Select Legacy (BIOS) or UEFI Mode for EUC Lite Touch Imaging

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Legacy (BIOS) vs UEFI

Why would you choose one mode vs the other? There are several advantages to using the more modern UEFI boot mode:

Some Benefits:

- Support for booting from partitions larger than 2.2TB
- Support for more than four partitions
- Security: Secure boot only signed OS, protect against root kits/boot kits
- Windows 10 Security Features: Device Guard and Credential Guard
- Faster startup/shutdown/sleep/resume times
- Imaging with UEFI results in a GPT partition scheme on the disk which has better protection against corruption

Some models such as the Microsoft Surface series only support UEFI mode.

EUC Lite Touch

How does this affect EUC Lite Touch imaging? Selecting the boot mode in the computer setup menu can determine the type of partition scheme used when formatting the drive. Booting in Legacy (BIOS) mode while imaging creates an MBR partition scheme while booting in UEFI mode creates a GPT partition scheme.

Partition Scheme Mismatch

One of the issues observed on older computers is that often they support booting in UEFI mode but not UEFI Network (PXE) booting. This issue arises when UEFI booting is enabled in the system setup. When selecting a boot option using the one-time boot menu, the option for booting from the NIC (Network - PXE) is available under the Legacy (BIOS) boot section but **not** UEFI. Selecting NIC from Legacy (BIOS) will cause the internal disk to be formatted with an MBR (BIOS) partition map. When the computer reboots, it'll try to boot from the internal disk in UEFI mode which does not recognize the MBR partition map. This will result in the error `Bootable disk not found` or similar. You'll need to switch from UEFI mode in the setup back to BIOS mode and then re-image the computer to resolve the issue.

Example of legacy computers that have this issue:

- Latitude E6x20 and older
- Optiplex 7010 and older

Conversely, if the computer is set to boot in Legacy and then UEFI Network (PXE) is selected from the one-time boot menu during imaging, the disk will be formatted with GPT partition map and the computer will be expecting an MBR partition map. This will also cause the error `Bootable disk not found`.

To summarize, the boot mode in the BIOS setup should match the mode selected at the one-time boot menu during imaging.

Enabling UEFI Mode for Dells

- Press **F2** to enter computer setup. Under **General > Boot Sequence** choose to use UEFI instead of Legacy
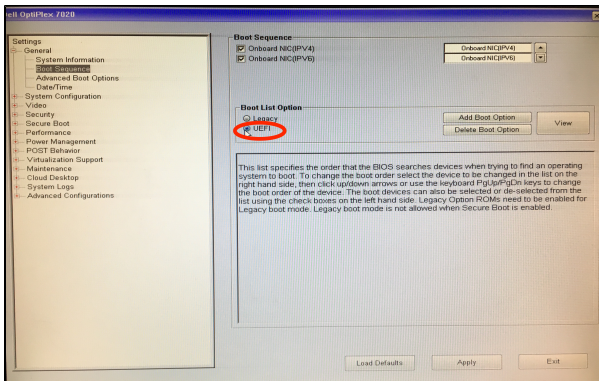
- Your OS choice will determine whether or not to leave **Enable Legacy Option ROMs** checked. For Windows 10 it is **HIGHLY recommended** to disable Legacy Option ROMs so that there is no confusion when selecting network boot from the F12 menu.
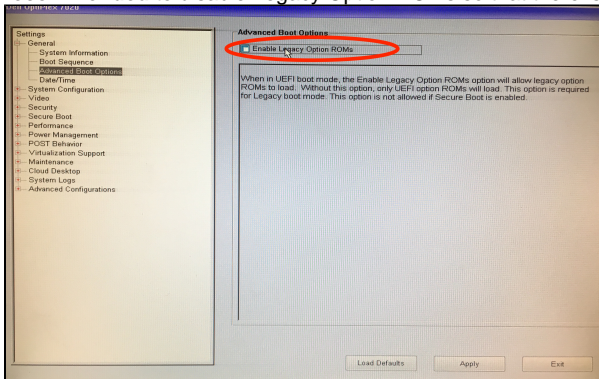
** Windows 7 (with Secure Boot disabled): Leave the option checked (if you do not enable this you will get a `\EFI\Microsoft\Boot\BCD` error during imaging)

   - **Windows 8.1 or Windows 10 (with Secure Boot)**: Leave this option unchecked (legacy option ROMs must be disabled to use Secure Boot)

- Under **System Configuration > Integrated NIC** select **Enable UEFI Network Stack** (Enabled w/PXE)
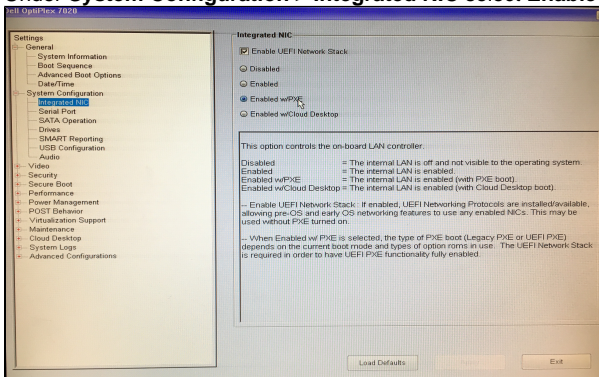
	Windows 7 Legacy (BIOS)	Windows 7 UEFI	Windows 8.1 or 10 (w Secure Boot)
Legacy or UEFI Boot Mode	Legacy	UEFI	UEFI
Enable Legacy Option ROMs	✅	✅	❌
Secure Boot	❌	❌	✅