Windows 7 / Vista / 2008 x64 Edition Support

Fax Voip uses a test-signed kernel-mode driver for *Virtual COM Ports* that will not load by default on 64 bit Windows 7, Windows Vista and Windows Server 2008. When you install Fax Voip on 64 bit operating systems Windows 7, Windows Vista or Windows Server 2008 please pay special attention to the selection of *Virtual COM Ports Driver* that will be used with Fax Voip modem lines.

Possible options are:

1. To operate with *Fax Voip Virtual COM Ports* and to use *DISABLE_INTEGRITY_CHECKS* mode.
2. To operate with *Fax Voip Virtual COM Ports* and to use *TESTSIGNING=ON* boot configuration option.
3. To operate with 3rd party Virtual COM Port drivers (for example to install Eltima Virtual Serial Port software or Eterlogic.com Virtual Serial Ports Emulator) in the *NORMAL* boot mode of 64 bit operation system.

Notes

*   More details about installation on 64-bit systems can be found in the chapter Run Setup Program (Windows 7, Vista or Windows Server 2008 64 bit).
*   To install *Fax Voip Virtual COM Ports* after installation of Fax Voip, you should first apply *DISABLE_INTEGRITY_CHECKS* mode or *TESTSIGNING=ON* boot configuration option. This can be done manually or by using the *Fax Voip FaxModem Control Panel*.
*   Fax Voip automatically detects the current boot configuration options. If Fax Voip is configured to operate with *Fax Voip Virtual COM Ports*, and the 64 bit operating system is loaded in *NORMAL* mode, you will be notified and will have to reconfigure Fax Voip program.

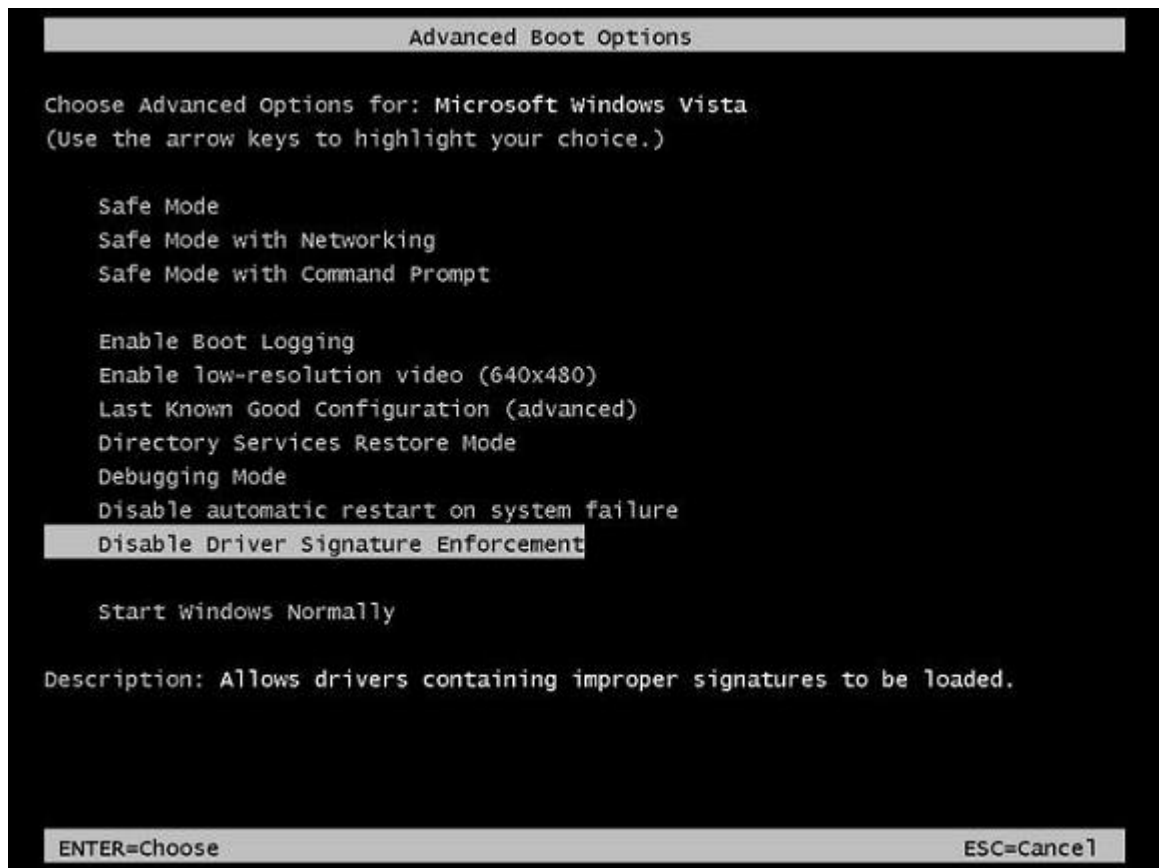## Using Fax Voip Virtual Serial Port Driver

