is a text-based document that you can store on the TI-84 Plus family, TI-89, TI-92, TI-92 Plus, and Voyage™ 200 Personal Learning Tool.

To create text files

1. In the TI Data Editor menu, click **File > New > TI Text**.



2. Type the text.

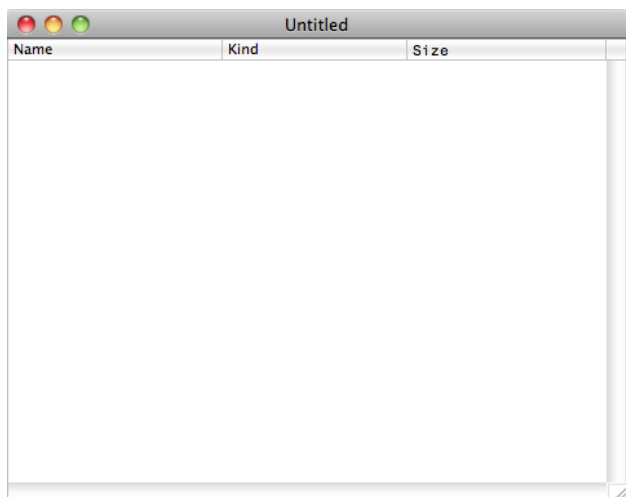
3. Save the text as a text file. (See "Saving data" on page 122.)

Creating group files

A group file is a file that contains a collection of device files stored together as one file. The device files can come from any TI file type. Group files provide a convenient way for you to send a large number of files to your device at one time.

To create group files

1. In the TI Data Editor menu, click **File > New > TI Group**.



2. On your computer, locate the device files you want to store in the group file.
3. Drag the device files to the TI Group window.

The TI Group window shows the name, kind, and size of each file.

Notes:

- If the destination platform dialog box opens, select a device type from the list and click **OK**.
- If the invalid file name dialog box opens, enter or select a name and click **OK**.

Name	Kind	Size
E	number	9 bytes
[D]	matrix	38 bytes
Str1	string	16 bytes
L1	list	29 bytes
Pic1	picture	758 bytes

Note: If the Native File dialog box opens, select a device type and click OK.

4. Save the group file. (See "Saving data" on page 122.)

Working with data

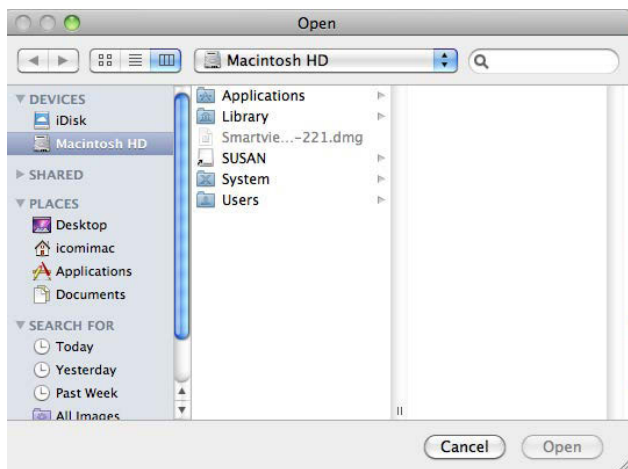
TI Data Editor contains many different data types, including variables, programs, and files. Once you create the data, you can use TI Data Editor to edit it and use it with your computer and device.

Opening data files

You can open most data files in TI Data Editor, including data files created on computers and data files created on TI graphing calculators. Data files can contain variables, programs, text, or groups.

To open data files

1. In the TI Data Editor menu bar, click **File > Open**.
The Open dialog box opens.



2. Navigate to the data file's location.
3. Click the data file.
4. Click **Open**.

Note: For data files originally created on a TI graphing calculator, TI Data Editor interprets the negate character (-) as a minus sign.

Selecting data

To perform an action on data, you must first select the data. The process of selecting data varies among the different data types. Cells contain the data for list and matrices, while the remaining data types contain textual data.

To select cells

You can select cells in any of the following ways:

- To select one cell, click the cell.
- To select multiple cells, hold down **Command** and click each cell.
- To select a cell row, click the row number.
- To select a cell column, click the column letter.

To select text

1. Click the beginning of the text.
2. Hold down **Shift** and click the end of the text.

TI Data Editor highlights the selected text.

Editing data

The process of editing data varies among the different data types. Cells contain the data for lists and matrices, while the remaining data types contain textual data.

To change cell data

1. Double-click the cell.
TI Data Editor highlights the cell's data.
2. Click the cell again.
A blinking cursor appears in the cell.
3. Make the necessary changes.
4. Press **Enter**.

To replace cell data

1. Click the cell.
TI Data Editor highlights the cell.
2. Type the new data.
3. Press **Enter**.

To change textual data

1. Click the location where you want to change the textual data.
2. Make the necessary changes.

To replace textual data

1. Select the data you want to replace.
2. Type the new data.

Copying data

You can copy variable, program, and text file data from one location to another.

To copy data

1. Select the data you want to copy.
2. Click **Edit > Copy**.
TI Data Editor puts a copy of the data on the clipboard.
3. To copy selected data to a different file, open an existing file or create a new one.
4. Click the location where you want to copy the data.
5. Click **Edit > Paste**.
TI Data Editor copies the data to the new location.

Moving data

You can move variable, program, and text file data from one location to another.

To move data

1. Select the data.
2. Click **Edit > Cut**.
TI Data Editor removes the data and places a copy of the data on the clipboard.
Note: TI Data Editor does not let you have cells without data, so it replaces any cell data you cut with a zero.
3. To move selected data to a different file, open an existing file or create a new one.
4. Click the location where you want to move the data.
5. Click **Edit > Paste**.
TI Data Editor moves the data to the new location.

Deleting data

You can delete data from variables, programs, and files.

To delete data

1. Select the data.
 2. Click **Edit > Delete**.
-

TI Data Editor deletes the data. There is no delete confirmation message, but you can undo a deletion.

Note: TI Data Editor does not let you have cells without data, so it replaces any cell data you delete with a zero. The only exception to this is for some instances of TI data variables. This data type can have an “empty” cell, but an empty cell *may* change to an undefined cell.

Adding programming functions to data

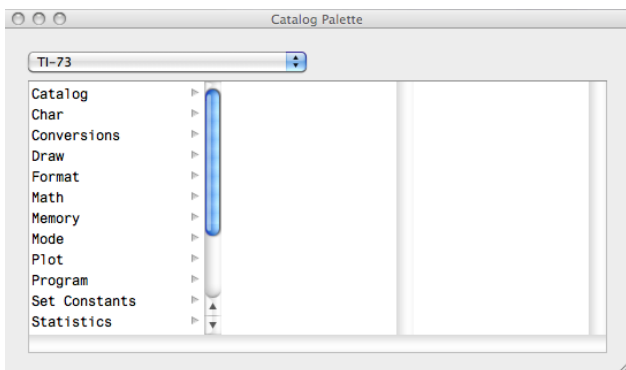
In TI Data Editor, you can use the catalog palette to add functions to the data in programs, text files, string variables, lists, matrices, vectors, and numbers. The catalog palette contains a selection of the programming functions found on TI graphing calculators. Using the catalog palette to add programming functions to programs, text files, string variables, lists, matrices, vectors, and numbers can make the process faster and easier for you.

Note: If the receiving device does not support this feature in lists, matrices, vectors, or numbers, you will either receive an error message when the file is sent to the device, or the unsupported item will be deleted when viewed on the device.

To add programming functions to data

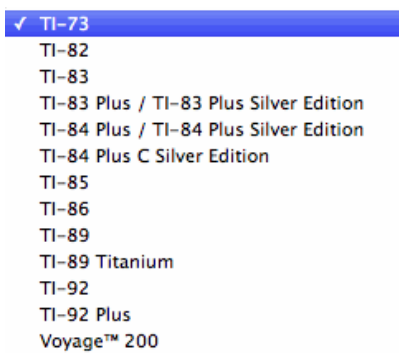
1. Click **View > Show Catalog Palette**.

The Catalog Palette window opens.



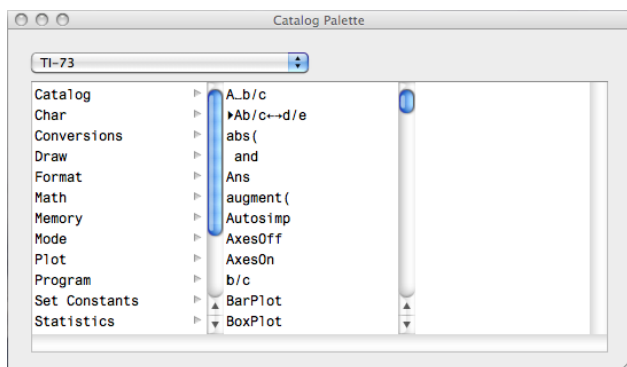
2. Click the device list.

A list of devices opens.



3. Click the device you want.
4. In the first column of the Catalog Palette window, click the programming function type you want.

A list of programming functions for the selected type opens in the second column.



5. If necessary, continue to click programming function types until you locate the function you need.
6. Double-click the function.
The function appears in the TI Program window.

