

# TI-Innovator™ Sketch Update Detailed Directions

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## Overview

The sketch is the software on the TI-Innovator™ Hub that communicates with the graphing calculator, processes the commands and controls external components. Keeping your sketch up to date ensures that you have the latest capabilities and support for your TI-Innovator™ Hub.

There are two primary steps to go through in updating the TI-Innovator™ Hub. If you already know that the TI-Innovator™ Hub needs updating and how to connect it to the computer, you can jump to Part B.

### Part A:

**Get the TI-Innovator™ Hub ready to update**

Step 1: [Check version number of TI-Innovator™ Hub](#)

Step 2: [Connect your TI-Innovator Hub™ to your computer](#)

#### What you need:

- USB Unit-to-Unit (Mini-A to Mini-B) cable

### Part B:

**Install Tools and Update the TI-Innovator™ Hub**

Step 1: [Install browser extension](#)

Step 2: [Install TI Cloud Agent application](#)

Step 3: [Update sketch](#)




#### What you need:

- USB Standard A to Micro cable
- Internet-connected Windows® or Mac® computer meeting the [system requirements](#) for updating the sketch.

## Part A: Get the TI-Innovator™ Hub ready to update

### Step 1: Check version number of TI-Innovator™ Hub

Connect graphing calculator to the DATA USB port of the TI-Innovator™ Hub.

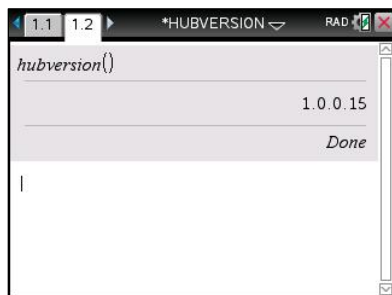
<p>A. Identify the "B" connector on the USB Unit-to-Unit (Mini-A to Mini-B) cable. Each end of this cable is embossed with a letter</p> 	<p>B. Insert the Mini-B connector into the PWR port at the bottom of the TI-Innovator™ Hub</p> 	<p>C. Insert the free end of the cable (the "A" connector) into the USB port on the graphing calculator</p> 
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D. Run program to query the version number of the sketch from the TI-Innovator™ Hub

#### TI-Nspire™ CX Program:

Create a program to query the sketch version. See [Appendix A](#) for details on how to create program or download the HubVersion.tns file that has the program pre-created to run from your TI-Nspire™ CX technology

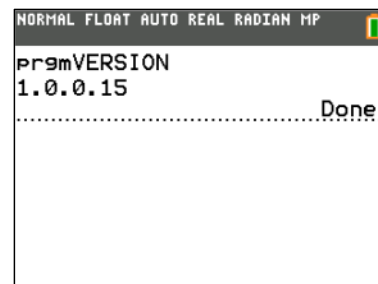
Execute the Program to view version number



#### TI-84 Plus CE Program:

Create a program to query the sketch version. See [Appendix B](#) for details on how to create program or download the VERSION.8xp file that has the program pre-created to run from your TI-84 Plus CE graphing calculator


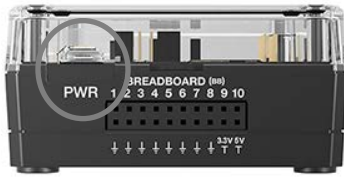

Execute the Program to view version number



## Part A: Get the TI-Innovator™ Hub ready to update

### Step 2: Connect your TI-Innovator™ Hub

Connect your computer to the Power (PWR) port on your TI-Innovator™ Hub using the micro-USB cable

<p>A. Identify the Micro connector on the USB Standard A to Micro cable</p> 	<p>B. Insert the Micro connector into the PWR port at the top of the TI-Innovator™ Hub.</p> 	<p>C. Insert the free end of the cable (the "A" connector) into the USB port on the computer</p> 
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Two green LEDs on the TI-Innovator™ Hub show that the TI-Innovator™ Hub is receiving power and is connected to the correct USB port for updating the sketch

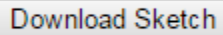
You are now ready for Part B.

## Part B: Install Tools and Update the TI-Innovator™ Hub

### Step 1: Install browser extension

Installing the browser extension steps will vary slightly based on the web browser you are using.