Fax Voip can not operate with *Fax Voip Virtual COM Ports* driver because of limitations of 64-bit operating systems Windows 7, Windows Vista and Windows Server 2008, imposed by Microsoft. There are two ways to install / operate / uninstall with *Fax Voip Virtual COM Ports* on these operating systems.

*   *DISABLE_INTEGRITY_CHECKS* mode
*   *TESTSIGNING=ON* boot configuration option

In the near future we do not plan to use the signed driver. Nevertheless, we will not object if you want to pay for a certificate and sign our driver for your use.
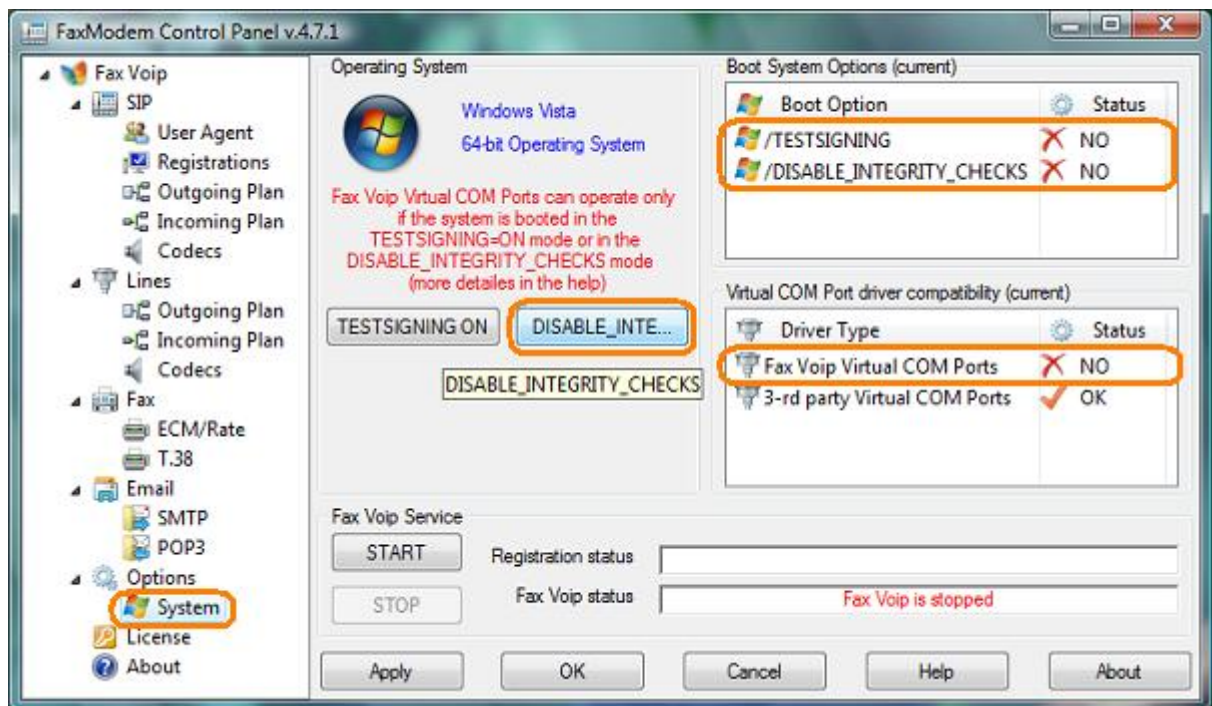
Disable Driver Signature Enforcement (DISABLE_INTEGRITY_CHECKS)

