Tech Tip

64-Bit Compatibility with Micromeritics Applications

Micromeritics products are designed to operate in most Microsoft[®] Windows[®] environments. However, more current versions of Microsoft Windows, specifically the 64-bit version of Windows 7, lack some of the services once offered by Microsoft. Because of this, Micromeritics applications will not operate with 64-bit operating systems. Micromeritics software applications are directly compatible with 32-bit version operating systems only.

In cases where a 64-bit operating system may be corporate-required or essential for running other software programs, we recommend VMware Workstation Player software and a 32-bit operating system be installed on the host computer (64 bit) as a guest operating system. This will allow proper installation and operation of the Micromeritics application.

The following steps will ensure proper installation:

- 1. Install and fully update the host (64-bit) operating system. This includes adding any hardware or software required, such as network cards or additional serial ports. Configuration will be performed later.
- 2. Verify that all updates have been applied and that additional programs such as anti-virus software have been installed and configured.
 - It is recommended (but not required) at this step that you use appropriate backup software to create a full backup of the host computer.
- 3. Install virtualization software following the vendor's instructions.

The virtualization software used may vary. We have tested VMware Workstation with Windows 7 and 10. VMware Workstation requires a host CPU with Intel VT-x hardware virtualization support.

It is essential that the processor type be verified for hardware virtualization support. Many value-priced systems or systems purchased prior to 2011 do not have processors that support this technology.

A virtualization service is available from Micromeritics if you experience difficulty in your setup. Due to the wide variation in hardware and software configurations, Micromeritics cannot guarantee that a given setup will function properly in all cases. Micromeritics will support the 64-bit version of Windows 10 on Intel-based computers meeting the compatibility requirements of VMware Workstation.



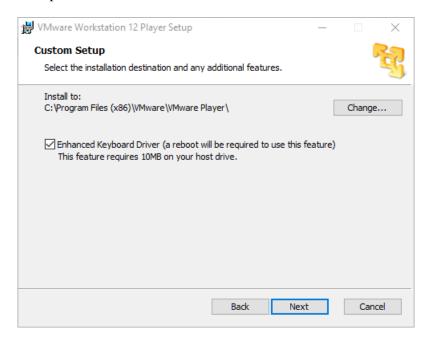
Tech Tip 7 Page 2 of 9

Other virtualization software programs are available such as Oracle VM VirtualBox and Microsoft Hyper-V. These have not been fully tested for compatibility with Micromeritics products.

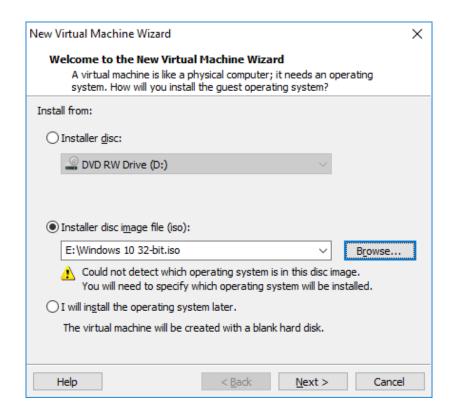
If you have problems with installation of the virtual PC, contact your local Micromeritics sales representative for assistance.

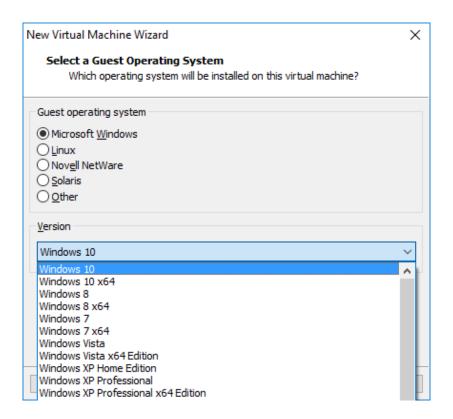
Installation

Install VMware Player as shown. If installing the 32-bit guest operating system from a DVD, select the installer disc; otherwise select the disc image (.iso) file. Select the 32-bit operating system to install if necessary (e.g., Windows 10 not Windows 10x64), and provide a name for the virtual machine; the example uses "Micromeritics VM."

