WML DataGateway ViewPoint Administrator's Guide

Innovative Technology

WML DataGateway ViewPoint Administrator's Guide

Version 88d4c05 (ticket2044_viewpoint_documentation), 02 June 2016

Acknowledgements.

Microsoft and Windows are registered to Microsoft Corporation.
HP and PCL are trademarks of Hewlett Packard.
PowerEdge is a trademark of Dell Corporation.
VMware is a trademark of VMware, Inc.
Linux is a registered trademark of Linus Torvalds.
Prescribe is a registered trademark of Kyocera-Mita Corporation.
Thanks to University College London, Stevenage Football Club and OneAnswer Insurance for the use of their logos.
E&OE

Table of Contents

About this manual

This manual describes how to set up and configure the ViewPoint system. The ViewPoint system is designed to allow brokers to access their customers' documents and other information that has been processed through DataGateway.

1. Intended Audience

This manual is aimed at IT administration staff who will be involved with maintaining and configuring the WML DataGateway ViewPoint system.

Some familiarity with Linux and MySQL would be beneficial but is not essential.

2. Software Licence and Copyright

> **Important**
>
> Before using the WML ViewPoint Software please read the licence agreement carefully. The right to use this software is granted only if the Customer agrees to the terms of this Licence. If you do not agree to the terms of this Licence, please return the product unused.
>
> William Matthew Limited considers that installation of the Software is your acceptance of our terms and conditions of the license.

1. The Software has been developed for use with the WML ViewPoint; The Licence is to be used without any time limit and may be subject to change.
2. The Software may not be duplicated, copied, resold, or re-branded without the written consent of William Matthew Limited.
3. It is the responsibility of any user, reseller, distributor, OEM or other third party to protect the rights of William Matthew Limited against violation of this Software Licence.
4. Some portions of The Software have been developed by third parties and are used by WML under the terms of the GNU General Public Licence, as well as other open source and free software licences. The source code to these portions of The Software are available to WML's customers under the same terms under which WML uses them. WML will uphold and protect the copyright of the original author of these portions of The Software.
5. William Matthew will consider any attempt to duplicate the functionality of any application provided by the software to constitute a breach of software licence, and may instigate legal proceedings to protect the copyright of the ViewPoint software and William Matthew Limited.

6. This Licence and the Software product may be transferred to a third party provided the third party agrees to all the terms of this Licence and that the transferring party retains no copies of the Software.
7. William Matthew Limited reserves the right to terminate this Licence upon breach.
8. In the event of a termination, all copies of the software must be destroyed or returned to William Matthew Ltd
9. Any disputes in respect of the Software Licence will be considered a breach of copyright and subject to English Law.

Chapter 1. Introduction

WML DataGateway ViewPoint comprises two components:

DataGateway	This is the system that processes documents including checking their integrity, converting them to other print formats and sending them to be printed or emailed.
ViewPoint	This is the system that enables brokers to access the documents related to their broker reference that have been processed by DataGateway. They may also be able to perform certain actions on the documents and produce reports.

Each document processed will have a broker reference embedded within it. This will be used to determine who can access the documents using ViewPoint

Logging in to the ViewPoint system is by user and password set up by the system administrator. Each user will be associated with a single broker reference. Only documents with the same broker reference will be visible to that user. There can be more than one user associated with a broker reference.

The information available to brokers and the actions they can perform will be determined by permissions set by a system adminstrator.

Subject to these permissions, brokers will be able to:

- View a list of documents held under document content control (DCC)
- View a held document
- Force release a held document
- Print a held document without releasing it
- Delete a held document
- View a list of documents for electronic delivery
- View a specific electronic delivery document
- View the audit trail for an electronic delivery document
- Print an electronic delivery document for mailing
- Send a 'documents ready' notification to a customer
- Change the email address and/or SMS number associated with an electronic delivery document
- Cancel an electronic delivery document
- Produce a report of electronic document delivery over a selectable period

Chapter 2. Getting Started

In this chapter, you will be guided through the initial set-up for the WML ViewPoint. There are three main processes involved here as follows:

- *VMware* - setting up the virtual machine on a VMware platform.
- *ViewPoint* - setting up the ViewPoint system ready for use
- *linking to DataGateway* - before the ViewPoint can be used it must be linked to its associated DataGateway system. The DataGateway system is where all the documents are processed.

2.1. Platform set-up

In this section, you will find out how to set up the various platform configurations. The following sections describe set-up tasks that are common to all configurations.

Setting up a ViewPoint system

ViewPoint firmware disk files are normally distributed as VMWare images (.vmdk or .esx.zip files).

Follow the procedure given by the vendor of your virtualization infrastructure to create a new virtual machine using the ViewPoint disk file as the virtual disk.

> **Note**
>
> The ViewPoint disk file will be read from and written to. For this reason, it is advisable to keep a copy of the original disk file from which a fresh virtual machine can be created. Select a suitable location on your disk system to store your in-use disk files. This should be somewhere where it is unlikely that the files will be moved or interfered with externally.
>
> Make a separate copy of the ViewPoint disk file for each new virtual appliance which you create.

VMware infrastructure options

VMware provides a number of different infrastructure options, including VMware workstation and VMware vSphere/ESXi.

A ViewPoint firmware disk should work on any type of VMware infrastructure, however, you do need to choose to download the correct vmdk disk image from our servers.

VMware virtual disks, pre-installed with ViewPoint software are available in two formats. The first is a growable disk provided as a single file with a name such as:

```
wmlpp-brokerif-vmware-sata-tree3-20160504_1547.vmdk
```

This format can be used as the virtual disk for virtual machines created on VMware Workstation, but not recent versions of VMware ESXi/vSphere.

If you are using VMware ESXi or vSphere, you will need to download the ESX-compatible VMDK. This is provided as a zip file with a file name suffix **.esx.zip**. The zip contains two files, a .esx.vmdk disk descriptor file and a 2.5 GB pre-allocated .esx-flat.vmdk file which contains the disk data. For example:

```
wmlpp-brokerif-vmware-sata-tree3-20160504_1547.esx.vmdk
wmlpp-brokerif-vmware-sata-tree3-20160504_1547.esx-flat.vmdk
```

Upload both of these .vmdk files to the data store of your VMware infrastructure before creating a new virtual machine.

> **Note**
>
> It is possible to use the ESX-compatible VMDK files on VMware Workstation.

VMware Workstation walk-through

This walk-through demonstrates the set up of a Virtualized appliance on VMware Workstation version 9.0 running on Microsoft Windows 8.

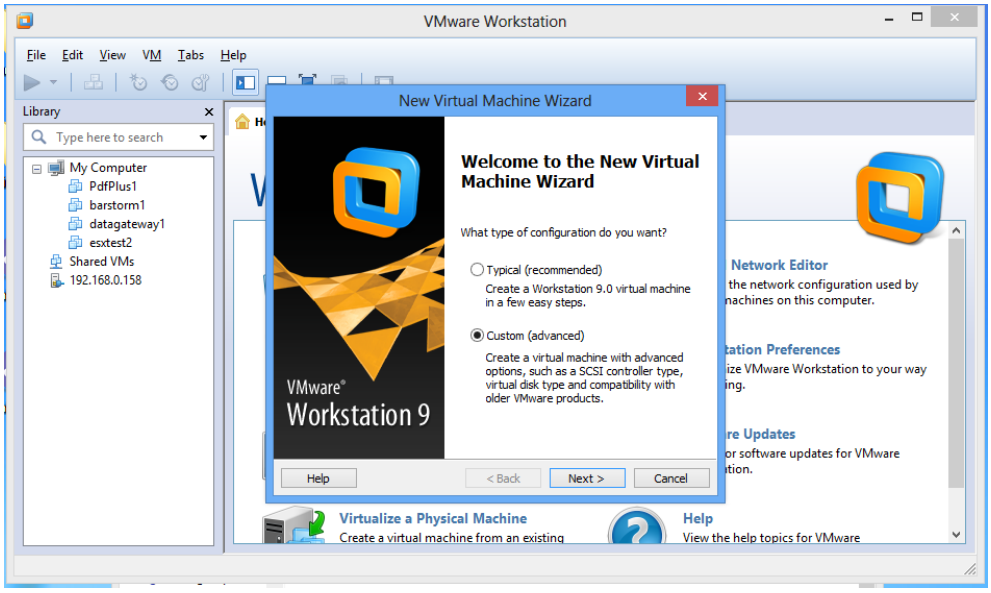
> **Note**
>
> It is assumed that you have VMware Workstation version 9.0 already installed on your PC. For help installing VMware Workstation, please refer to the VMware website.

Creating a new Virtualized appliance is carried out in the VMware Workstation user interface. This is accessed via an icon in your start menu or on the desktop.

Figure 2.1. The Home tab of the VMware Workstation user interface.

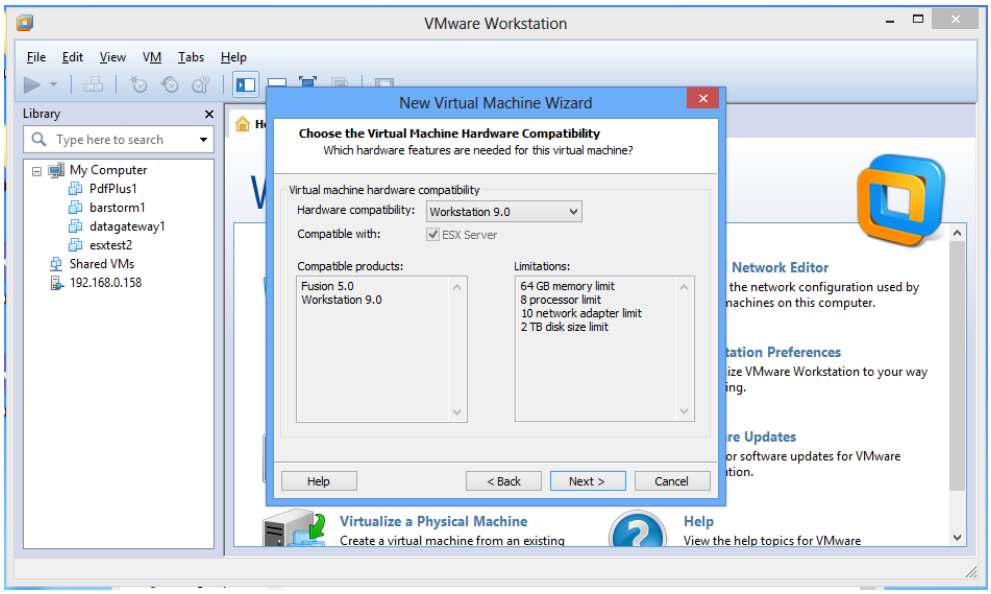
In the VMware Workstation Home tab, click **Create a New Virtual Machine**. The **New Virtual Machine Wizard** will open (Figure 2.2). Select **Custom (advanced)** so that it will be possible to specify that we want to use an existing, preformatted virtual disk. Click **Next**.

Figure 2.2. The "New Virtual Machine Wizard".



The first window allows you to specify the hardware compatibility for the virtual machine. This may be a consideration if you wish to move your virtual machine to older versions of VMware Workstation or to other VMware infrastructure products. In our example, we leave it at its default of **Workstation 9**.

Figure 2.3. Choosing the virtual machine hardware compatibility.



As we will use a pre-existing virtual disk, containing a ready-to-boot operating system, select **I will install the operating system later** on the **Guest operating system installation** window (Figure 2.4).

Figure 2.4. Selecting the source for the operating system for the virtual machine.

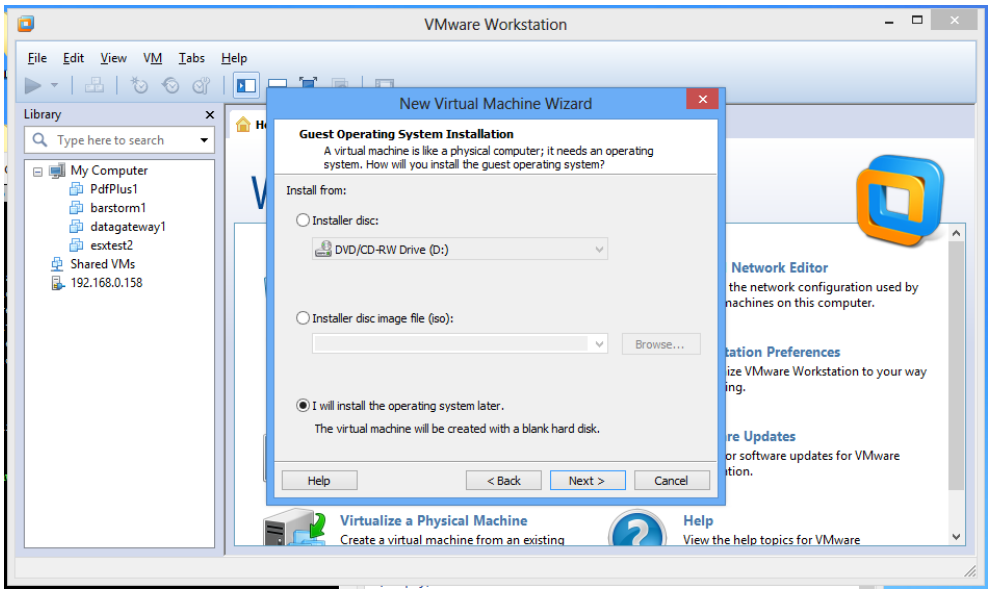
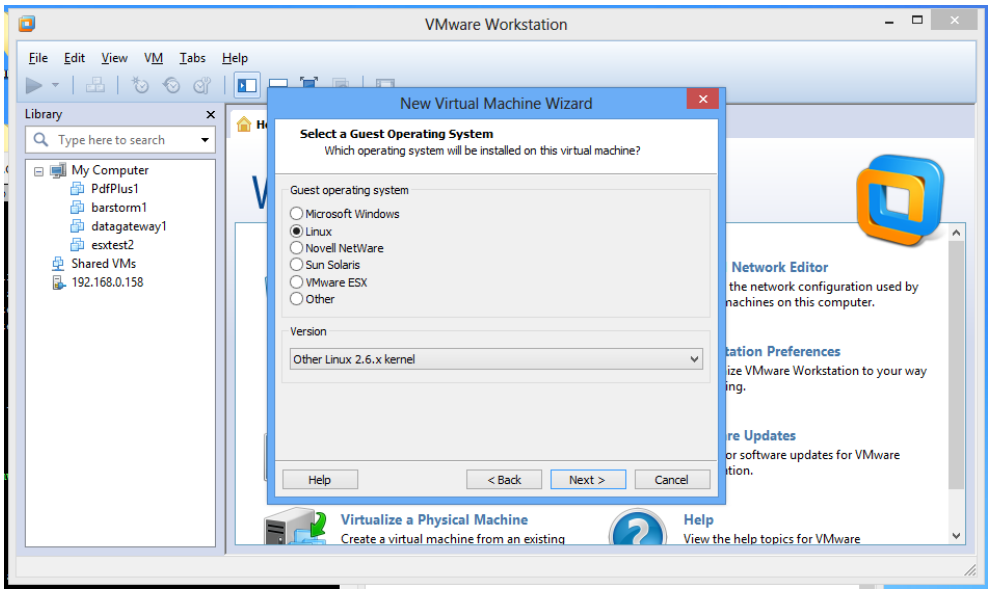


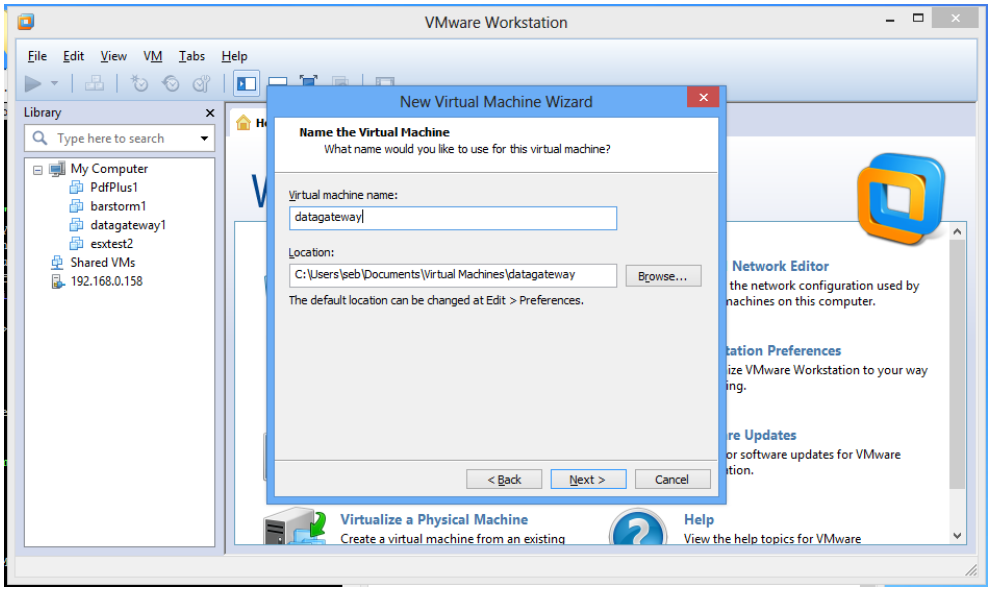
Figure 2.5. Specifying the operating system for the guest appliance.



