



Biblical Hebrew (SIL) keyboard manual

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Introduction

This manual and keyboard charts are designed to help you make use of the SIL International Biblical Hebrew keyboard driver. This keyboard driver has been developed to facilitate typing of Biblical texts including *teamin* (accents/cantillation marks) and *nikud* (vowel points). The driver works with the Windows 2000 and Windows XP operating systems, and is being made available for download from the Society of Biblical Literature website (www.sbl-site.org) as a service to scholars using the new SBL Hebrew font. The keyboard layout was designed by SIL International and built by John Hudson, designer of the SBL Hebrew type.

Installation

The keyboard driver can only be installed on Windows 2000 and Windows XP. Because the keyboard driver, like the SBL Hebrew font, relies on Unicode character encoding, it cannot be installed on older operating systems and will not work with non-Unicode applications that rely on 8-bit character sets.

The keyboard deliverable ships with an install file, `BHebSIL.msi`, and the driver itself, a dynamically linked library, `BHebSIL.dll`. These are delivered as a self-extracting zipped archive: `BHebSIL.exe`. Unzip the install file and driver by double-clicking on the self-extracting archive file. The files will be unzipped to a directory structure in the same location as the archive:

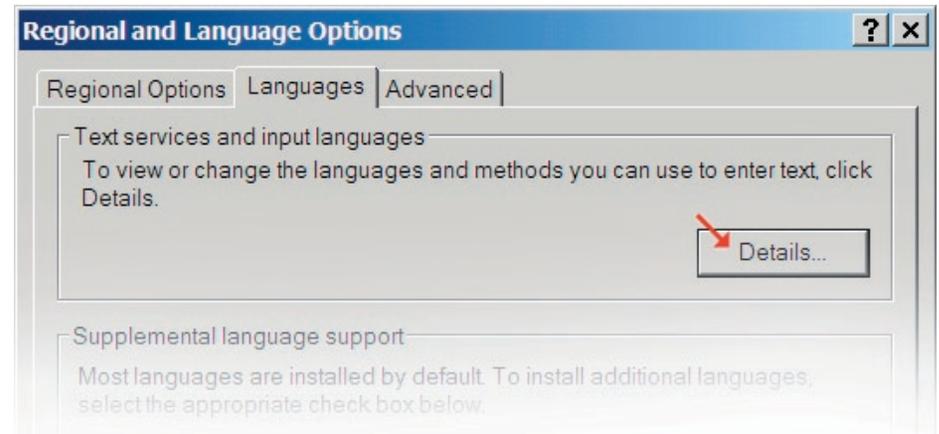
```
/BHebSIL.exe
/i386
  BHebSIL.dll
  BHebSIL.msi
```