Begin pressing the *F8* key when you see IRQ and resource information while booting (immediately after POST). You will be presented with several options for booting Windows 7, Vista or Windows Server 2008. One of the options will be to *"Disable Driver Signature Enforcement"*. Select it and allow the computer to boot. To be possible to operate with *Fax Voip Virtual COM Ports*, you should repeat this process every time you boot the computer.

```
                        Advanced Boot Options

Choose Advanced Options for: Microsoft Windows Vista
(Use the arrow keys to highlight your choice.)

     Safe Mode
     Safe Mode with Networking
     Safe Mode with Command Prompt

     Enable Boot Logging
     Enable low-resolution video (640x480)
     Last Known Good Configuration (advanced)
     Directory Services Restore Mode
     Debugging Mode
     Disable automatic restart on system failure
     Disable Driver Signature Enforcement

     Start Windows Normally

Description: Allows drivers containing improper signatures to be loaded.



ENTER=Choose                                             ESC=Cancel
```

**To apply DISABLE_INTEGRITY_CHECKS mode via Fax Voip FaxModem Control Panel**

1. Open **Fax Voip FaxModem Control Panel**.
2. Click **Options** in TreeView, and then click **System**.
3. In the Operation System pane click **DISABLE_INTEGRITY_CHECKS** button.