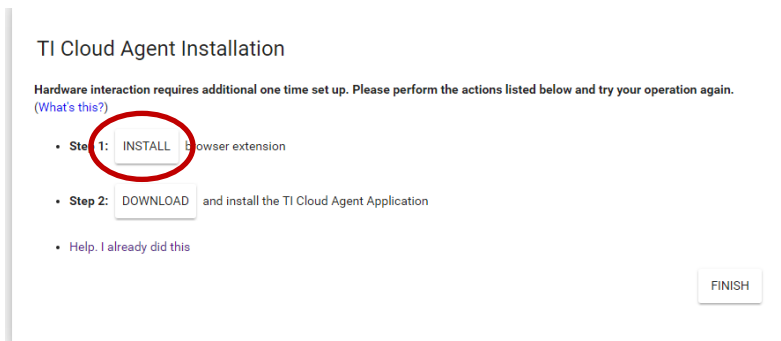
- A. From sketch update page select the button to Download Sketch.

A rectangular button with a light gray border and the text "Download Sketch" in a sans-serif font.

The TI Cloud Agent Installation window will open.

Note: Steps 1 and 2 are only required the first time you update your TI-Innovator™ Sketch. If these steps have been previously completed on your computer when you select the “Download Sketch” button you will be jumped directly to [Step 3: Update Sketch](#).

- B. Select to install the browser extension by selecting the “Install” button

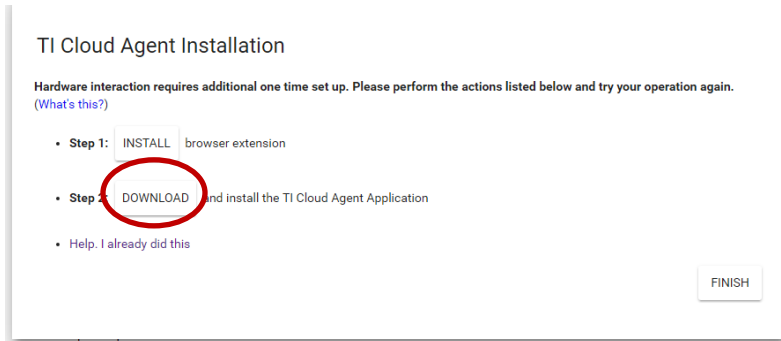


Follow the prompts for installing the browser extension. The installation of the browser extension will differ by type of browser. For specific direction by browser type, see [Appendix C](#).

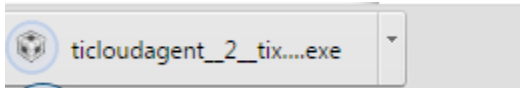
## Part B: Install Tools and Update the TI-Innovator™ Hub

### Step 2: Install TI Cloud Agent

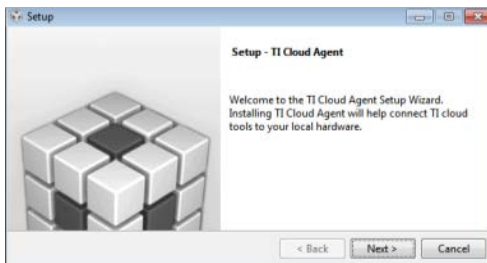
- A. Select to download the TI Cloud Agent application by selecting the “Download” button.



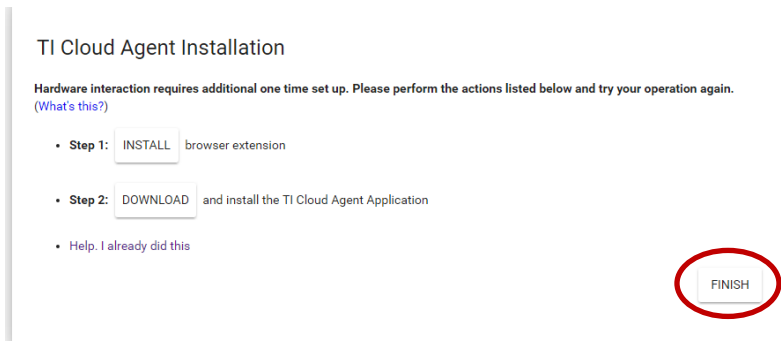
- B. The .exe file will download. Select to run the ticloudagent\_2\_tixds110.exe



- C. The installer dialog will open. Follow prompts to install on the computer.



- D. After installer is complete, return to the web page. Select Finish.



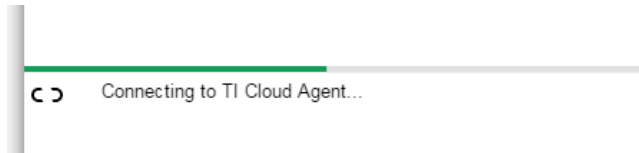
## Part B: Install Tools and Update the TI-Innovator™ Hub

### Step 3: Update TI-Innovator™ sketch





- A. From the sketch update page select the button to Download Sketch.