The next window (Figure 2.5) allows you to choose which operating system your target appliance will be running. All WML appliances run a 32 bit Linux operating system and so

you should choose **Linux** for **Guest operating system** and **Other Linux 2.6.x kernel** for **Version**. Click **Next**.

Figure 2.6. Choosing the name for the virtual machine.



You can now choose the name for your virtual machine. Here, it has been named "datagateway" (Figure 2.6). The virtual machine definition files will be created in the default location **Documents\Virtual Machines**.

Figure 2.7. Setting the number of processors for the virtual appliance.

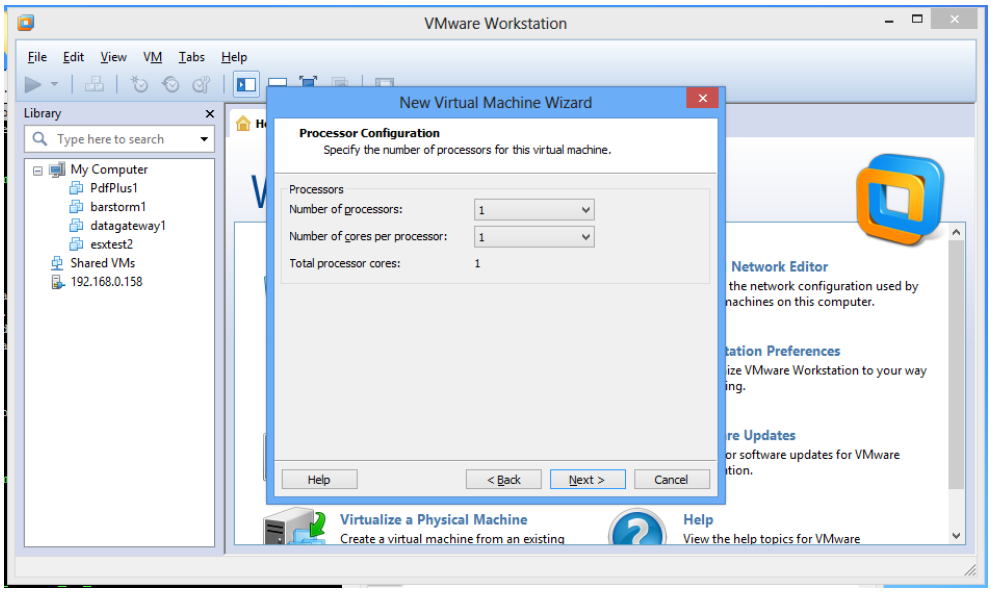
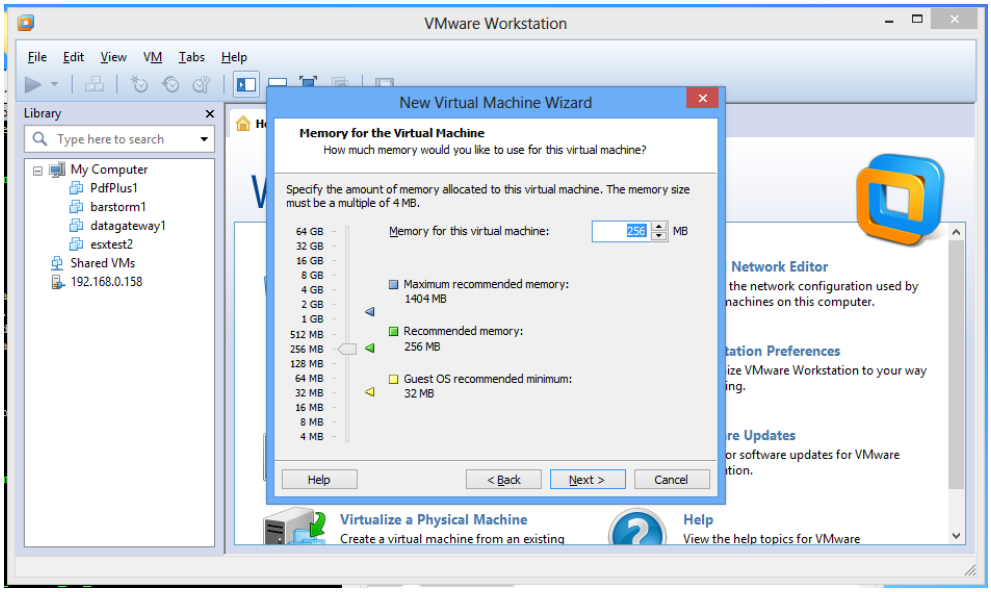


Figure 2.8. Setting the amount of RAM for the virtual appliance.



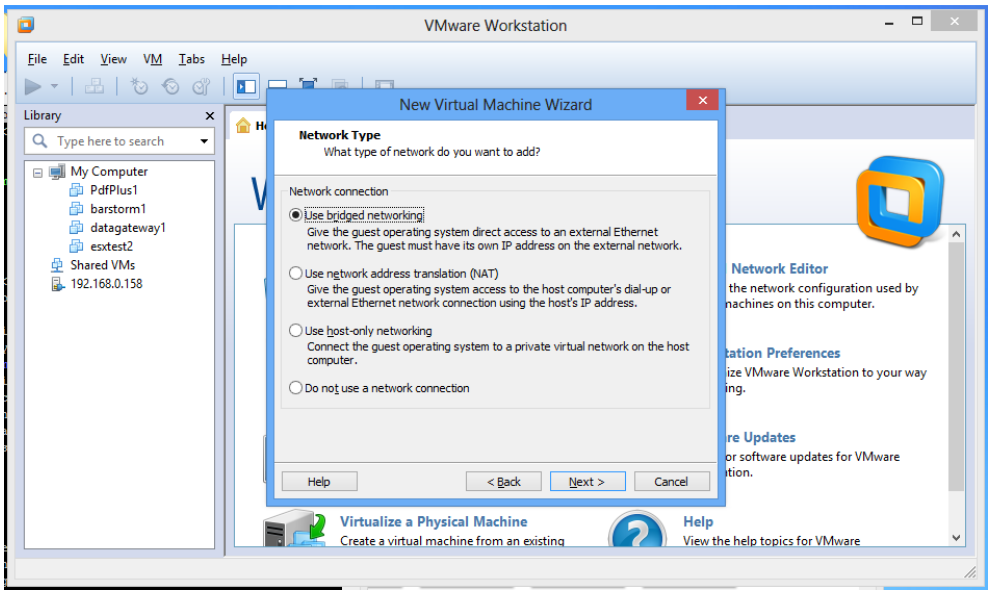
The next two screens (Figure 2.7 and Figure 2.8) allow you to specify the initial amount of RAM and processor resource to assign to your virtual print appliance.

Assign the desired number of processors for the virtual appliance. A single processor may be sufficient for simpler applications. Assigning two processors to the system will improve the responsiveness of the web interface when the print processing load is high.

Specify a minimum of 256 MB of RAM. Some applications may require more memory to run correctly, but 256 MB is sufficient for simpler tasks and short documents.

> **Note**
>
> The amount of RAM may be altered after the virtual appliance has been created. Altering the number of processors is not recommended by VMware, but it can be done. WML appliances will safely handle a change in the number of available processors.

Figure 2.9. The Network Type window.



In the **Network Type** window (Figure 2.9) you can select different kinds of network. For a most systems, you are likely to need **Use bridged networking**, which allows your virtual appliance to join your physical network as if it were a real machine. **Use network address translation (NAT)** is unlikely to be suitable choice, as the WML Virtualized appliance acts as a server. For test installations, **Use host-only networking** may be a suitable choice. In this case, the virtual machine exists on an internal, virtual network.

A full discussion of networking your virtual machines is outside the scope of this document. If you are unsure of which type of network connection to choose, contact your network administrator or your networking consultant or supplier.

Figure 2.10. Selecting the virtual I/O controller type.

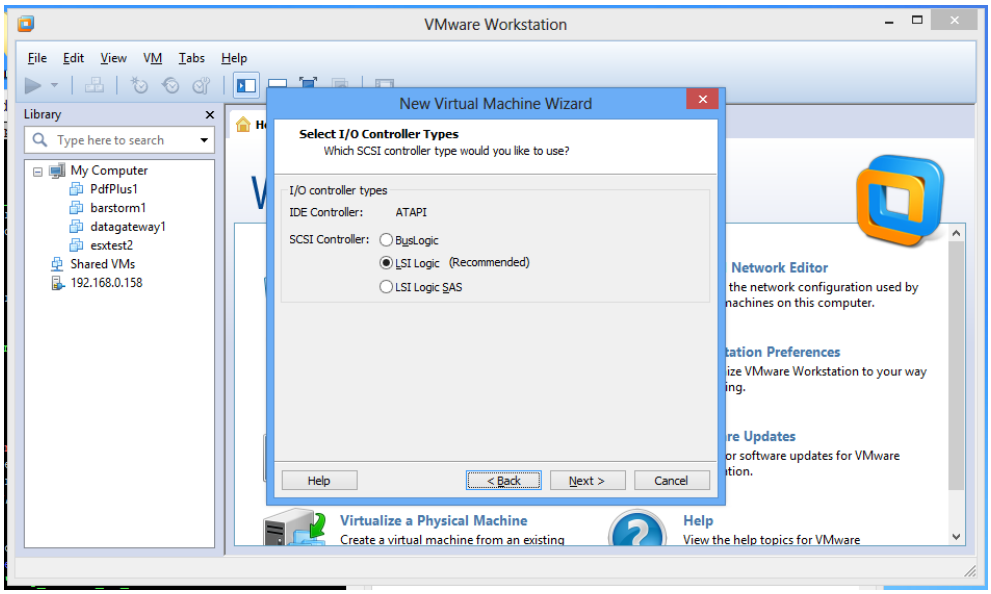
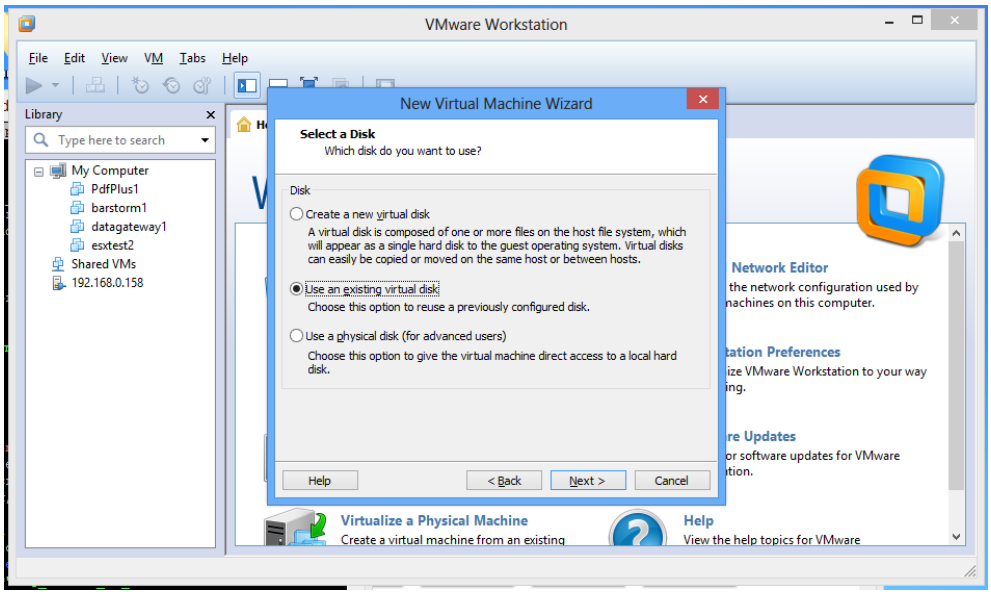


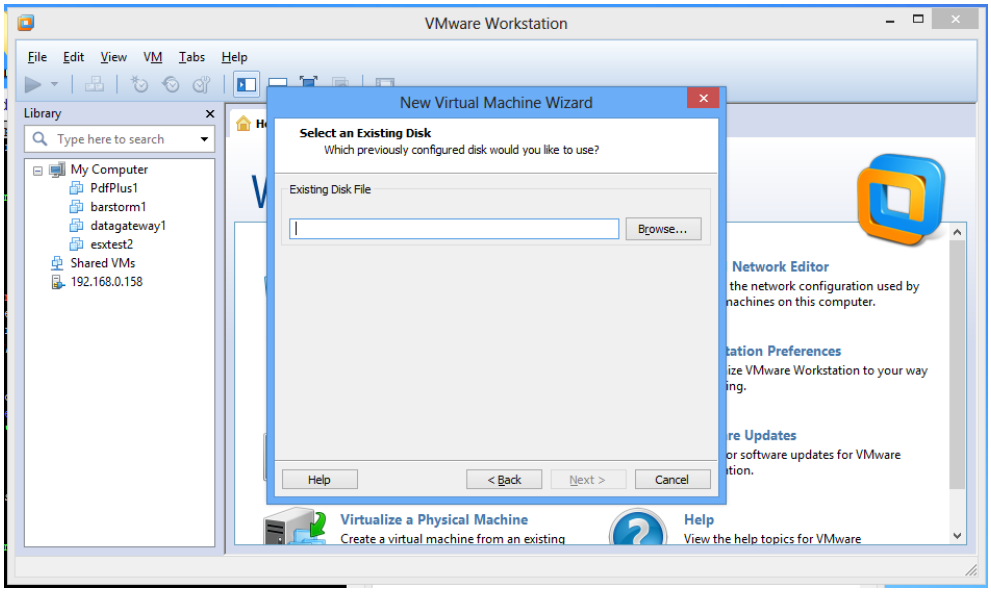
Figure 2.10 shows a screen allowing a choice of virtual disk I/O controllers. Leave the default **LSI Logic (Recommended)** checked.

Figure 2.11. Selecting a hard disk for the virtual appliance.



In the next window (Figure 2.11) you have the option to **Create a new virtual disk**. This would create an *empty* disk, which would then need to have the operating system installed (perhaps from a dvd or cdrom). Because you are using a pre-populated disk file supplied by WML, you should click on **Use an existing virtual disk**, which will open the next window, shown in Figure 2.12.

Figure 2.12. Selecting an existing disk.



Browse to the vmdk disk image (Figure 2.13). You will probably see a pop-up asking if you wish to convert the existing virtual disk to a newer format (Figure 2.14). You can choose to do this or not, as you prefer; the virtual machine will boot correctly in either case.

> **Warning**
>
> VMware Workstation will *not* make a copy of this disk image file; it's up to you to keep a copy of the original disk image. The disk image file will be read from and written to, and may increase in size to a maximum of approximately 2.5 GB.

Figure 2.13. Selecting the WML Virtualized disk file.