4. The **Disable Driver Signature Enforcement** information window will be displayed. This window displays instructions on what to do when loading the operating system.
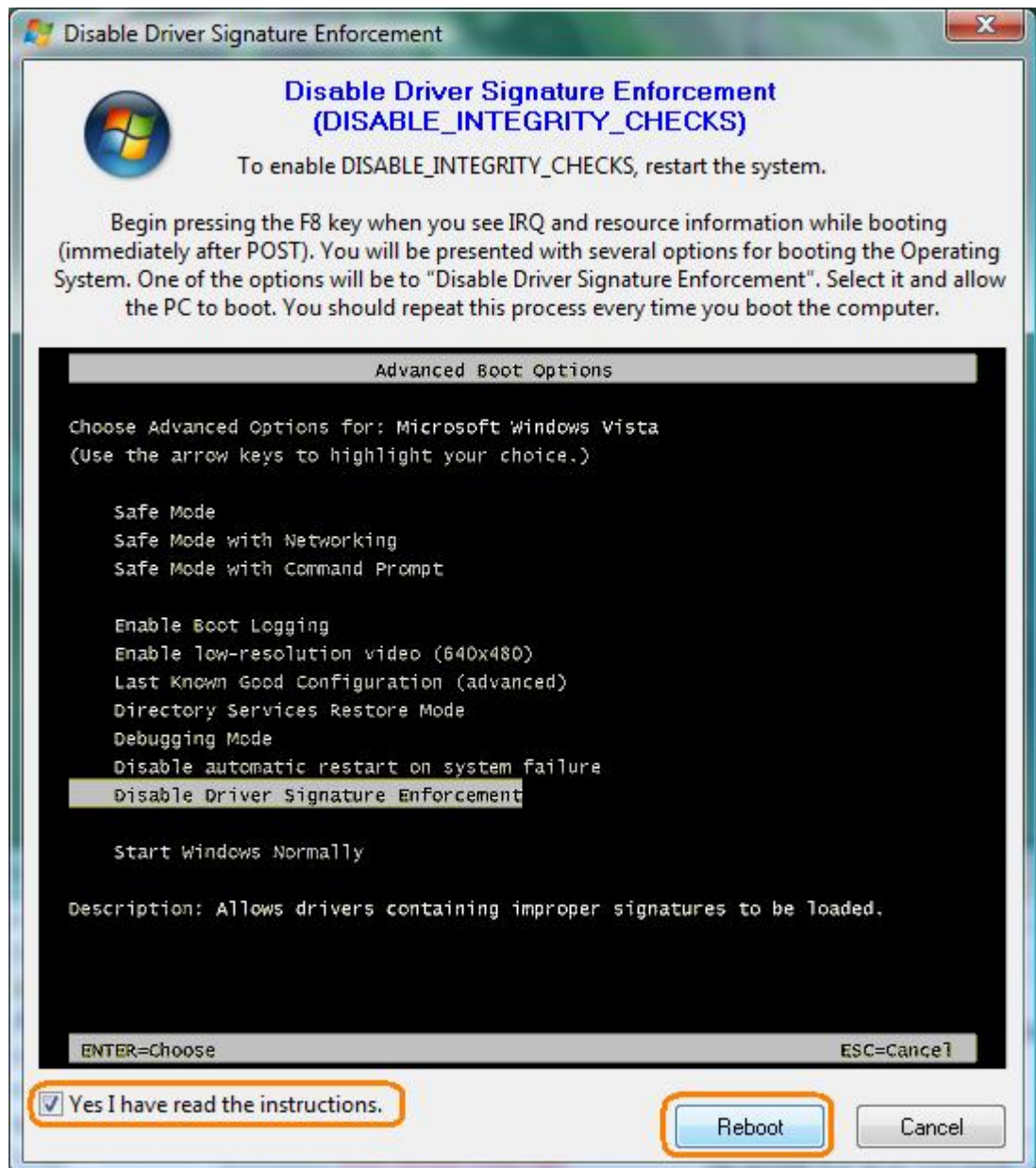
5. Read the instructions, select the **Yes I have read the instructions** option and then click **Reboot** to reboot the operating system.
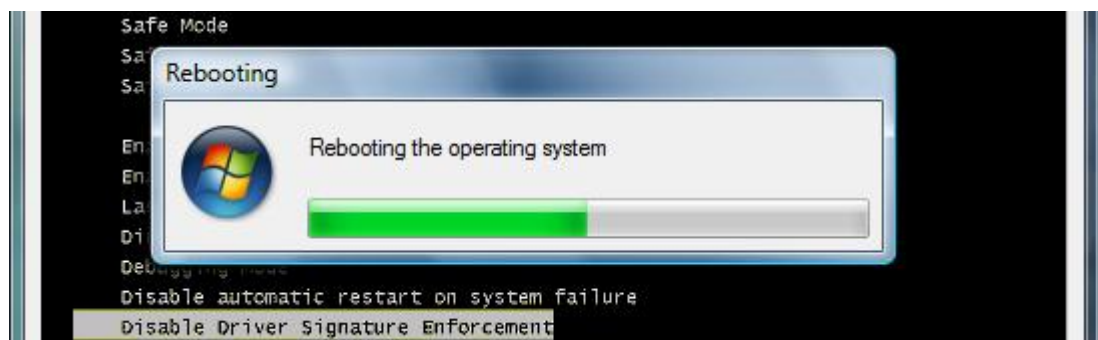
6. Begin pressing the F8 key when you see IRQ and resource information while booting (immediately after POST). You will be presented with several options for booting Windows 7, Vista or Windows Server 2008. One of the options will be to *"Disable Driver Signature Enforcement"*. Select it and allow the PC to boot. You should manually repeat this procedure every time you boot the computer.

TESTSIGNING Boot Configuration Option

The TESTSIGNING boot configuration option determines whether Windows 7, Windows Vista or Windows Server 2008 will load any type of test-signed kernel-mode code. This option is not set by default, which means test-signed kernel-mode drivers will not load by default on 64-bit versions of Windows 7, Windows Vista or Windows Server 2008.