Download Sketch

- B. During the sketch update, the web page will first connect to the TI Cloud Agent. This status is shown at the bottom of the web page.



- C. The status of the update is reflected in several dialogs. In addition, the TI-Innovator™ Hub has a red LED that blinks to indicate that the sketch software is being received.

Web Page Prompts	TI-Innovator™ Hub
<div><p>1.  Downloading program... CANCEL</p><p>2.  Downloading program into MSP432P401R... CANCEL</p><p>3.  Flash Successful! OK</p></div>	

Once you see the “Flash Successful!” dialog, you are done!

## Troubleshooting

### **Why do I get an error when I try to update the TI-Innovator™ Sketch?**

- For sketch updating, make sure you are using the USB Standard A to Micro cable, not the USB Standard A to Mini-B cable. Connect the micro end of the cable to the PWR connector at the top of the Hub.
- Make sure you are using one of the Web browsers required for updating.

### **My TI-Innovator™ Hub is showing it gets power but will not talk to the update tool.**

- This could be a cable issue. Some USB cables are only for power, not for data. Make sure you use the cable that comes with the TI-Innovator™ Hub.
- Make sure you are using the micro-USB port (marked PWR) on the TI-Innovator™ Hub.

### **Do I need admin privileges on my computer to upgrade the sketch?**

Yes. The initial use of the process to upgrade the sketch requires installation of hardware-specific drivers on your computer. This step requires admin privileges on the computer. Subsequent use of the upgrade mechanism does not require admin privileges.

### **Do we require an extension to be installed?**

Yes. The process installs a browser extension called the TI Cloud Agent Bridge. The extension is needed to enable the browser to communicate with the main application.



## Appendices

### Appendix A – Check TI-Innovator™ Sketch version using TI-Nspire™ Technology

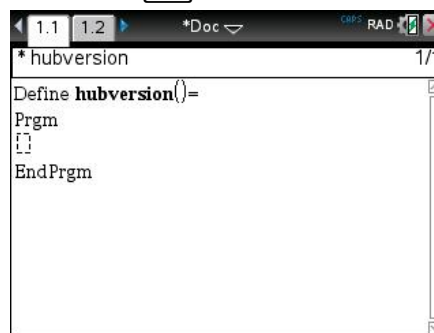
1. Open a New Document
2. Add a Calculator app
3. In the Calculator app, start a new program by selecting: **[menu]** > Functions & Programs > Program Editor> New...
4. In the Name: field, type the name of your program, hubversion, and select **[enter]**.  
(Note: Leave the Type as Program and the Library Access as None.)



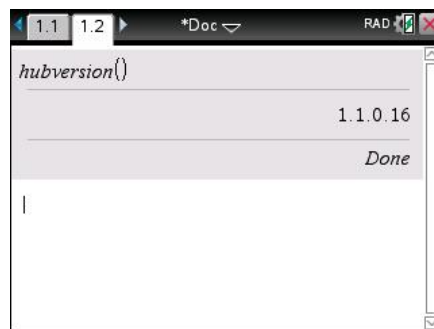
5. Enter the Send Version command
  - a. Press down arrow to move cursor to the line below Prgm
  - b. Press **[menu]** > Hub > Manage
  - c. Select **Send "VERSION"** to paste into the program the commands to query the version of the TI-Innovator™ Sketch



6. Store the program to memory
  - a. To store the program select **[menu]** > Check Syntax & Store> Check Syntax & Store
7. Run the Program
  - a. Add a Calculator app.
  - b. Press **[var]** and select hubversion



- c. Press **[enter]**

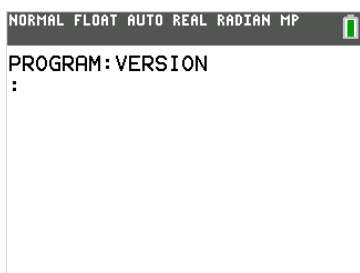


## Appendix B - Check TI-Innovator™ Sketch version using TI-84 Plus CE graphing calculator

1. Open a new program
  - a. Press `[prgm]`
  - b. Use right arrow to select highlight **NEW**
  - c. Press `[enter]`



2. Type in program name VERSION and press `[enter]`



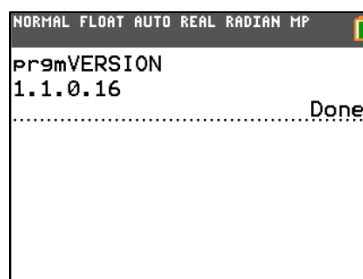
3. Enter in command to query the version
  - a. Press `[prgm]`
  - b. Use right arrow to select **HUB**
  - c. Scroll down to select **Manage** and press `[enter]`
  - d. Scroll down to select **VERSION"):Get(Str0):Disp** and press `[enter]`



4. Press `[2nd][quit]` to close the program editing screen
5. Execute Program VERSION
  - a. Press `[prgm]`
  - b. Select the program VERSION and press `[enter]`
  - c. prgmVERSION will be pasted onto the screen.



