
Setting up QEMU for 2X VirtualDesktopServer Manual



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PREPARING QEMU FOR 2X VIRTUALDESKTOPSERVER

2X VDI Agent System Requirements

- Processor supporting Virtualization Technologies (such as Intel VT or AMD VMX)
- Packages
 - libvirt-0.4.6-11.1
 - virt-manager-0.5.3-64.23
 - qemu-0.10.1-0.1.1
 - kqemu-kmp-pae-1.4.0pre1_2.6.27.19_3.2-2.1.6
 - kqemu-kmp-default-1.4.0pre1_2.6.27.19_3.2-2.1.6

The use of 2X VirtualDesktopServer with QEMU was tested using OpenSuse 11.1 as the host server.

NOTE: Make sure that support for virtualization is enabled from the BIOS. Run the following command:

```
egrep -q '^flags.*(svm|vmx)' /proc/cpuinfo && echo 'virtualization supported'
```

and a message should be displayed confirming that virtualization is supported.

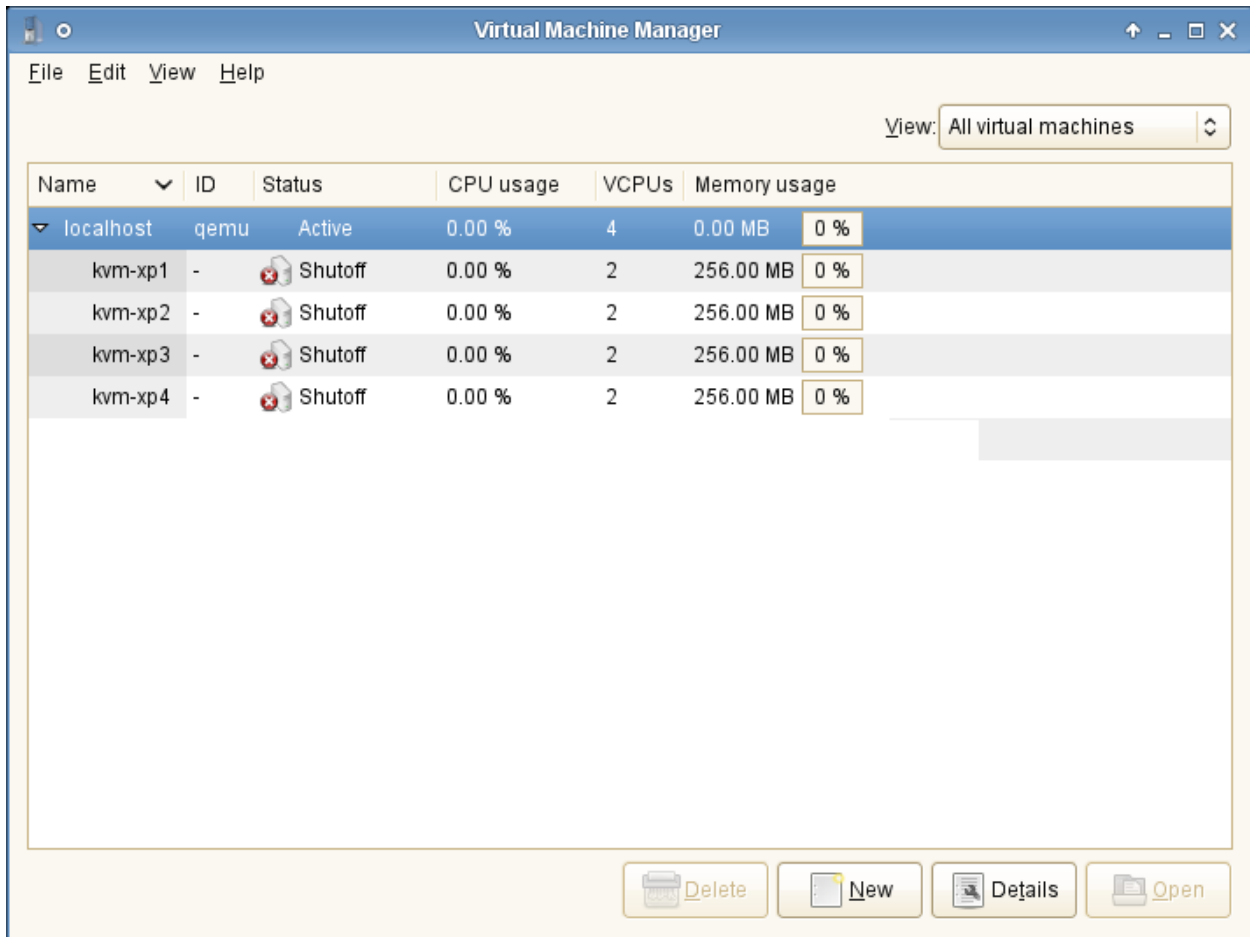


Figure 1: Virtual Machine Manager

A guest operating system (like Windows XP/Vista) must be created on the QEMU server which features an RDP server.

Important:

- The guest name must be equal to the computer name.
- The use of fixed IPs on the guest operating systems is preferred.

After the guest OS installation is complete make sure that the RDP server is started. To confirm that the server is running, launch a Remote Desktop Client and connect to the guest operating system using the computer name (of the guest OS) and the RDP port (default RDP port is 3389).

CONFIGURING 2X VIRTUALDESKTOPSERVER TO USE QEMU GUESTS

Adding a Virtual Desktop Host

You have two ways to add servers to the farm. You can either automatically search for available VDI Hosts within your domain by clicking the 'Find...' button or you can click on the 'Add...' button to manually add the VDI Hosts.