To enable test-signing, use the following **BCDEdit** command:
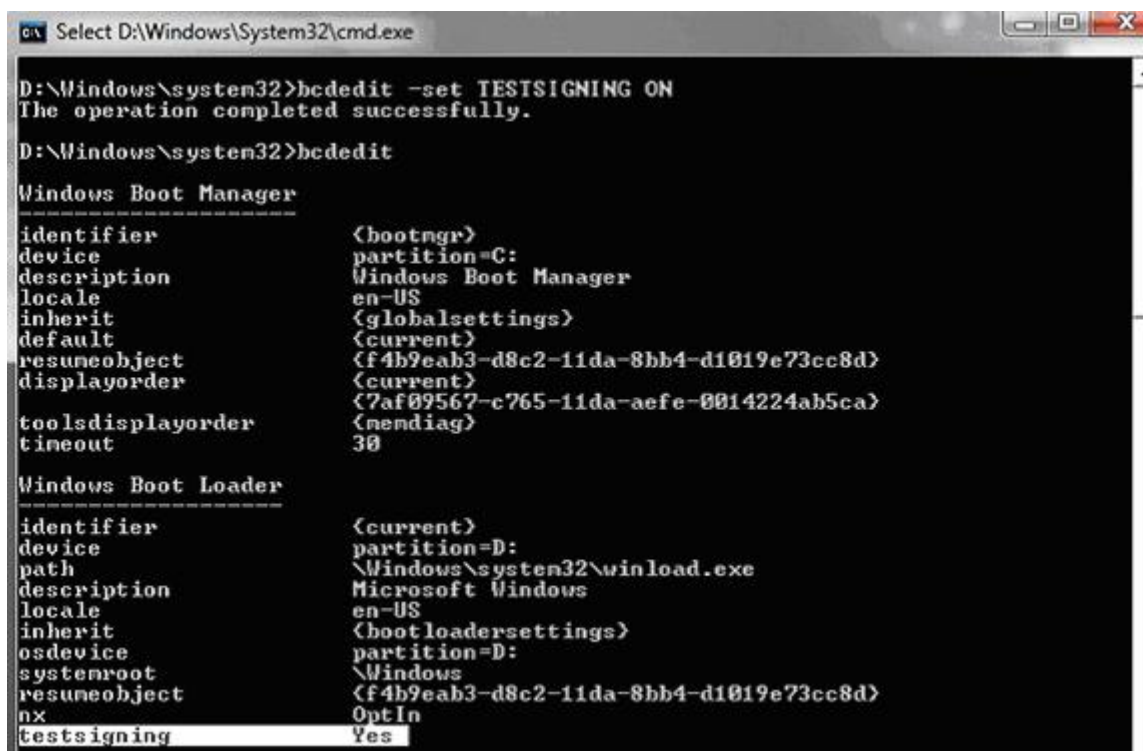
Bcdedit.exe -set TESTSIGNING ON

To disable test-signing, use the following **BCDEdit** command:

Bcdedit.exe -set TESTSIGNING OFF

After running the **BCDEdit** command, **restart the computer** for the change to take effect.

To use **BCDEdit**, the user must be a member of the Administrators group on the system and run the command from an elevated command prompt. To open an elevated command window, create a desktop shortcut to *Cmd.exe*, right-click on the **Cmd.exe** shortcut, and select **Run as administrator**.

The following figure shows the result of using the **BCDEdit** command-line tool to enable test-signing.

When the **BCDEdit** option for test-signing is enabled, Windows does the following: Displays a watermark with the text **"Test Mode"** in all four corners of the desktop, to remind users the system has test-signing enabled. The operating system loader and the kernel load drivers that are signed by any certificate. The certificate validation is not required to chain up to a trusted root certification authority. However, each driver image file must have a digital signature.