Inserting special characters into data

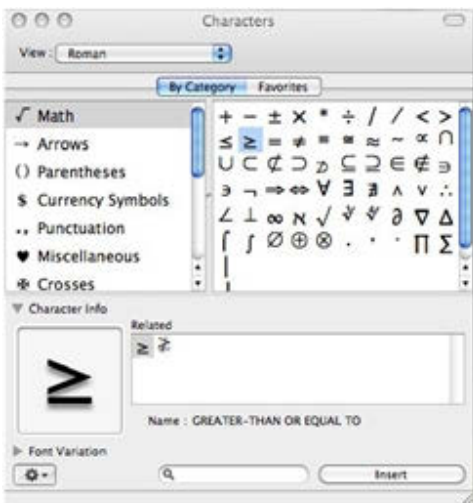
When you create or save your data, you may need to use system-provided TI characters.

To insert special characters into data

You can insert special characters into text, program, and string data. Before you insert the special characters, make sure that your device can support them.

1. In the data window, place your cursor in the location where you want to insert the special character.
2. Click **Edit > Special Characters**.

A list of text options opens.



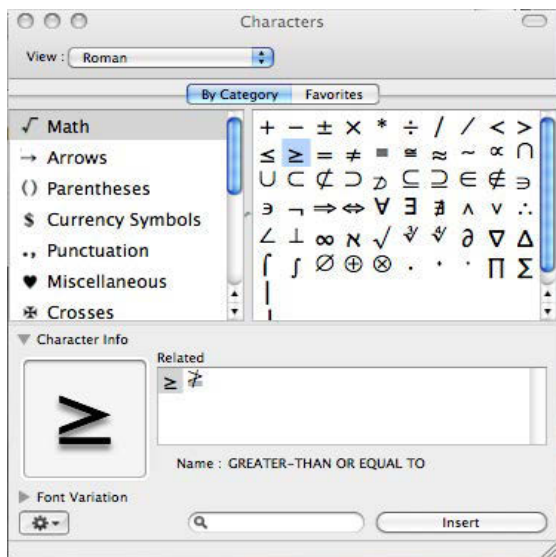
3. Navigate to the character you need to add.
4. Double-click the character.

The software inserts the character in the selected location.

To add special characters to computer file names

1. In the Save As dialog, place your cursor in the location where you want to insert the character.
2. Click **Character Palette**.

The Characters dialog opens.



3. Navigate to the character you need to add.
4. Double-click the character.

The software inserts the character in the selected location.

Notes:

- Avoid adding special characters to the device file names. TI graphing calculators cannot support many of the special characters.
- Because the character palette is system provided, it does not close when you close the Save As dialog or when you close the TI Connect™ software. You must close the palette yourself when you finish using it.

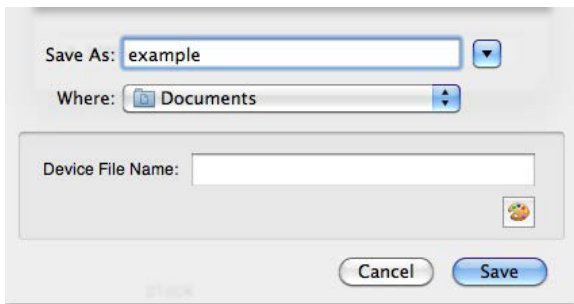
Saving data

After you create or edit data for your TI graphing calculators, you can save it for future use. You can save new data as a file, save changes to a data file, or save a copy of a data file.

To save new data as a file

1. Click **File > Save As**.

The Save As dialog opens.



Note: The Save As dialog may differ slightly from the image above, depending upon the release of Mac OS X being utilized.

2. In the Save As dialog, type a computer file name.

Note: You may find that some names become highlighted as you type them. This occurs when you type a reserve word or invalid name for the device you specified. If you continue to type, you will find that the highlighted letters are erased. To retain the highlighted letters, clear highlighting and continue typing.

3. If necessary, navigate to a new save location.
4. Type a device file name. This is the name your file will have once it is sent to your TI device.
5. If you are saving a program and want it protected, click **Protected Program**.

Note: You cannot edit a Protected Program on the TI device.

6. Click **Save**.

TI Data Editor saves the data as a file.

To save changes to a data file

- ▶ Click **File > Save**.

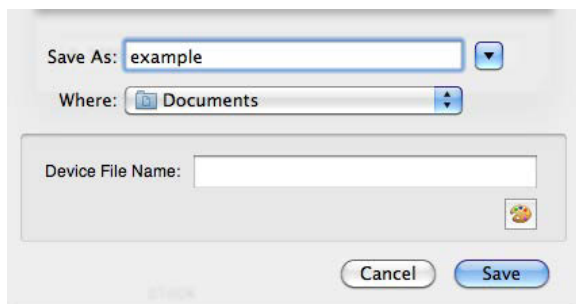
TI Data Editor saves the changes to the data file.

Note: If you opened the file from TI Device Explorer, the software sends the file back to the connected device instead of saving it on the computer.

To save a copy of a data file

1. Click **File > Save A Copy As**.

The Save As dialog opens.



Note: The Save As dialog for program data differs slightly from the image above. It contains a Protected Program option.

2. In the Save As field, type a computer file name.
3. If necessary, navigate to a new save location.
4. Type a device file name. This is the name your file will have once it is sent to your TI device.
5. If you are saving a copy of a program and want it protected, click **Protected Program**.
6. Click **Save**.

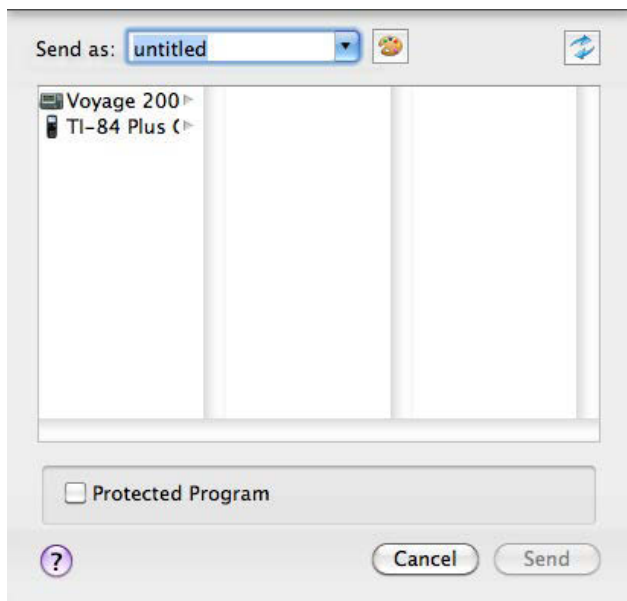
TI Data Editor saves a copy of the data file.

Sending Data to TI Graphing Calculators

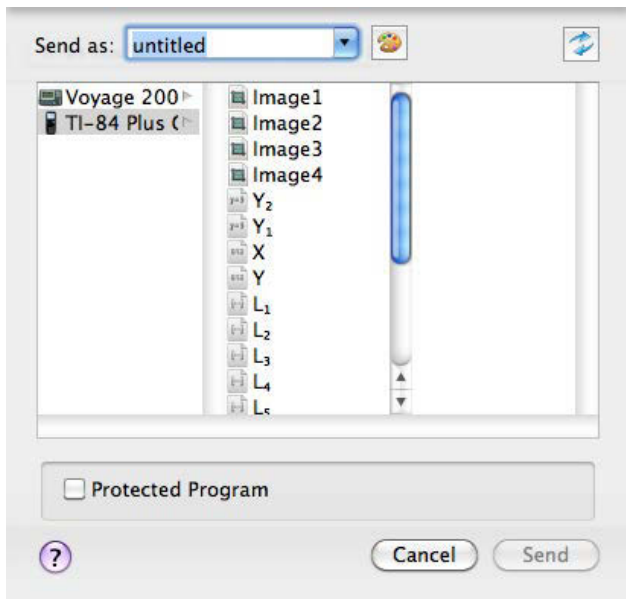
To send data to a selected device

1. If you have not already done so, save your data as a file.
2. Click the window of the data you want to send.
3. Click **File > Send to Device**.

The Send As dialog opens.



4. Select the device to which you want to send the data.
A list of the device contents opens in the second column.



5. If applicable, click the device folder to which you want to send the file. A list of the device folder's contents opens in the third column.
6. For devices without device folders, click the second column. For devices with device folders, click the third column.
7. Type the name in the **Send as** field.

Note: You may find that some names become highlighted as you type them. This occurs when you type a reserved word or invalid name for the device you specified. If you continue to type, you will find that the highlighted letters are erased. To retain the highlighted letters, clear highlighting and continue typing.

8. Click **Send**.
TI Data Editor sends the file to the selected device.

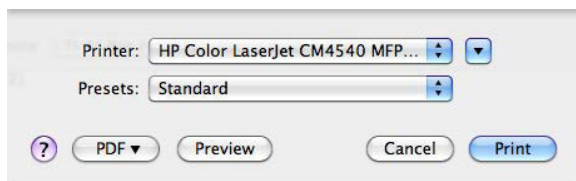
Printing data

You can print any data type you create in TI Data Editor.