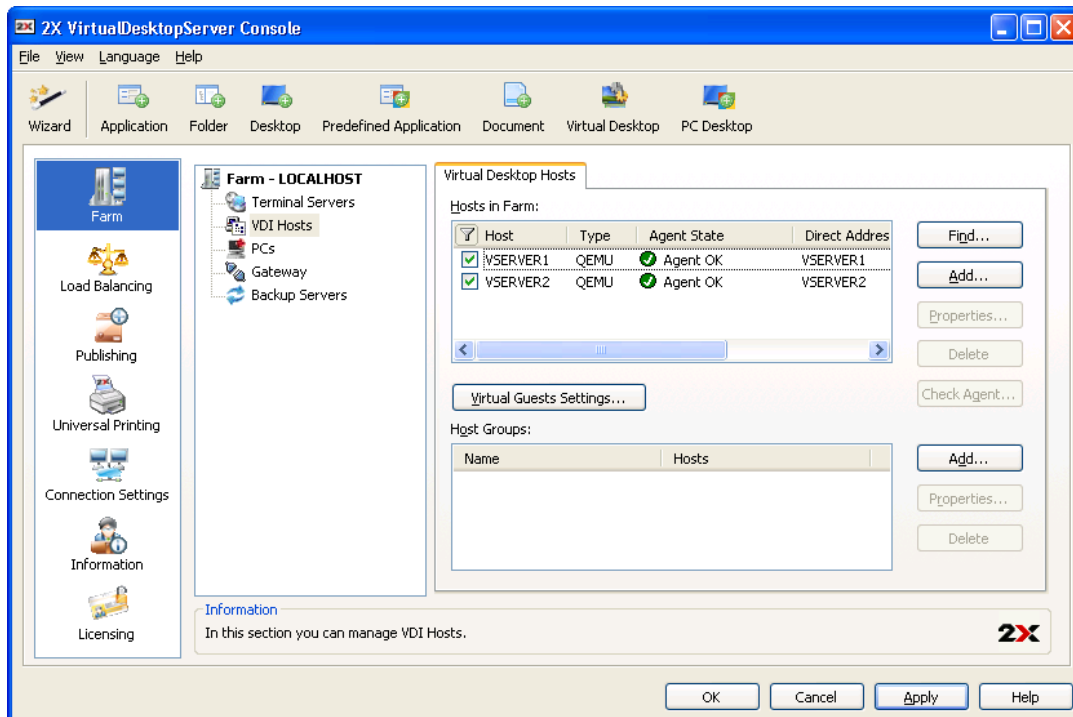


Figure 2 - Add VDI Hosts to the farm

NOTE: The checkbox next to the server name indicates the particular server is available to users on this farm. To disable a server temporarily, uncheck this checkbox.

Find a Virtual Host

Click the 'Find...' button to automatically search for available Virtual Hosts.

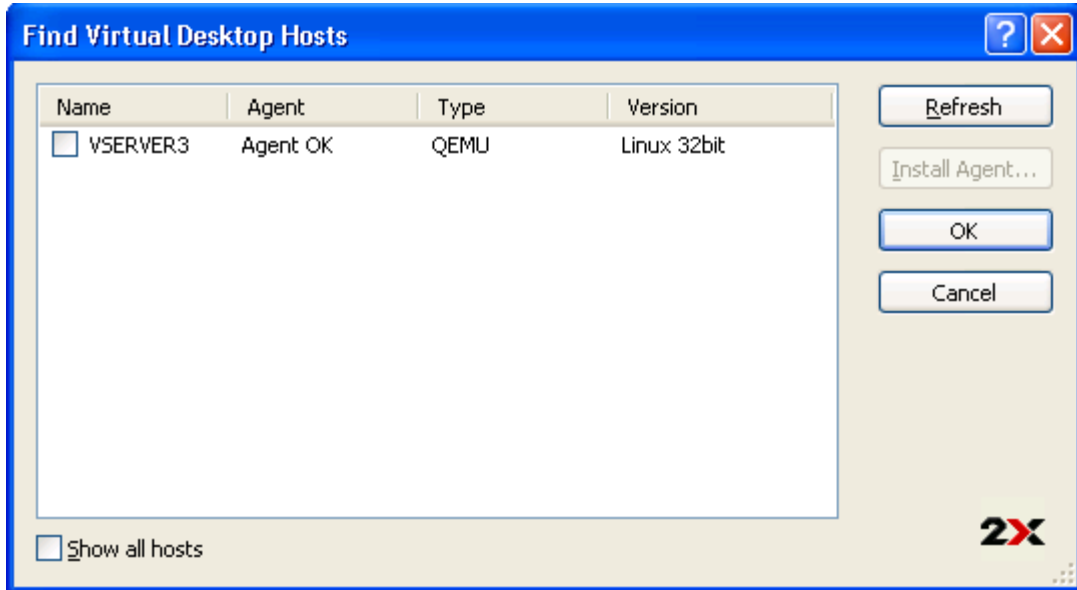


Figure 3 - Find available VDI Hosts

All Virtual Hosts within your domain will appear on the list of available servers to your farm, also identifying the host type. To add a server to the farm, enable the checkbox in front of the server name. Click the 'OK' button to commit changes.

It will be necessary to install 2X VDI Agent on all Virtual Hosts before they can successfully participate in a load-balanced farm.

Add a Virtual Host

To manually **add** a Host to your farm click the 'Add...' button and then choose a 'VDI Type' and enter the Host name or IP address in the 'VDI Host:' field as shown in the figure below.

The 'VDI Agent' property will point to the 'VDI Host' since the 'VDI Agent' will be running on the same machine as the virtualization technology.

Click 'Next' to continue.