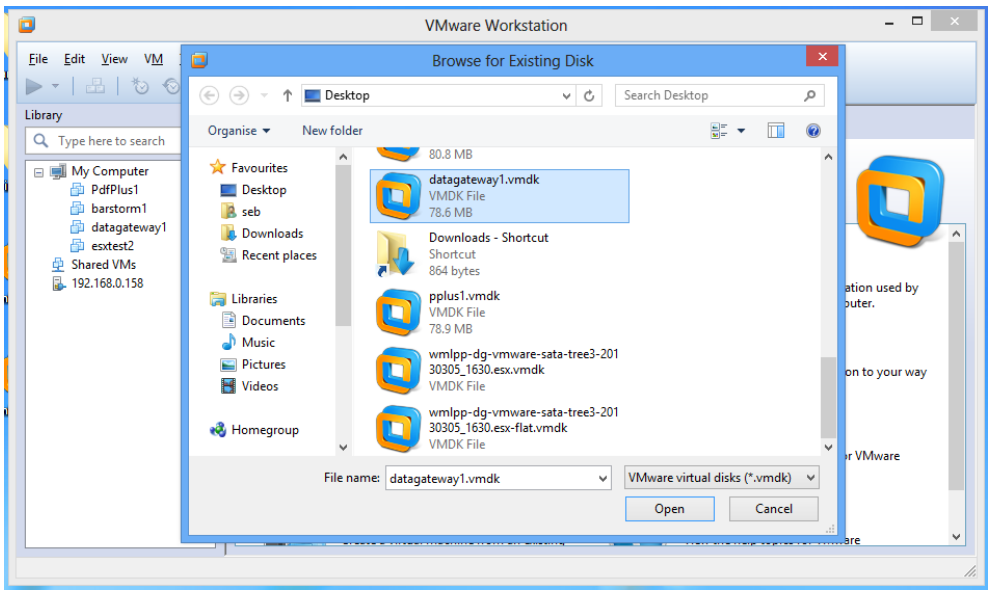
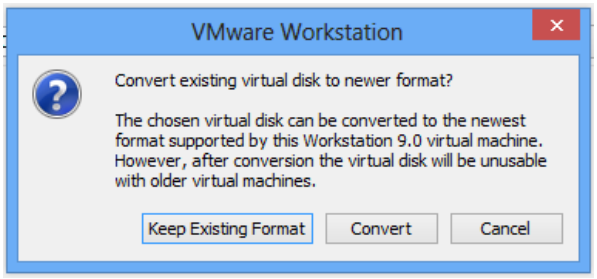
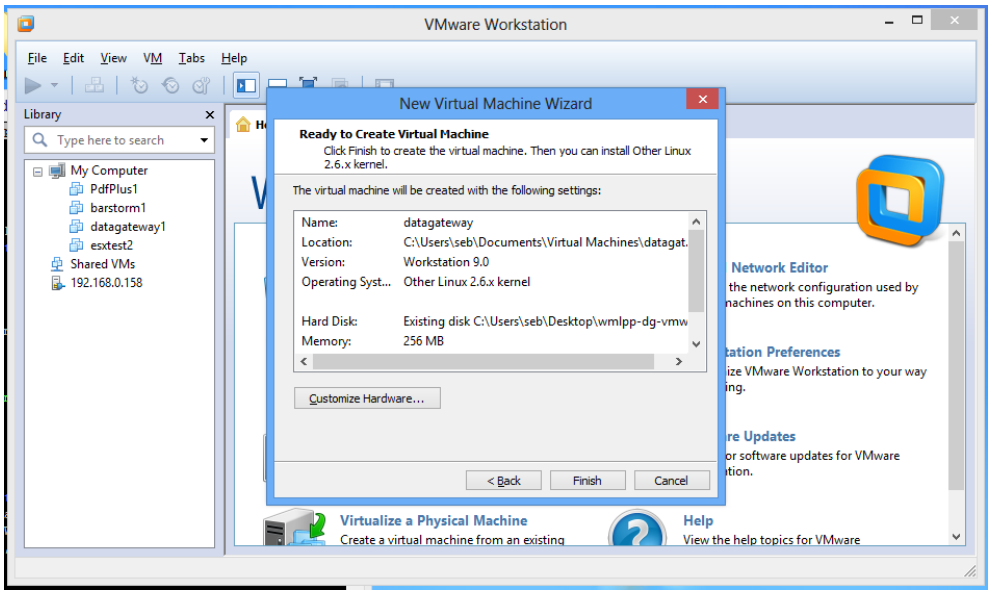


Figure 2.14. Converting to newer format.



Choose to keep the existing disk format, or convert it and press **Next**. You'll see the final window in the wizard (Figure 2.15). When you click **Finish**, your Virtualized virtual appliance is ready to use.

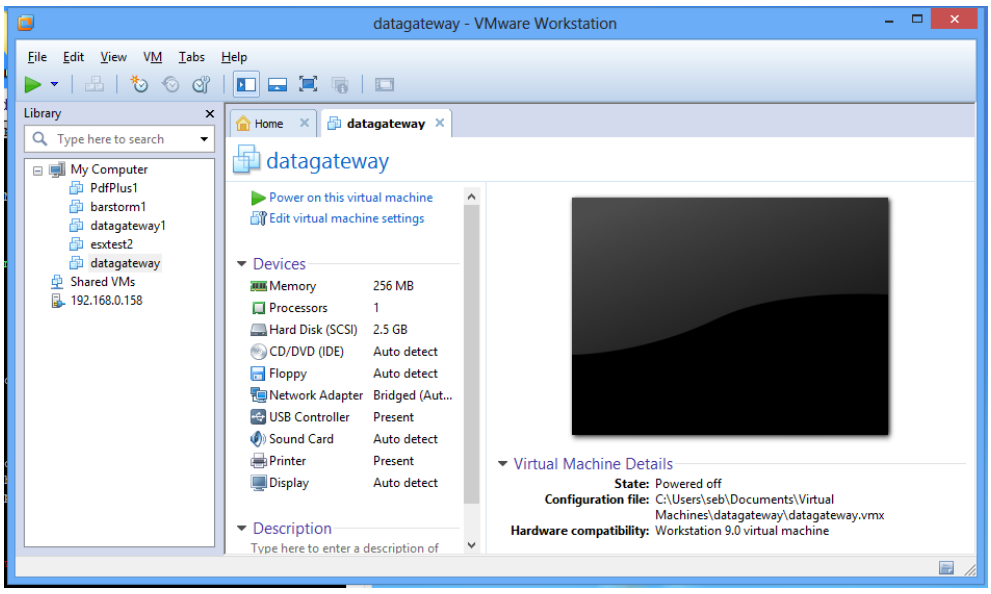
Figure 2.15. Ready to Create Virtual Machine - a summary of your new virtual appliance.



After creating your new virtual machine, a new tab will appear in the VMware Workstation UI. You can access the console of your virtual machine here (Figure 2.16). When you first boot your virtual machine, you will see a message about installing a guest operating system. You can simply click the button labelled **I Finished Installing**.

> **Note**
>
> There is no need to install VMware tools on a WML Virtualized system. VMware tools enhances the user experience when using a mouse within a graphical environment. The ViewPoint has no graphical console and hence VMware tools is not used.

Figure 2.16. The new appliance tab.



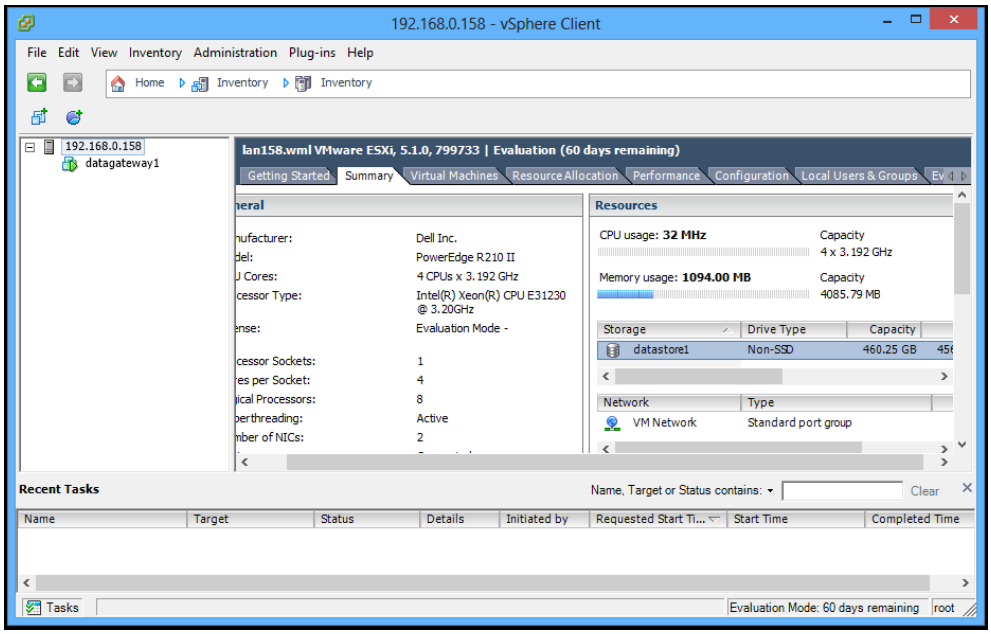
We hope you found this walk-through for VMware Workstation useful.

VMware vSphere ESXi walk-through

This walk-through demonstrates the set up of a Virtualized appliance on a VMware ESXi hypervisor version 5.1.0. The ESXi hypervisor is controlled from vSphere client 5.1.0 running on Windows 8.

> **Note**
>
> It is assumed that you have a server with VMware ESXi version 5.1.0 already installed on a server, and VMware vSphere client version 5.1.0 on a separate PC or laptop. For help installing VMware vSphere, please refer to the VMware website.

Figure 2.17. The Summary tab in vSphere client for the ESXi host (192.168.0.158).



Creating a new Virtualized appliance is carried out in the VMware vSphere client user interface. This is accessed via an icon in your start menu or on the desktop. When you open vSphere client, you must connect to the IP address of your VMware ESXi host.

Once you have connected to the ESXi host, you will see the vSphere client **Getting Started** screen. Figure 2.17 shows the vSphere client, with the **Summary** tab showing.

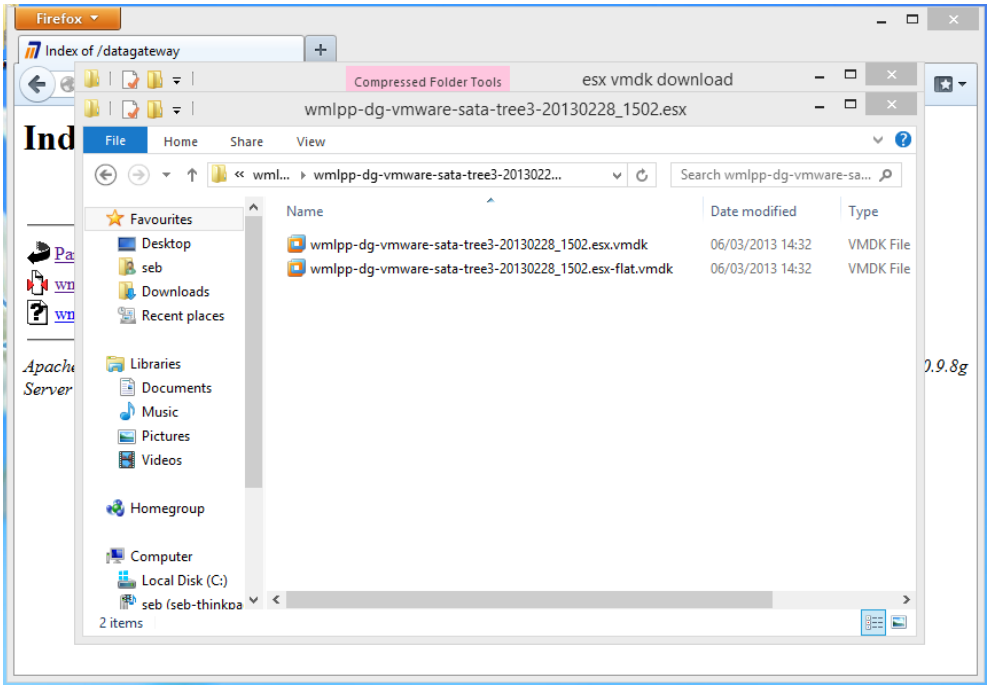
Figure 2.18. VMware images on the WML web server.

Before starting, download the latest ViewPoint image from:

```
http://wmltd.co.uk/viewpoint/
```

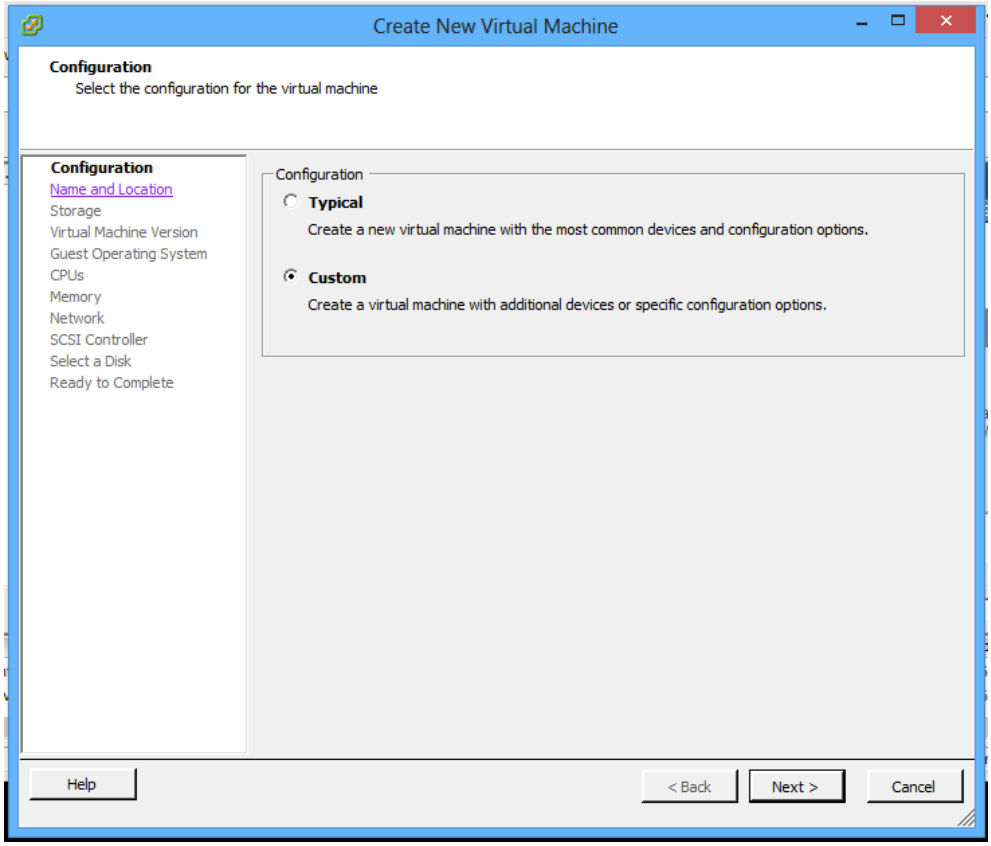
Choose the .esx.zip file (Figure 2.18). Unpack the zip and find the two .vmdk files (Figure 2.19).

Figure 2.19. The .esx.zip file unpacks to provide two vmdk files.



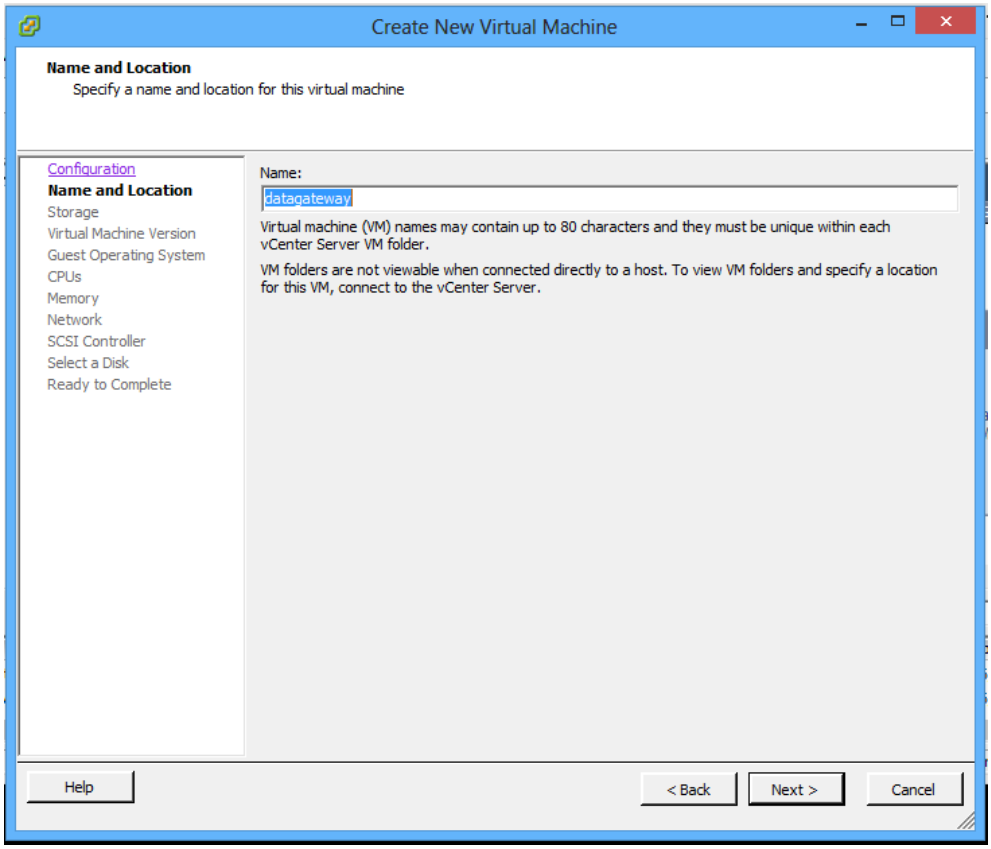
Upload both of the .vmdk files to the datastore of your ESXi host; in the **Summary** tab (Figure 2.25), right-click on the datastore and choose **Browse datastore**. The Datastore Browser has icons to upload two files. Your datastore will now contain the pre-installed virtual disk for your new virtual machine.

Figure 2.20. The "New Virtual Machine" wizard.



