Self study Training

VMware user guide

Contents

1. Install Cordys BOP-4 Self Study VM

1.1 Prerequisites

On the disk where you place the zip file, containing the Cordys BOP-4 self study VM, you require 2 GB free disk space.

On the disk where you extract the Cordys BOP-4 self study VM, you require 6.5 GB free disk space.

At least 2 GB memory is advised.

You require VMware Player (or VMware Server, VMware workstation etc).
The VMware is tested with:
> VM Player Version 3.1.4

1.2 Using the VM Ware

1) Extract the Zip file (a directory cordysserver will be created when you extract the zip file)
2) Open VMware player and select the file cordysserver.vmx
    a. In the screen where it asked if the VM is copied or moved choose **I moved it**.
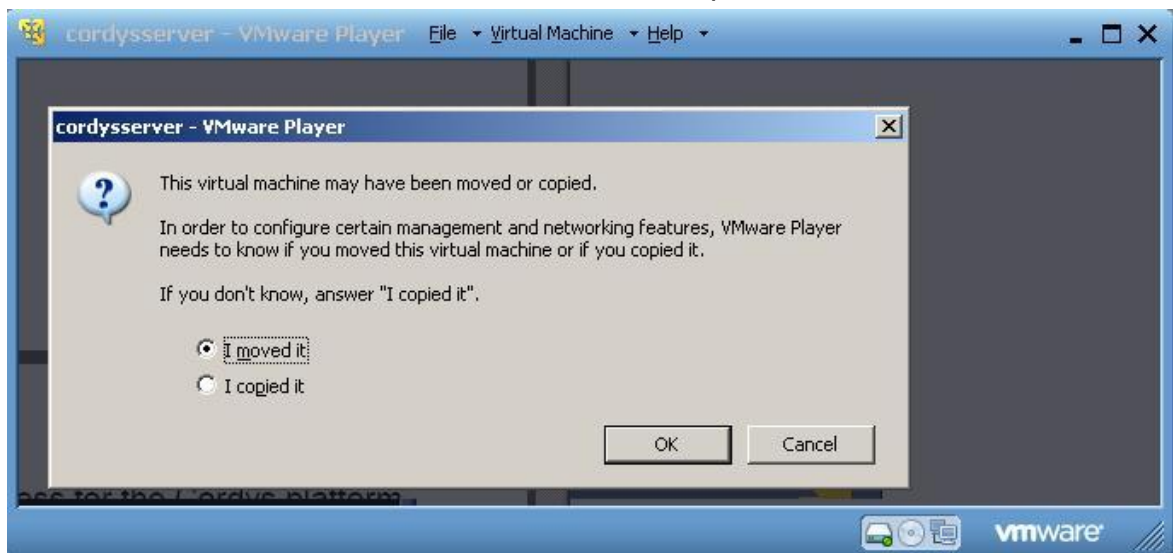
3) Click **OK**.

4) The software update IS Not Required

5) The boot process starts

6) The system is correctly started when you see an ip-address for the Cordys platform URL for example **http://192.168.211.128**.

7) You can login with user **root** password **cordys** to perform system operations.

8) The update tools options is not required
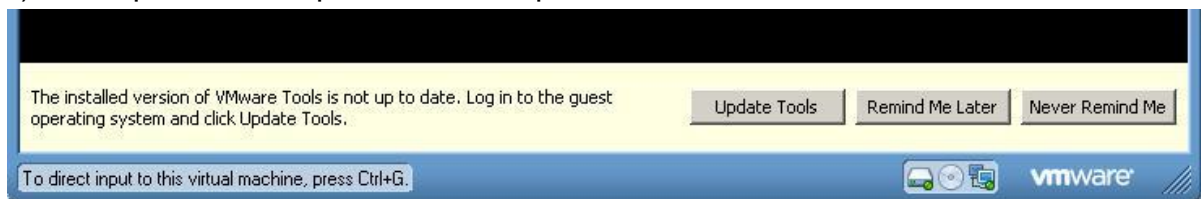
1.3 Stopping the VM

1) In the VMware console login with user **root**, password **cordys**
2) Type the command: **shutdown –h now**
3) Wait for the operating system to shutdown
4) Close the VMware console

1.4 Start with the Cordys BOP-4 Training

1) Open Internet Explorer on your machine
2) Type the Address based on the IP Address displayed in your VM console.
   For example: **http://192.168.211.128/cordys**.