To apply TESTSIGNING boot configuration option via Fax Voip FaxModem Control Panel
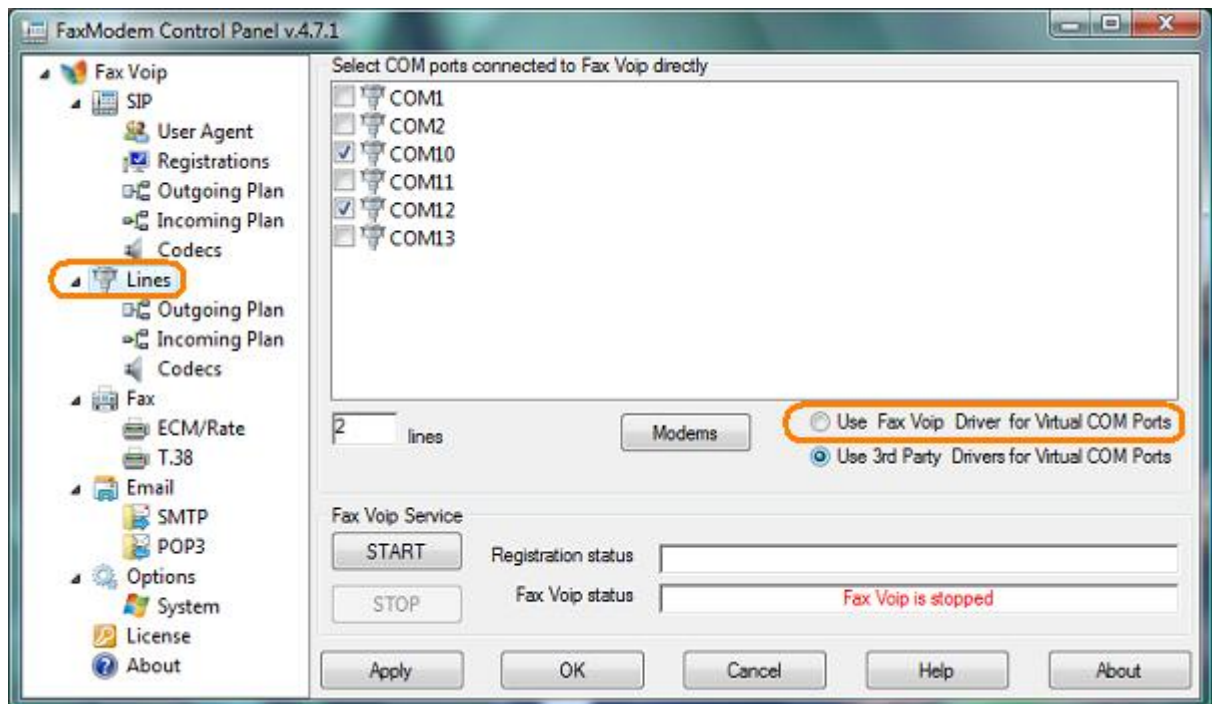
1. Open **Fax Voip FaxModem Control Panel**.
2. Click **Options** in TreeView, and then click **System**.