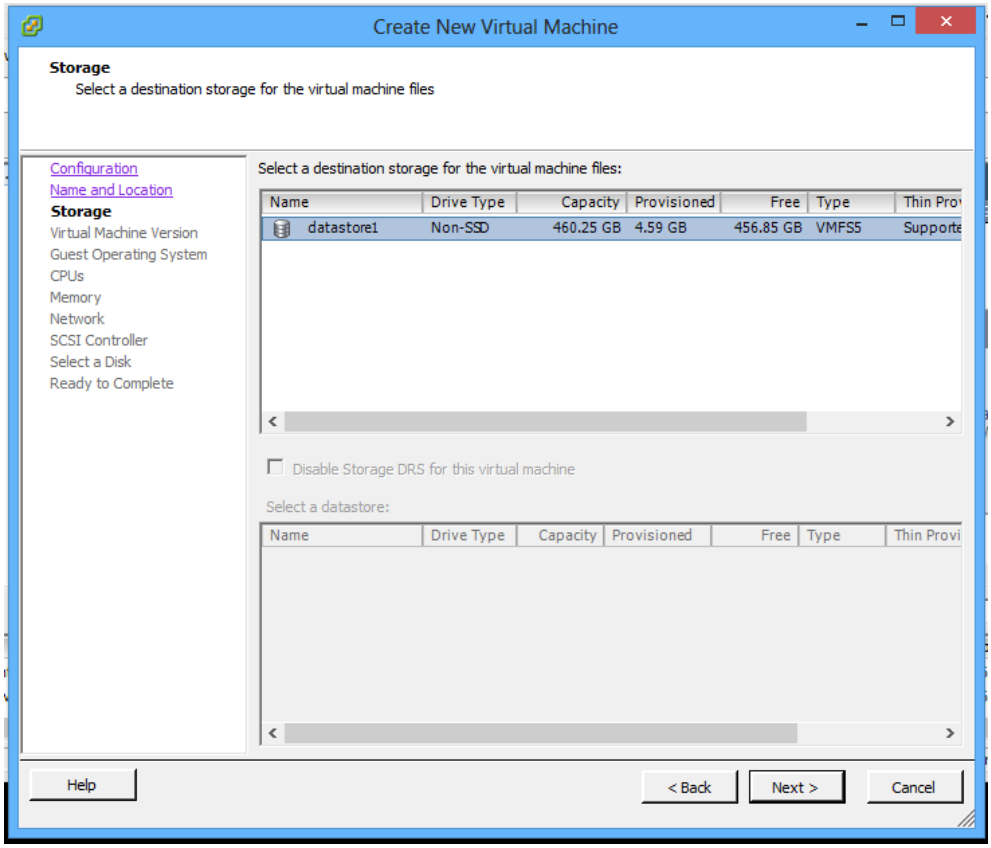
In the **Getting Started** tab, click the link **Create a new virtual machine**. The **Create New Virtual Machine** wizard will open (Figure 2.20). Select **Custom** so that it will be possible to specify that we want to use an existing, preformatted virtual disk. Click **Next**.

Figure 2.21. Choosing the name for the virtual machine.



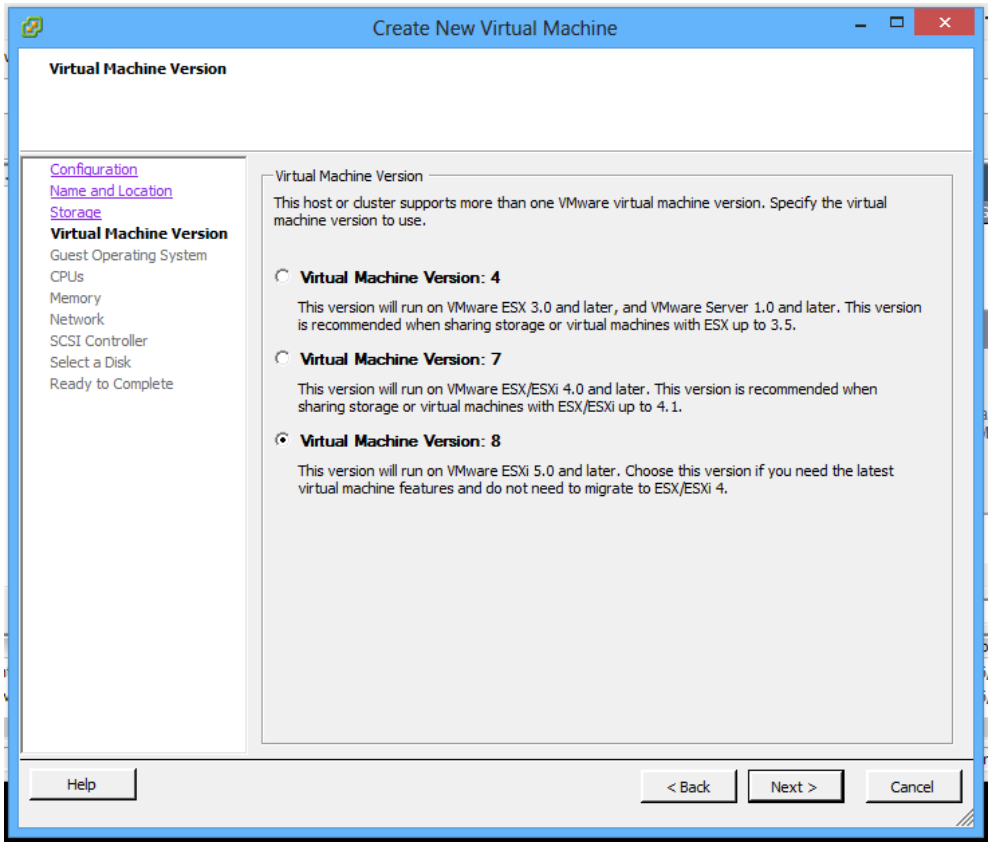
You can now choose the name for your virtual machine. Here, it has been named “datagateway” (Figure 2.21).

Figure 2.22. Choosing a datastore for the virtual machine.



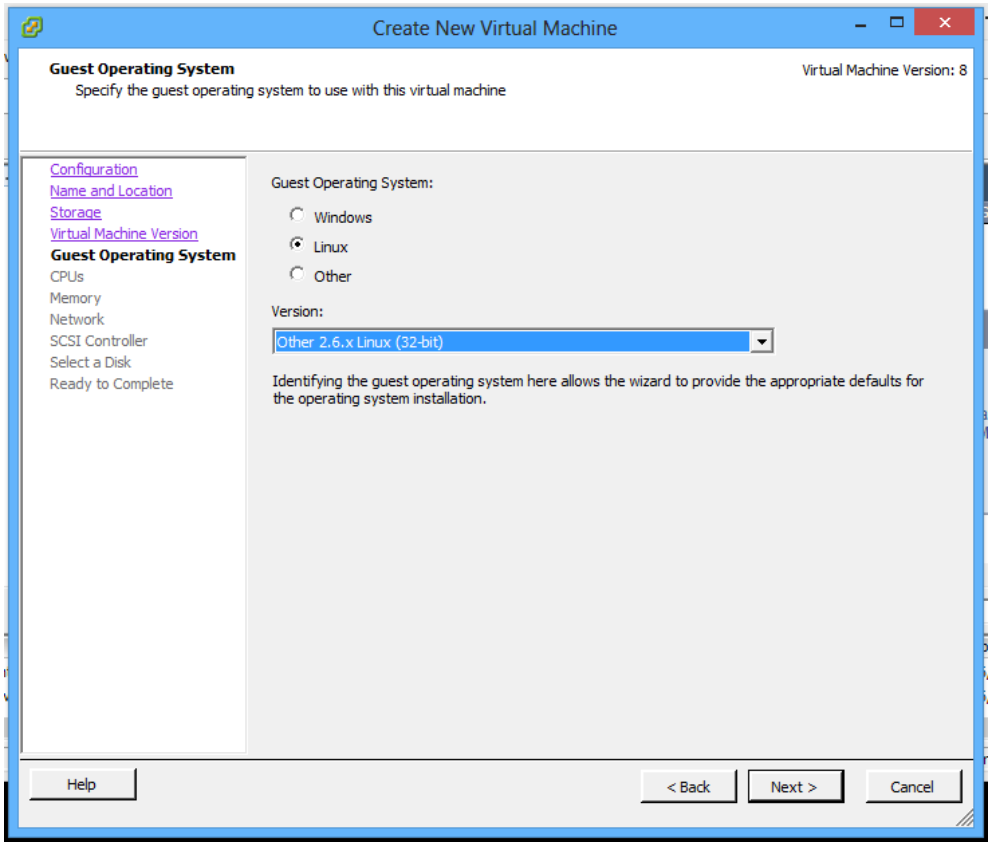
The next window allows you to specify a datastore in which you will create or find the virtual disk for the machine. Choose the datastore to which you uploaded the ViewPoint vmdk files. In this example, there is only a single datastore called datastore1.

Figure 2.23. Choosing the virtual machine hardware compatibility.



The Virtual Machine Version window allows you to specify the hardware compatibility for the virtual machine. This may be a consideration if you wish to move your virtual machine to older versions of VMware ESXi or to other VMware infrastructure products. In our example, we leave it at its default of **8**.

Figure 2.24. Specifying the operating system for the guest appliance.



The next window (Figure 2.24) allows you to choose which operating system your target appliance will be running. All WML appliances run a 32 bit Linux operating system and so you should choose **Linux** for **Guest Operating System** and **Other 2.6.x Linux (32-bit)** for **Version**. Click **Next**.

Figure 2.25. Setting the number of processors for the virtual appliance.

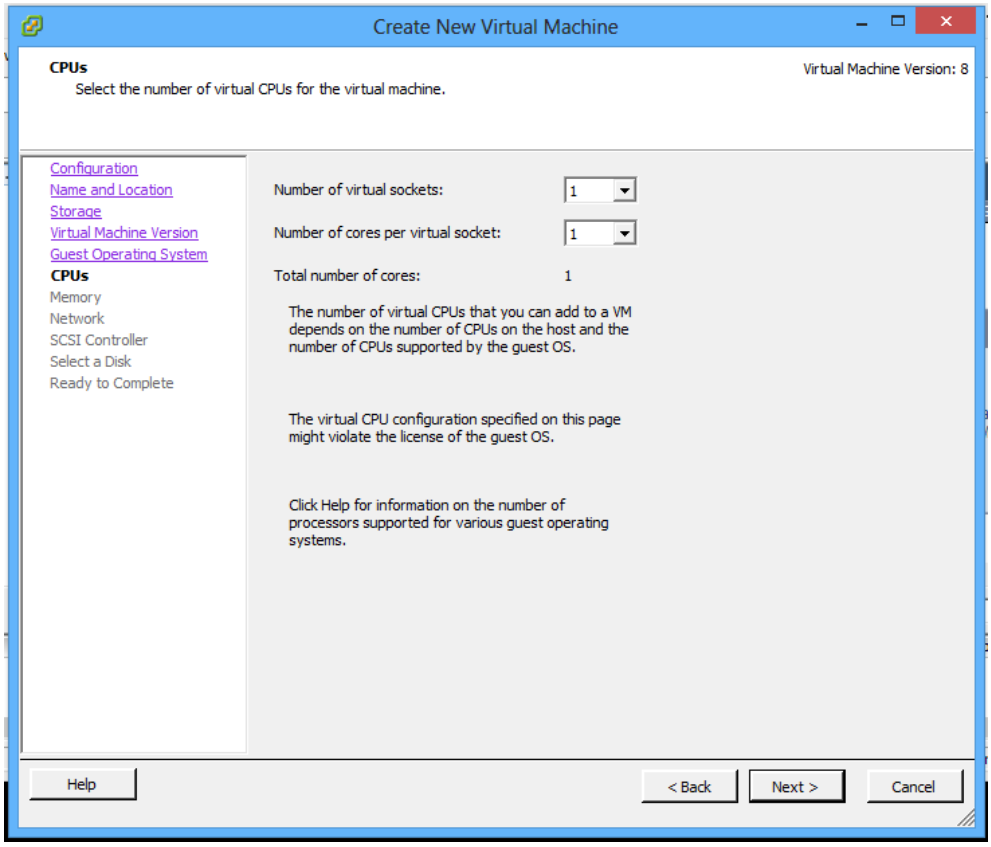
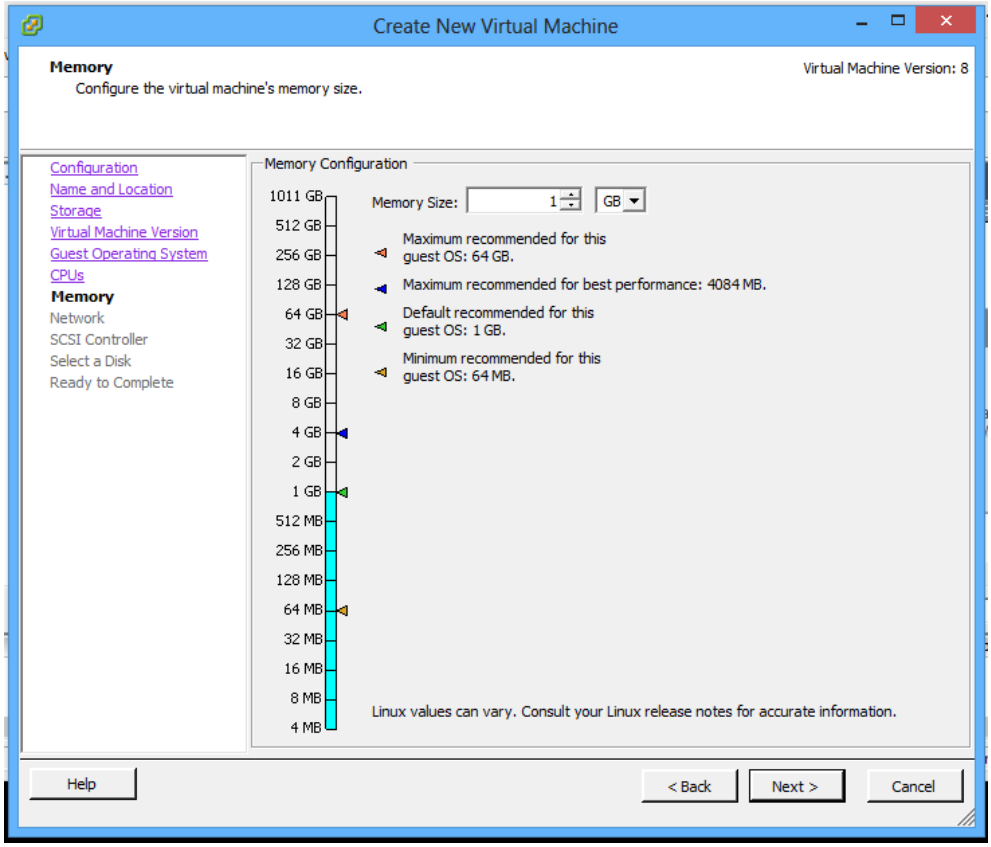


Figure 2.26. Setting the amount of RAM for the virtual appliance.



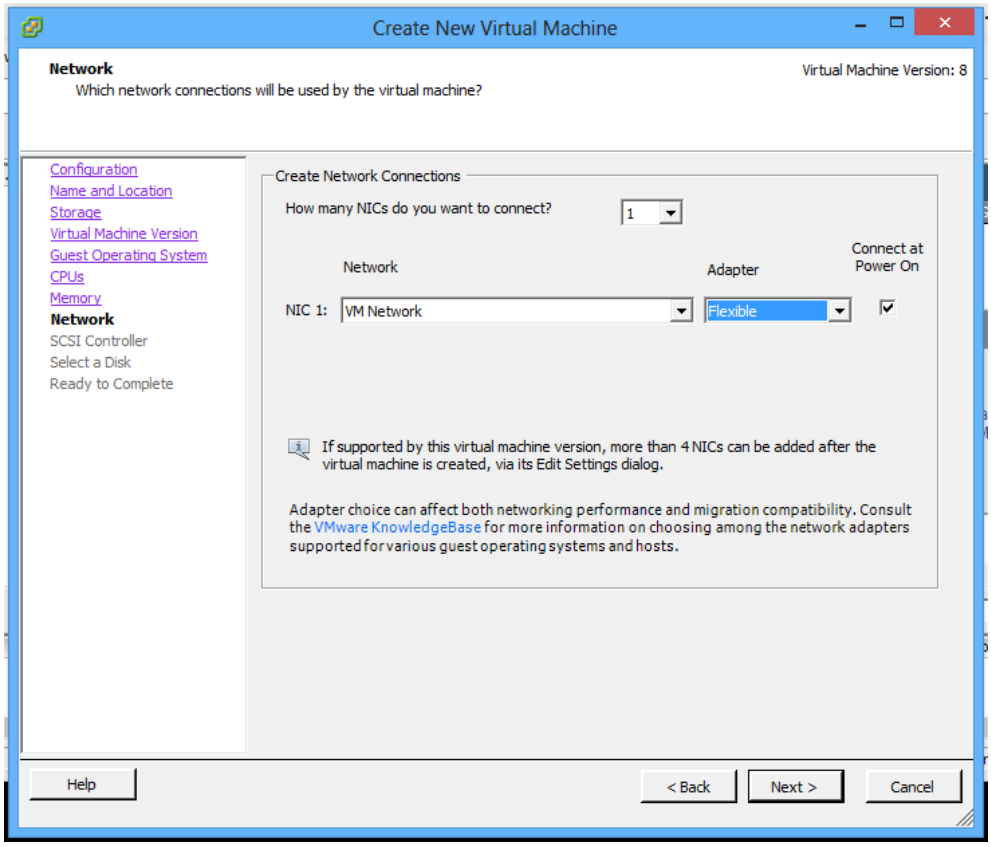
The next two screens (Figure 2.25 and Figure 2.26) allow you to specify the initial amount of RAM and processor resource to assign to your virtual print appliance.