SELF STUDY TRAINING

> **NOTE**
> The IP address must be the same as in the VMware console.

3) User name **student1** with password **student1.**

Page 6 of 24
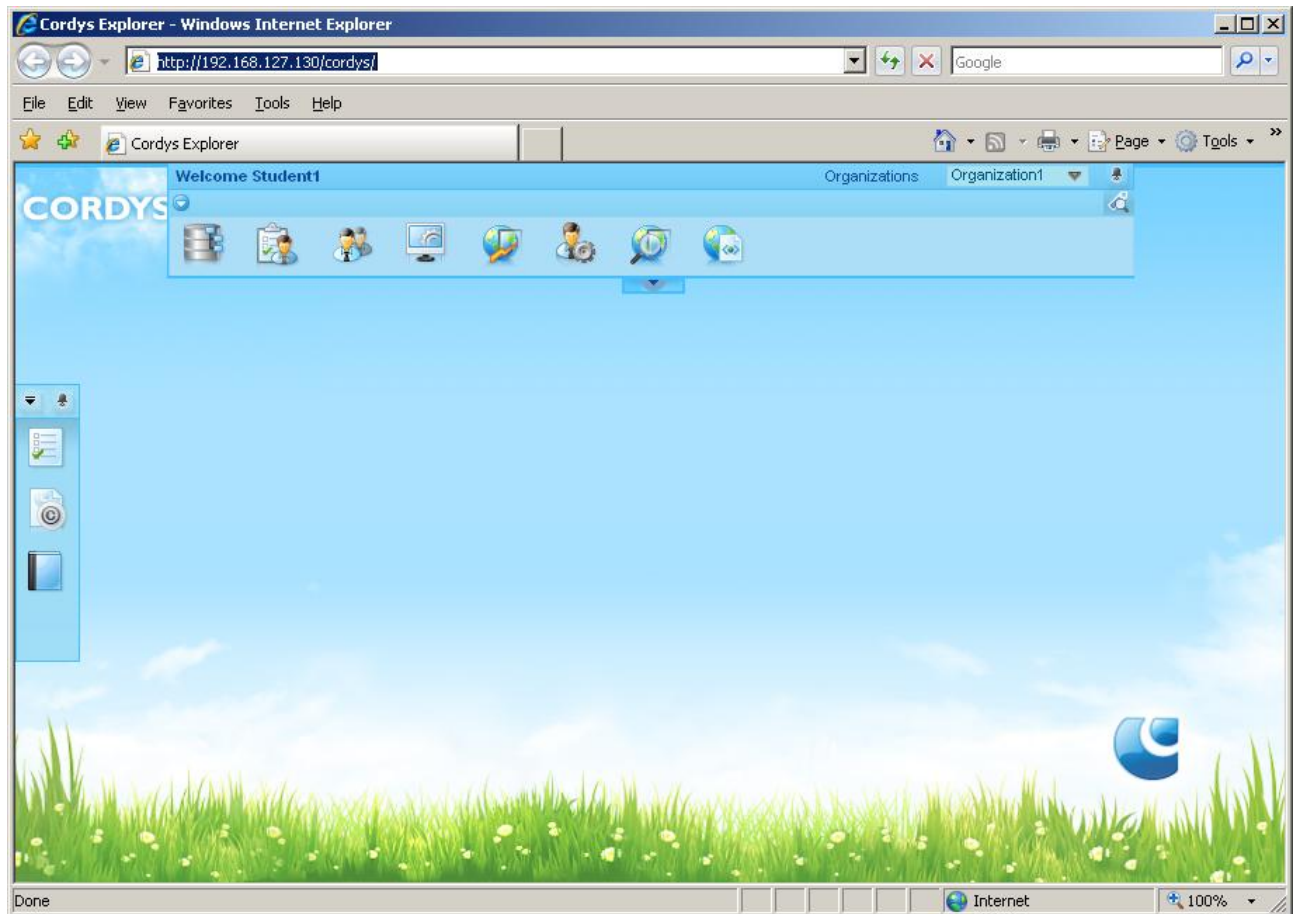
NOTE

For some exercises you require a second account you can use student2 with password student2 for those exercises in a second browser.

