[W8] Configuring Intel Windows 8 Hardware

How to configure a Windows 8+ computer to enable the use of the e-Exam System USB stick. Do this well before the exam!

Before you begin

- These instructions apply to computers with Windows 8+ pre-installed that have an 'Intel' processor and a USB port.
- If you performed an upgraded to Win 8 from Windows 7 these procedures are probably unnecessary, so try guide 'Wa' or 'Wm' first.
- Be sure to write down menu, item and setting before making a change in BIOS. This will allow you to easily reverse things.
- You need to know the 'BIOS set-up key' for your computer. See the list of these in guide 'Wk' before starting at Step 1 below.

Why? Laptops sold with Windows 8+ pre-installed will prevent you from booting to the e-Exam USB stick via the one time boot menu or via changed boot priority due to 'secure boot' settings. This may also apply if you installed Windows 8 yourself using UEFI.

You need to disable 'secure boot'. You may also need to revert to 'Legacy BIOS' mode (and perhaps unlock the boot menu or enable external devices) in order to enable the booting of alternative operating systems (the e-Exam System is Ubuntu).

1) Boot into Windows 8

Now to gain access to the UEFI/BIOS settings.

Option A - At a 'Power' button (found in the Charms bar > Settings or login screen bottom right):

 Hold down a 'Shift' key while clicking 'Restart' [go to step 2]

Option B - Inside Windows 8 tiles (Metro):

- Go to Charms (Win+C)
- Select 'Settings' (gear icon)
- Select 'Change PC settings', next,
 - If in Win 8.0: Select 'Update and recovery', then 'Recovery'. ... or
 - If in Win 8.1: Select 'General'.
- Then, Select 'Advanced startup',
- Select 'Restart now' [go to step 2]

Option C - Command line:

• Shutdown.exe /r /o [go to step 2] 🔻

2) At the Boot 'Choose an option' screen:

- Select 'Troubleshoot' then,
- Select 'Advanced Options' then,
- Select 'UEFI Firmware Settings' (or 'Start-up Settings' if UEFI isn't present) then,
- Click 'Restart'.

3) The computer should now restart. Depending upon the manufacturer it will do one of:

- If 'UEFI Firmware Settings' was available, then the computer may automatically boot directly to the UEFI firmware settings screen. [go to step 4]
- Or you may be presented with a choice to enter the BIOS / UEFI set up area – if so choose it.[go to step 4]
- Otherwise, the computer will restart somewhat normally - you will need to press the 'BIOS set-up key' early in this process (tap repeatedly if you are unsure of the timing). The specific key varies by manufacturer (see list in guide 'Wk'). A message such as "Press F2 for setup" may be displayed briefly after the power is cycles on. [go to step 4]

Having trouble? Try a web search for the user manual for your computer make and model. Search for your computer brand / model along with key words such as 'boot menu', 'bios set up', 'UEFI set up', 'boot priority'.

4) Once inside the BIOS/ UEFI settings area look for menu items such as 'Boot', 'UEFI', 'Advanced', 'Security', 'Authentication'. Menus will vary between makes. *Remember to write down each affected setting and original value before making changes (or take a photo of the screen!)*. First:

- a. Disable 'secure boot' (or 'security check at boot') #.
- b. Change the boot priority[^] to place the USB device first (See guide 'Wa' for more help on this item).

Now tryout the settings by going to step 5 [go to step 5]

4.1) One or more of the following BIOS/UEFI settings may also be required:

- Enable 'external' boot devices i.e. USBs.
- Enable the 'boot menu' (one time boot key).
- Enable/switch to 'legacy boot' or disable 'UEFI boot'* or set 'launch CSM' to enabled.

If you find options greyed out (unable to be changed), you may need to turn off a security setting or 'allow changes' or use a BIOS/UEFI administrator password.

5) Save the updated settings and Exit the BIOS/UEFI.

You should now be able to boot using the e-Exam USB:

• Insert the e-Exam USB, then turn on the power[^]. If the e-Exam System fails start see **4.1** above and the notes below.

Notes:

^ Some computers will still require use of the 'one time boot' key -See guide 'Wm'.

* *Be sure to check you can still boot to windows* - if not try switching back to UEFI boot but keep secure boot disabled.

A possible side effect of disabling secure boot on non-updated Windows 8.1 installs is that it may cause a watermark to appear in bottom right corner of the screen stating "SecureBoot isn't configured correctly". Microsoft released a hotfix on 17 Oct 2013 to remove the notice, see http://support.microsoft.com/kb/2902864. In any case this will not affect the normal operation of Windows 8.1.