We recommend that you allow 1 processor with 4 cores for maximum performance of the system although 1 processor with 1 core would work at a pinch.

Specify a minimum of 1 GB of RAM which is sufficient for simpler tasks and short documents. However, we recommend 4 GB for good performance.

> **Note**
>
> The amount of RAM may be altered after the virtual appliance has been created. Altering the number of processors is not recommended by VMware, but it can be done. WML appliances will safely handle a change in the number of available processors.

Figure 2.27. The Network window.



In the **Network** window (Figure 2.27) you can select the number of virtual network interface cards to assign to the virtual machine. The default of a single NIC is usually suitable for a ViewPoint. By default, the NIC for the virtual machine will join the same network as the ESXi host.

Figure 2.28. Selecting the virtual I/O controller type.

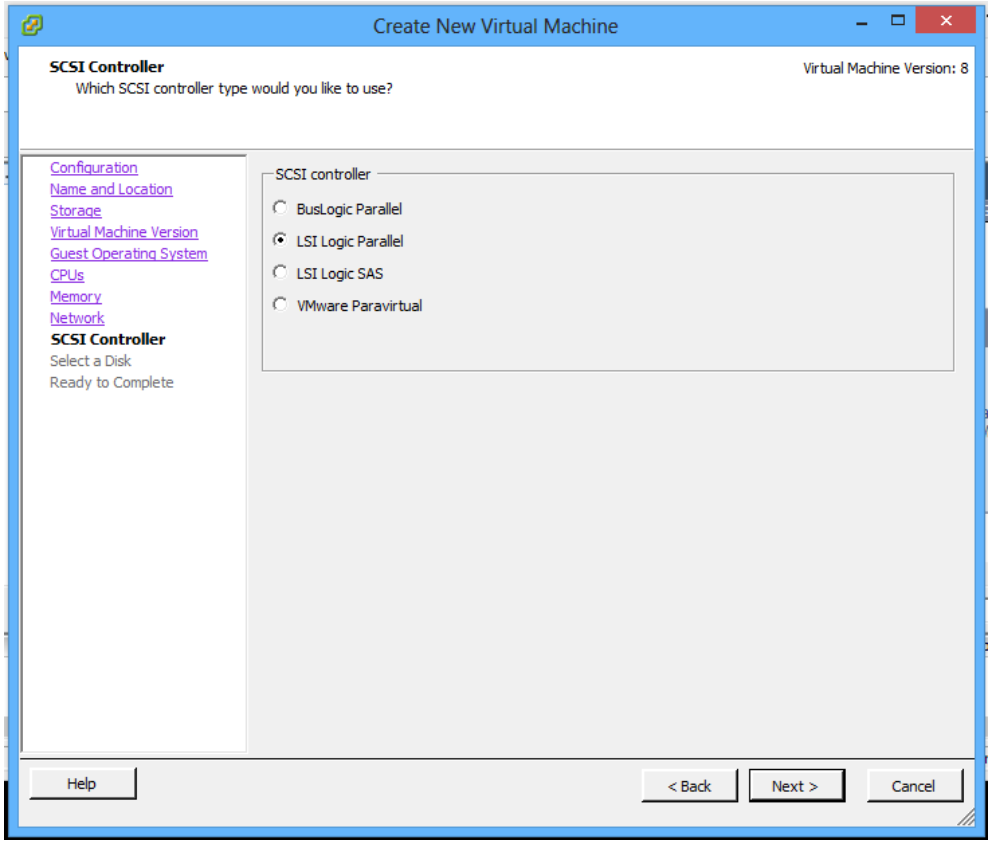
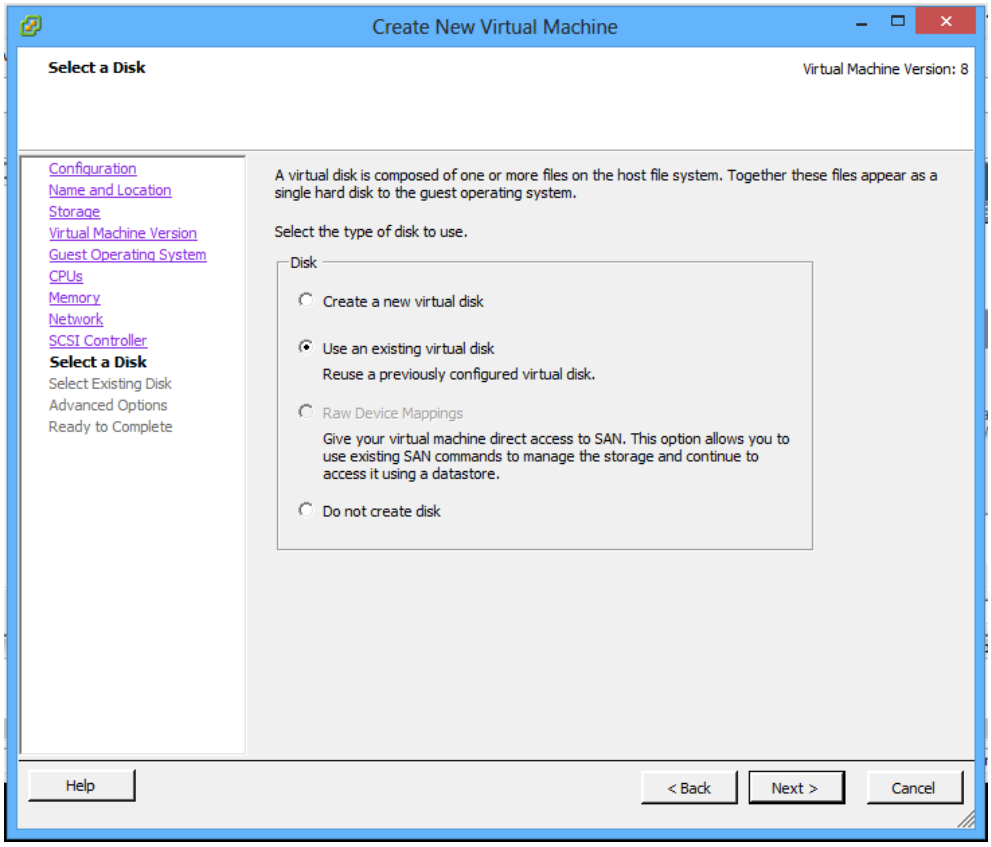


Figure 2.28 shows a screen allowing a choice of virtual SCSI disk controllers. Leave the default **LSI Logic Parallel** checked.

Figure 2.29. Selecting a hard disk for the virtual appliance.



In the next window (Figure 2.29) you have the option to **Create a new virtual disk**. This would create an *empty* disk, which would then need to have the operating system installed (perhaps from a dvd or cdrom). Because you are using a pre-populated disk file supplied by WML, you should click on **Use an existing virtual disk**, which will open the next window, shown in Figure 2.30.

Figure 2.30. Selecting an existing disk.

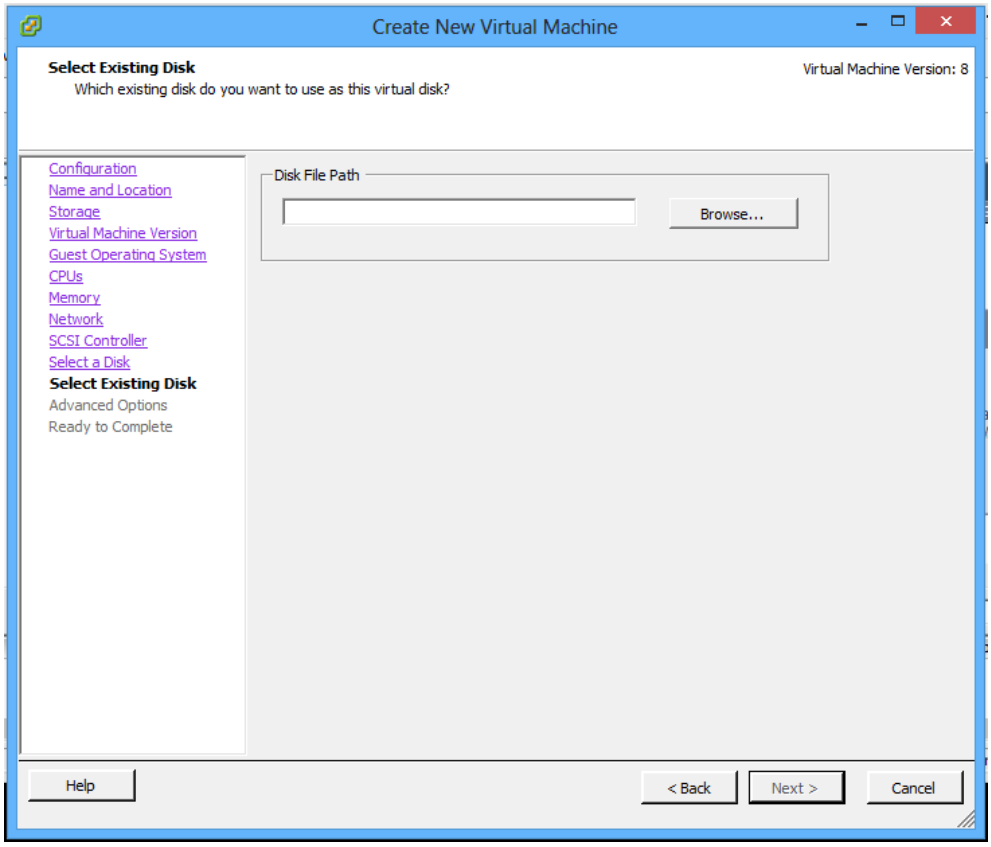
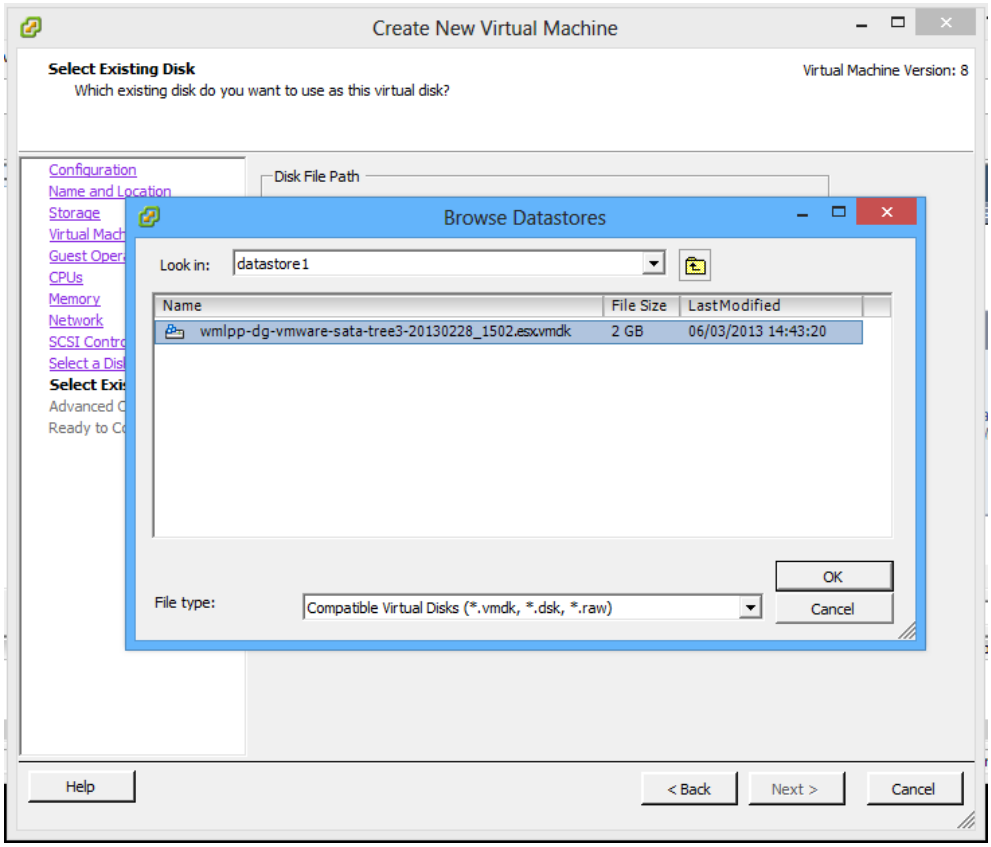
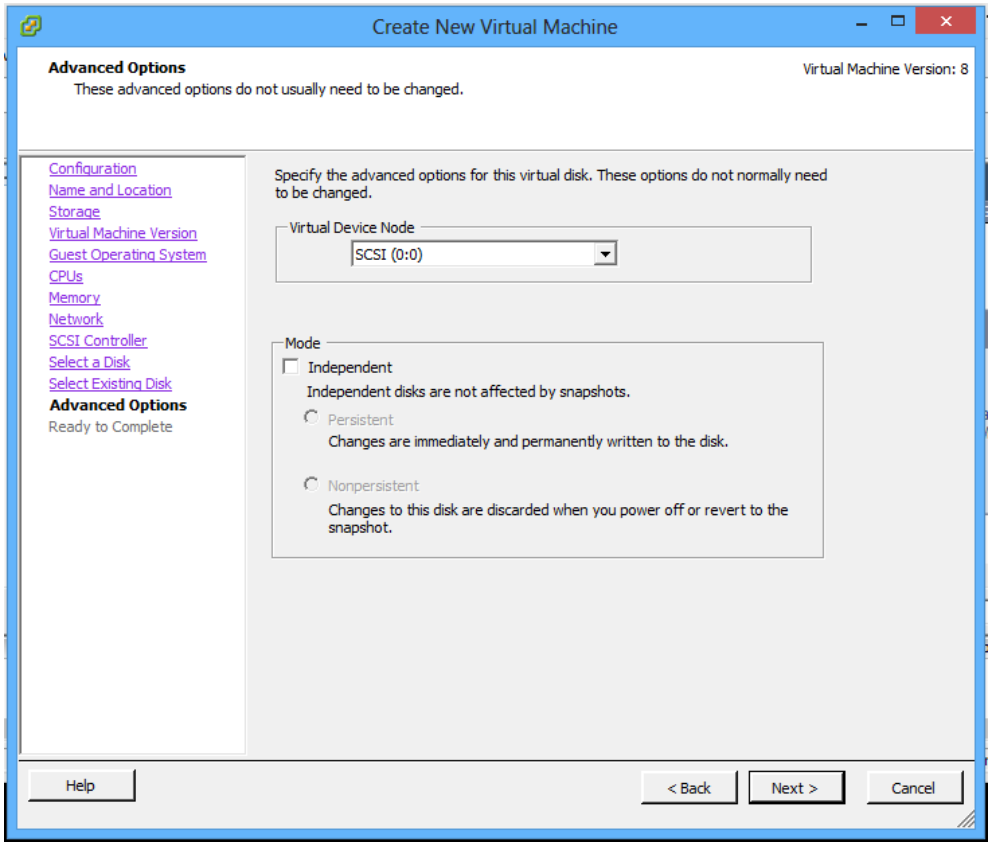


Figure 2.31. Selecting the WML Virtualized disk file.