NOTE IE 8

For internet explorer 8 to be able to connect to the same URL, with a different user you have to use File → New Session, prior to entering the URL.
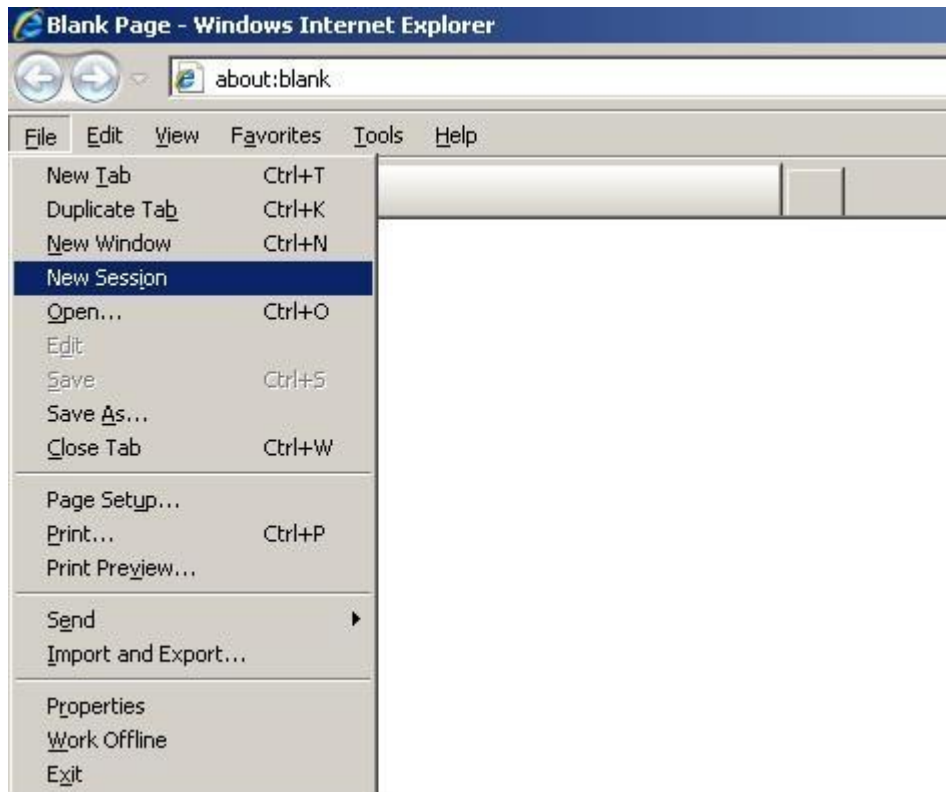
4) You can now start with the Cordys BOP-4 training

1.5 System Configuration

Below you the information about the location of installed applications as well as all user name and password details

1.5.1 Usernames and Password

User	Password	Purpose
root	cordys	System Administration + mysql
student1	student1	Student user
student2	student2	Neighbor student1
Directory Manager	cordys	CMC usages
cordys	cordysuser	Cordys database user
nw	city	Database user Northwind, HRM, Claimscache
admin	cordys	Cordys jmx admin user

1.5.2 Application Installation Directories

Application	Directory
Cordys	/opt/Cordys/defaultInst
Cars	/opt/Cordys/CARS/defaultInst
MYSQL	/var/lib/mysql
Apache	/usr/local/apache2063 /usr/local/apache2063/htdocs
Java	/usr/java

1.6 Perform actions with/on the server

It is possible that you may want to perform actions on the server for example to look at a file, create your own database, get the application you have packaged and may things more.

This is how you can do this:

1.6.1 Using the VM Ware console

1) In the VMware console login with user **root**.
2) Type or perform the command you want.

1.6.2 Restart Cordys

You can restart Cordys without restarting the complete VM by using the command restartcordys.sh. This will stop and start CARS and Cordys.

1) In the VMware console login with user **root**.
2) Type the command **restartcordys.sh**.

Note that the command must be typed Lower Case.

1.6.3 Using SVN with the VMware

Although SVN is not included in the VMware you can use it with the VMware by installing (Visual) SVN on your own machine and connect from within the VMware to your own SVN.

This way you can reuse the content also in another VMware when the license is expired etc.

Below are the steps to configure Visual SVN and the VMware to work with SVN. You can also use another SVN Server in your network just perform the steps using the server name instead of the name of your client machine.