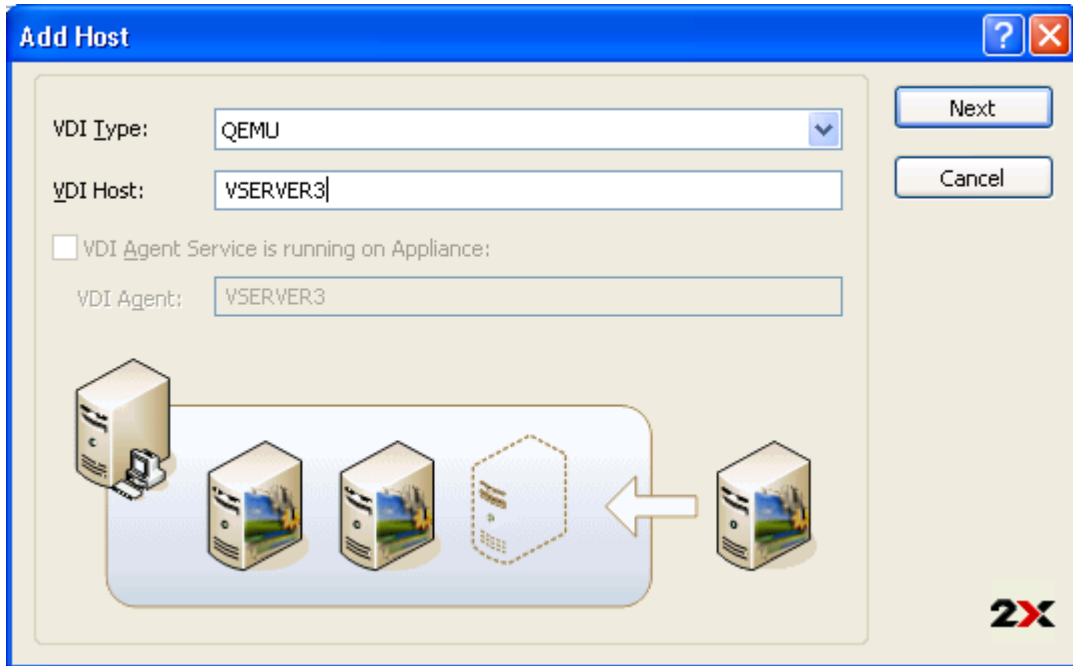


Figure 4 - Manually add a new Host

Installing 2X VDI Agent

Remote Installation

2X VirtualDesktopServer will check whether 2X VDI Agent is installed. Check the status and if the status states that the Agent did not reply or the service is not installed, click the **'Install...'** button to install 2X VDI Agent. Click **'Add'** if the status states that the Agent is already installed.

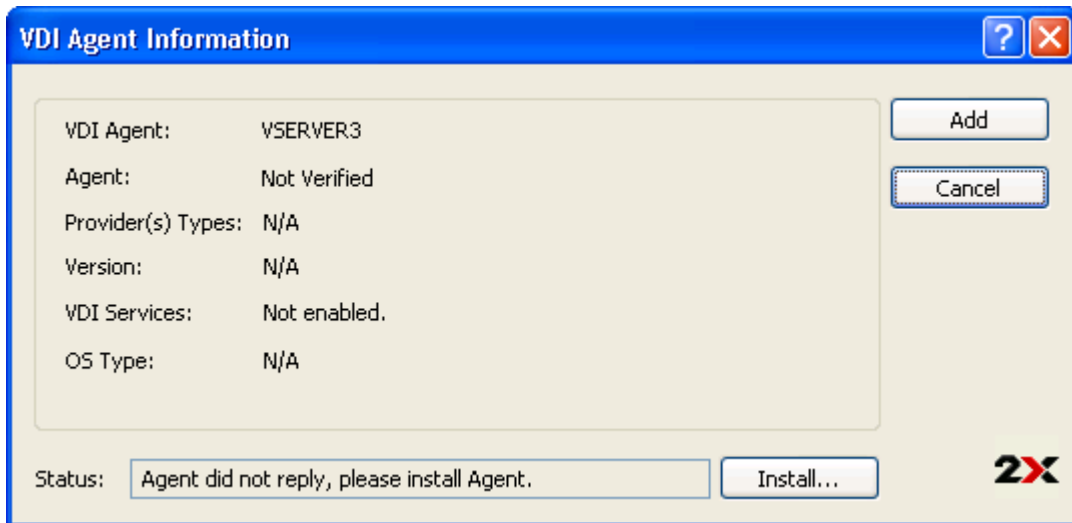


Figure 5 - 2X VDI Agent Information

Select the OS on which 2X VDI Agent will be installed.