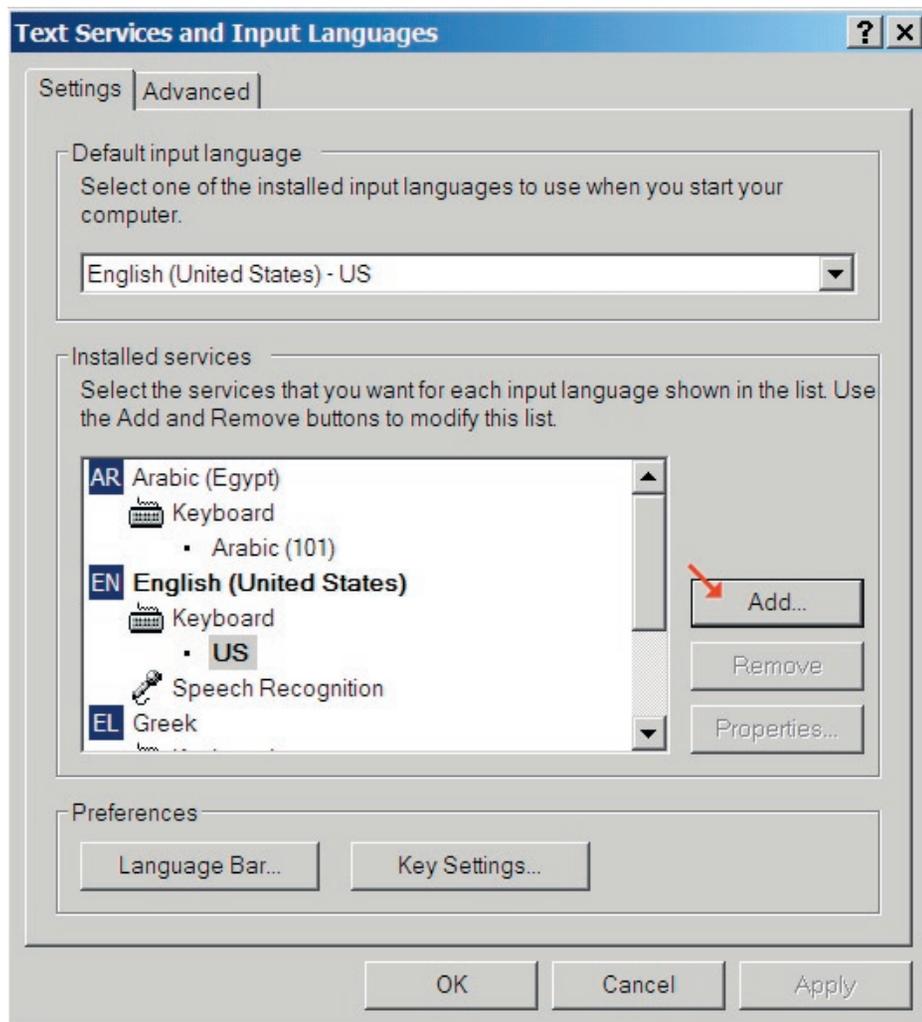
Installing the keyboard on your system is a two-stage process: first you need to register the driver on your system, and second you need to activate the keyboard in your text services settings.

Note that you do not need to do anything with the driver file itself. To register the driver on your system, double-click on the `BHebSIL.msi` install file. Windows will install the driver and register it on your system (this may take up to a minute depending on the speed of your computer). Once the driver is installed and registered Windows will report that the keyboard has been successfully installed.

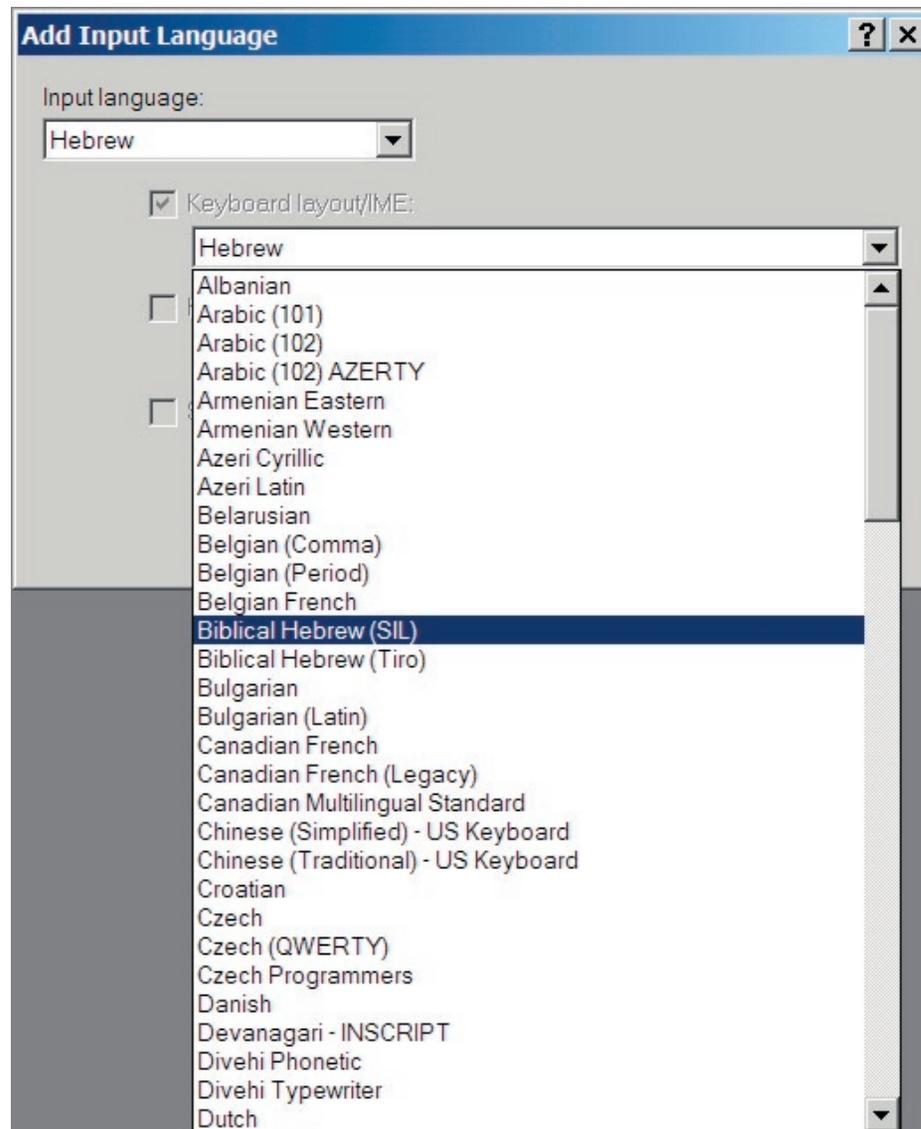
Do not delete the .msi install file. If you ever need to remove the keyboard from your system you will need this file. For complete uninstallation instructions, see page 11 of this manual.