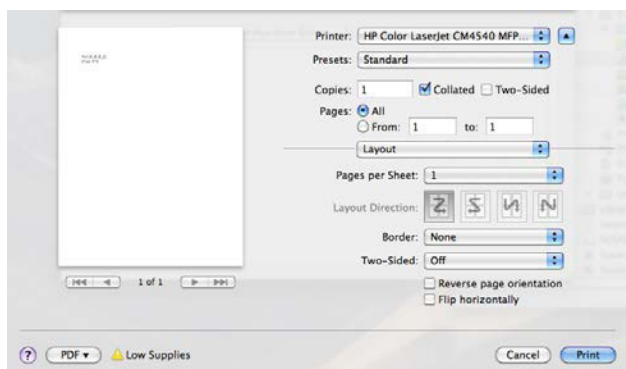
To print data

1. Click the window of the data you want to print.
2. Click **File > Print**.

The Print dialog box opens



3. To expand the print options, click the down arrow to the right of the **Printer:**
If necessary, change the print settings.



4. Click **Print**.

TI Data Editor prints the data.

Troubleshooting

This section contains information to help you quickly solve any problems you may encounter while using TI Data Editor. If you are unable to find an answer to your question here or in other sections of the help, visit education.ti.com/go/download.

Frequently-asked questions

Q: What data types can I create in TI Data Editor?

You can create matrix variables, text files, list variables, programs, string variables, group files, vectors, data and number variables.

Q: *Can I use all of the data types with any TI graphing calculator?*

No. Some data types do not work on all devices.

Q: *Why does TI Data Editor open to the New Document Chooser?*

TI Data Editor does not have a main home screen. The software contains a variety of tools that each have their own screen. When you open TI Data Editor, it needs to know which screen to open.

Q: *When I launch TI Data Editor, do I have to choose a new document from the New Document Chooser?*

No. You can also open previously saved data. (See "Opening data files" on page 115.)

Q: *Can I select items from the auto-complete drawer?*

No. You must type the shortcuts in the auto-complete drawer.

Q: *Can I drag functions from the catalog palette to a TI data variable window?*

No. You must double-click the items in the catalog palette to add them to the TI Device Program window.

Q: *In the Save As dialog, what does the Protect Program feature do?*

Protect Program prevents the program from being edited on a TI graphing calculator.

Q: *Why did a zero replace the cell data I deleted?*

A cell cannot be empty, so TI Data Editor replaces deleted cells with zeros.

Q: *Can I delete a cell instead of just its data?*

You can delete cells by removing rows and columns. However, this may remove necessary data from your variable.

Q: *When I open a data file that I created on my device, why does TI Data Editor show the negate character (-) as a minus sign?*

TI Data Editor interprets the negate character (-) as a minus sign. This gives you the ability to later open the file in other software programs. Some software programs, such as Excel, cannot recognize the negate character.

Q: *Are there any characters I cannot use in data variables?*

Yes. With the matrix, list, data and number variables, you cannot use commas, semi-colons, spaces, or tabs.

Q: *Can I use complex numbers as data?*

Yes. TI Data Editor supports complex numbers.

Q: *Why does my matrix contain more columns on the device than it did when I created it in TI Data Editor?*

The matrix you created in TI Data Editor contains commas, semi-colons, spaces, or tabs. The device interprets cells with these symbols as multiple cells.

Q: *Why does my list contain more numbers on the device than it did when I created it in TI Data Editor?*

The number you created in TI Data Editor contains commas, semi-colons, spaces, or tabs. The device interprets these symbols as the beginning of a new number. For example, if you put the number 1,400 in a list cell, the device interprets it as {1 400}.

Q: *Can I rename the individual files in my group?*

Yes. Double-click the file name, type the new name, and press **Enter**.

System requirements

- Macintosh® OS X 10.6 (Snow Leopard) or later
- At least 512 MB RAM
- At least 40 MB hard disk space available
- Available USB port
- Internet access (direct or dial-up) required for TI Software Update and TI OS Restore (full) functionality.

Error messages

Error Message	Possible causes or solutions
TI Communication Manager quit. Would you like to restart it or quit TI Data Editor?	An error occurred during the communication process. To restart TI Data Editor, click Launch .

Error Message	Possible causes or solutions
The application TI Data Editor has unexpectedly quit.	To close the error window, click Done . If you need to continue, reopen TI Data Editor. Note: You lose all unsaved data when this error occurs.
File is not valid.	The data in the file you sent may contain an e, +, or -. Sending list or matrix data containing e, +, or - to a TI-89, TI-92, or TI-92 Plus device or a Voyage™ 200 Personal Learning Tool results in an invalid file error message.

Sending questions to Texas Instruments

If you encounter a problem while using TI Data Editor that appears to be an issue with the software, you can alert Texas Instruments to the situation.

To send questions to Texas Instruments

1. Click **TI Data Editor > Send Questions to TI...**

The Feedback dialog opens.

Send Question to TI...

Please provide as much information as possible. Include the Device OS version. Providing complete information will help result in quicker solutions to any issues or problems you may be encountering with this software.

Subject:

Device Model:
Device OS:

Comments, Questions, or Problem Description:

? Cancel Send

2. Type a subject for the feedback.
3. Type the relevant information.
4. Click **Send**.

Glossary

This section provides reference material that you may find helpful while using TI Data Editor.

Terminology

application - 1: Software designed to run on a TI graphing calculator, such as TI CellSheet™ Converter. Also called an App. 2: Software you can use with a TI graphing calculator, such as TI Device Explorer. More commonly called a tool.

data type - The type of data. For example, string.

data variable - A variable for your TI graphing calculator. This includes matrix variables, list variables, string variables, and number variables.

device - One of the following TI graphing calculators: TI-73, TI-82, TI-83, TI-83 Plus, TI-83 Plus Silver Edition, TI-84 Plus, TI-84 Plus Silver Edition, TI-84 Plus C Silver Edition, TI-85, TI-86, TI-89, TI-89 Titanium, TI-92, TI-92 Plus, Voyage™ 200 PLT, TI Presenter, CBL™ 2, CBR™ 2, LabPro®.

function - A basic computer operation that has a specific result.

numeric data - Data consisting of numbers.

tool - A computer software application you can use with a TI graphing calculator.

two-dimensional - Made of multiple rows and columns. Matrices are two-dimensional.

zero cell - A cell with the number 0 in it. It takes the place of a deleted or cleared cell.

File types

Data file (*.TIData) - A file that contains spreadsheet data for a TI graphing calculator.

Group file (*.XXg) - A collection of files stored together as one file.

Examples: NEWGROUP.82, TI92Lists.9Xg.

Group file (8xo) - A collection of files stored together as one file. The 8xo file is unique to the Mac. The 8xo file is not compatible with the TI Connect™ PC version. Example: NEWGROUP.8xo.

Note: The TI-83 Plus family and TI-84 Plus family group variable type is a collection of items that are joined together and placed in archive on the actual TI graphing calculator, and then sent as a single object (not multiple transactions) to a computer via TI Connect™ software. This is an individual data item and has to be returned to archive. If there is insufficient space on the TI graphing calculator, the item will be rejected and you must free archive in order to store it on the TI graphing calculator.

List file (*.TIList, *.XXI) - A file that contains a List variable for TI graphing calculators. Examples: L2.73I, L3.TIList.

Matrix file (*.TIMatrix, *.XXm) - A file that contains a Matrix variable for a TI graphing calculator. Examples: A.TIMatrix, Matrix.V2m.

Number file (*.TINumber, *.XXn) - A file that contains a Number variable for a TI graphing calculator. Examples: A.TINumber, Q.8Xn.

Program file (*.TIProgram, *.XXp) - A file that contains a program created for a TI graphing calculator. Examples: MyProgram.TIProgram, Circle.TIProgram, test.89p.

String file (*.TIString) - A file that contains a string variable for a TI graphing calculator. Examples: B.TIString, Hello.TIString, New.TIString.

Text file (*.TIText, *.xxt) - A file that contains text data for a TI graphing calculator. Examples: Schedule.TIText, Assignments.9xt.

Vector file (*.TIVector) - A file that contains a vector variable for a TI graphing calculator. Example: Vector1.TIVector.

Data types

data variable - Numeric and alphabetic data stored in a two-dimensional format similar to a spreadsheet.

list variable - Numeric data stored in a single-column list.

group file - In TI Data Editor, a file that stores previously-created files together.

matrix variable - Numeric data stored in a two-dimensional format with one number per cell.

number variable - Numeric data stored in a single-number format with one number per file.

program - A set of commands that TI graphing calculators carry out as if you had typed them on the calculator.

string variable - Sequences of characters that define the text that a program shows or that accept input from the keyboard in a program.

text file - A text-based document that you can store on TI-89, TI-92, and TI-92 Plus calculators and the Voyage™ 200 Personal Learning Tool.

vector variable - Single-row matrices that you can use to store data.

Introduction to TI Software Update

TI Software Update is a tool in the TI Connect™ software that you can use to update the software of a TI handheld device. The TI Software Update tool supports the TI-73, TI-83 Plus Family, TI-84 Plus Family, TI-89 Titanium Family, TI-89 Family, TI-92 Plus, and Voyage™ 200 Personal Learning Tool.