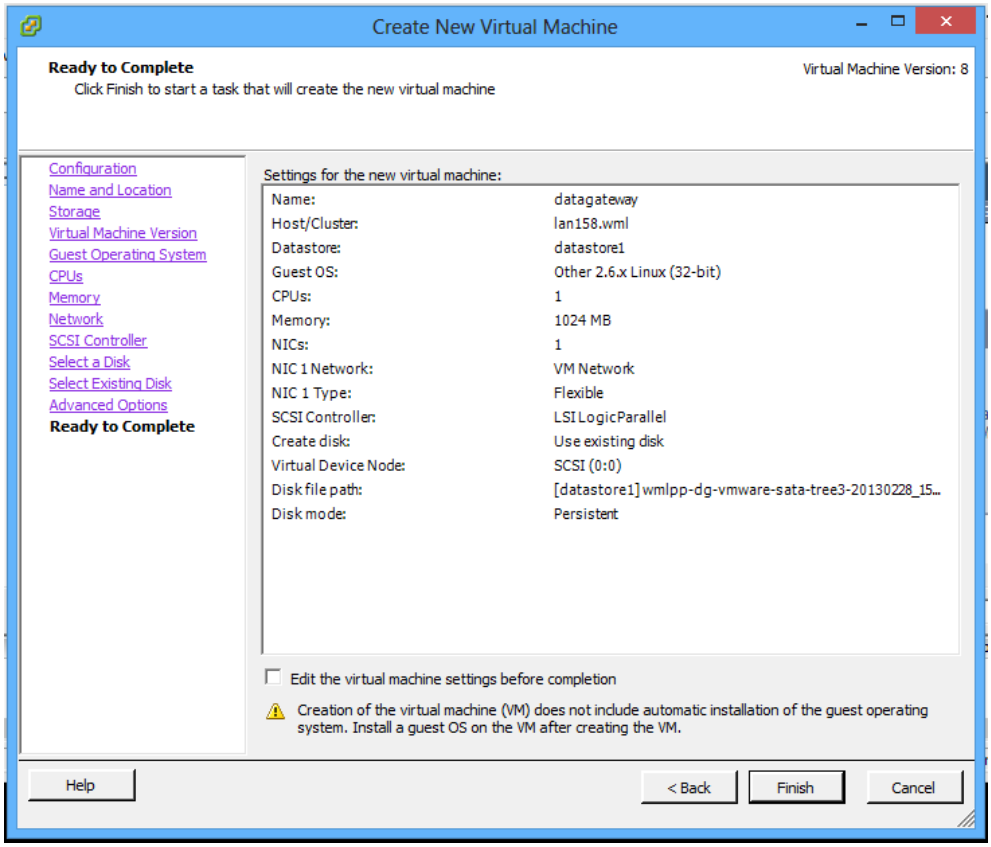
Browse to the vmdk disk image (Figure 2.31) in your datastore and select it.

Figure 2.32. Advanced disk options.



The penultimate window shows some advanced options for your virtual disk. Leave the virtual device node as **SCSI (0:0)** and click **Next**.

Figure 2.33. Ready to Complete - a summary of your new virtual appliance.

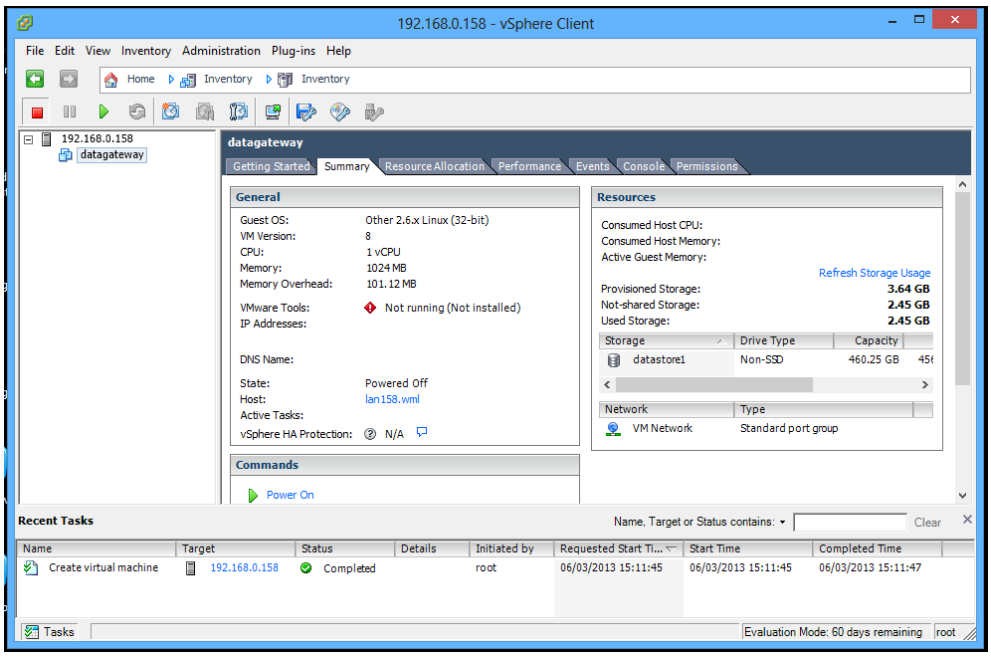


The last window shows a summary of the settings chosen for your new virtual machine (Figure 2.33). Click **Finish** to create the VM.

After creating your new virtual machine, a new item will appear in the inventory for your ESXi host (Figure 2.34). You can also access the console of your virtual machine in the vSphere client to find its IP address. Connect a browser to the IP address to access the ViewPoint web user interface.

> **Note**
>
> There is no need to install VMware tools on a WML Virtualized. VMware tools enhances the user experience when using a mouse within a graphical environment. The ViewPoint has no graphical console and hence VMware tools is not used.

Figure 2.34. The new appliance summary tab.



We hope you found this walk-through for VMware vSphere and ESXi useful.

2.2. ViewPoint set-up

In this section, you will find out how to set up and configure the ViewPoint.

Accessing the console

Occasionally, you may need to access the console of your ViewPoint, to carry out system configuration, maintenance and trouble-shooting.

Accessing the console on Virtualized appliances

The virtual machine console for Virtualized appliances is available via the VMware Server management interface, the VMware Workstation UI or the vSphere client, depending on which VMware infrastructure is in use.

You can log in as **admin** for manual IP address configuration or as **root** for other system tasks.

IP address configuration

By default, the IP address of the ViewPoint will be allocated using DHCP.

To determine what IP address has been allocated you can consult your DHCP server logs. Alternatively, you can log into the ViewPoint console, view the IP address displayed there or carry out manual IP address configuration.

Console IP address configuration

When you need to configure the IP address without the web user interface, you can do so by logging in at the machine's console, as described in the section called “Accessing the console”.

At the ViewPoint console, log in using the username **admin** and the password that has been set for the admin user on your system.

When you have logged in, the current network settings will be displayed. You will then be given the option to configure the IP address manually or via DHCP, or to quit.

```
Enter “manual” for manual IP configuration
or “dhcp” for automatic IP configuration (q to
quit).
```

If manual configuration is chosen, you will then be prompted for an IP address for the device, a Netmask address and, optionally, a gateway address.

```
Enter the IP for the device e.g.: 192.168.0.20
Enter the Netmask for the device e.g.: 255.255.255.0
Enter the Gateway (n for none): _
```

For both manual and DHCP configuration, you will be asked to confirm whether you want to reset the DNS settings. Specifying a DNS server IP which is not accessible on your network can lock the web based user interface of the ViewPoint.

```
Do you wish to reset the DNS settings? Specifying a DNS
server IP which is not accessible on your network
can lock the web based user interface of this device.
Enter 'y' to remove DNS settings, 'n' to keep them.
```

The ViewPoint will now be reconfigured, the new network settings will be displayed and the program will exit. To make further changes you will need to log in and follow the process through again.

2.3. Linking ViewPoint to DataGateway

In order for the ViewPoint to access the information on the DataGateway it needs to be connected using secure links. This section explains how to do this.

lp user ssh connection

A secure connection is required to transfer files between the DataGateway server and the ViewPoint server. This is achieved with a passwordless key pair.

Assume the following for the example below:

- The DataGateway server has an alias DataGateway (real name lan202);
- The ViewPoint server has an alias ViewPoint (real name lan213).

The lp@ViewPoint user must be able to collect files using scp from DataGateway using the lp@DataGateway user account.

Creating the keys for the lp user on the ViewPoint system

> **Note**
>
> In the procedures that follow commands to type into the Linux terminal are written in **bold** responses are written in *italics.*

Procedure 2.1. Create the ssh directory for the lp user if it doesn't exist

1. **Log in as root on the ViewPoint system**
2. **Check master ssh directory exists**

```
ls -ld /var/.ssh
lrwxrwxrwx    1 root     root           26 Nov 27 11:02 /var/.ssh ->
/etc/persistent/pp/.sshvar
```

3. **Check whether local ssh directory exists**

```
ls -l /etc/persistent/pp/.sshvar
ls: /etc/persistent/pp/.sshvar: No such file or directory
```

4. **If it doesn't, create local ssh directory**

```
mkdir /etc/persistent/pp/.sshvar
```

5. **Set ownership of local ssh directory**

```
chown lp /etc/persistent/pp/.sshvar
```

6. **Check ssh directory now exists**

```
ls -ld /etc/persistent/pp/.sshvar
drwxr-xr-x    2 lp       sys          1024 Dec 10 09:09 /etc/persistent/pp/.sshvar
```

Procedure 2.2. Generate the ssh keys for the lp user (when asked for the passphrase hit the 'enter' key)

1. **Log in as root on the ViewPoint system**
2. **Generate the keys**

```
sudo -u lp ssh-keygen -t rsa
Generating public/private rsa key pair.
Enter file in which to save the key (/var/.ssh/id_rsa): /etc/persistent/pp/.sshvar/id_rsa
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /etc/persistent/pp/.sshvar/id_rsa.
Your public key has been saved in /etc/persistent/pp/.sshvar/id_rsa.pub.
The key fingerprint is:
14:40:5f:59:7d:6e:6f:cc:fb:9b:91:40:13:bb:d4:94 lp@hostname
The key's randomart image is:
+--[ RSA 2048]----+
|     .o.. .o.o ..|
|       . o.   *E.|
|        o    = + |
|       .    o o o|
|        S    o +.|
|               . *|
|                +.|
|                .o|
|                o+|
+-----------------+
```

3. **Check keys exist in local ssh directory**

```
ls -la /etc/persistent/pp/.sshvar
drwxr-xr-x    2 lp       sys          1024 Dec 10 09:13 .
drwxrwxr-x   12 root     lp           1024 Dec 10 09:09 ..
-rw-------    1 lp       lp           1675 Dec 10 09:13 id_rsa
-rw-r--r--    1 lp       lp            393 Dec 10 09:13 id_rsa.pub
```

Copying the public key of lp@ViewPoint to the .ssh directory of lp@DataGateway

Perform the following steps on the DataGateway VM:

Procedure 2.3. Create the ssh directory for the lp user if it doesn't exist

1. **Log in as root on the DataGateway system**
2. **Check master ssh directory exists**

```
ls -ld /var/.ssh
lrwxrwxrwx    1 root     root           26 Nov 27 11:02 /var/.ssh ->
```

```
/etc/persistent/pp/.sshvar
```

3. **Check local ssh directory exists**

```
ls -l /etc/persistent/pp/.sshvar
ls: /etc/persistent/pp/.sshvar: No such file or directory
```

4. **Create local ssh directory**

```
mkdir /etc/persistent/pp/.sshvar
```

5. **Set ownership of local ssh directory**

```
chown lp /etc/persistent/pp/.sshvar
```

6. **Check local ssh directory exists**

```
ls -ld /etc/persistent/pp/.sshvar
drwxr-xr-x    2 lp       sys          1024 Dec 10 09:24 /etc/persistent/pp/.sshvar
```

Procedure 2.4. scp the public key across and turn it into the authorized_keys2 file for lp@DataGateway

1. **Log in as root on the DataGateway system**
2. **Copy public key from ViewPoint system to DataGateway**

```
scp root@lan213:/etc/wml/pp/.sshvar/id_rsa.pub /etc/wml/pp/.sshvar/authorized_keys2
```

3. **Change ownership of key**

```
chown lp /etc/persistent/pp/.sshvar/authorized_keys2
```

4. **Change permissions to key**

```
chmod 600 /etc/persistent/pp/.sshvar/authorized_keys2
```

5. **Check properties of the key**

```
ls -l /etc/persistent/pp/.sshvar
-rw-------    1 lp       sys           393 Dec 10 09:41 authorized_keys2
```

Allow ssh use by the lp user on the DataGateway server

Procedure 2.5. Edit the sshd_config file so that the AllowUsers directive includes the lp user

1. Log in as root on the DataGateway system
2. Edit /etc/persistent/sys/sshd_config

```
sed -i 's/AllowUsers root/& lp/' /etc/persistent/sys/sshd_config
```

3. Check the file is correct (AllowUsers should be set to root and lp)

```
grep -v -e "^$" -e "^#" /etc/persistent/sys/sshd_config
Port 22
Port 7522
Protocol 2
LoginGraceTime 2m
PermitRootLogin yes
StrictModes no
AllowUsers root lp
AllowTcpForwarding yes
GatewayPorts yes
X11Forwarding yes
Subsystem sftp /usr/libexec/sftp-server
```

4. Restart the sshd on DataGateway server

```
reboot
```

Add DataGateway server to the known_hosts file of the lp@ViewPoint user

Procedure 2.6. Login from lp@ViewPoint to lp@DataGateway

1. Log in as root on the ViewPoint system
2. Login

```
sudo -u lp ssh lp@lan202
```

3. **Check result**

```
ifconfig | grep inet
inet addr:192.168.0.202  Bcast:192.168.0.255  Mask:255.255.255.0
inet addr:127.0.0.1  Mask:255.0.0.0
```

4. **Exit from DataGateway**

```
exit
Connection to lan202 closed.
```

With the secure links set up it is also necessary for some configuration files to be created on the ViewPoint system. Also some changes are needed to the database on DataGateway This section explains how to do this.

Configuration files

In order for the system to understand its environment several configuration files need to created on the ViewPoint system.

- *database ssh tunnel* Configures the communications route between the two systems
- *ViewPoint authorisation database* Configures ViewPoint access to the authorisation database on the DataGateway system
- *DCC remote connection* Configures the way that DCC communicates between the two systems.
- *EDD remote connection* Configures the way that EDD communicates between the two systems.

Database ssh tunnel

The file holding the configuration data for the database ssh tunnel is found in: /etc/persistent/pp/dbSshTunnel.xml and will look similar to:

```
<?xml version="1.0" ?>
<WmlSettings>
  <WmlppSshTunnel>
    <StructuredInput>
      <variable key="localPort" value="3306"/>
      <variable key="remotePort" value="3306"/>
      <variable key="remoteHost" value="???.???.???.???"/>
    </StructuredInput>
  </WmlppSshTunnel>
</WmlSettings>
```

Where ???.???.???.??? is the IP address (or hostname) of the DataGateway system.

ViewPoint authorisation database

The file holding the configuration data for the ViewPoint authorisation database access is found in: /etc/persistent/pp/brokerif/config.xml and will look similar to:

```
<?xml version="1.0"?>
<WmlSettings>
  <WmlAuth>
    <StructuredInput>
      <variable key="databasePass" value="password"/>
      <variable key="databaseUser" value="wmlauthvp"/>
      <variable key="databaseServer" value="127.0.0.1:3306"/>
      <variable key="database" value="wmlauthvp"/>
    </StructuredInput>
  </WmlAuth>
</WmlSettings>
```

DCC remote connection

The file holding the configuration data for the DCC database access is found in: /etc/persistent/pp/dcc/config.xml and will look similar to:

```
<?xml version="1.0"?>
<WmlSettings>
  <WmlDcc>
    <StructuredInput>
      <variable key="databasePass" value="password"/>
      <variable key="databaseUser" value="wmldcc"/>
      <variable key="databaseServer" value="127.0.0.1:3306"/>
      <variable key="database" value="wmldcc"/>
      <variable key="remoteFileServer" value="???.???.???.???"/>
    </StructuredInput>
  </WmlDcc>
</WmlSettings>
```

Where ???.???.???.??? is the IP address (or hostname) of the DataGateway system.

EDD remote connection

The file holding the configuration data for the EDD database access is found in: /etc/persistent/pp/edd/config.xml and will look similar to:

```
<?xml version="1.0"?>
<WmlSettings>
  <WmlEdd>
    <StructuredInput>
```

```
      <variable key="databasePass" value="password"/>
      <variable key="databaseUser" value="wmledd"/>
      <variable key="databaseServer" value="127.0.0.1:3306"/>
      <variable key="database" value="wmledd"/>
      <variable key="remoteFileServer" value="???.???.???.???"/>
    </StructuredInput>
  </WmlEdd>
</WmlSettings>
```

Where ???.???.???.??? is the IP address (or hostname) of the DataGateway system.

Database Configuration

The database for both ViewPoint and DataGateway exists on the DataGateway system. Certain changes need to be made to this system including a configuration file and the MySQL database itself. This section describes these changes. All the changes listed below should be carried out on the DataGateway system.