Now you need to set up your text services to use the keyboard. Go to the Control Panel via Settings in your Start Menu and select 'Regional and Language Options'. [Note that these instructions record the install process for Windows XP; the names of some settings windows may vary slightly in Windows 2000, but the process is the same.] This will open a new window with three tabbed panels. Select the 'Languages' tab, and then click the 'Details...' button. This will open the 'Text Services and Input Languages' window.



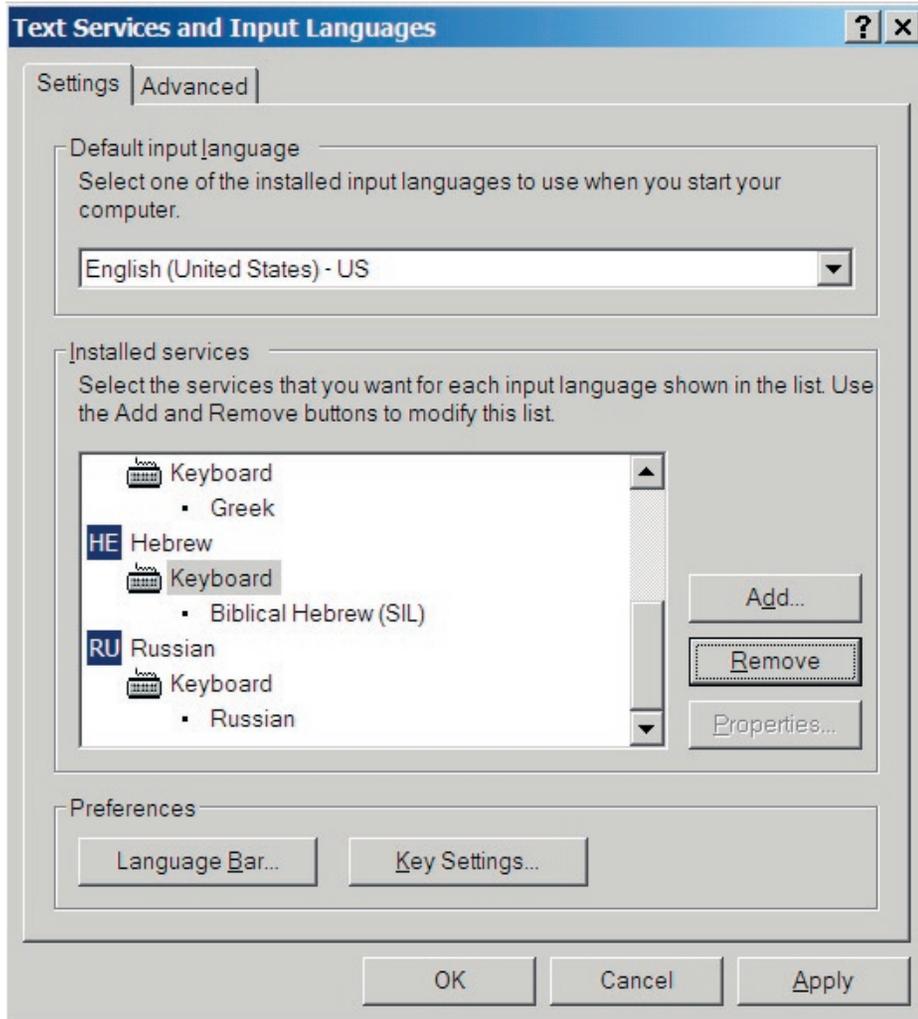


This window displays the languages and keyboards that are installed on your system. The window contents will depend on which languages and keyboards you currently have installed, and may not look exactly like the illustration above. To add a new keyboard, click the 'Add...' button to open the 'Add Input Language' window shown opposite. Select 'Hebrew' in the 'Input Language' field, and then select the 'Biblical Hebrew (SIL)' keyboard from the dropdown list of 'Keyboard layout/IME' options.



Note that when you first open the dropdown list the 'Hebrew' keyboard will automatically be selected. This is the modern Israeli keyboard, *not* the Biblical Hebrew keyboard. You will need to scroll up to find the correct keyboard as shown above. Once you have selected the correct

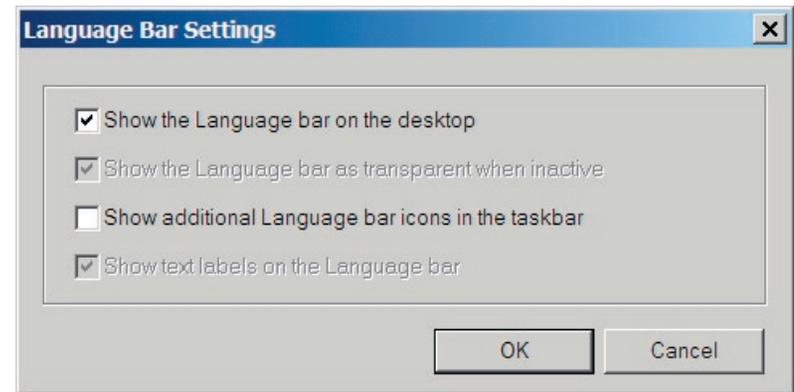
keyboard from the list you can close the 'Add Input Language' window. If you have successfully installed the keyboard in your text services, the 'Text Services and Input Languages' window will now look like this:



Note that it is possible to have more than one keyboard installed for a single language. For instance, you might have both the Biblical Hebrew and modern Israeli keyboard installed for Hebrew. In this case the 'Text

Services and Input Languages' window will list all keyboards associated with the Hebrew language.

It is strongly recommended that you set preferences to display the language bar on your desktop. This will place a small language/keyboard icon in the taskbar, which you can use to quickly and easily switch between different keyboard drivers. To set this preference, click the 'Language Bar...' button in the 'Text Services and Input Languages' window to open the preferences dialogue, which should be set to look like this:



You can now close both the 'Language Bar Settings' dialogue, and the 'Text Services and Input Languages' and 'Regional and Language Options' windows. Your Biblical Hebrew keyboard is ready to use.

Using the language bar

The language bar displays, in minimised mode, as a two-letter language icon in your taskbar. If your default input language is English, you will see a small blue square with the letters EN: **EN**. If you left-click once on this icon a list of all text services supported languages will pop up. To use your Biblical Hebrew keyboard, select the Hebrew language (HE) from the pop-up list. [Note that this keyboard selection will only apply to the application you are using when you switch to the Hebrew keyboard; other applications will continue to use your default keyboard or whichever one you have been using in them. If you want to use the He-

brew keyboard in more than one application, you will need to activate it for each application.] If the SIL Biblical Hebrew keyboard is the only keyboard you have associated with the Hebrew language, you are now ready to start typing Biblical Hebrew.

If you have more than one keyboard associated with the Hebrew language, the language bar should display a small keyboard icon next to the HE language icon when Hebrew is selected:  If you hover your mouse pointer over the keyboard icon, it will display the name of the keyboard currently selected. If it is not the keyboard you want, click on the keyboard icon and select the preferred keyboard from the pop-up list. [Note that due to a display problem the keyboard icon might not appear immediately when you select the Hebrew language icon. To correct this, right-click on the Hebrew language icon and select 'Restore the Language Bar' from the pop-up menu. This will display the full language bar on your desktop. Click the small minimise button in the top right of the language bar to return it to the taskbar: the keyboard icon should now be displayed next to the Hebrew language icon.]