With TI Software Update, you can update device operating systems, free applications, and purchased applications. You should update your device's software when new or updated software is available. By updating your device's software, you can expand the software's current functions and make it work more efficiently.

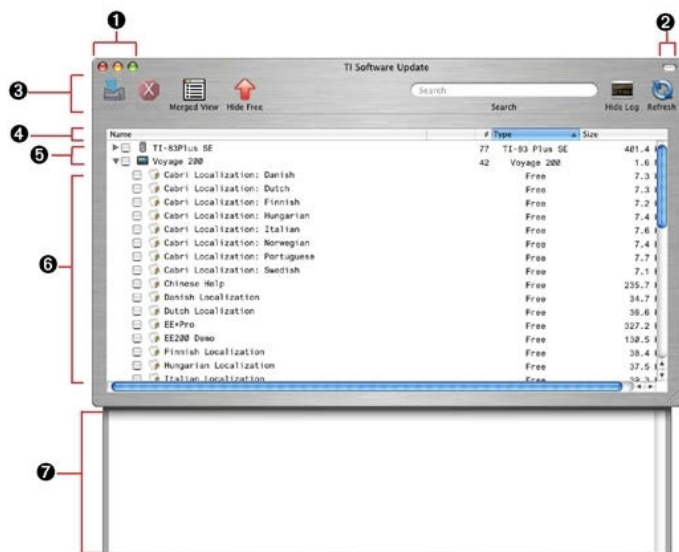
Before you start using TI Software Update, you should learn the basics of the tool. This section covers the basic information you may need to know. It describes the TI Software Update window; information on opening, closing, and setting up TI Software Update; and information on setting up your devices for use with TI Software Update.

TI Software Update window

The window has two views, normal view and merged view. Normal view shows the connected devices with their files, while merged view shows a combined list of all of the files on the connected devices.

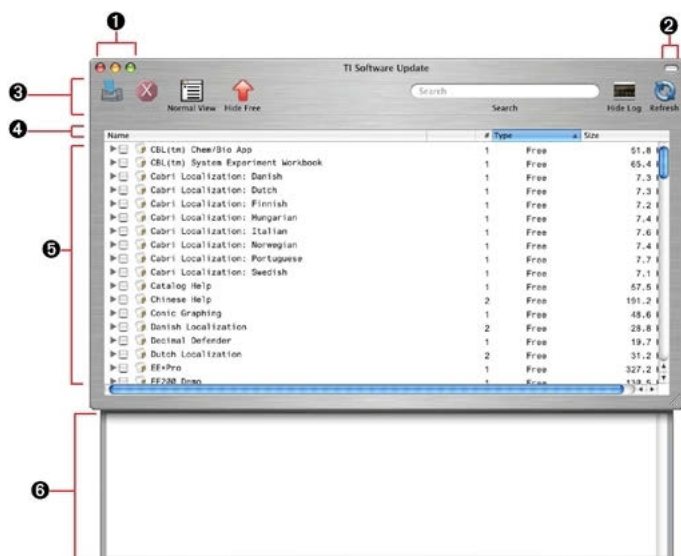
Note: When you open the window, it may not have the log drawer open. You can use the View menu to open and close this drawer. (See "Showing and hiding the log" on page 142.)

TI Software Update window (normal view)



- 1 window control buttons** - Buttons used to close, minimize, or expand the window.
- 2 toolbar visibility button** - Hides or shows the toolbar.
- 3 toolbar** - Provides button-accessed shortcuts to TI Software Update functions.
- 4 title bar** - Names the type of information below it, such as application, size, and file type. Clicking the names in the title bar changes the way TI software Update shows the availability updates.
- 5 device list** - Lists the connected devices and the number of updates available for them.
- 6 updates list** - Lists the available updates for the connected device (s). In normal view, it shows the connected device(s). In merged view, it shows all of the files available.
- 7 log drawer** - Shows the log for any recent update. In it, you can track the progress of an update or determine why an update failed.


TI Software Update Window (merged view)

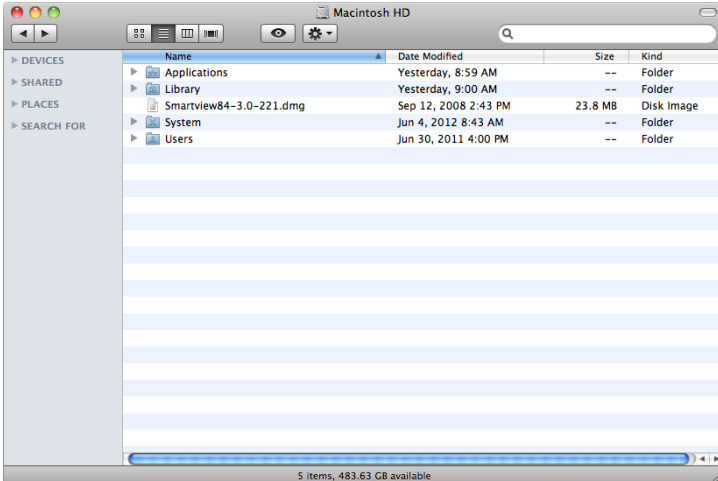



- 1 window control buttons** - Buttons used to close, minimize, or expand the window.
- 2 toolbar display button** - Hides or shows the toolbar.
- 3 toolbar** - Provides button-accessed shortcuts to TI Software Update functions.
- 4 title bar** - Names the type of information below it, such as application, size, and file type. Clicking the names in the title bar changes the way TI software Update shows the availability updates in the window.
- 5 updates list** - Lists the available updates for the connected device(s). In normal view, it shows the connected device(s). In merged view, it shows all of the files available.
- 6 log drawer** - Shows the log for any recent update. In it, you can track the progress of an update or determine why an update failed.

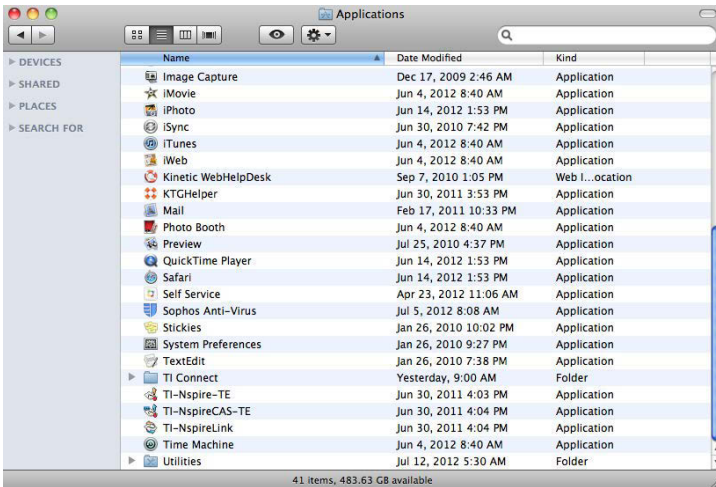
Opening TI Software Update

To open TI Software Update

1. On your desktop, double-click **Macintosh HD** .

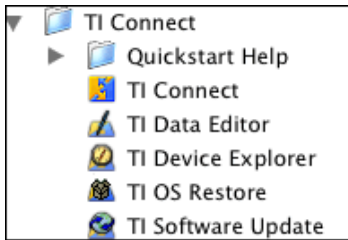


2. Click the arrow  by the **Applications** folder.

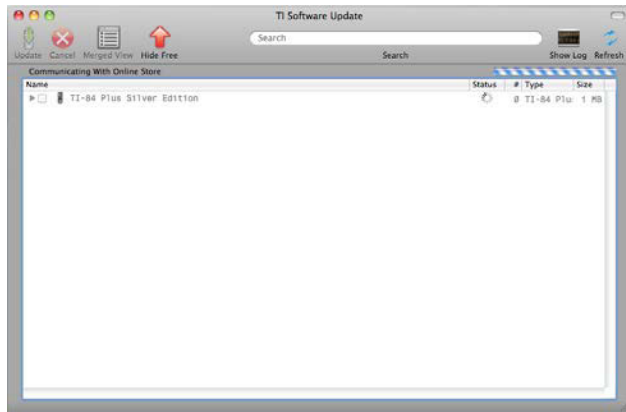


3. Navigate to the **TI Connect™** folder.

If the TI Connect™ folder is not open, click the arrow ► by the folder.



4. Double-click **TI Software Update**.



Note: If the TI Software Update window does not show the correct device(s), disconnect the TI Connectivity Cable(s) from the computer and then reconnect them.

Closing TI Software Update

You must close TI Software Update from the menu bar, rather than the window. If you close TI Software Update from the window, the window closes but the software remains open.

To close TI Software Update

- In the menu bar, click **TI Software Update > Quit TI Software Update**.

Connecting and disconnecting TI handheld devices

You can connect your TI graphing calculators to your computer using either of the following TI Connectivity Cables:

- USB Silver Edition cable
- USB computer cable (TI-84 Plus Family and TI-89 Titanium devices only)

You should connect your devices each time you start the TI Connect™ software and then disconnect them when you finish. This helps the software to recognize which devices you are using.

