

TI Connect™ Quick-Start Guide

Materials

- Computer
- TI Connect™ software
- TI-GRAPH LINK™ cable (gray, black or silver (USB))
- TI Graphing Handheld (TI-73, TI-83 Plus, TI-83 Plus Silver Edition, TI-89, TI-92 Plus, TI Voyager™ plt)

Objectives

This activity outlines the use of TI Connect™ computer software.

Other Resources

Recommended

- Internet connection (for device OS updates, Flash™ application updates, and online shopping)

Introduction

1. We'll start by assuming that *TI Connect* is installed and that all your hardware (TI device, cable, and computer's communication is working).
2. *TI Connect* works with all three of the *TI-GRAPH LINK* cables: black, gray, and silver (USB). If you are having trouble, read the USB cable warning section of this document. Whenever possible, use the USB cable, because it is usually faster.

TI Connect

1. The *TI Connect* Home Screen is shown in Figure 1.
2. The buttons across the top of the screen take you to other “pages” of *TI Connect* and to the online shopping area. You may also use these buttons to search for TI device OS or Apps updates.
3. The application buttons, like **DeviceExplorer**, run other *TI Connect* programs on your computer.
4. The “Options” button lets you set default folders and communications settings. The “Help” button displays the Help file for *TI Connect*.

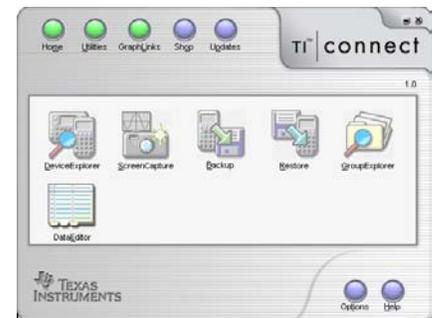


Figure 1

DeviceExplorer

1. Start **DeviceExplorer** to display the contents of your connected TI device. See Figure 1.
2. Your DeviceExplorer tree looks different, depending on the type of device you are looking at. Navigate the tree (click a “+” to expand a branch, “-“ to collapse it) to see individual files in the device.
3. Be sure to explore *the entire* tree: in a TI-89 device **Applications (Apps)** are located under the **main** folder.
4. On a TI-83 Plus, you may find variables under the **RAM** area (the device name at the top, or under the **Flash/Archive** area if the variables are archived).
5. However, note that a single variable can be stored only in the RAM area or in the Flash/Archive area but not both.
 - To transfer a file from the connected TI device to the computer, use the ‘drag-n-drop’ principle: click on a file and, **holding the mouse button down**, drag the file to another window (like Windows® Explorer) on your screen (or to the *Desktop*).
 - To transfer a file from the computer to the connected TI device, drag the file from the computer window to the **DeviceExplorer** window. **You can drop files into different ‘parts’ of the device:** at the end of the ‘drop’ action, make sure the appropriate section of the device’s memory is chosen.
 - The TI-83 Plus has **RAM** (the device name at the top of the tree), or **Flash/Archive**. The TI-89 has **folders**: be sure to choose a folder.
 - Some files, like Apps, and Groups, can only be put into the **Flash/Archive** area of a TI-83 Plus. **TI Connect** ‘knows’ where to place these files. At the top of the Explorer tree is an item called “Screen Image.”
 - Dragging this image to your computer takes a screenshot and lets you save it as a “pic” file on your computer (*.??i). This file can be opened with the TI Connect **ScreenCapture** program or John Hanna’s 83IVIEW picture editing program. You can also double-click the “Screen Image” branch to get a screenshot.
 - To select a number of device files together, use Ctrl-clicks to select individual files or click, then Shift-click

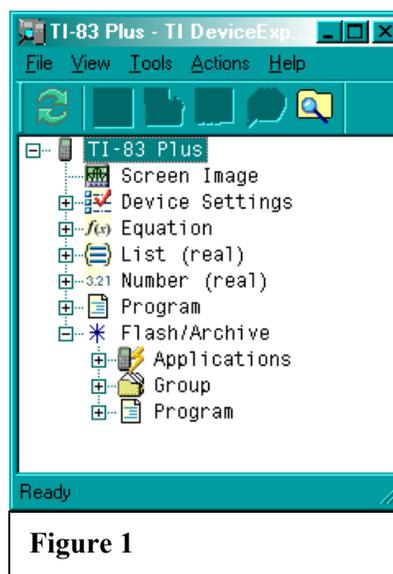


Figure 1

to select a continuous list of files in the *DeviceExplorer* window.