1) Install Visual SVN on your own client machine. For install/configure details: See our training "*Developing Services* " Module "*Development Environment*" located at https://wiki.cordys.com/x/ijBzCQ.

   a. You can create your own repositories or use the one from Cordys Academy, see Using the Academy SVN Repository on page 11.

2) Check the IP Address of your client machine
   a. Open a command prompt (cmd)
   b. Give the command

```
ipconfig
```
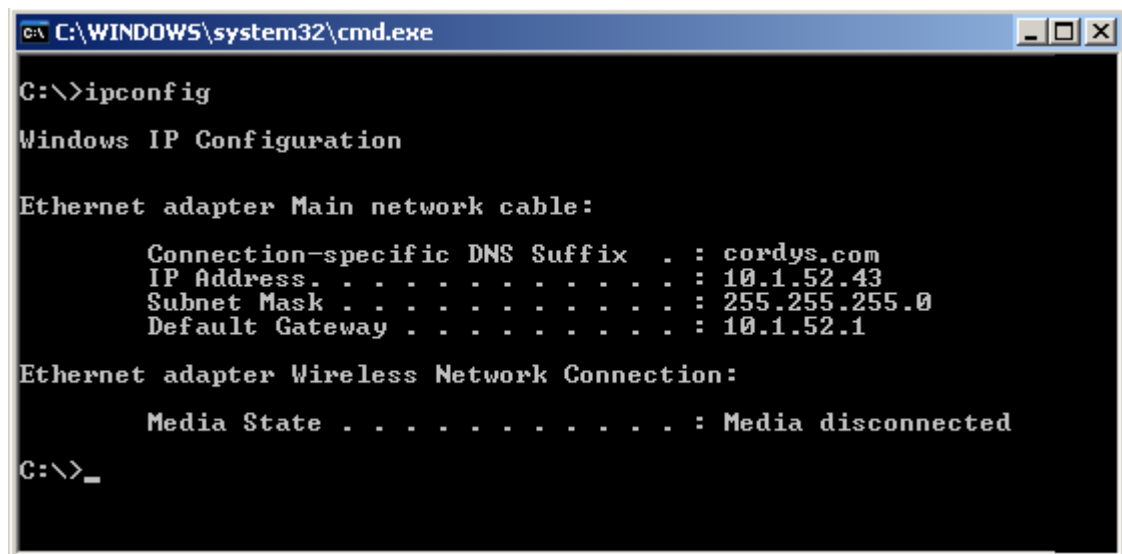

   c. Leave the command prompt open as you need the *IP Address*.
3) Login to the VMWare console with user root.
4) Give the following commands

```
cd /etc
vi hosts
```

5) Vi opens with the hosts file, press **i** for insert mode.
6) Navigate to the end and add a new line.

7) Provide the following information

```
Your-IP-Address your-machine-name
```


8) Press **esc** and type **wq** and enter to save the file

9) Give the following command, so check if it is success

```
ping -c 3 your-machine-name
```

10) You can now use the SVN repository on your own machine by using the SVN url pointing to your machine for example:
http://CND1222.cordys.com:5001/svn/Fundamentals/trunk

NOTE – IP ADDRESS

1) When your company have dynamic IP Address assignments (DHCP) you are required to update the IP address in the host file when your IP Address changes.

2) Do not use an IP-Address in the SVN url as you cannot change this.

1.6.4 Using the Academy SVN Repository

During the Cordys Academy trainings a preconfigured SVN repository is used. You can use the below steps to add this repository to your own Visual SVN server.

1) Download the zip file *Student1_SVNRepos.zip* from
https://wiki.cordys.com/download/attachments/140837389/Student1_SVNRepos.zip

2) Open the *VisualSVN Server Manager*.

3) Right click VisualSVN Server (Local) and select *Properties*.
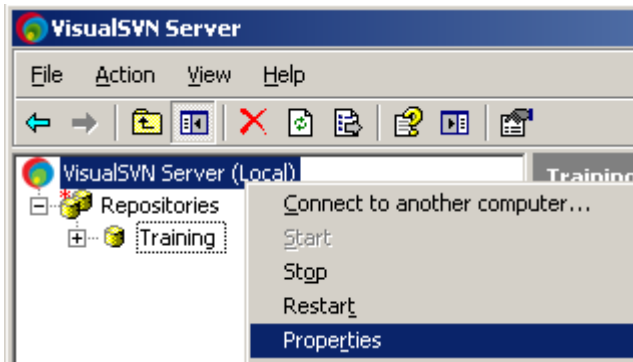
4) Go to the tab *General*.