- d. Press `[enter]` to execute



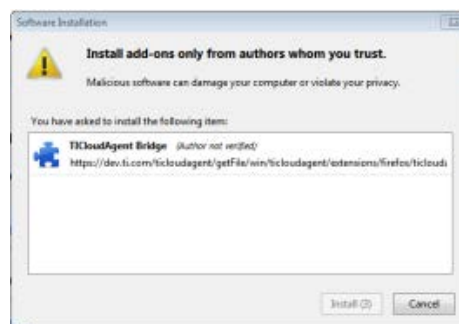
## Appendix C – Installing browser extension: Specific browser directions

The specific steps to install the Browser Extension will vary depending on the browser that is being used. Check the [system requirements](#) to ensure you are using a supported browser.

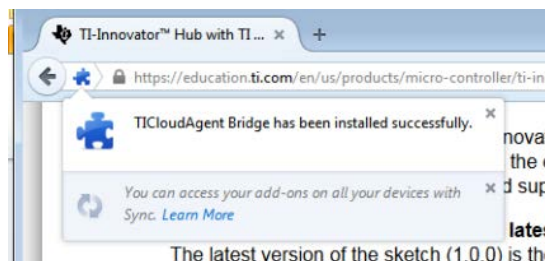
Specific directions for Firefox® and Chrome™ are below.

### Firefox®:

- A. A dialog box to install the add-on will open. Select to install.

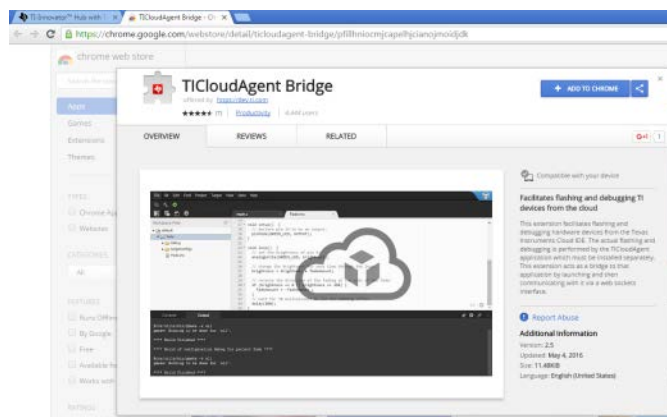


- B. Once installation is complete, a pop-up in the upper left-hand corner will appear



### Chrome™:

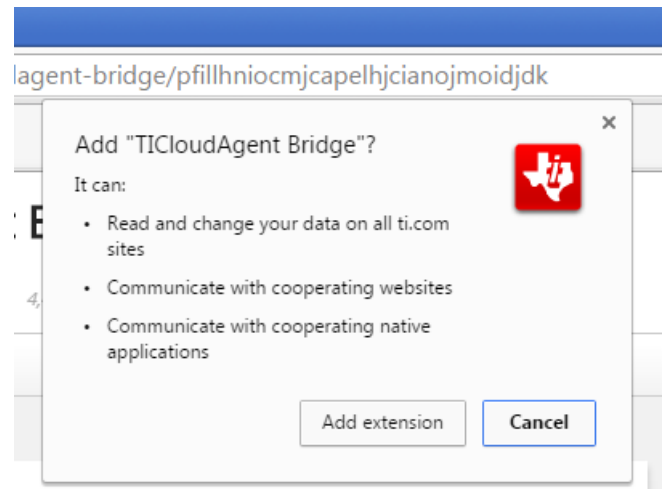
- A. A new tab will open in the web browser showing the TICloudAgent Bridge



- B. Select the "+ Add to Chrome" button



- C. A pop-up dialog will appear. Select to “Add extension”



- D. Button in upper right-hand corner will indicate that the extension has been added to Chrome™. Continue the process by going back to the other tab “TI-Innovator™ Hub”.