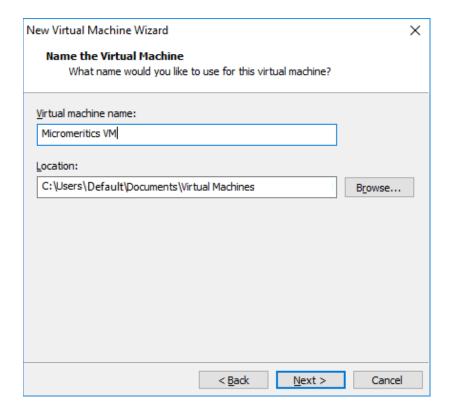


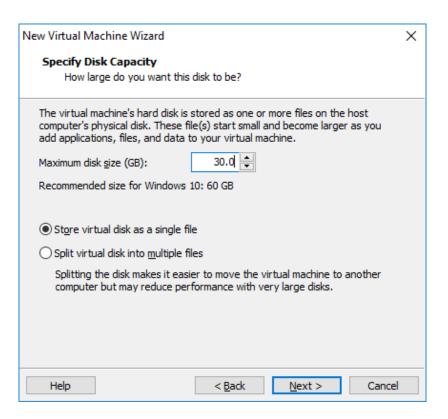
Tech Tip 7 Page 3 of 9



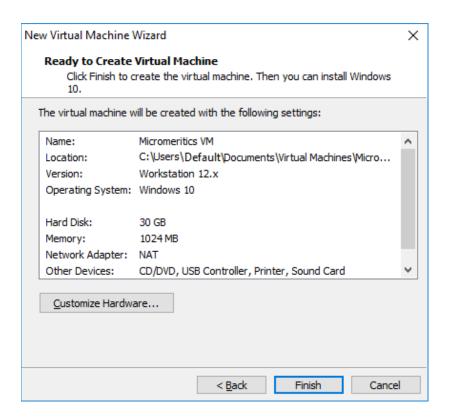


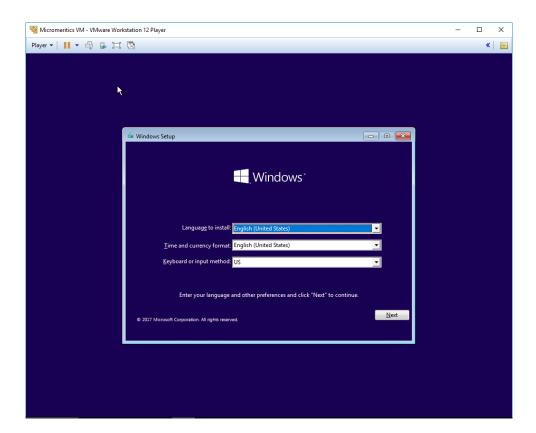
Tech Tip 7 Page 4 of 9





Tech Tip 7 Page 5 of 9



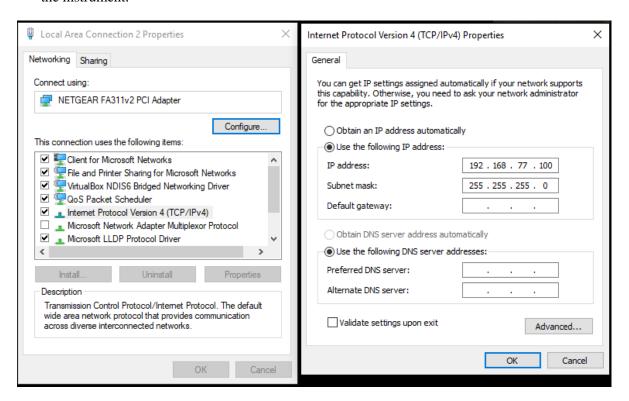


Tech Tip 7 Page 6 of 9

Configuration

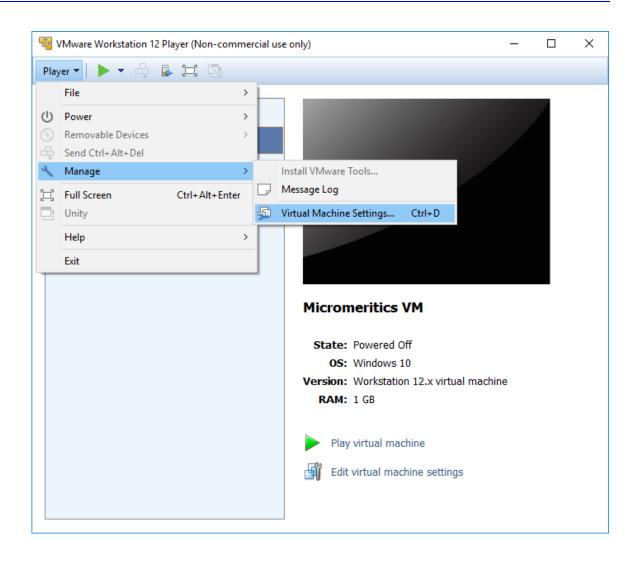
After the 32-bit guest operating system has been installed, configuration is required for the host and guest operating systems for proper communication with the instrument.

1. Configure the host operating system network adapter as specified in the Operator's Manual for the instrument.

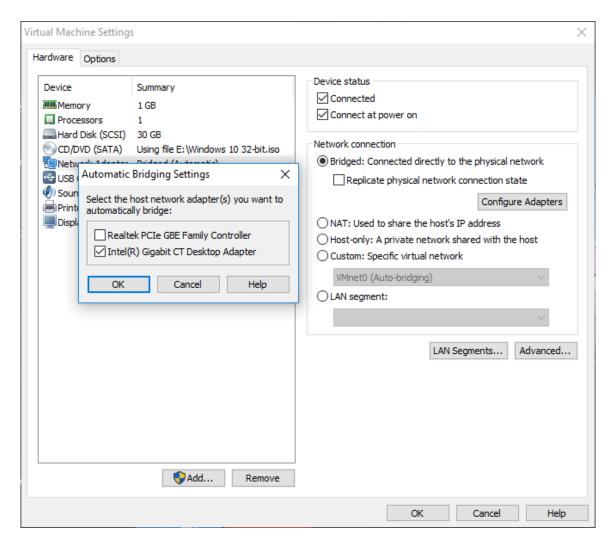


2. Bridge the network adapter between the host and guest operating systems to allow the Micromeritics application direct access to the network adapter connected to the instrument. Select the guest operating system then use the Player menu to select Manage then Virtual Machine Settings. On the Hardware tab, select Network Adapters. Under "Network connection" select "Bridged" then press the Configure Adapters button and select the host operating system network adapter previously configured.

Tech Tip 7 Page 7 of 9

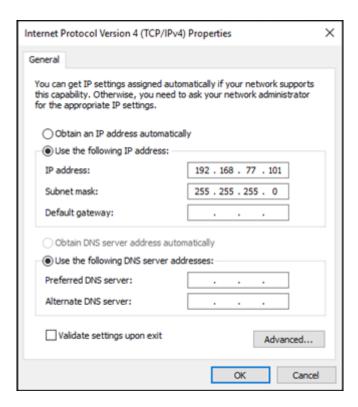


Tech Tip 7 Page 8 of 9



3. The 32-bit guest operating system should configure its network adapter with the same subnet as the 64-bit host operating system but a different last octet in the IP address. For example, if the host network adapter is configured as shown above (192.168.77.100), the guest network adapter can be configured as 192.168.77.101.

Tech Tip 7 Page 9 of 9



4. To simplify accessing sample files from both the host and guest, a standard Windows networked shared folder may be created on the host. This would then be accessible from the guest operating system on the virtual machine.