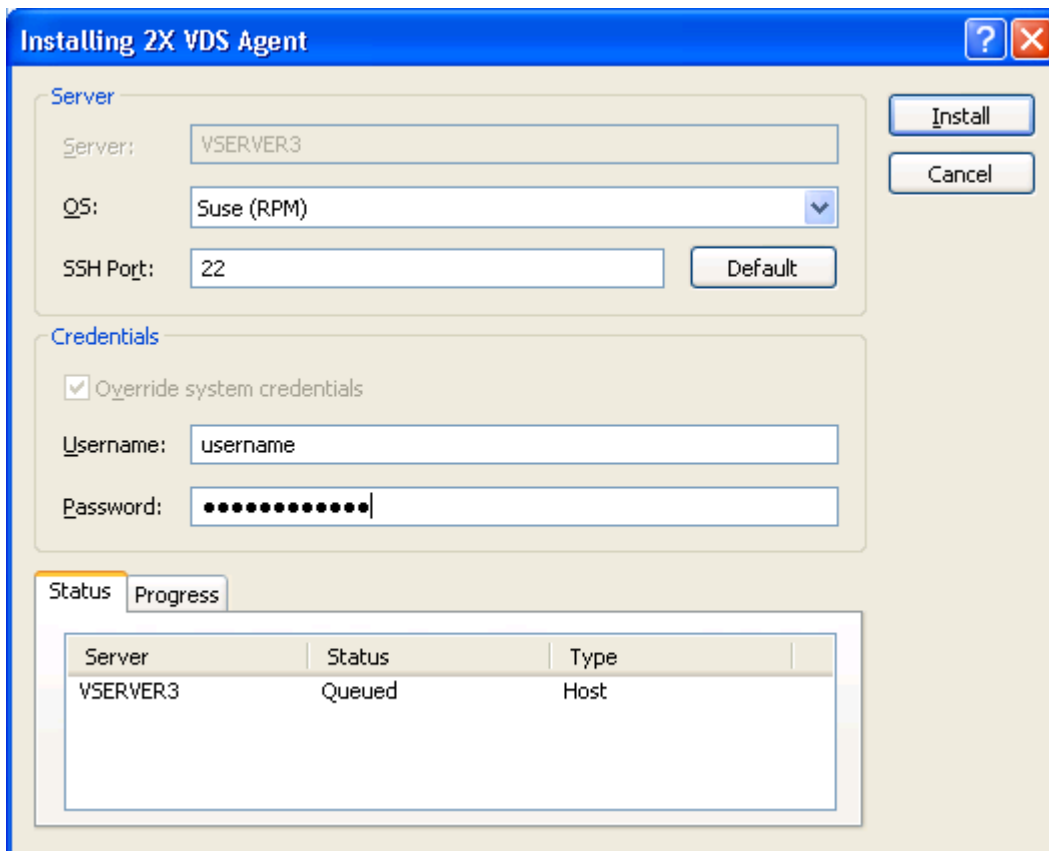


Figure 6: Installing 2X VDI Agent

Click **'Install'** after you've checked and possibly entered the administrative credentials. Click **'Done'** after the installation is complete. Once setup is complete, 2X VirtualDesktopServer will confirm that the latest 2X VDI Agent is installed.

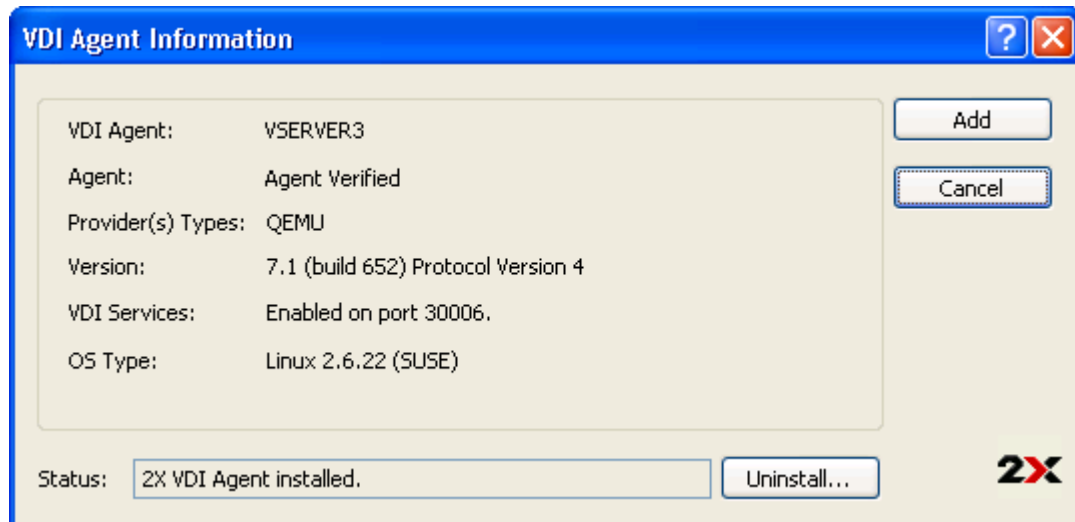


Figure 7 - 2X VDI Agent verified

Click **'Add'** to continue adding the Virtual Host to the Farm.

Make sure that 2X VDI Agent is installed on each Virtual Desktop Host added to the farm. 2X VDI Agent collects the information required by 2X Publishing Agent to be able to load balance each session according to available resources.

Manual Installation

For Debian (Ubuntu)

1. Download 2X VDI Agent for Linux from the [downloads site](#) and save it to a local directory.
2. Run the debian package using the following command "`dpkg -i packagename`".

For RPM (Fedora / SUSE)

1. Download 2X VDI Agent for Linux from the [downloads site](#) and save it to a local directory.
2. Change directory to where the package is saved.
3. If the client is installing first time: `rpm -ivh 2xvdsagent.rpm`
4. If the client is upgrading: `rpm -Uvh 2xvdsagent.rpm`
5. If the client is deleting the package: `rpm -e 2xvdsagent`