5) Check the location for the *Repository Root*.
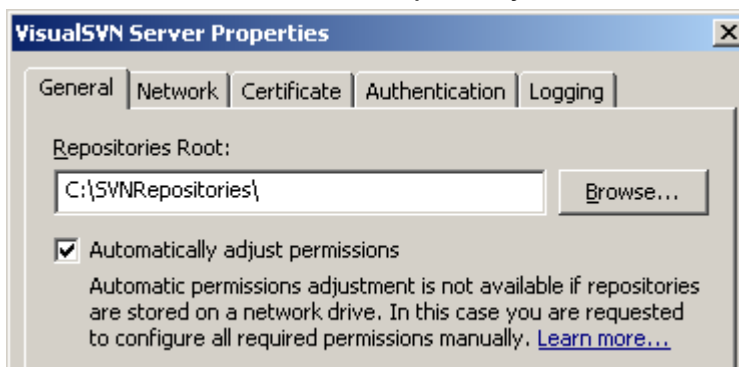
6) Extract the Student1_SVNRepos.zip file into the *Repository Root* location.

7) The Student1 repository is now available for use in SVN.

> **NOTE**
> You can copy and rename the Student1 folder to any name for a second repository or so.

1.6.5 Using a terminal application like Putty

Next to using the VMWare console you might want to use another terminal client for example putty. Below steps explains how to connect to the vmware.

1) Install the terminal application, like Putty, on your local machine.
2) Connect to the VM, use the IP-Address and the credentials which are mentioned in the vmware console after start-up.
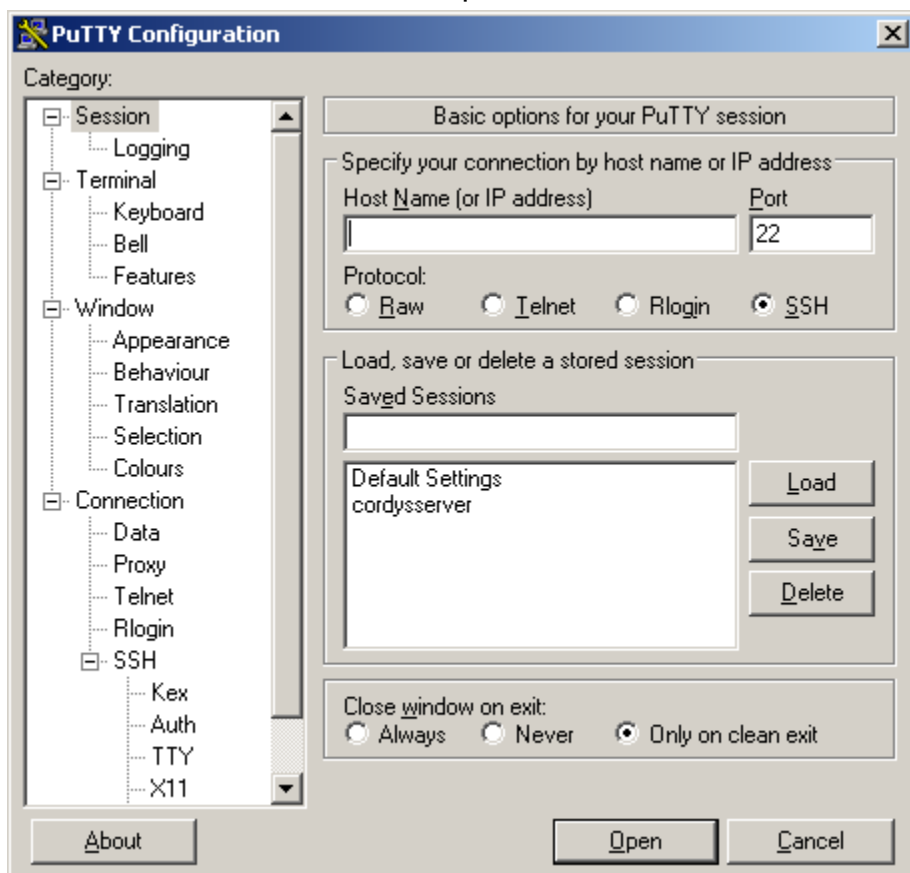
3) Type or perform the command you want.