To connect TI handheld devices (USB Silver Edition cable)

1. Connect the USB Silver Edition cable to the device's I/O port.
2. Connect the USB Silver Edition cable to the computer's USB port.
If TI Software Update is running, the device appears in the window.

Note: If TI Software Update is running and the device does not appear in the window, repeat steps 1 and 2.

To connect TI handheld devices (USB computer cable)

1. Connect the USB computer cable to the device's USB port.
2. Connect the USB computer cable to the computer's USB port.
If TI Software Update is running, the device appears in the window.

Note: If TI Software Update is running and the device does not appear in the window, repeat steps 1 and 2.

To disconnect TI handheld devices (USB Silver Edition cable)

1. Disconnect the USB Silver Edition cable from the computer's USB port.
2. Disconnect the USB Silver Edition cable from the device's I/O port.

Note: If TI Software Update does not automatically remove disconnected

devices from the window, click **Refresh**



To disconnect TI handheld devices (USB computer cable)

1. Disconnect the USB computer cable from the computer's USB port.
2. Disconnect the USB computer cable from the device's USB port.

Note: If TI Software Update does not automatically remove disconnected

devices from the window, click **Refresh**



Refreshing devices in the window

Refreshing the window lets the software detect changes to the connected TI graphing calculators(s). For instance, if you download a purchased software application, refresh removes the purchased software application from the window.

To refresh devices in the window

- ▶ Click **Refresh**



TI Software Update connects to the attached device(s), determines any changes, and shows the refreshed information in the window.

Note: If this step does not refresh the devices in the window, disconnect the TI Connectivity Cable(s) from the computer and then reconnect them.

Checking devices

To make sure TI Software Update shows the connected devices accurately, you can check devices. When you check devices, the software re-identifies the connected devices and their needed updates.

To check devices

- ▶ Click **Update > Check Devices**.

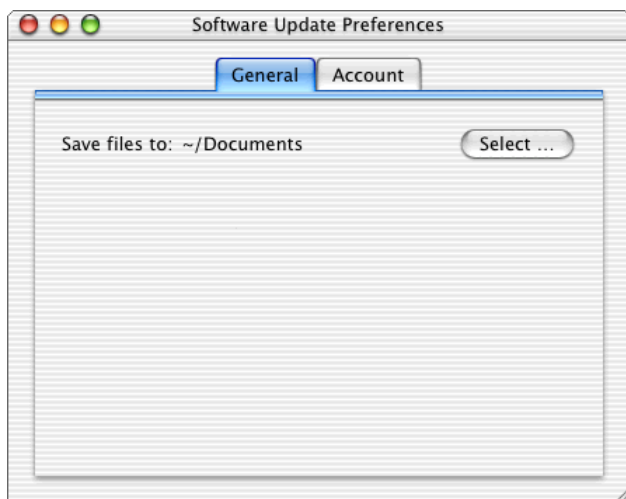
TI Software Update identifies the connected devices, checks for updates, and shows the devices and/or updates in the window.

Setting the download location

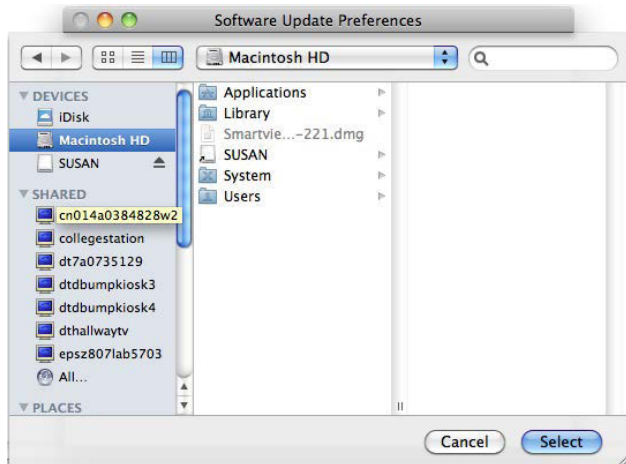
You may want to set the download location before you update your device software. By default, TI Software Update downloads device software updates to the desktop. You can change the download location to a more convenient place using preferences.

To set the downloaded location

1. In the menu bar, click **TI Software Update > Preferences**.



2. Click the **General** tab.
3. Click **Select**.



4. Navigate to the new save location.
 5. Click **Select**.
- TI Software Update changes the save location.

Showing and hiding free device software

TI Software Update lets you decide whether or not you want to view available free software. This makes it easier to find the updates you need.

To show free device software

- ▶ Click **View > Show Free Updates** or click **Show Free** .

TI Software Update shows the updates available for the free applications.

To hide free device software

- ▶ Click **View > Hide Free Updates** or click **Hide Free** .

TI Software Update hides the updates available for the free applications.

Showing and hiding the log

The log shows the status of your updates. Use the log to track the progress of an update and, if necessary, locate any problems that occur during an update.

To show the log

- ▶ Click **View > Show Log** or click **Show Log** .

The log drawer opens at the bottom of the TI Software Update window.

To hide the log

- ▶ Click **View > Hide Log** or click **Hide Log** .

The log drawer closes.

Creating keychains

A keychain is a file that TI Software Update uses to automatically log you in to the TI Online Store. If you are the only person who uses the TI Connect™ software, then creating a keychain saves you the time of logging in when you want to update your software. However, if other people use the TI Connect™ software, you may want to have each person log in separately. In this case, you should not create a keychain.

To create keychains

1. Click the box by a device or a file.

A check mark appears in the box.

<input checked="" type="checkbox"/>	Cabri Geometry for TI-89	1	Purchased	427
<input type="checkbox"/>	CellSheet for TI-89 (Euro Offer)	1	Purchased	114.3

2. Click **Update > Update Checked Items** or click **Update**



Enter your user name and password to login to the TI Online Store, then press the "Login" button.

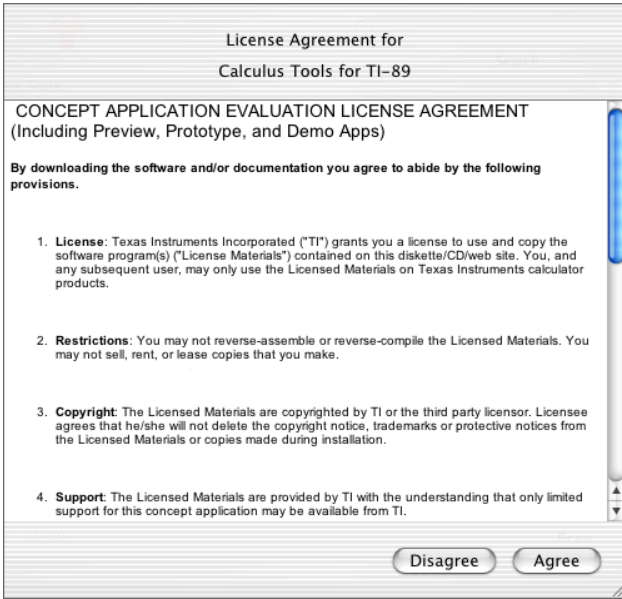
User Name:	<input type="text"/>
Password:	<input type="password"/>
<input checked="" type="checkbox"/> Add to Your Keychain	

3. Type your User Name.
4. Type your password.

Note: If you have forgotten your password, go to the TI Education Technology home page. Click the **Sign In** link, and follow the instructions for obtaining your password.

5. Click **Login**.

TI Software Update creates a keychain for you and then logs you into the TI Online Store. A license agreement opens for the selected file.



6. To exit the license agreement, click **Disagree**.

-or-

To continue the update, click **Agree**.

Updating Device Software

You should update device software when new or updated software is made available. Updating expands the software's current functions and makes it work more efficiently. With TI Software Update, you can update device operating systems, purchased applications, and free applications.

Updating device operating systems

Use TI Software Update to update device operating systems. Updating your operating system can give your device new features, support for new accessories, and improved performance. You can update device operating systems from normal or merged view.

Warnings:

- **Updating an operating system erases all data on your calculator.**
- **Do not disconnect a device during an OS update.**

Before you start

- Make sure your device is properly connected to your computer.
- Make sure your device has good or new batteries.
- If you are in normal view and cannot see the device software files, click the arrow ► to the left of the device.

To update device operating systems

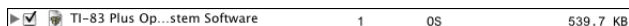
1. Back up your device. ([See the TI Device Explorer help.](#))
2. If the main window shows free updates, click **View > Hide Free Updates**

or click **Hide Free**  .

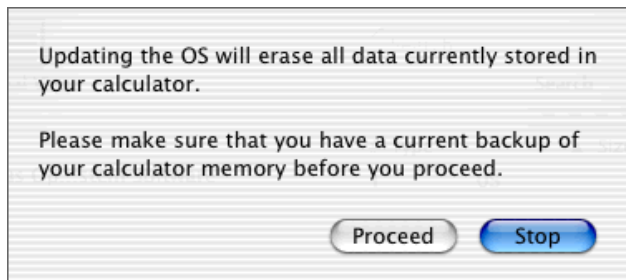
TI Software Update hides the available free updates.