ScreenCapture

1. The *ScreenCapture* program takes a screen image of the connected TI device when it starts. You can take multiple screenshots. See Figure 1.
2. To take more screen images, prepare the device screen and then click the ‘camera’ button on the toolbar (or press Ctrl-G, or use Actions/Get Screen).
3. To use a picture in another application (like a word processor), make the picture the ‘active window’ by clicking on it, then use Edit/Copy (or press Ctrl-C, or click the “Copy” button on the toolbar), then switch to the other application, and use Edit/Paste (or Ctrl-V).
4. The individual pictures can be saved as photo (*.jpg) or bitmap (*.bmp) image files or as device picture files, which can be transferred to the device using *DeviceExplorer*.

Backup

1. Click the **Backup** button on the *TI Connect* Home screen to back up your device to your computer. It’s always a good idea to perform an occasional backup of your device files. **Backup does not back up Flash applications or Groups.** Backup *does* copy all individual files (programs, lists, etc.) regardless of their location in **RAM** or **ARCHIVE**.
2. *TI Connect* may display a “Detecting Device” message, then the “Save As” window.
3. Navigate to the location on your computer where you want to store the backup file.
4. Enter a backup file name.
5. Click **Save**. The files in the device that can be backed up are stored in a single group file on the computer.

Restore

1. To restore backed up files to your device:
 - On the TI Connect Home screen, click the Restore button.
 - *TI Connect* displays the “Open” window.
 - Navigate to the location on your computer where you

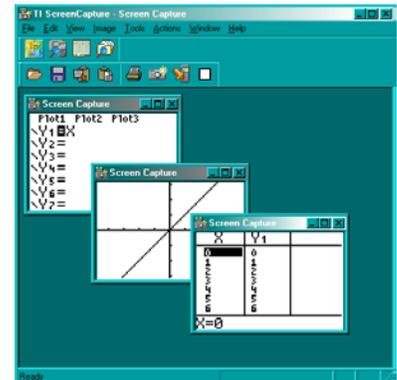


Figure 1

stored the backup (group) file.

- Click the backup file to select it.
- Click the **Open** button.

GroupExplorer

1. **GroupExplorer** is similar to Microsoft Windows® Explorer, and includes the ability to display the contents of TI “Group” files residing on your computer. It does not have all the functionality of Windows Explorer, however, as it only displays ‘files’ that are inside a device “group” file.
2. A Group file (*.??g) contains multiple device files, for example, lists, programs, matrices, pictures, or functions.
3. In **GroupExplorer**, group files appear as another level of ‘folder’ in the Explorer tree, and the contents of the group file appear as separate items underneath the group folder. Very cool.
4. Use **GroupExplorer** and **DeviceExplorer** together to:
 - Manage files inside a group file
 - Copy group files to and from the calculator
 - Add files from the calculator into the group file
 - Delete files from a group file
5. Some tips about GroupExplorer:
 - You *cannot* copy **Apps** using the **GroupExplorer** window.
 - You *cannot* put device Group files into a group file on the computer.
 - You *can* copy a computer group file back into a group file on the device, but you have to make sure you drop it onto the “Flash/Archive” branch of the tree in **DeviceExplorer**, not the RAM area. If you drop it into RAM, the contents of the group file will be extracted to RAM.
 - Sometimes, when copying a group file’s *contents* back to the handheld (by dropping it onto RAM), you will get an error message saying that the file cannot be transferred. This may happen if the file in the device is archived. Choose “Skip”.
 - If you drag a group of files or a TI-89 folder to

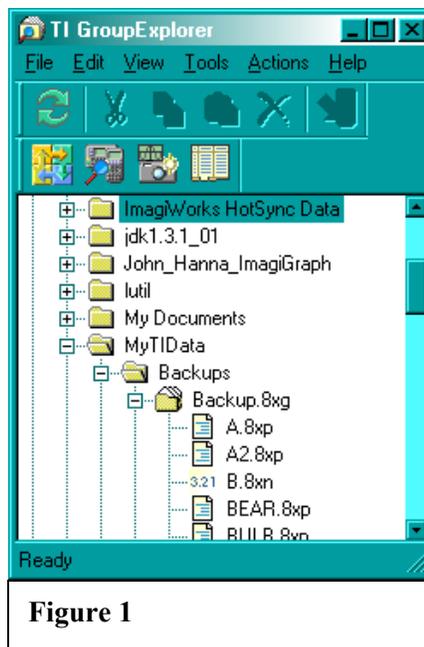


Figure 1

GroupExplorer, you will have an opportunity at the end of the transfer to create a group file, but not by dropping it onto an ordinary folder window!

DataEditor

1. **DataEditor** consists of three Editors: a **Number Editor**, a **List Editor**, and a **Matrix Editor**.
2. It supports ‘drag-n-drop’ from a computer or device file and supports importing of text data from other sources.

Operating System and Flash Apps Updates

1. **TI Connect** is configured by default to search the Internet for updates and upgrades to your device’s operating system.
2. To *disable* this feature:
 - Click the **TI Connect** Home screen’s **Options** button (or use any of its programs’ **Tools/Options** menu item).
 - Change the “Update device software from Web” option to “Do not automatically check for new software”.
3. When the search feature is enabled, **TI Connect** will check the connected TI device for any updates to the OS or the purchased applications.
4. If the device needs a new OS, an updates notification message will be displayed that will download and store the files on your computer or if preferred download and send the files directly to the device.