1.6.6 Exchange files with the VMWare

Using Preconfigured shares

For some training there are 2 shared preconfigured in the VMware

cordys This is a read share to the whole Cordys directory usable for viewing and getting files from the cordys installation directory and its sub directories.

cordys_cws = This is a read/write share to the cordys/cws location so you can import/export files to your CWS project.

1) Create a mapping to the server using the ip-address For example: \\192.168.186.139\cordys_cws
2) Use your student account for access.

Using a tool like WINSCP

To access any file at any location you must use a tool like WINSCP.

1) Install an application, like WINSCP on your local machine.
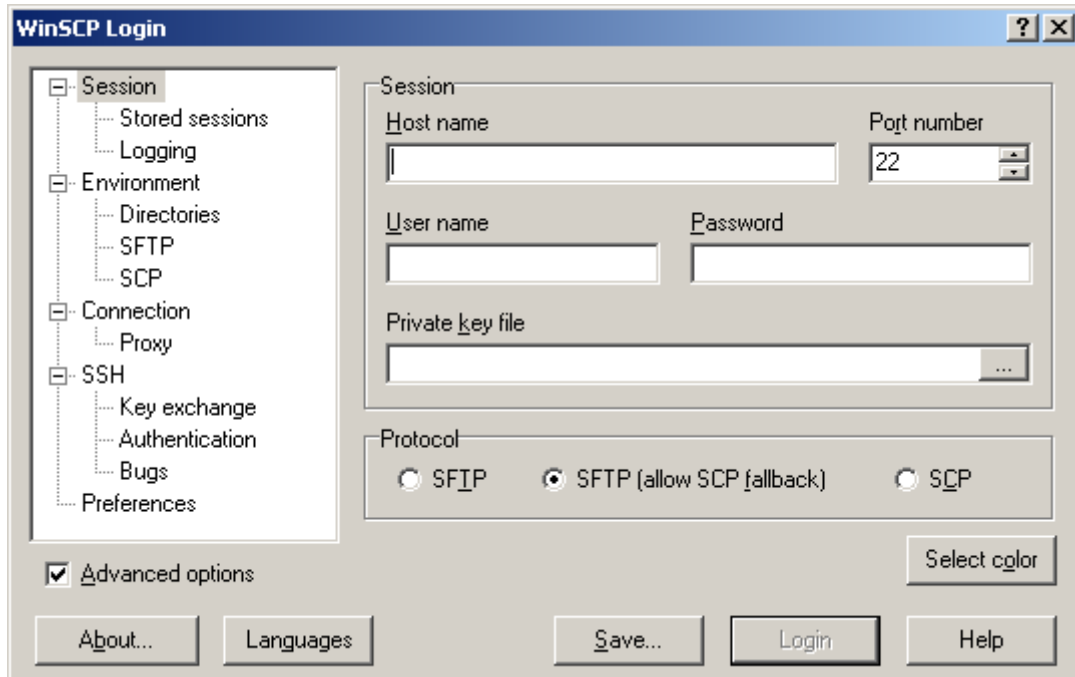
2) Select *protocol* **SFTP (Allow SCP fallback)**.
3) Connect to the VM server, use the IP-Address and the credentials which are mentioned in the vmware console after start-up.
4) You can now upload and download files to and from the server

1.6.7 Using Graphical Mode of CentOS/Linux

If you want to use the graphical mode of CentOS perform the following steps.
1) Login to the VMWare console
2) Give the command **init 5**
3) The machine will now start in graphical mode

1.6.8 Using the CARS Documentation

When you want to use the CARS documentation you can do so by using the following address from an internet browser.

http://<<ip-address>>/carsdoc/index.htm

For example: http://192.168.127.130/carsdoc/index.htm

Note that this is not a CARS standard but is configured especially for this VMware

2. Troubleshooting

2.1 Cordys start hangs in startup/boot sequence.

While starting the system the system hangs at the step **Starting Cordys**

```
Starting jexec:                                          [  OK  ]
Starting system message bus:                             [  OK  ]
Starting cars-slapddefaultInst:                          [  OK  ]
Starting cups-config-daemon:                             [  OK  ]
Starting HAL daemon:                                     [  OK  ]
Starting Cordys Monitor                                  [  OK  ]
Starting cordys:   _
```

This can be due to two reasons:

1) You downloaded the VMware a while back and the license is expired.

