Understanding Common Networking Configurations

You can configure bridged networking, NAT, and host-only networking for virtual machines. You can also use the virtual networking components to create sophisticated custom virtual networks.

Bridged Networking

Bridged networking connects a virtual machine to a network by using the network adapter on the host system. If the host system is on a network, bridged networking is often the easiest way to give the virtual machine access to that network. When you install Workstation on a Windows or Linux host system, a bridged network (VMnet0) is set up for you.

NAT Networking

With NAT, a virtual machine does not have its own IP address on the external network. Instead, a separate private network is set up on the host system. In the default configuration, a virtual machine gets an address on this private network from the virtual DHCP server. The virtual machine and the host system share a single network identity that is not visible on the external network.

When you install Workstation on a Windows or Linux host system, a NAT network (VMnet8) is set up for you. When you use the New Virtual Machine wizard to create a new virtual machine and select the typical configuration type, the wizard configures the virtual machine to use the default NAT network. You can have only one NAT network.

Host-Only Networking

Host-only networking creates a network that is completely contained within the host computer. Host-only networking provides a network connection between the virtual machine and the host system by using a virtual network adapter that is visible on the host operating system. When you install Workstation on a Windows or Linux host system, a host-only network (VMnet1) is set up for you.

Custom Networking Configurations

With the Workstation virtual networking components, you can create sophisticated virtual networks. The virtual networks can be connected to one or more external networks, or they can run entirely on the host system. You can use the virtual network editor to configure multiple network cards in the host system and create multiple virtual networks.