Using the Shell Script

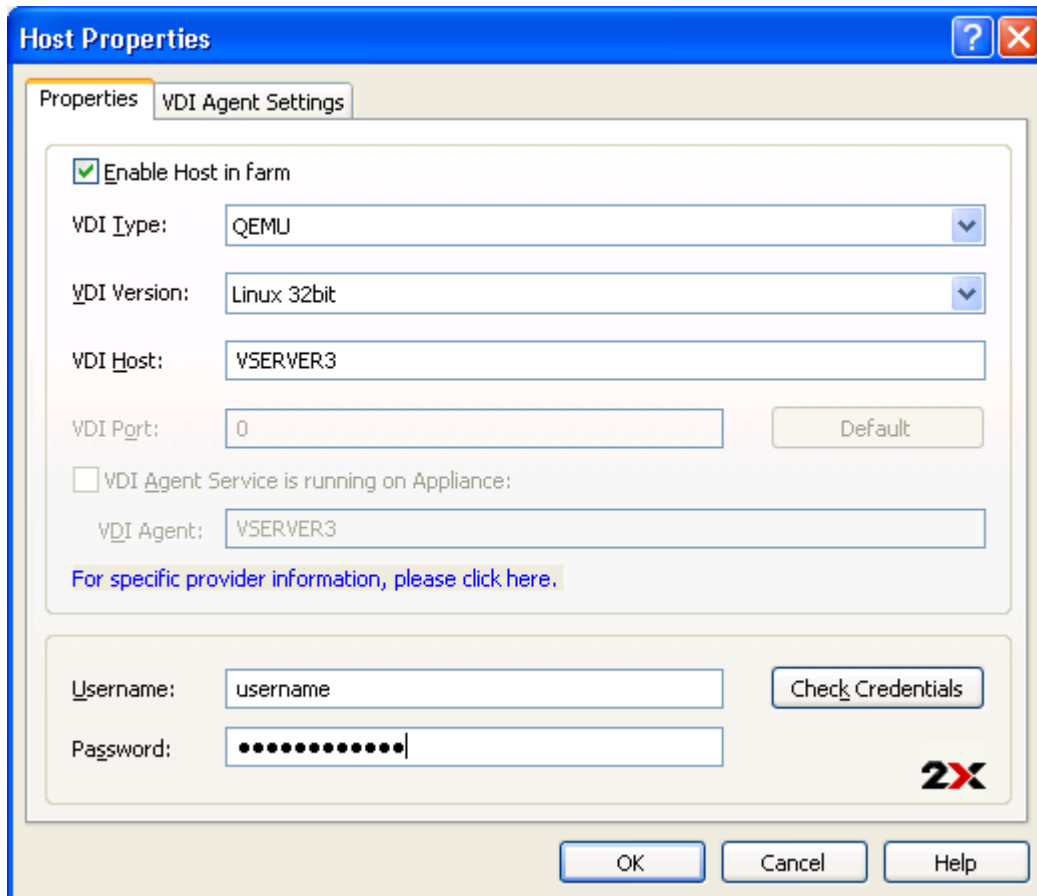
1. Download 2X VDI Agent for Linux from the [downloads site](#) and save it to a local directory.
2. Change directory to where the package is saved and ensure that setup is executable ("chmod 777 *packagename*").
3. Run the 2X VDI Agent installation script.

When using installer script, add VDI Agent control script (/opt/2X/VDSAgent/bin/2XVDSAgent.sh) to local start-up script so that the service is launched automatically on boot-up

NOTE: If you need more information on how to install the 2X VDI Agent manually please consult the [2X VirtualDesktopServer Manual](#)

Virtual Host Settings

Host Properties



The screenshot shows the 'Host Properties' dialog box with the 'VDI Agent Settings' tab selected. The 'Enable Host in farm' checkbox is checked. The 'VDI Type' dropdown is set to 'QEMU', and the 'VDI Version' dropdown is set to 'Linux 32bit'. The 'VDI Host' text field contains 'VSERVER.3'. The 'VDI Port' text field contains '0', and there is a 'Default' button next to it. Below this, there is an unchecked checkbox for 'VDI Agent Service is running on Appliance:' and a 'VDI Agent' text field containing 'VSERVER.3'. A blue link says 'For specific provider information, please click here.' At the bottom, there are fields for 'Username:' (containing 'username') and 'Password:' (with masked characters), and a 'Check Credentials' button. The '2X' logo is in the bottom right corner of the dialog. At the very bottom are 'OK', 'Cancel', and 'Help' buttons.

Figure 8 - Configure each Host properties

To enable this host in the farm, make sure that the 'Enable Host in farm' checkbox is checked.

Select the VDI provider of the host from the 'VDI Type' field and the version that you are using from the 'VDI Version' field. To change the Host name or IP address of a particular VDI host, use the 'VDI Host' field.

The 'VDI Agent' property will point to the 'VDI Host' since the 'VDI Agent' will be running on the same machine as the virtualization technology.

To start using the new host, please enter the username and password of the host. Click on 'Check Credentials' if you would like to test the username and password before clicking 'OK'.