Known input issues

The SIL Biblical Hebrew keyboard has been tested with a variety of applications on Windows XP. The keyboard functions correctly in all test situations, inputting Unicode character values as specified in the charts on the following pages. However, a number of bugs have been identified in test applications. Most seriously, some shift-state keys on the SIL Biblical Hebrew keyboard trigger an unwanted font change that breaks correct text rendering in Microsoft Office Xp—including Word 2002—and the current version Microsoft Wordpad. This is due to a bug in these applications, and reveals itself either by displaying empty boxes or by misplacing combining marks after consonants. The problem appears only affects input in applications that use RichEdit formatted text. Plain text applications such as Notepad and other text editors do not have this problem, so it is possible to work around the bug by typing text in a plain text editor and then pasting it into Word 2002, Wordpad

or another application. Note that this bug has been fixed in Word 2003.

Using the keyboard

- **Normal state.** The SIL Biblical Hebrew keyboard tries as far as possible to match the positioning of Hebrew letters to English phonetic cognates, *e.g.* ק=Q, י=Y. This intuitive layout is only partial, due to dissimilarity between Hebrew and English graphemes, and some assignments are arbitrary, *e.g.* פ=F. Note that vocalisation and cantillation marks are distributed across all four states of this keyboard, and that some characters can be input in more than one way.
- **Shift state.** This state is of the SIL keyboard contains final forms of *kaf, mem, etc.*
- **AltGr state.** Some keyboard hardware makes a distinction between the left and right Alt keys, identifying the latter as AltGr. Even if your keyboard does not have the right Alt key labelled as AltGr, some applications will treat it as distinct. This means that, alone and in combination with the Shift key, two additional states can be utilised for text input. *If you find that holding down the right Alt key does not provide access to this state, you can press a combination of Ctrl+Alt instead.*
- **Shift+AltGr state.** See note of AltGr state. *If you find that holding down the right Alt plus the Shift key does not provide access to this state, you can press a combination of Shift+Ctrl+Alt instead.*

The keyboard charts

The charts on the following four pages show the layout of the different states of the SIL Biblical Hebrew keyboard. Each key is represented by a diagram containing an image of the character, a key identifier, a mnemonic name and the character's Unicode value. There are three types of keys:



Base character key

The large black glyph shows the character. The red letter or other character in the top left corner indicates the English keyboard identifier (e.g. the *alef* is located on the T key). The grey text below the glyph names the character and gives its Unicode value.



Combining character key

The black glyph shows the default positioning of the mark on a consonant, represented by a grey dotted circle. The other information is the same as on the base character key.



Control character key

Control characters are not normally displayed in text, and have no advance width, so they are represented in the key charts by a grey identifier in a dotted square. The other information is the same as on the base character key.

Note that the names on the key diagrams are meant only as an aid to identification. In some cases they have been abbreviated to fit on the key diagram, and not all names correspond directly to Unicode Standard character names or any other nomenclature. The Hebrew cantillation marks have different names in different traditions (the Sephardic and Ashkenazic traditions even use the same names for different marks) so users should be guided by the appearance of the glyph and the Unicode value rather than the name.

Biblical Hebrew (SIL) – US Standard layout

State : Normal

€ euro* 20AC	1 1 one 0031	2 2 two 0032	3 3 three 0033	4 4 four 0034	5 5 five 0035	6 6 six 0036	7 7 seven 0037	8 8 eight 0038	9 9 nine 0039	0 0 zero 0030	- - maqaf 05BE	= ⋯ dagesh 05BC	Backspace
Tab	Q ק qof 05E7	W ו vav 05D5	E ⋯ segol 05B6	R ר resh 05E8	T ת tav 05EA	Y י yod 05D9	U ⋯ qubuts 05BB	I ⋯ hiriq 05B4	O ⋯ holam 05B9	P פ pe 05E4	[[bracket*† 005D]] bracket*† 005B	\ \ paseq 05C0
Caps Lock	A ⋯ patah 05B7	S ס samekh 05E1	D ד dalet 05D3	F ש sin (dot) 05E9+05C2	G ג gimel 05D2	H ה he 05D4	J ש shin (dot) 05E9+05C1	K כ kaf 05DB	L ל lamed 05DC	; ⋯ sheva 05B0	' , right quote* 2019	Enter	
Shift	Z ז zayin 05D6	X ח het 05D7	C צ tsadi 05E6	V ט tet 05D8	B ב bet 05D1	N נ nun 05E0	M מ mem 05DE	, , comma 002C	. . period 002E	/ / slash 002F	Shift		
Ctrl	Alt	Space word space 0020						Alt (AltGr)	Ctrl				

Most letter positions are based on phonetic similarity to English keyboard characters, e.g. ק=Q, י=Y. Final forms are located in the Shift state.