DataGateway authorisation database

The file holding the configuration data for the DataGateway authorisation database access is found in: /etc/persistent/pp/brokerif/config.xml and will look similar to:

```
<?xml version="1.0"?>
<WmlSettings>
  <WmlAuth>
    <StructuredInput>
      <variable key="databasePass" value="password"/>
      <variable key="databaseUser" value="wmlauthdg"/>
      <variable key="databaseServer" value="127.0.0.1"/>
      <variable key="database" value="wmlauthdg"/>
    </StructuredInput>
  </WmlAuth>
</WmlSettings>
```

Creating the DataGateway Authorisation Database

> **Note**
>
> In the procedures that follow commands to type into the Linux terminal are written in **bold** responses are written in *italics.*

Procedure 2.7. Create and configure the database

1. **Log in as root on the DataGateway system**
2. **Open the mysql database server**

```
mysql -uroot -p<password>
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 21715
Server version: 5.1.73-log Source distribution

Copyright (c) 2000, 2013, Oracle and/or its affiliates. All rights reserved.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>
```

3. **Create the database**

```
CREATE DATABASE wmlauthdg;
Query OK, 1 row affected (0.00 sec)
```

4. **Grant permissions**

```
GRANT SELECT,INSERT,UPDATE,DELETE,CREATE,DROP,ALTER ON wmlauthdg.*
TO 'wmlauthdg'@'localhost' IDENTIFIED BY 'password';
Query OK, 0 rows affected (0.00 sec)
```

5. **Check creation**

```
show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| wmlarchive         |
| wmlauth            |
| wmlauthdg          |
| wmldcc             |
| wmledd             |
| wmlreport          |
+--------------------+
```

Creating the ViewPoint Authorisation Database

Procedure 2.8. Create and configure the database

1. **Create the database**

```
CREATE DATABASE wmlauthvp;
Query OK, 1 row affected (0.02 sec)
```

2. **Grant permissions**

```
GRANT SELECT,INSERT,UPDATE,DELETE,CREATE,DROP,ALTER ON wmlauthvp.*
TO 'wmlauthvp'@'localhost' IDENTIFIED BY 'password';
Query OK, 0 rows affected (0.00 sec)
```

3. **Check creation**

```
show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| wmlarchive         |
| wmlauth            |
| wmlauthdg          |
| wmlauthvp          |
| wmldcc             |
| wmledd             |
| wmlreport          |
+--------------------+
```

Chapter 3. User Maintenance

3.1. Overview of Users

This chapter describes how to set up and manage privileged users, broker references and broker users.

Privileged users, also known as 'System Users' or 'System Administrators', are special users that have full permissions across all aspects of the ViewPoint. When the ViewPoint system is first set up it is provided with a privileged user called 'root' which will have a password which will be notified to the customer. This is the only user that will exist at this stage. This user can be used to create other privileged users and also broker references and broker users.

Broker References are the means of identifying the group of brokers with whom a document is associated. Each document processed must have a broker reference embedded within it and this reference must be known to the system. Broker references are set up and maintained by privileged users. Broker references cannot be deleted but can be enabled and disabled.

Broker Users, otherwise known as 'Brokers' or 'Users', are users who can access data and/or perform actions subject to permissions set by a privileged user. All broker users must be associated with one and only one broker reference. There may be more than one broker user associated with each broker reference. A broker user may only access documents or other information related to the associated broker reference.

3.2. Privileged User Login Process

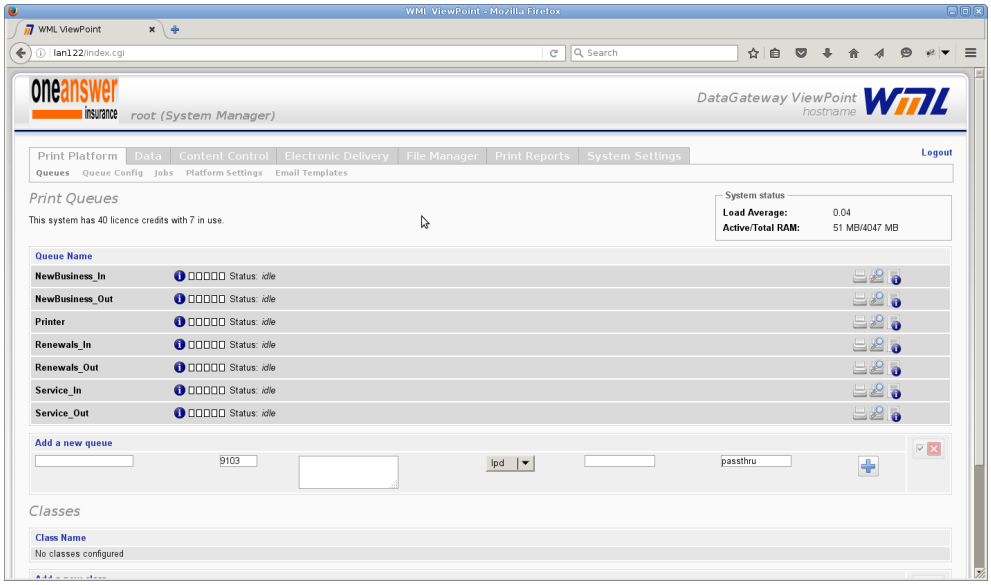
In order to access any aspect of ViewPoint it is necessary to login with a valid user and password. The initial login screen looks like Figure 3.1.

Figure 3.1. Logging in to ViewPoint

The login procedure is the same for all users whether privileged or not. Enter the user name in the first edit box and then the password in the second. Click on the **Login** button.

After successfully logging in as a privileged user the full system web page is displayed showing all available tabs as in Figure 3.2.

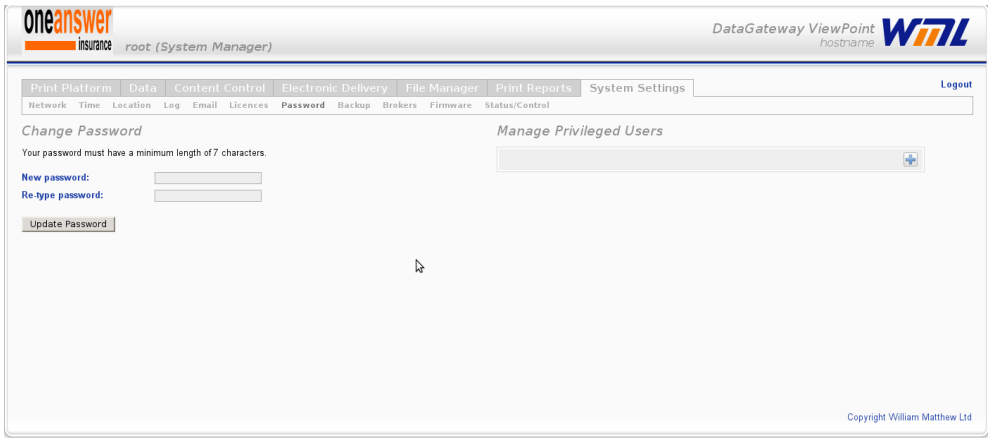
Figure 3.2. ViewPoint full system page



3.3. Management of Privileged Users

Privileged users can only be created or deleted by another privileged user. Having logged in, go to the **System Settings** tab and navigate to **Password**. This will bring up the web page shown in Figure 3.3.

Figure 3.3. ViewPoint password page



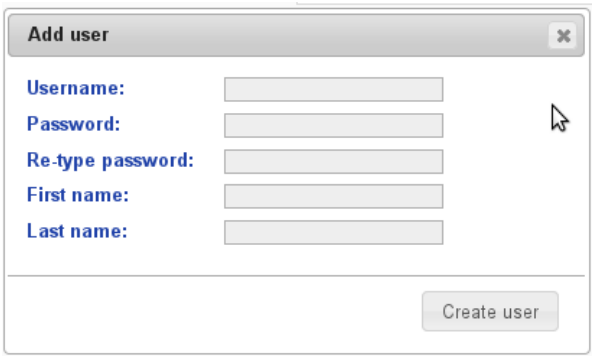
Changing your own Password

All users, privileged or not, are able to change their own passwords using the **Change Password** section on this web page. Passwords must be at least 7 characters long and may consist of any printable character. After entering a new password click **Update password** and the password will be changed.

Creating a Privileged User

Only privileged users may create a new privileged user. This is done by clicking on the icon next to the empty edit box under **Manage Privileged Users**. This will open the window shown in Figure 3.4.

Figure 3.4. ViewPoint add user page



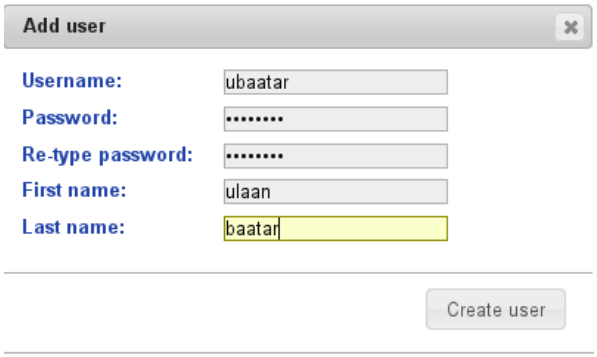
Note

The following restrictions apply to usernames:

- contains only *lowercase* letters and digits
- starts with a letter
- contains two or more characters
- contains less than 32 characters

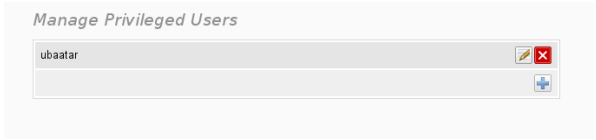
There are no restrictions on the password other than it must be at least 7 characters. Enter the first name and last name (these will be displayed when the user is logged in) and click on **Create user**.

Figure 3.5. ViewPoint add user page (filled in)



After a few seconds the new user will be added to the privileged user list and the window shown in Figure 3.6 will be displayed.

Figure 3.6. ViewPoint a new user has been added successfully

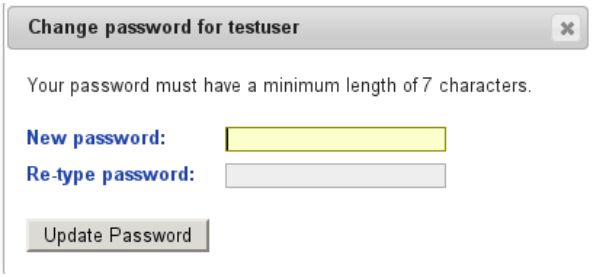


Changing the Password of a Privileged User

Only privileged users may change the password of a privileged user. The privileged user may change their own password as described in the the section called "Changing your own Password" section in Section 3.3. If the privileged user has forgotten the password then another privileged user may reset it.

Next to the name of the user you wish to change, click on the edit icon . This will bring up the window shown in Figure 3.7 into which the new password can be typed. Click on **Update Password** to change the password.

Figure 3.7. ViewPoint change privileged user password



Deleting a Privileged User

Only privileged users may delete a privileged user. Next to the name of the user you wish to delete, click on the delete icon . You will be asked to confirm that you wish to delete the user. Click on **OK** if you want to delete the user or **Cancel** if you have changed your mind.

3.4. Management of Broker Information

Overview

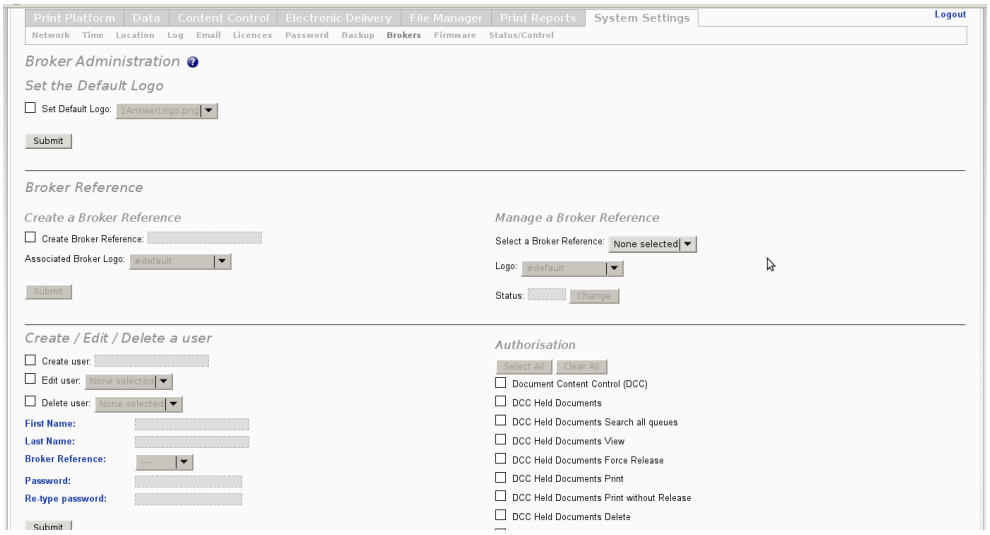
Broker information such as broker references, logos and broker users can only be managed by privileged users.

The actions that can be performed by the privileged user are:

- Set the default logo
- Create a broker reference
- Change the logo associated with a broker reference
- Enable/disable a broker reference
- Create a broker user
- Edit a broker user
- Delete a broker user
- Set the authorisation levels for a broker user

To perform any of these actions you must log in as a privileged user and select the **System Settings** tab and then the **Brokers** web page. Figure 3.8 will be displayed.

Figure 3.8. ViewPoint brokers management web page



Setting the default logo

The default logo is the logo that is displayed in the top left hand corner of each web page if there is no user logged in or a priveleged user is logged in. The default logo can only be set or changed by a privileged user. To see more about logos see Chapter 4.

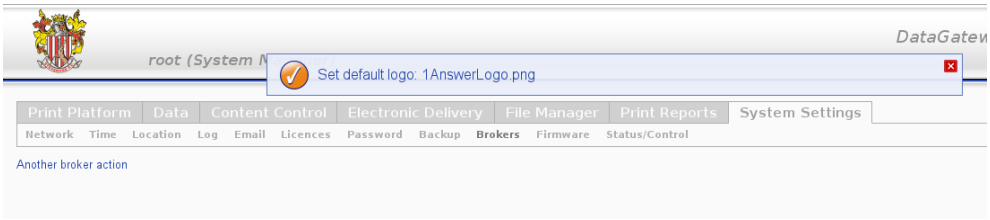
In order for a logo to be used as a default logo it must have been uploaded to the system as described in Section 4.2.

In order to set or change the default logo check the box labelled **Set Default Logo**. This will enable the associated drop-down box which will display the name of the current default logo. Select the new default logo from those listed in the drop-down box.

Figure 3.9. ViewPoint selecting the default logo

When the new logo has been selected click on **Submit**. Figure 3.10 should be displayed:

Figure 3.10. ViewPoint default logo selected and submitted

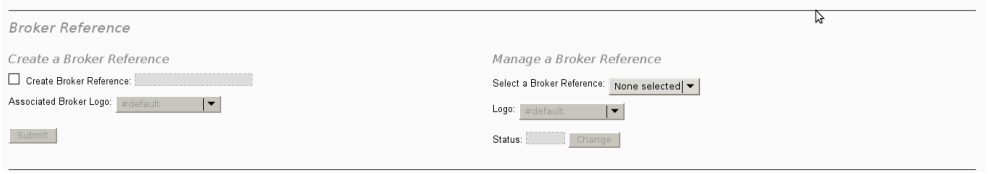


In order to return to the Brokers web page click on **Another broker action**. Otherwise select another tab to go to it.

Creation and management of broker references

The second section in the Brokers web page, headed **Broker Reference**, is concerned with management of broker references.

Figure 3.11. ViewPoint broker reference section



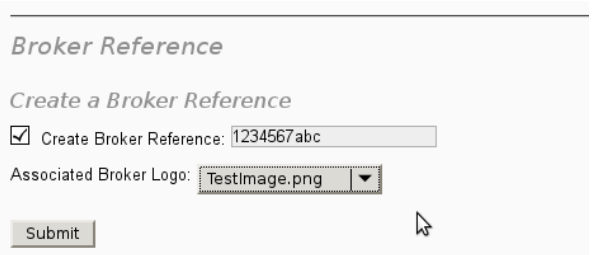
Creating a new broker reference

To create a new broker reference check the box labelled **Create Broker Reference**. This will enable the associated edit box. Type in the broker reference here.

> **Note**
>
> **There are some constraints on the broker reference:**
>
> - It may contain any characters from the following list: a-z, 0-9, hyphen, underline, forward slash, backward slash, hash (#), full stop or comma.
> - It must contain between 2 and 31 characters (inclusive)
> - It must be unique within the system

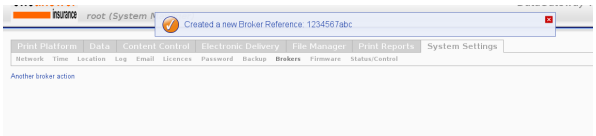
The logo to be associated with that broker may also be set at this point. Select the logo required from the drop-down box with the label **Associated Broker Logo**. The default (#default) indicates that there is no specific logo for this broker and the default logo is to be used instead.