> Solution: You can download a new VMware.

2) You made wrong/false changes to the Cordys and/or CARS configuration due to which Cordys does not start anymore.

> Solution: Use a terminal like putty, to connect to the VMware study the log files like monitor and LDAP. Fix the problem and restart the system

2.2 Cordys has not been started – Message in Login screen

In the login screen it is indicated that "Cordys has not been started"

```
Cordys has not been started properly, or in time!

 ================================================================
 |                                                              |
 |           Cordys Evaluation Package -- BOP-4 CU08            |
 |                                                              |
 |                                                              |
 ================================================================
 |                                                              |
 |                                                              |
 |     Cordys Platform URL :  http://192.168.127.134            |
 |                                                              |
 |                 LoginID :  root                              |
 |                password :  cordys                            |
 |                                                              |
 ================================================================

cordysserver login: _
```

When Cordys daemon is started we check for 2 minutes if Cordys comes up if not you receive this information line.

The reason that Cordys is not started can be due to several reasons:

1) You client machine is running low on resource which lead to the fact that it may take more than 2 minutes for Cordys to start. You can make the connection via the internet browser

> Solution: Ignore this information message.

2) You downloaded the VMware a while back and the license is expired.

Solution: You can download a new VMware.

3) You made wrong/false changes to the Cordys and/or CARS configuration due to which Cordys does not start anymore.

Solution: Check the log files like the monitor and LDAP log, to find the cause of the problem and fix the problem and restart the system.

2.3 Communication Failure

2.4 LDAPException: (40) Could not receive bootstrap information from multicast in time: 30000 milliseconds.

When I connect to Cordys via de browser I get a Communication failure, LDAP exception. Error.

Error Description
Communication Failure.

Error Details
LDAPException: (40) Could not receive bootstrap information from multicast in time: 30000 milliseconds. Check if the LDAP SOAP Processor is running. If it is running, the computer may be slow. Add the 'bus.ldaprequest.timeout=<timeout>' property in the wcp.properties file and specify the duration after which a request times out. LDAPException: Server Message: Could not receive bootstrap information from multicast in time: 30000 milliseconds. Check if the LDAP SOAP Processor is running. If it is running, the computer may be slow. Add the 'bus.ldaprequest.timeout=<timeout>' property in the wcp.properties file and specify the duration after which a request times out. at com.eibus.directory.soap.Proxy.getInstance(Proxy.java:94) at com.eibus.directory.soap.Proxy.getInstance(Proxy.java:168) at com.eibus.directory.soap.LDAPDirectory.<init> (LDAPDirectory.java:108) at com.eibus.web.gateway.BusGateway.<init>(BusGateway.java:75) at com.eibus.web.gateway.BusGateway.getGateway(BusGateway.java:69) at com.eibus.web.gateway.SOAPTransaction.createConnection(SOAPTransaction.java:955) at com.eibus.web.gateway.SOAPTransaction.<init>(SOAPTransaction.java:195) at com.eibus.web.gateway.SOAPTransaction.<init> (SOAPTransaction.java:174) at com.eibus.web.soap.Gateway.service(Gateway.java:87) at com.eibus.web.isapi.WebApplication.handleExtensionControlBlock(WebApplication.java:88) at com.eibus.web.isapi.ExtensionControlBlock.execute(ExtensionControlBlock.java:97) at com.eibus.web.isapi.Engine.handleExtensionControlBlock(Engine.java:156) Caused by: java.net.SocketTimeoutException: Could not receive bootstrap information from multicast in time: 30000 milliseconds. Check if the LDAP SOAP Processor is running. If it is running, the computer may be slow. Add the 'bus.ldaprequest.timeout=<timeout>' property in the wcp.properties file and specify the duration after which a request times out. at com.eibus.directory.soap.LDAPMulticastClient.sendAndWait (LDAPMulticastClient.java:317) at com.eibus.directory.soap.LDAPMulticastClient.sendAndWait(LDAPMulticastClient.java:194) at com.eibus.directory.soap.Proxy.getInstance(Proxy.java:89) ... 11 more

Error Details   ⟱

1) Most likely Cars and or Cordys is not started correctly, see Cordys has not been started – Message in Login screen on page 15 for more details

2.5 Assigned roles do not appear in the My Application App Palette

When assigning roles to your users there are no tasks appearing in the My Application app Palette.