3. Click the box next to the operating system.

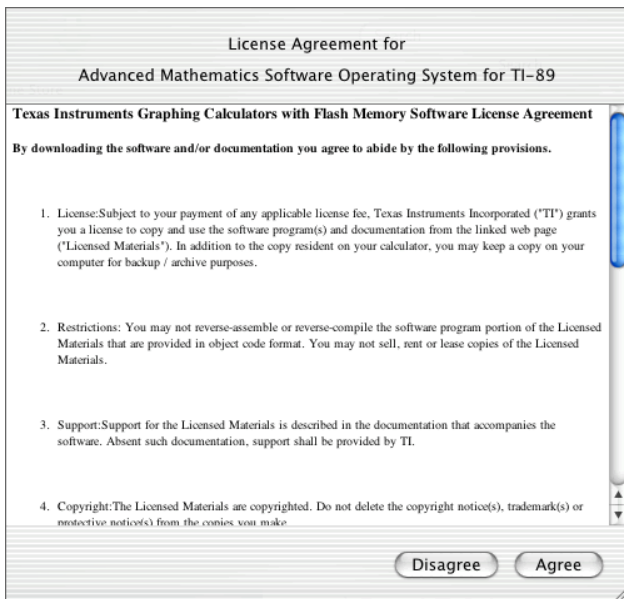
A check mark appears in the box.



4. Click **Update > Update Checked Items** or click **Update**  .



5. Click **Proceed**.



6. Read the license agreement, and then click **Agree**.

TI Software Update downloads the operating system to your device and stores a copy of it on the computer (by default, it stores it on your desktop). When the software finishes the download, a green check mark appears next the operating system file in the main window.

Note: If you want to view the update progress, show the log. (See "Showing and hiding the log" on page 142.)

Updating purchased device software

You can use TI Software Update to update the purchased software on your device. Updating purchased device software keeps the software running as efficiently as possible. You can update your purchased software from normal or merged view.

Warning: Do not disconnect a device during a download.

Before you start

- Make sure you have the most current operating system on your device. (See "Updating device operating systems" on page 144.)

- Make sure your device is properly connected to your computer.
- Make sure your device has good or new batteries.
- If you are in normal view and cannot see the device software files, click the arrow ► to the left of the device.

To update purchased device software

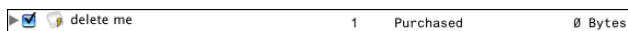
1. If the main window shows free updates, click **View > Hide Free Updates**

or click **Hide Free** .

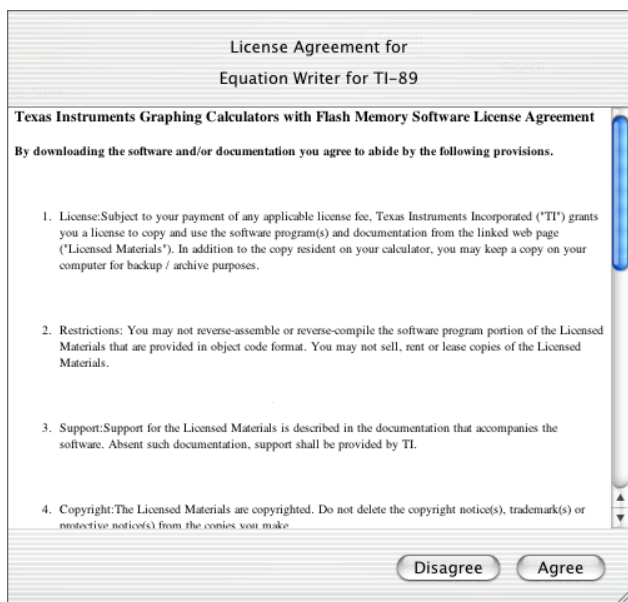
TI Software Update hides the available free updates.

2. Click the box next to each file you want to update.

A check mark appears in the box(es).



3. Click **Update > Update Checked Items** or click **Update** .



4. For each license agreement, read the information, and then click **Agree**.

TI Software Update downloads the selected files to your device and stores a copy of the files on the computer (by default, it stores them on your desktop). When the software finishes downloading, green check marks appear in the main window next to the selected files.

Note: If you want to view the update progress, show the log. (See "Showing and hiding the log" on page 142.)

Updating free device software

TI Software Update lists all free applications available for the connected device(s). This means that it lists software already on your device and software that is not on your device. Because of this, you can use TI Software Update to both update your current free device software and acquire new free device software.

Warning: Do not disconnect a device during a download.

Notes:

- TI Software Update does not remove downloaded free device software updates from the list.
- TI Software Update lists free device software that does not need updates.

Before you start

- Make sure your device has the most current operating system.
- Make sure your device is properly connected to your computer.
- Make sure your device has good or new batteries.
- If you are in normal view and cannot see the device software files, click the arrow ► to the left of the device.

To update or acquire free device software

1. If the main window does not show free updates, click **View > Show Free**

Updates or click **Show Free**



TI Software Update shows the available free updates.

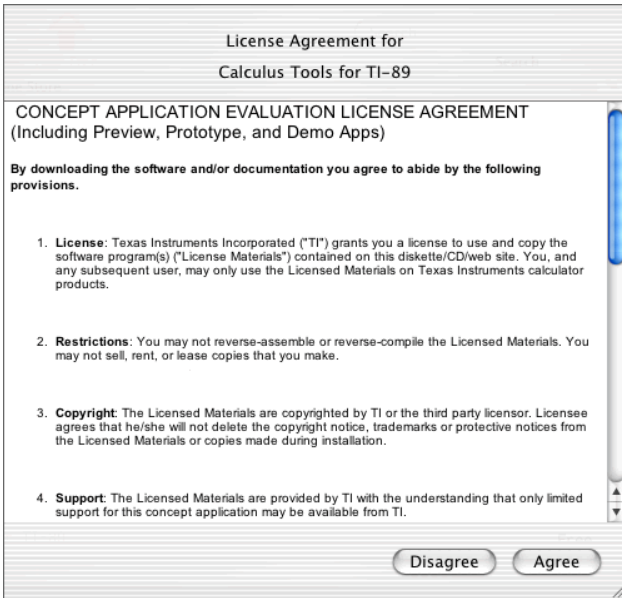
2. Click the box next to each file you want to update or acquire.

A check mark appears in the box(es).

<input checked="" type="checkbox"/>	Area Formulas for TI-83 Plus	1	Free	125.1 KB
-------------------------------------	------------------------------	---	------	----------



3. Click **Update > Update Checked Items** or click **Update**.



4. For each license agreement, read the information and then click **Agree**.

TI Software Update downloads the selected files to your device and stores a copy of the files on the computer (by default, it stores them on your desktop). When the software finishes the download, a green check mark appears in the main window next the selected files.

Note: If you want to view the update progress, show the log. (See "Showing and hiding the log" on page 142.)

Customizing the toolbar

When you customize the toolbar, you can choose from a variety of options, ranging from adding new items to the toolbar to changing the display of the icons. Customizing the toolbar makes TI Software Update more convenient and easier to use.

Hiding and showing the toolbar

You can choose whether or not to show the toolbar in the window.

To hide the toolbar

- ▶ Click **View > Hide Toolbar**.

The window no longer shows the toolbar.

To show the toolbar

- ▶ Click **View > Show Toolbar**.

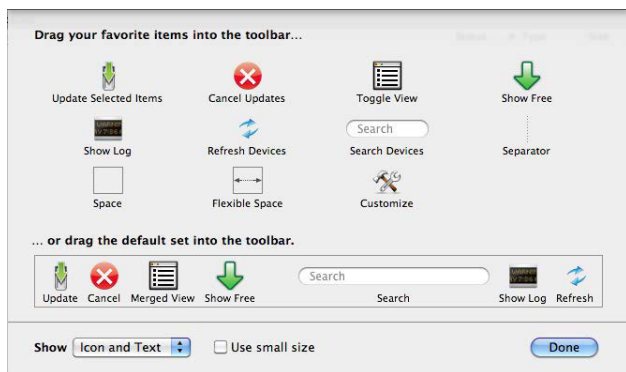
The window shows the toolbar.

Removing items from the toolbar

You can remove tools, separators, and spaces from the toolbar.

To remove items from toolbar

1. Click **View > Customize Toolbar**.



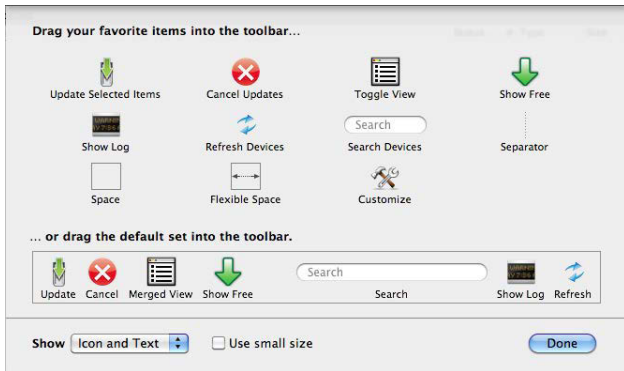
2. Drag the unwanted toolbar item to the Customize Toolbar dialog box.
3. Click **Done**.