VDI Agent Settings

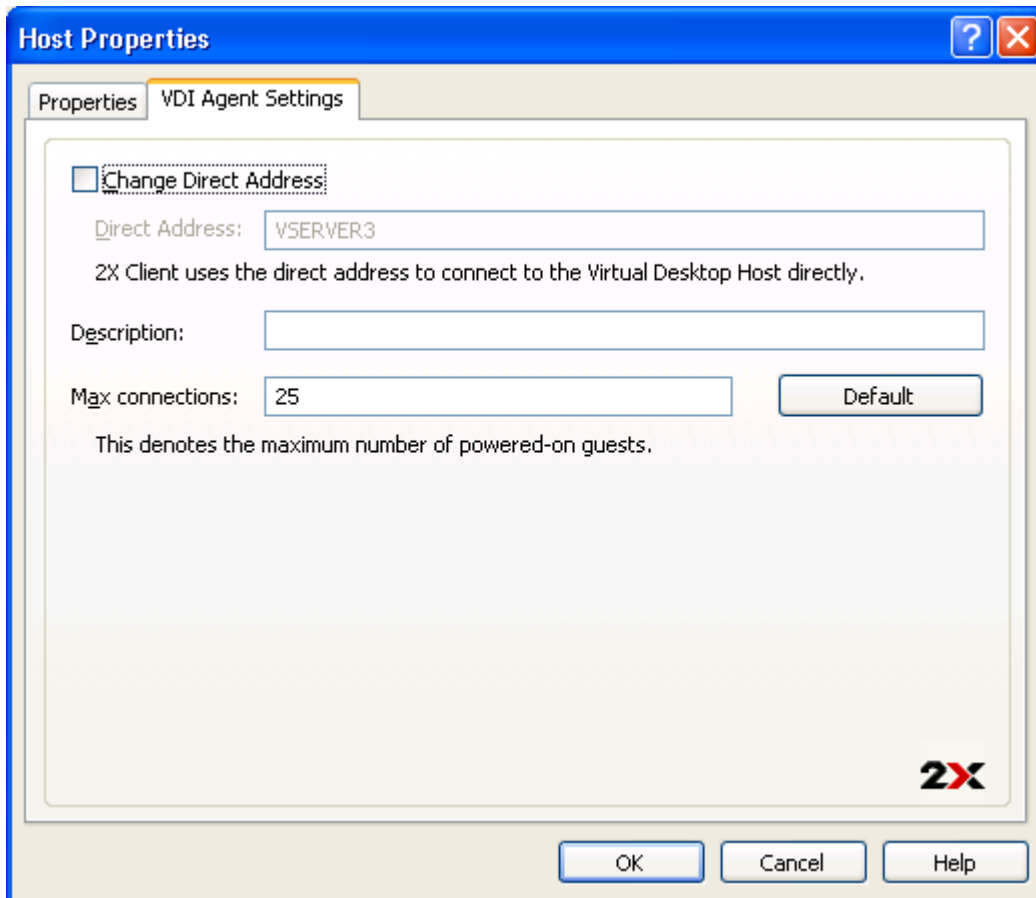


Figure 9 - Configure the VDI Agent Settings

You can configure the direct address by checking the 'Change Direct Address' checkbox and type a new direct address. This address is used in Direct Connection mode only (this is an internal or external IP address) depending on where the clients will be. If external, the IP addresses must be assigned at your firewall to your servers).

A 'Description' can be given to the host which can be used to easily identify different server from one another.

Next you can type the maximum number of powered-on guests you want this host to accept.

Publish a Virtual Desktop

To start publishing the applications, select 'Publishing' from the Navigation bar and click the 'Add...' button from the Publishing tools.



Publish Virtual Desktops

To publish a virtual desktop with the wizard, click on 'Publishing' in the Navigation bar and click 'Add...'. From the 'Select Type' dialog choose 'Virtual Desktop' (Publish a Virtual Desktop).

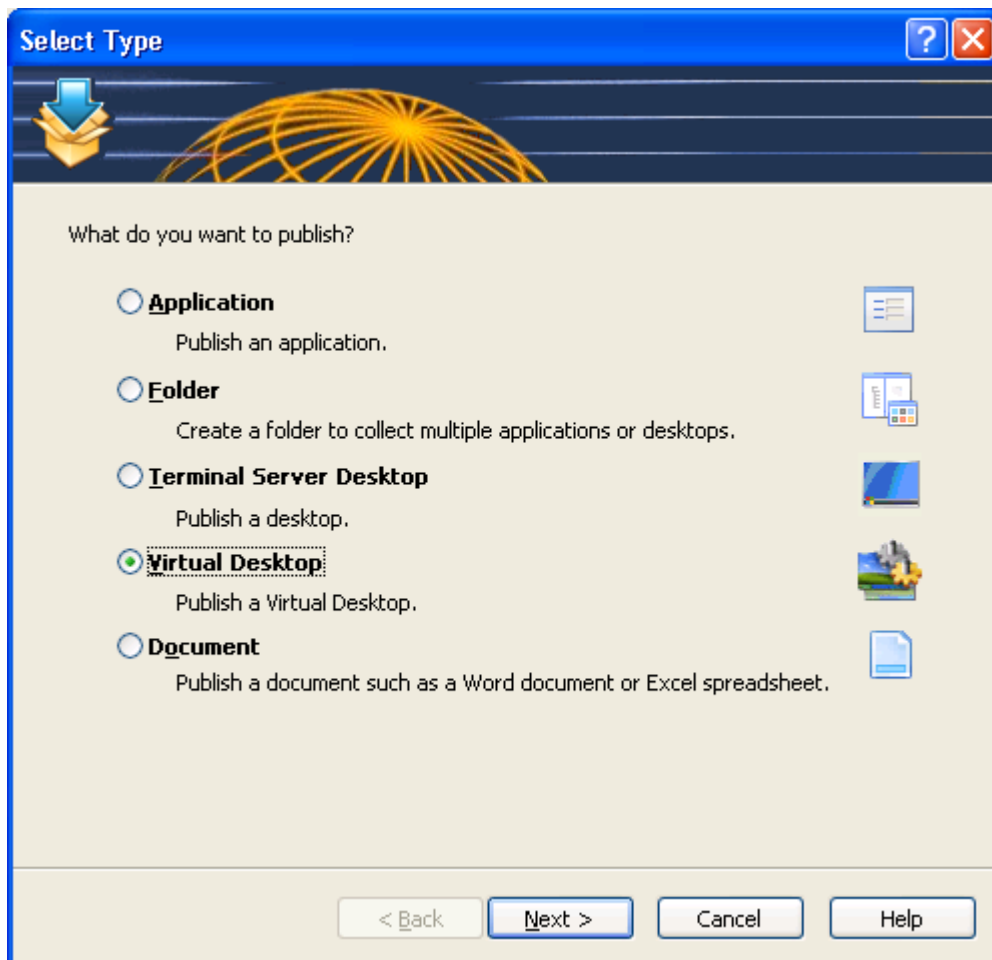


Figure 10 - Select Virtual Desktop as the Type

NOTE: If only one server is listed in the Virtual Desktops Hosts list, the wizard will skip the 'Publish From' dialog and continue with the 'Application Settings' dialog.