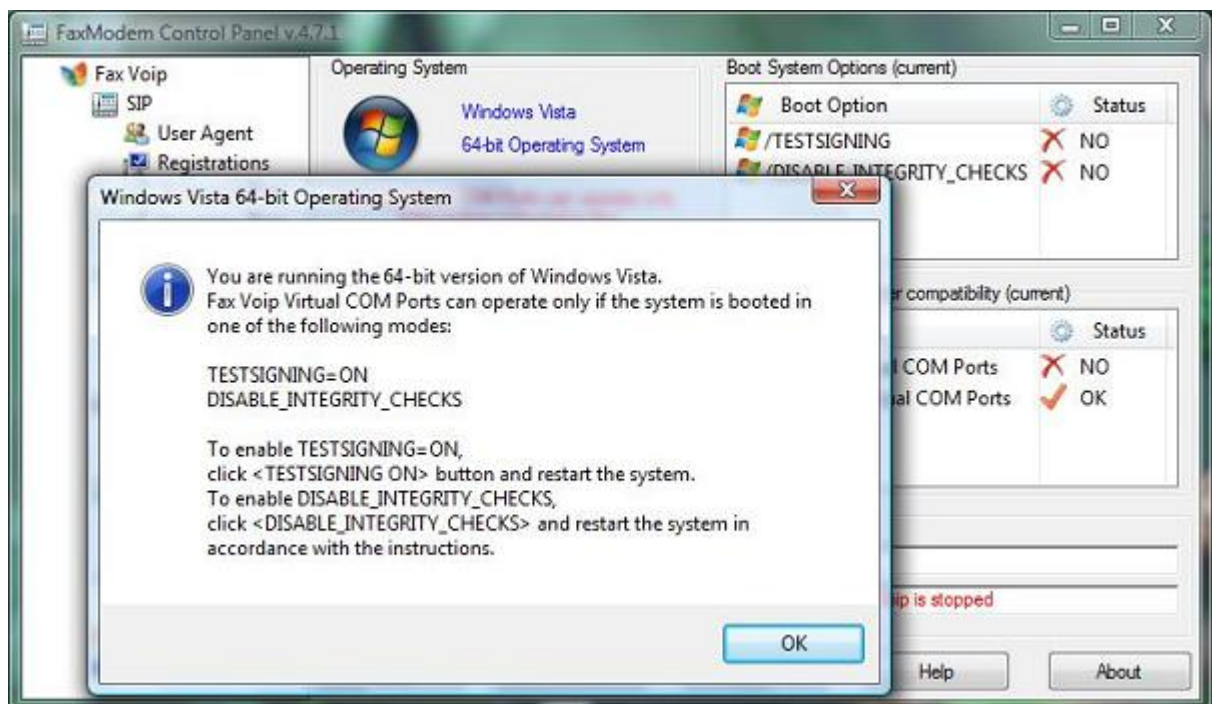3. In the Operation System pane click **TESTSIGNING ON** button.
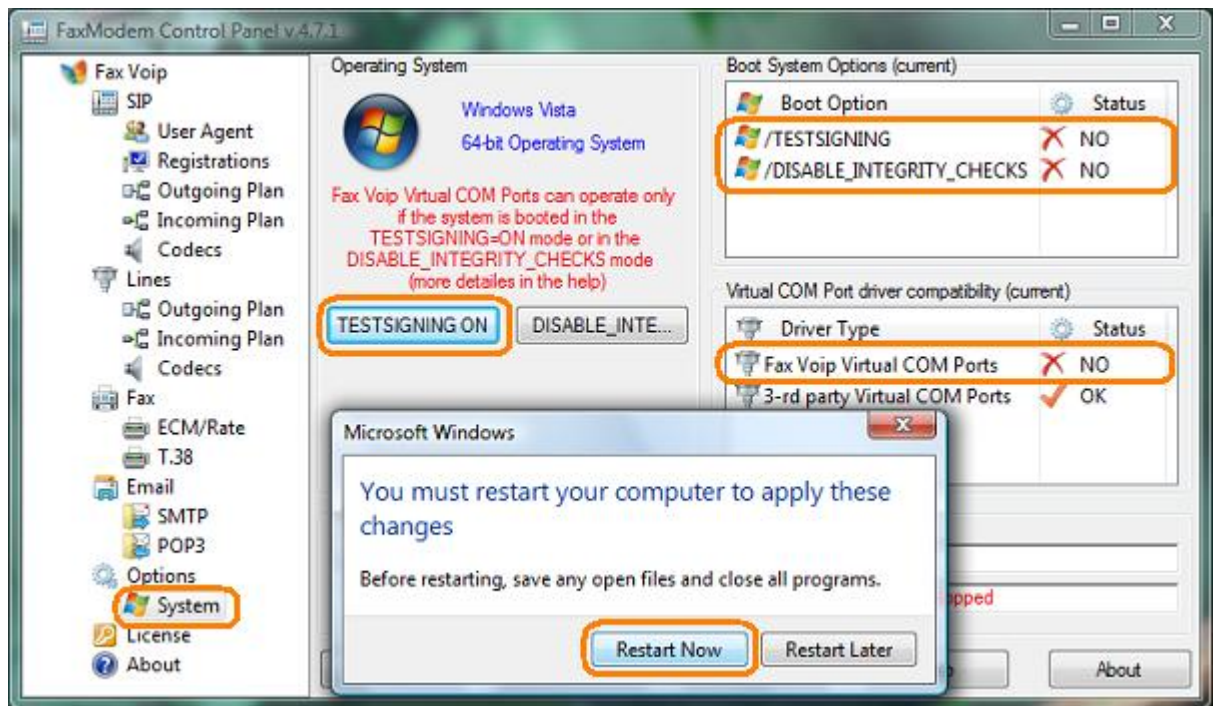
4. Click **Restart Now** to reboot the operating system and apply **TESTSIGNING=ON** boot configuration option.