Adding items to the toolbar

You can add tools, separators, and spaces to the toolbar.

To add items to the toolbar

1. Click **View > Customize Toolbar**.



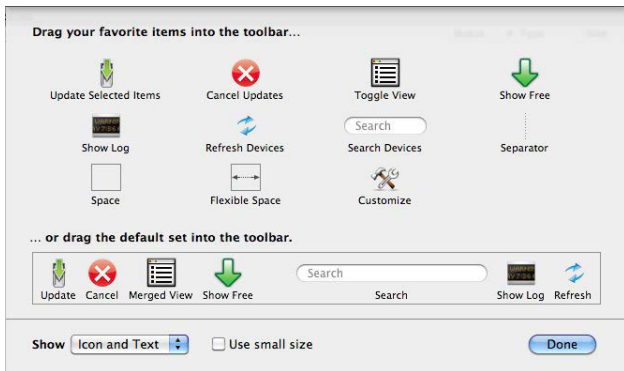
2. Drag the additional item to the main window's toolbar.
3. Click **Done**.

Setting the toolbar to the default

When you first open a tool it shows a default toolbar. If you change the toolbar and decide you do not want to keep the changes, you can always revert back to the default.

To set the toolbar to the default

1. Click **View > Customize Toolbar**.



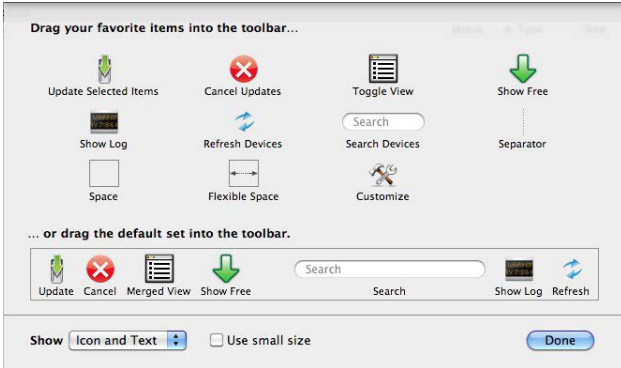
2. Drag the default set to the main window's toolbar.
3. Click **Done**.

Changing the display of icons and text

TI Software Update lets you change the icons and the text that displays in the toolbar. You can choose to display both icons and text, only icons, or only text.

To change the display of icons and/or text

1. Click **View > Customize Toolbar**.



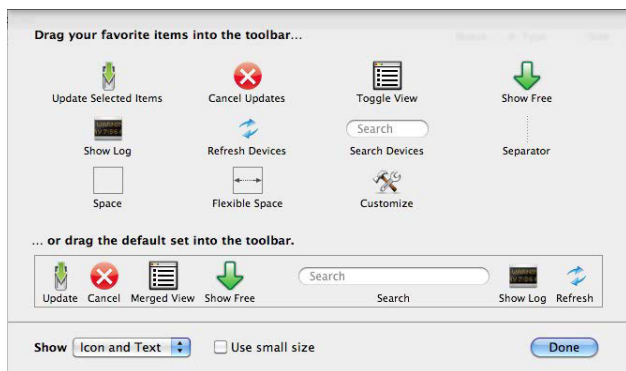
2. From the Show drop-down list, select the option you want.
3. Click **Done**.

Changing the size of toolbar icons

TI Software Update lets you change the size of the icons in the toolbar. Changing the size of the toolbar icons can help you to find and use them more quickly.

To change the size of the icons

1. Click **View > Customize Toolbar**.



2. Click **Use Small Icons**.

If Use Small Icons is off, TI Software Update turns it on. A check mark appears and the icons in the toolbar become smaller.

If Use Small Icons is on, TI Software Update turns it off. The check mark disappears and the icons in the toolbar become larger.

3. Click **Done**.

Troubleshooting

This section contains information to help you quickly solve any problems you may encounter while using TI Software Update. If you are unable to find an answer to your question here or in other sections of the help, visit the TI-Cares KnowledgeBase at education.ti.com/go/download.

Frequently-asked questions

Q: *Are there any devices that TI Software Update cannot update?*

Yes. TI Software Update cannot update the following devices: TI-82, TI-83, TI-85, TI-86, TI-92, CBL™, CBL™ 2, CBR™, LabPro®, or TI Presenter™.

Q: *Can I change the computer location where the software downloads the updates?*

Yes. You can change the location under Preferences. (See "Setting the download location" on page 140.)

Q: *Can I back up my device in TI Software Update?*

No. You must use TI Device Explorer to back up your device.

Q: *Can I cancel an update?*

Yes. You can cancel an update in any of the following ways:

- In the Login dialog, click **Cancel**.
- In the License Agreement window, click **Disagree**.

- In the TI Software Update window, click **Cancel**.



Q: *Can I download all available device updates at once?*

Yes. In normal view, click the box by the device and then click **Update > Update Checked Items**.

Note: TI Software Update lists all available free applications for your device. If you choose this option, TI Software Update downloads files that you may not want or need. To download updates only for files currently on your device, click **View > Hide Free Updates** before you download the updates.

Q: *How can I determine why an update failed?*

Open the log. The log shows the progress of any update and any errors that occurred during the update. (See "Showing and hiding the log" on page 142.)

Q: *How many applications can I update at a time?*

You can update as many applications as the Device Updates window shows.

Q: *Is there any way for me to view only the device files that need updates?*

TI Software Update cannot distinguish between free applications that need updates and those that do not. However, it can make this distinction for operating systems and purchased applications. To view only operating systems and purchased applications, click **View > Hide Free Updates**.

Q: *What does the blue exclamation point symbol  mean?*

This symbol indicates an operating system that you need to download. You must have the most recent operating system to download applications.

Q: *What does the green check mark symbol  mean?*

This symbol indicates a successful update.

Q: *What should I do if TI Software Update does not show the connected device(s)?*

Disconnect the TI Connectivity Cable(s) from the computer and then reconnect them. If TI Software Update still does not show the device, quit TI Software Update and then open it again.

Q: *Where are the software update files I downloaded to my desktop?*

The software update files should be on your desktop. To see them, you may need to click the desktop.

Q: *Why are there no free applications in the Device Updates window?*

TI Software Update is set to hide updates for free applications. (See "Showing and hiding free device software" on page 142.)

Q: *Why are my connected devices grayed out?*

The devices are grayed out because they are not supported by TI Software Update.

Q: *Why is my connected device not in the TI Software Update window?*

There are two reasons why this might happen:

- The TI Connectivity Cable is not connected correctly or needs to be reconnected. Check the connection to the device and computer.
- You connected the device after you opened TI Software Update.

Click **Refresh**  .

Q: *Why does TI Software Update not remove downloaded free applications when I click refresh?*

TI Software Update lists all available free applications for the connected device, even if you have downloaded them.

Q: *Why does TI Software Update list more updatable files than I have on my device?*

TI Software Update lists all available free applications for the connected device. This means that it includes both files currently on your device and files that you have not yet acquired.

System requirements

- Macintosh® OS X 10.6 (Snow Leopard) or later

- At least 512 MB RAM
- At least 40 MB hard disk space available
- Available USB port
- Internet access (direct or dial-up) required for TI Software Update and TI OS Restore (full) functionality.

Error messages

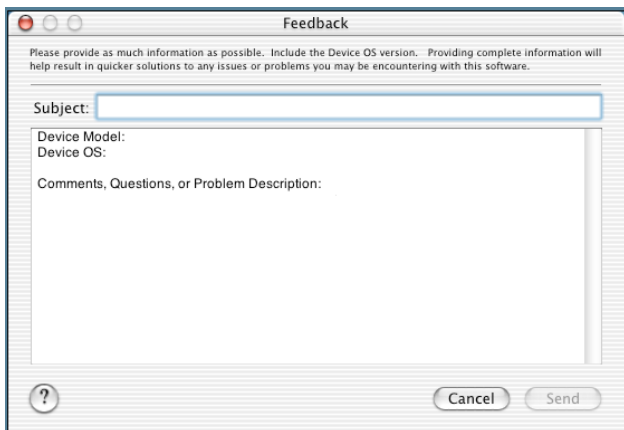
Error Message	Possible causes or solutions
TI Communication Manager quit. Would you like to restart it or quit TI Software Update?	An error occurred during the communication process. To restart TI Software Update, click Launch .
The application TI Software Update has unexpectedly quit.	To close the error window, click Done . If you need to continue, reopen TI Software Update. Note: You lose any unsaved data when this error occurs.

Sending questions to Texas Instruments

If you encounter a problem while using TI Software Update that appears to be an issue with the software, you can alert Texas Instruments to the situation.

To send questions to Texas Instruments

1. Click **TI Software Update > Send Questions to TI...**



2. In the subject line, type a subject for the feedback.
3. In the main window, type the relevant information.
4. Click **Send**.

Glossary

This section provides reference material that you may find helpful while using TI Software Update. In it, you can find terminology and file type explanations.