In the 'Publish From' dialog as seen in the below figure you can choose from which Virtual Desktop Host/s you want to publish the virtual desktop. You can choose to publish the virtual desktop from 'All Server in Farm' , from Server Groups or from Individual Hosts.

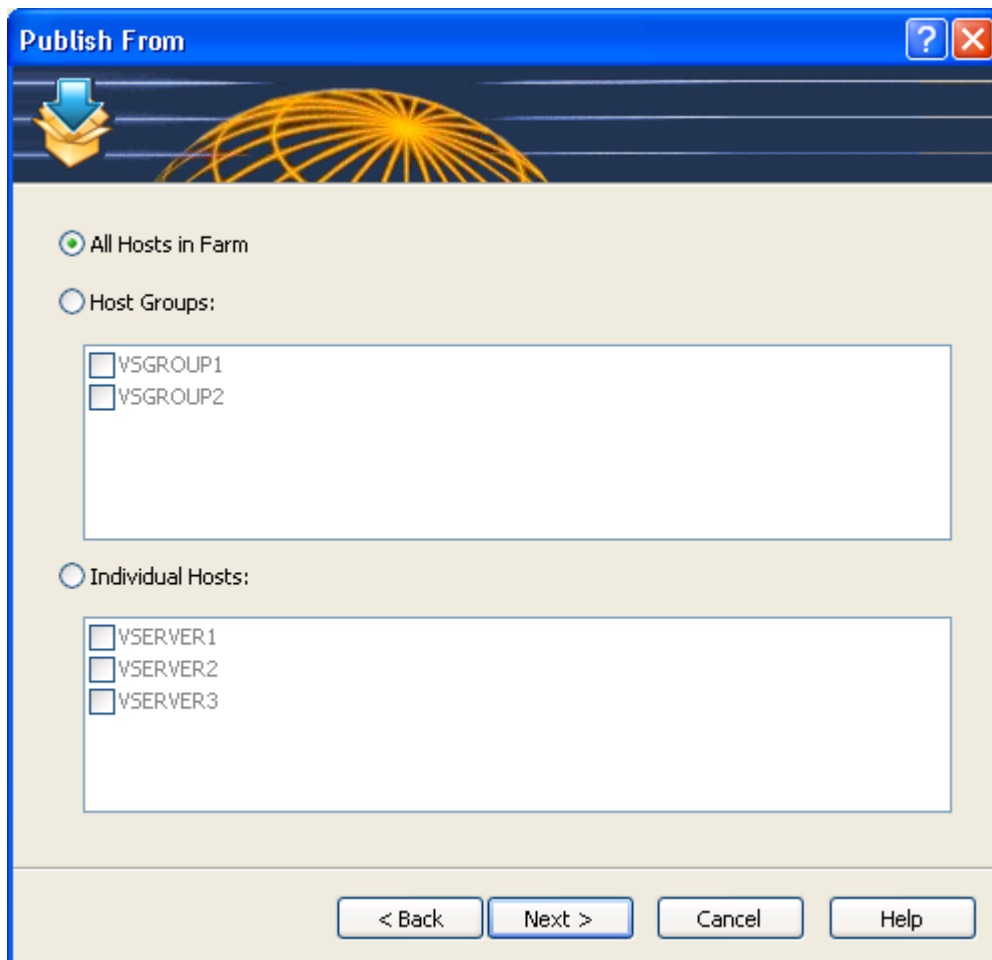


Figure 11: Choose from which Virtual Hosts you want to publish the application

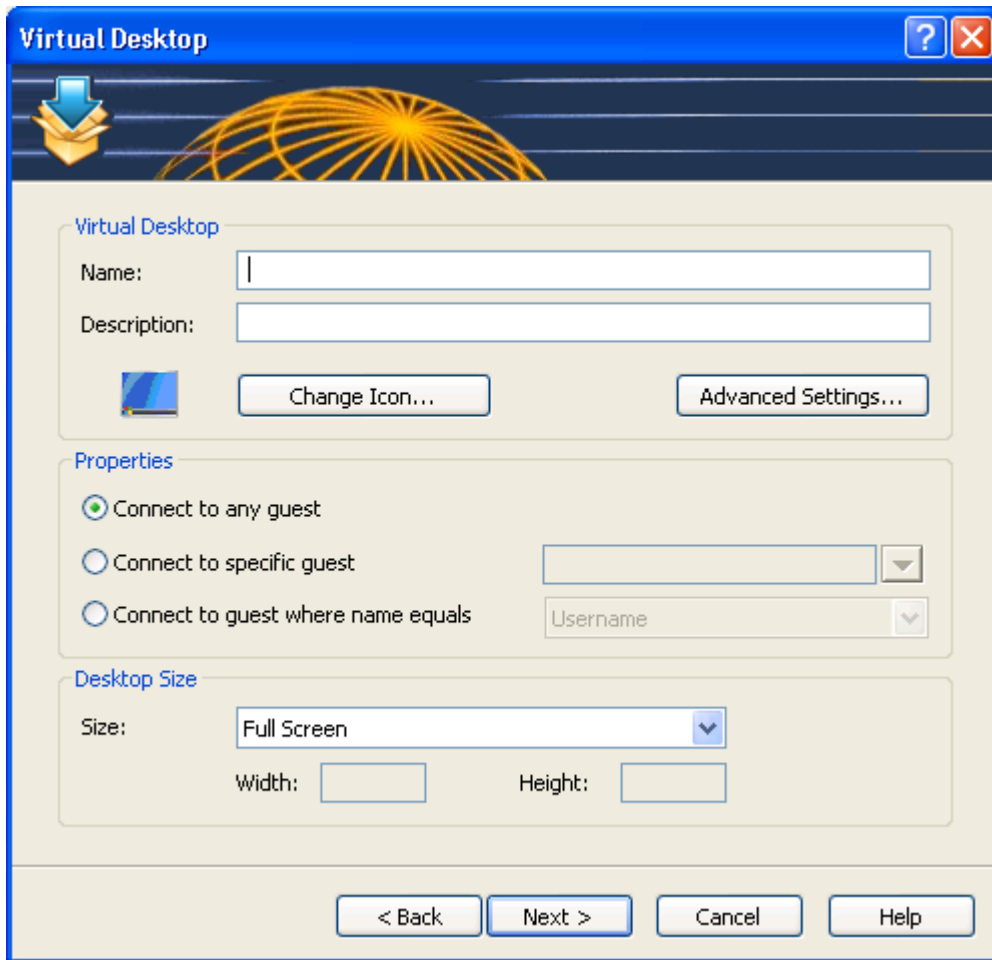


Figure 12 - Virtual Desktop Settings

Virtual Desktop

In this dialog you can type the Desktop Name and a Description for the published desktop. From this dialog you may also change the icon for the published desktop.

Properties

There are 3 different properties which can be used by the Virtual Desktop. 'Connect to any guest' will load any virtual desktop published to any user that logs in. 'Connect to specific guest' will load the virtual desktop selected to every user. 'Connect to a guest where name equals' will loads the virtual desktop to users who's user name is the same as that of the virtual desktop or to users which are using a machine that has an IP address equal to the virtual desktop's name.