Figure 3.12. ViewPoint creating a broker reference



Once the broker reference has been entered and its logo selected (or left at the default), click on the **Submit** button to action the changes. If all has been successful Figure 3.13 will be displayed:

Figure 3.13. ViewPoint creating a broker reference

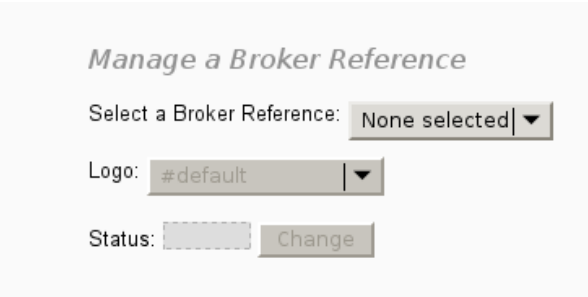


In order to return to the Brokers web page click on **Another broker action**. Otherwise select another tab to go to it.

Managing a broker reference

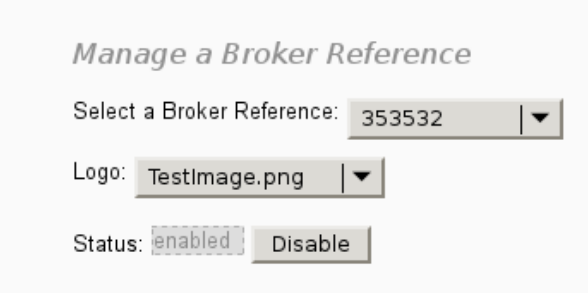
The associated logo of a broker reference can be changed under the **Manage a Broker Reference** section. This is also where a broker reference can be disabled and enabled.

Figure 3.14. ViewPoint managing a broker reference



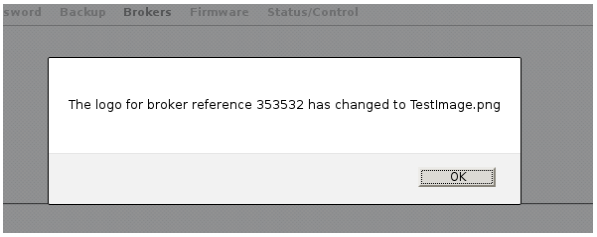
In order to enable or disable a broker reference or set its logo you must first select the broker reference you want to change. This is done by selecting it from the drop down box with the label **Select a Broker Reference**. Once this has been done the current associated logo will be displayed in the drop down box with the label **Logo** and the status box will indicate whether the broker interface is enabled or disabled. Figure 3.15 shows that the currently associated logo for broker reference 353532 is TestImage.png and that the broker reference is enabled.

Figure 3.15. ViewPoint broker reference logo and status displayed



To change the logo associated with the broker reference select the desired logo from the drop down box with the label **Logo**. Note that the change is made immediately when a logo is selected. Figure 3.16 will be displayed:

Figure 3.16. ViewPoint broker reference logo changed

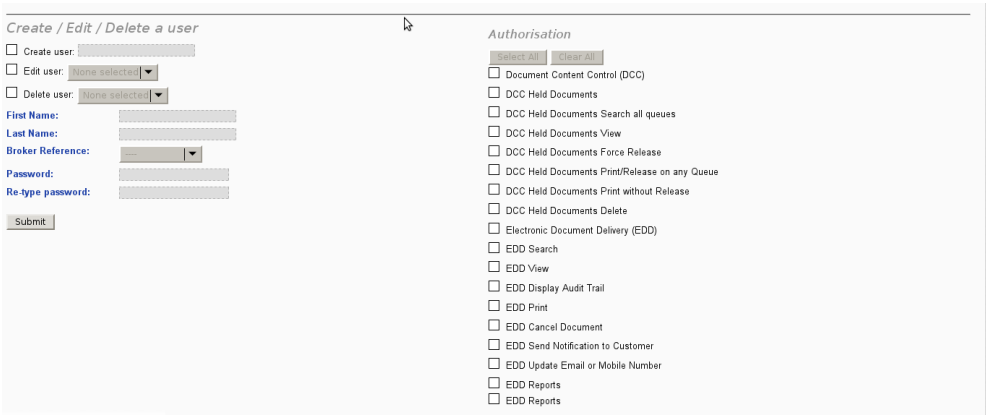


The button with the label **Status** toggles between enabling and disabling the broker reference. If the broker reference is enabled the title of the button will be **Disable** and clicking on it will disable the broker reference. If the broker reference is disabled the title of the button will be **Enable** and clicking on it will enable the broker reference.

Creation, editing and deletion of broker users

The third section in the Brokers web page, headed **Create / Edit / Delete a user**, is concerned with management of broker users. This is where broker users are managed.

Figure 3.17. ViewPoint broker user management section



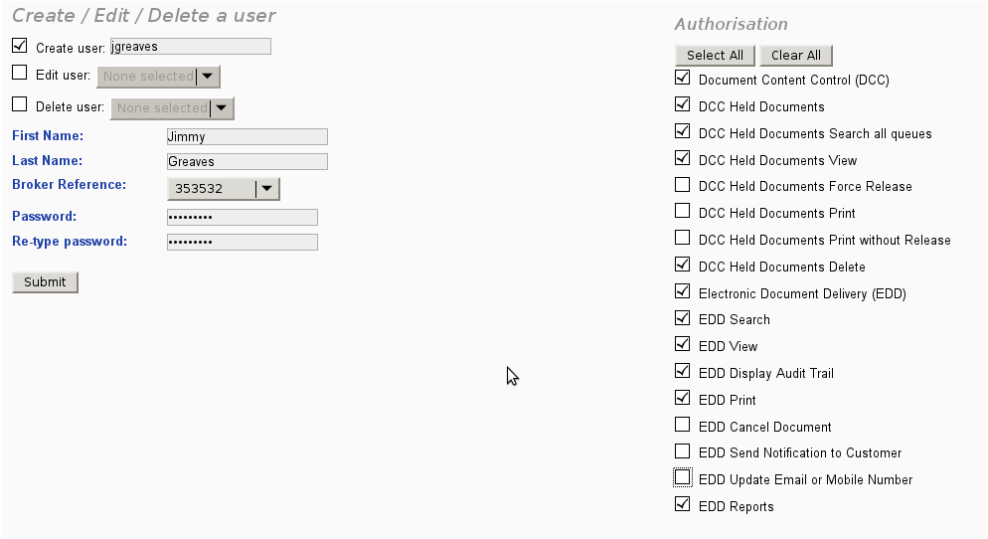
Creating a new broker user

To create a new user check the box labelled **Create user** this will enable the associated edit box. Type the name of the user in the box.

> **Note**
>
> **The following restrictions apply to usernames:**
>
> - contains only *lowercase* letters and digits
> - starts with a letter
> - contains two or more characters
> - contains less than 32 characters

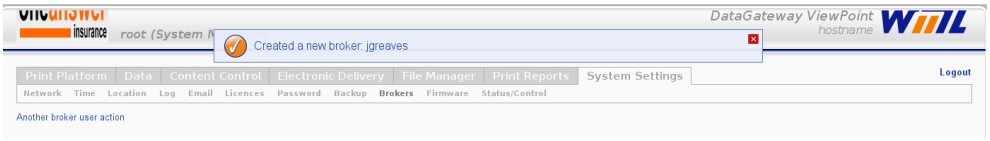
When the new user's name has been entered you can enter a first name and last name, select the broker reference from the drop down box and set the password. You can also select which authorisation permissions the new user will have by checking individual boxes or by clicking on the **Select All** button.

Figure 3.18. ViewPoint creating a new broker user



When all is complete then click on the **Submit** button. Figure 3.19 will be shown:

Figure 3.19. ViewPoint a new broker user has been created

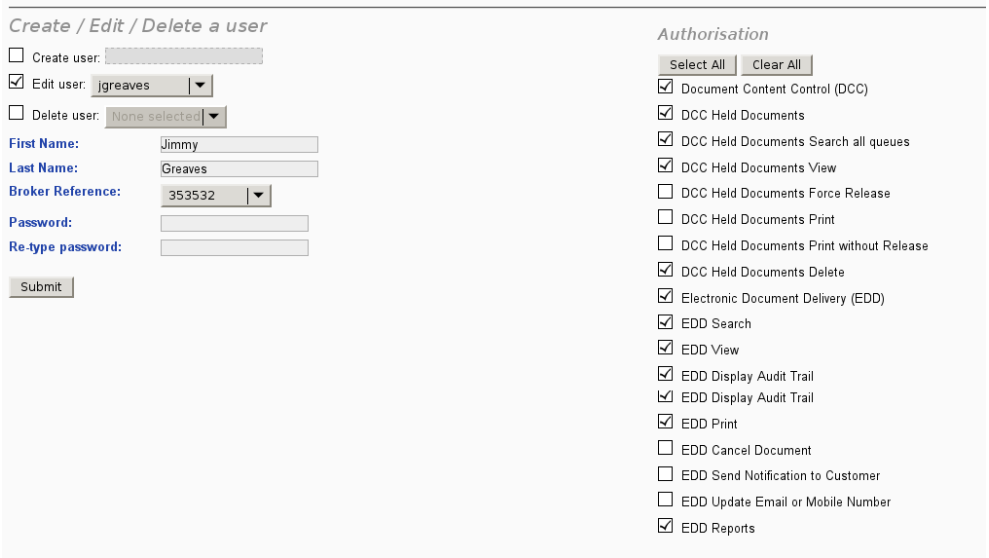


In order to return to the Brokers web page click on **Another broker action**. Otherwise select another tab to go to it.

Editing an existing broker user

To edit a broker user check the box labelled **Edit user** this will enable the associated drop down box. Select the user that you wish to edit. This will cause the first name, last name, broker interface and authorisation permissions for the selected user to be displayed. Note that the password is not displayed.

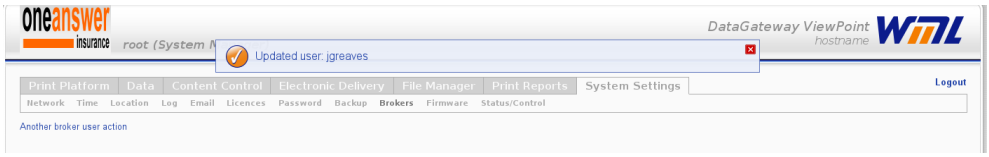
Figure 3.20. ViewPoint editing a broker user



Any of the details can be changed including the password. To change the password type the new password into the Password edit box and then repeat it in the Re-type password edit box.

When the changes have been made click on the **Submit** button and Figure 3.21 will be shown.

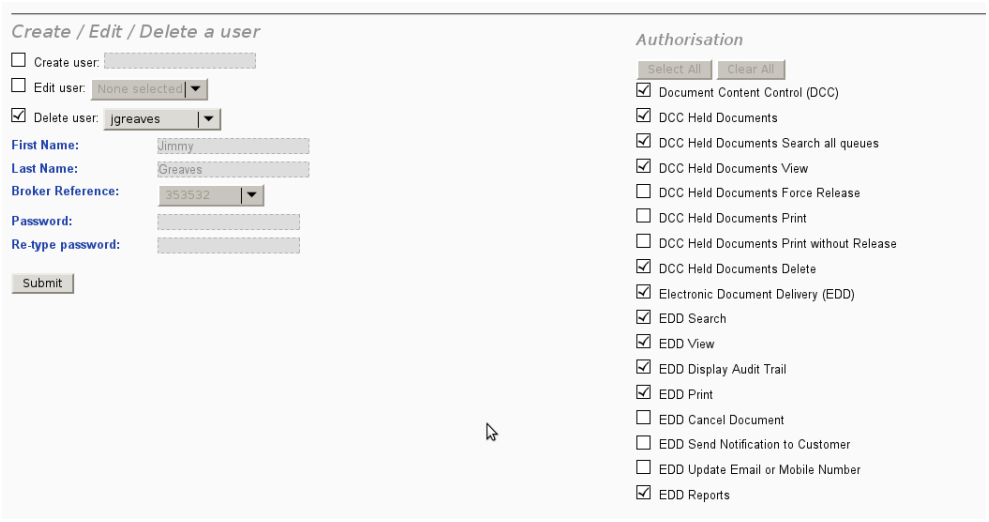
Figure 3.21. ViewPoint broker user edited confirmation



Deleting a broker user

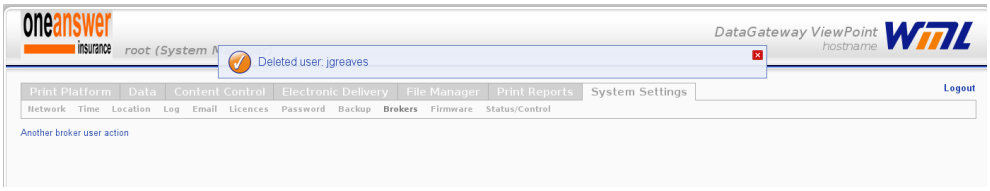
To delete a broker user check the box labelled **Delete user** this will enable the associated drop down box. Select the user that you wish to delete. This will cause the first name, last name, broker interface and authorisation permissions for the selected user to be displayed. Note that the password is not displayed. All these fields are for confirmation purposes only you will not be able to change anything.

Figure 3.22. ViewPoint deleting a broker user



When you have confirmed from the displayed data that this is the broker user that you want to delete click on the **Submit** button. You will be asked to confirm that you want to delete the user. If you confirm then Figure 3.23 will be displayed:

Figure 3.23. ViewPoint broker user deleted confirmation



Chapter 4. Logos

4.1. Overview of logos in ViewPoint

ViewPoint has the added feature of having a logo displayed in the top left hand corner of every web page. This can be a logo for specific broker references or can be a default logo which will be displayed if none has been provided for the broker reference or a system manager is currently logged in.

A logo is a small graphics file typically no larger than 130 pixels wide and 75 pixels high.

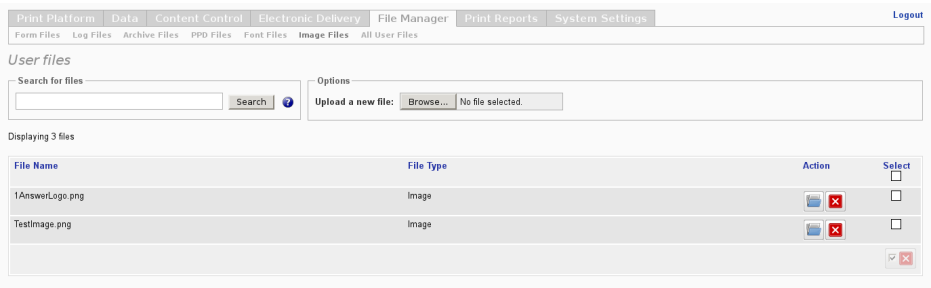
4.2. Uploading logos to ViewPoint

Before a logo can be displayed it must be uploaded to the system as follows:

Procedure 4.1. Uploading a logo to the ViewPoint system

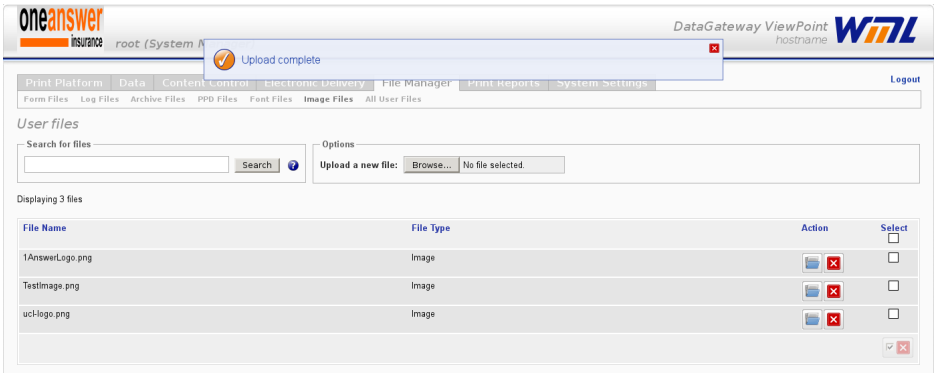
1. **Navigate to the 'Image Files' tab on the 'File Manager' web page.**
   A list of existing logo files will be displayed.

   Figure 4.1. ViewPoint image files tab on File Manager web page



2. **Click on the 'Browse' button and navigate to the image file you want.**
   The file will be uploaded and the message "Upload complete" will be displayed and the logo will have been added to the list.

Figure 4.2. ViewPoint an image file has been loaded



4.3. Associating a logo with a broker reference

A logo may be associated with a broker reference in one of three ways:

- Set as the default logo as described in the section called “Setting the default logo” in Section 3.4
- Associated with a broker reference when created, see the section called “Creating a new broker reference” in Section 3.4
- Associated with a broker reference by editing it, see the section called “Managing a broker reference” in Section 3.4