{the following instructions are available in the Help files of TI Connect}

To check for updated Flash stuff (OS or Apps)

1. On the **TI Connect** home screen, click “Updates”.
2. Select either or both “Check for a newer version of operating system” and “Check for new versions of my installed Flash applications” checkboxes.
3. Click Continue.
 - **TI Connect** displays the “Updates Status” window. It then establishes a connection to the TI Online Store and compares the material on your device with the

latest material available.

- If you have the latest versions, TI Connect displays the “Newest software installed” window indicating that an upgrade is not required.
- If a newer stuff is available, TI Connect displays the latest versions in the TI Connect “Updates” window.

To update your device’s Flash software (OS or Apps)

1. In the TI Connect “Updates” window, click the displayed item(s). To select multiple files, press **Ctrl** and click each upgrade you want.
 - If you want to download the software to the connected device, click “Download software to my device”. If you want to download the software to your computer, click “Download software to my computer at” and enter a download location or click “Browse” to select a download location. Select both options to download the software to both your computer and the connected device.
 - To download the software now, click “Continue”. To download the software later, click “Remind me later”. If you click “Continue”, TI Connect displays the Online Store Information window.
 - Follow the login and registration instructions (if necessary) provided by the TI Online Store registration process.
2. In the process of **upgrading** the Operating System, **TI Connect** will
 - Back up your files
 - Install the new OS
 - Restore your files
 - **DO NOT INTERRUPT THE UPGRADE PROCESS!**

Communication settings

1. **TI Connect** communicates with a handheld TI device using any of three cables:
 - The **Gray** serial cable has a 25-pin “serial” connector and may come with adapters for a 9-pin serial port and an Apple® Macintosh® serial port.

- The **Black** serial cable has a 9-pin connector for Windows only.
 - The **Silver** cable has a USB connector for both Windows and the Apple Macintosh.
2. **TI Connect** attempts to automatically detect the connected device. To configure the communication settings by hand:
 - Click the blue **Options** button on the **TI Connect** Home screen (or select Tools/Options from any **TI Connect** application's menu).
 - At the bottom of the options dialog box, click the "Communication Settings" button.
 - Select the device, cable type and communications port from the drop-down lists and click the "OK" button.
 3. Alternatively, you can let **TI Connect** determine your settings if there is a device attached to the computer. Just click the **Find** button on the Communication Settings dialog box.

USB cable warning!

1. If you attach the **Silver** USB cable to your Windows PC *without* having the appropriate device driver installed, the Windows® "Plug-N-Play®" installs the cable as an "Unknown Device".
2. Even if you later install the **TI Connect** software (which also installs the USB cable driver), the USB cable *still* will not work!
 - To fix this USB "problem" see the instructions in the **TI Connect** help system under the "Connecting the Cable" section.

The "Old" TI-GRAPH LINK™ Programs

1. The older **TI-GRAPH LINK** programs are still useful because they contain a **Program Editor**, which is not yet available in **TI Connect**. The **TI-GRAPH LINK** programs are not installed with **TI Connect**.
2. Links (buttons) to the old **TI Graph-Link** programs are available from the **TI Connect** home page. Click the green "**Graph-Links**" button. A page of **TI-GRAPH LINK** buttons is displayed. Clicking one of

them will cause **TI Connect** to attempt to locate the TI-GRAPH LINK™ program. If **TI Connect** cannot locate the program, you can browse for the file yourself by clicking the “Browse” button, or download it for free from the TI Online Store by clicking the “TI Online Store” button.

Utilities

1. Click the green “Utilities” button on the **TI Connect** Home screen to start other TI software installed on your computer or available on the TI Online Store.
2. If **TI Connect** cannot find an application you select, it displays a window where you can browse to locate it or check the TI Online Store to download it.
3. Current “Utilities” software consists of TI **StudyCards™ Creator** and **TI InterActive!™**.

Options

1. Click the **Options** button on the **TI Connect** home screen or select the *Tools/Options* menu item on any of the **TI Connect** programs.
2. Default Application:
 - Select an application to start when you click any **TI Connect** shortcut. Note that there are also shortcuts for each of the programs in **TI Connect** in your **Start/Programs** menu.
3. Default Directories:
 - You can tell **TI Connect** where you want your files stored on your computer by default.
 - The default locations are inside **C:\MyTIData**, a folder that gets created as part of the install process.
 - There are three user-selectable file locations, one for your data (individual or group files that come from your device), one for downloads from the Online Store, and one for backups.
 - On the **Options** dialog, use the browse button (labeled “...” to the right of each folder address) to select another ‘favorite location’ for these files.