* Character not included in first release of SBL Hebrew font.

† Mirrored character: some applications may reverse display, e.g.)→(

Biblical Hebrew (SIL) – US Standard layout

State: ALTGR (ALT+CTRL)

˘ \$ dollar 0024	1 ◌̇ meteg 05BD	2	3 ◌̇ tipeha 0596	4 ◌̇ merkha 05A5	5 ◌̇ mer. kefula 05A6	6 ◌̇ dehi 05AD	7 ◌̇ munah 05A3	8 ◌̇ tevir 059B	9 ◌̇ darga 05A7	0 ◌̇ yer. benyomo 05AA	- — em dash* 2014	= ◌̇ etnahta 0591	Backspace	
Tab	Q	W	E	R	T	Y	U	I	O	P	[]	◌̇ < yetiv 059A	◌̇ < mahapakh 05A4
Caps Lock	A	S	D	F	G	H	J	K	L	;	'	◌̇ ◊ punctum 0323	Enter	
Shift	Z	X	C	V	B	N	M [ZWNJ] zero width non joiner 200C	, ◀◀ guillemets*† 00AB	. ▶▶ guillemets*† 00BB	/ ' geresh p. 05F3	Shift			
Ctrl		Alt	Space thin space 2009					Alt (AltGr)		Ctrl				

* Character not included in first release of SBL Hebrew font.

† Mirrored character: some applications may reverse display, e.g.)→(

Biblical Hebrew (SIL) – US Standard layout

State : ALTGR+SHIFT (ALT+CTRL+SHIFT)

	1	2  zinor 05AE	3  pashta 0599	4  tel. gedola 05A0	5  tel. qetana 05A9	6	7  pazer 05A1	8  zaq. gadol 0595	9  shalsholet 0593	0  masora c. 05AF	-  rafe 05BF	=  mark base 25CC	Backspace	
Tab	Q	W	E  hat. segol 05B1	R	T	Y	U	I	O  hat. qamats 05B3	P  c. grapheme joiner 034F	[ zaq. qatan 0594]	^  segolta 0592	~  ole 05AB
Caps Lock	A  hat. patah 05B2	S	D	F	G	H	J	K	L	;	'  sof pasuq 05C3	Enter		
Shift	Z	X	C	V	B	N	M  zero width joiner 200D	,	masora dot 0307	.	thousands 0308	/	Shift	
Ctrl		Alt	Space no-break space 00A0									Alt (AltGr)		Ctrl

* Character not included in first release of SBL Hebrew font.

† Mirrored character: some applications may reverse display, e.g.)→(

Uninstalling the keyboard

If you want to completely remove the SIL Biblical Hebrew keyboard from your system, you must reverse the two stages of the installation process. Begin by opening the 'Text Services and Input Languages' window as explained on pages 2–3. Select the 'Biblical Hebrew (SIL)' keyboard from the list of installed services, and then click the 'Remove' button. Close the 'Text Services and Input Languages' window. Now locate the same `BHebSIL.msi` file that you used to install the keyboard driver on your system. *As noted on page 2, it is important that you not delete this file after installation.* Double-click on the `BHebSIL.msi` file; you will be offered the option to remove or repair the keyboard. Ensure that the remove option is checked, and click okay. Windows will notify you when the keyboard has been successfully removed. Note that you *must* remove the keyboard from installed services before attempting to uninstall the driver using the .msi file. If you have not done this first step, the second will fail and the keyboard will not be removed.

If you are updating the keyboard with a newer version, you must completely remove the old driver from your system, using its own .msi install file, before attempting to install the new keyboard.

If you have accidentally deleted the .msi install file, and need to remove the keyboard from your system, contact the distributor of the keyboard or revisit the download site and obtain a copy of the install file.