Terminology

application - 1: Software designed to run on a TI handheld device, such as TI CellSheet™ Converter. Also called an App. 2: Software you can use with a TI handheld device, such as TI DeviceExplorer. More commonly called a tool.

cable - The item that connects your TI handheld device and your computer. Generically called a TI Connectivity cable.

default - The way the software runs without instructions. In TI Software Update, defaults that you can change include the toolbar, the save location, and the display of free applications.

device - One of the following TI handheld devices: TI-73, TI-82, TI-83, TI-83 Plus, TI-83 Plus Silver Edition, TI-84 Plus Family, TI-85, TI-86, TI-89, TI-92, TI-92 Plus, Voyage™ 200 PLT, TI Presenter, CBL 2.

device file - A file created specifically for a TI handheld device.

device type - TI-73, TI-82, TI-83, TI-83 Plus, TI-83 Plus Silver Edition, TI-84 Plus Family, TI-85, TI-86, TI-89, TI-92, TI-92 Plus, Voyage™ 200 PLT, TI Presenter, CBL 2.

download - To copy a file onto your computer.

drag-and-drop - To click a file and drag it to a new location.

keychain - A file that automatically logs you in to the TI Online Store.

log - The record of recent updates. In the log, you can view an update's status and/or determine any problems that occur during an update.

main window - The window that contains the toolbar you want to customize.

refresh - 1: (TI Software Update window) To update the window by determining what devices are connected to the computer. 2: (Device Updates window) To update the window by determining which applications no longer need updates.

size - The number of bytes, kilobytes (KB), and megabytes (MB) of memory an application takes up on your TI handheld device.

TI Device Explorer - A tool in the TI Connect™ software that lets you work with the device files, device screens, and date/time on a TI handheld device.

TI Online Store Account - A free account with the TI Online Store that lets you download software. It consists of your e-mail address and a password of your choice.

tool - 1: A computer software application you can use with a TI handheld device. 2: A button in the toolbar.

type - 1: (Normal View) The type of file: an operating system (OS), a purchased application (Purchased), or a free application (Free). 2: (Merged View) The type of device.

update - To find and download newer versions of the software (operating system and applications) on your TI handheld device.

upload - To copy a file onto a TI handheld device.

File Types

Operating System file (*.XXu) - A file that contains device operating system software. Examples: Os160.73u, Os115.8xu, TI92base.9xu.

Handheld Software Application file (App) (*.XXk) - A file that contains an application created for a specific TI handheld device. Examples: TICabri.89k, TIFinance.9xk.

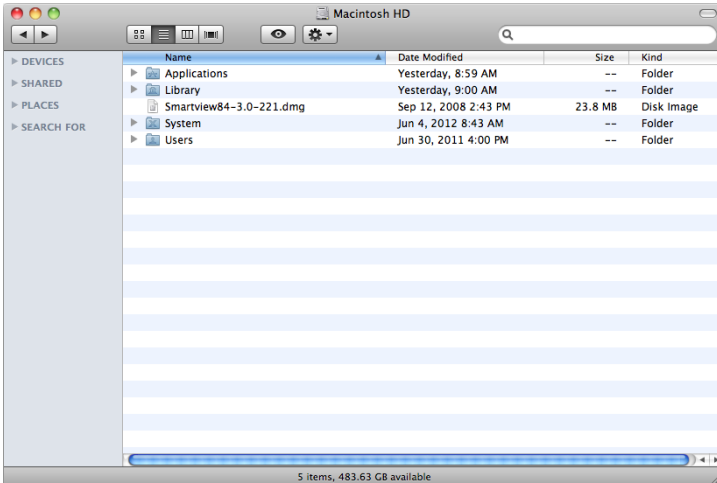
Introduction to TI OS Restore

TI OS Restore is a tool in the TI Connect™ software that lets you restore operating systems to devices that no longer have an operating system. Use the TI OS Restore tool to restore the operating system of any connected TI graphing calculator.

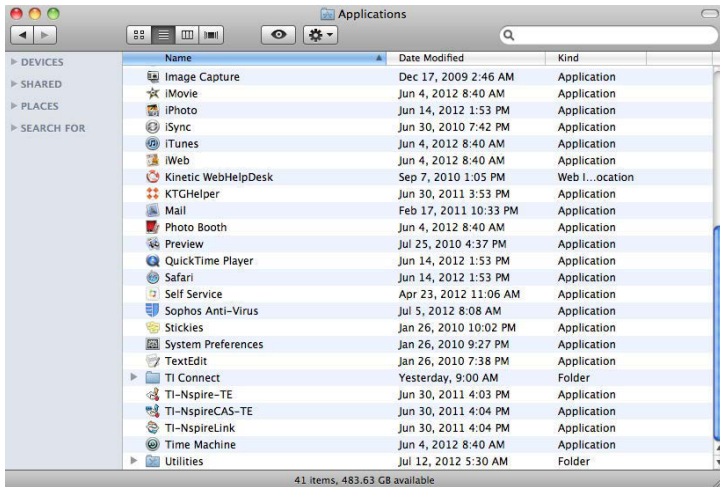
Opening TI OS Restore

TI OS Restore can open automatically when the software detects a device without an operating system. However, you can open TI OS Restore manually. To open TI OS Restore:

1. On your desktop, double-click **Macintosh HD**.

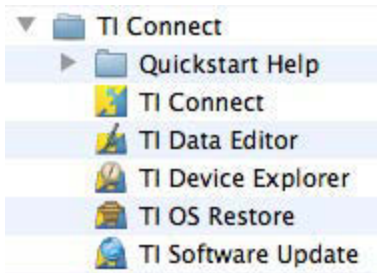


2. Click the arrow by the ► **Applications** folder.

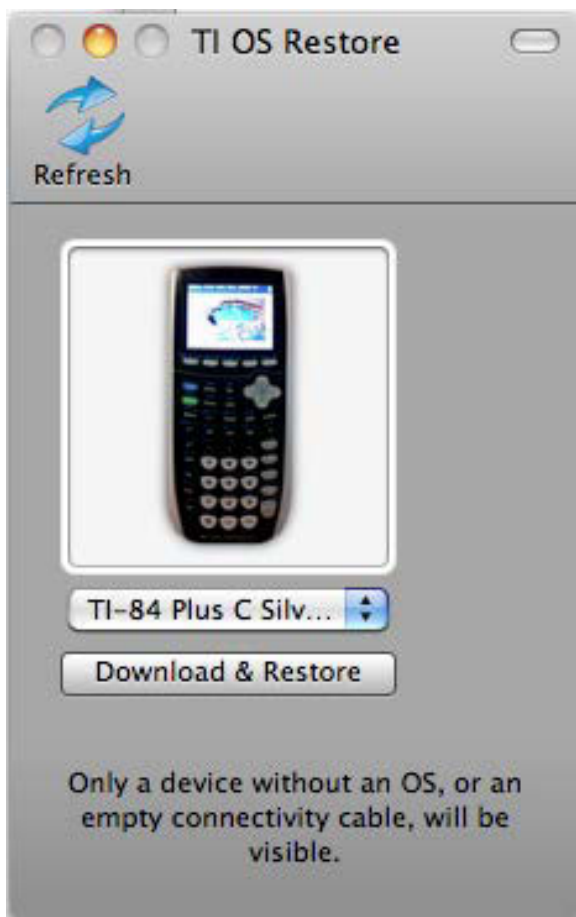


3. Navigate to the TI Connect folder.

If the TI Connect folder is not open, click the arrow ► by the folder name.



4. Double-click **TI OS Restore**.



Closing TI OS Restore

You must close TI OS Restore from the menu bar, rather than the window. If you close TI OS Restore from the window, the window closes but the software remains open.

To close TI Device Explorer

- ▶ In the menu bar, click **TI OS Restore > Quit TI OS Restore**.

Restoring device operating systems

The TI OS Restore tool only has one feature: restoring operating systems. With TI OS Restore, you can restore the device operating system of any connected TI graphing calculator.

To restore device operating systems:

1. Connect the device that needs an operating system.

The TI OS Restore window opens.

Note: If the TI OS Restore window does not open, you can open it manually. (See [Opening TI OS Restore.](#))



2. Make sure that the device shown in the TI OS Restore window is the correct device. If it is not, select the correct device from the drop-down list.
3. Click **Download & Restore**.

TI OS Restores connects to the TI online store, locates the most current operating system for the connected device, and downloads it to your computer.

A dialog opens asking you to make sure the device is in the correct state.



4. Click **Proceed**.

The software sends the OS to the device.

Legal Information

This section contains important legal notices about this product, including important information, service and support information, and the license agreement.

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For U.S. and Canada:

For General Information

Home Page: education.ti.com

KnowledgeBase and e-mail inquiries: education.ti.com/support

Phone: (800) TI-CARES / (800) 842-2737
For U.S., Canada, Mexico, Puerto Rico, and
Virgin Islands only

International information: education.ti.com/international

For Technical Support

KnowledgeBase and support by e-mail: education.ti.com/support

Phone (not toll-free): (972) 917-8324

For Product (Hardware) Service

Customers in the U.S., Canada, Mexico, Puerto Rico and Virgin Islands:
Always contact Texas Instruments Customer Support before returning a product for service.

For All Other Countries:

For general information

For more information about TI products and services, contact TI by e-mail or visit the TI Internet address.

E-mail inquiries: ti-cares@ti.com

Home Page: education.ti.com

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