Desktop Size

Choose, from the drop down list, the resolution you would like to use. Choose 'Custom' to be able to enter your own resolution.

Click '**Finish**' to finalize the wizard, and the application you've just configured will be generated in the 'Published Applications Explorer' area. Now you can re-configure the options by using the tabs in the 'Published Applications Properties' area.

USING 2X CLIENT WITH QEMU

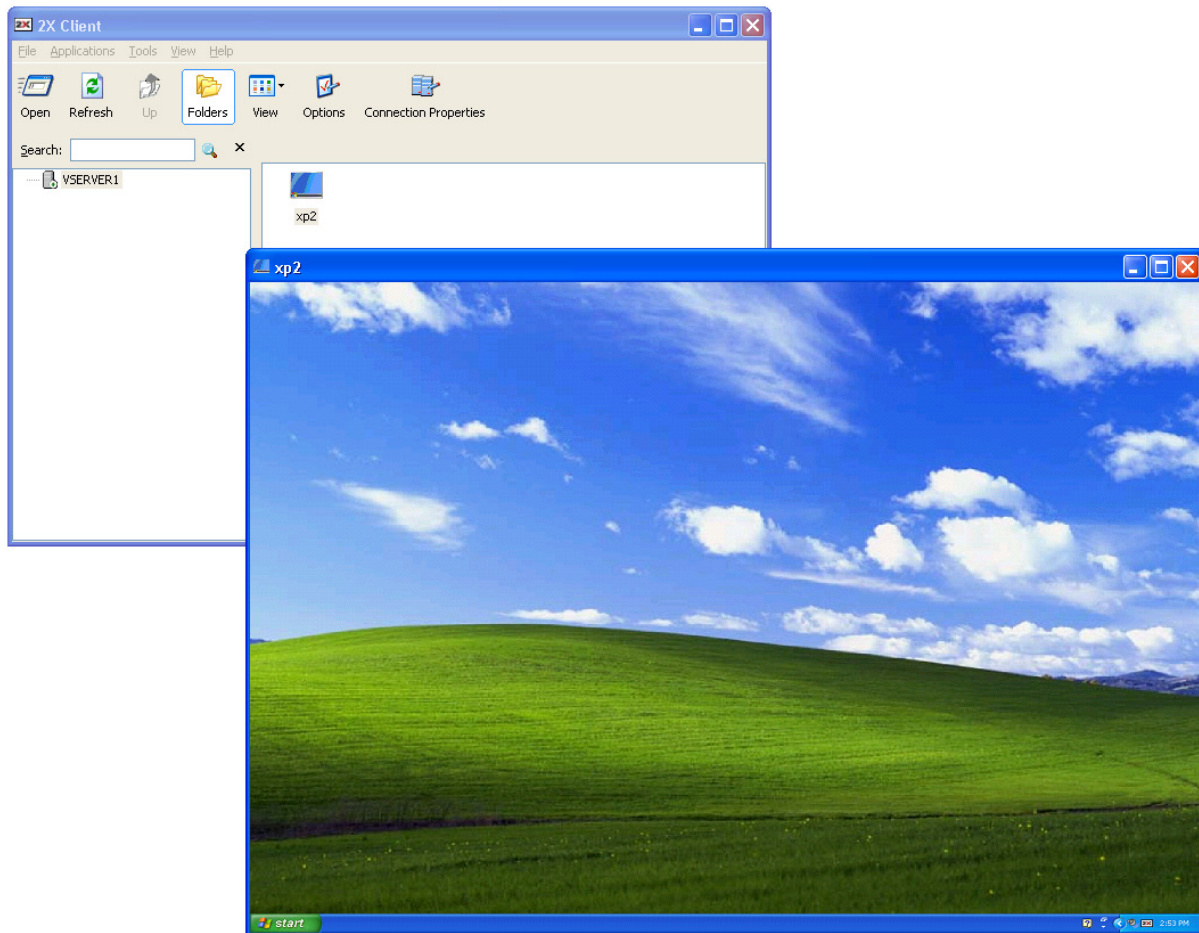


Figure 13: A published virtual desktop launched from 2X Client

Once a new virtual desktop is published using the 2X VirtualDesktopServer Console, the desktop will show up on all the clients with a connection to the 2X VirtualDesktopServer (this depends on special filters set by the administrator). By double clicking on the published virtual desktop, 2X Client will start a connection to the published virtual desktop.