Troubleshooting

**Not able to select *Use Fax Voip Driver for Virtual COM Ports* option.**

FaxVoip display a warning message and switches to **System** panel.

Cause: the 64 bit operation system Windows 7, Windows Vista or Windows Server 2008 is booted in the *NORMAL* mode.

Solution: you should restart your operation system in the *DISABLE_INTEGRITY_CHECKS mode* or with *TESTSIGNING=ON boot configuration option*.

Fax Voip displays the *Select Driver for Virtual COM Ports* dialog window.
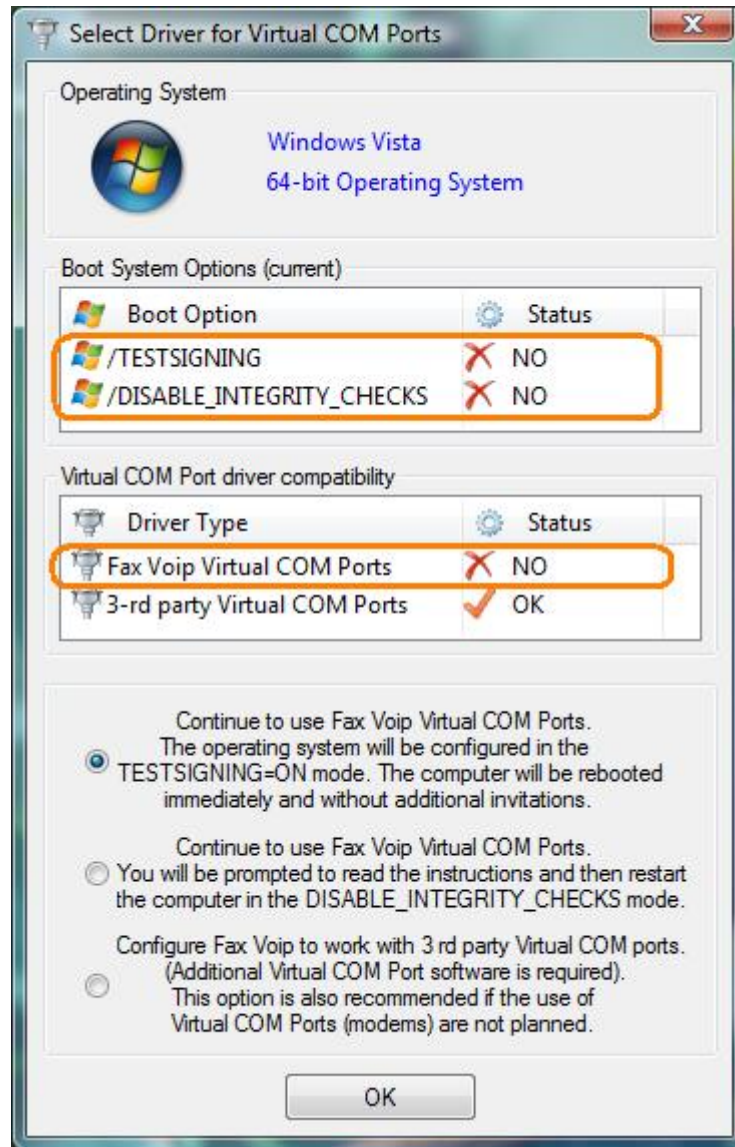
Cause: Fax Voip was originally configured to work with *Fax Voip Virtual COM Ports*. The 64 bit operation system Windows 7, Windows Vista or Windows Server 2008 is booted in the *NORMAL* mode.

Solution: select one of the options and then click **OK**. More details can be found in the chapter Run Setup Program (Windows 7, Vista or Windows Server 2008 64 bit).

Using 3-rd party Virtual Serial Port Drivers

Fax Voip can operate with *third-party drivers* for *Virtual COM Ports*. This is especially important for users of new 64-bit Windows operating systems, because some third-party drivers can operate in the *NORMAL* boot mode on those systems. We have tested Fax Voip with different drivers, and can recommend Eltima Virtual Serial Port Driver and Eterlogic.com Virtual Serial Ports Emulator. May also use other drivers, but should take into account that not all manufacturers support the fax transmission with Serial Port emulation. If you want to use third-party drivers, it is desirable to install the selected program before installing Fax Voip and read the relevant documentation. More details can be found in the section Using Fax Voip with Virtual COM Port Soft of this User Guide.