1) Right click in the My Application App Palette and click Refresh

If tasks still do not appear, this happens in some occasions; reboot the VMware once and the roles and tasks get reflected. See Stopping the VM on page 5 to stop the VM and then start

2.6 The console does not allow me to login with user root password cordys.

2.7 Keyboard layout in the VM differs from my keyboard.

The installed keyboard layout in the VMware is a US keyboard layout this means that when you for example have a Germany keyboard the layout does not match so you are typing the wrong password.

On a German keyboard the password would be cordzs

You can change the keyboard layout via the command:

system-config-keyboard --text keyboardtype

```
[root@cordysserver ~]# system-config-keyboard --text de
Loading /lib/kbd/keymaps/i386/qwertz/de.map.gz
[root@cordysserver ~]# _
```
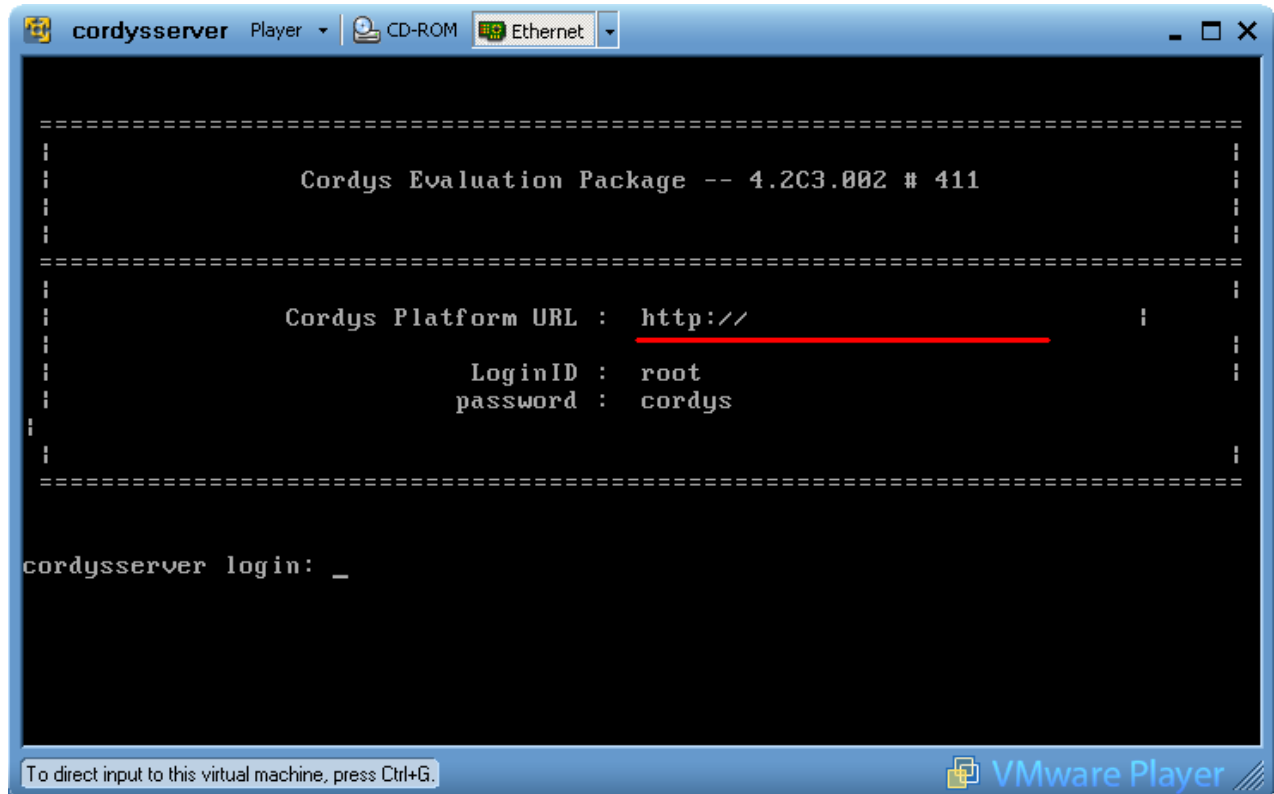
For example:

Country	Keyboard type
Belgium	be-latin1
French	fr
Germany	de

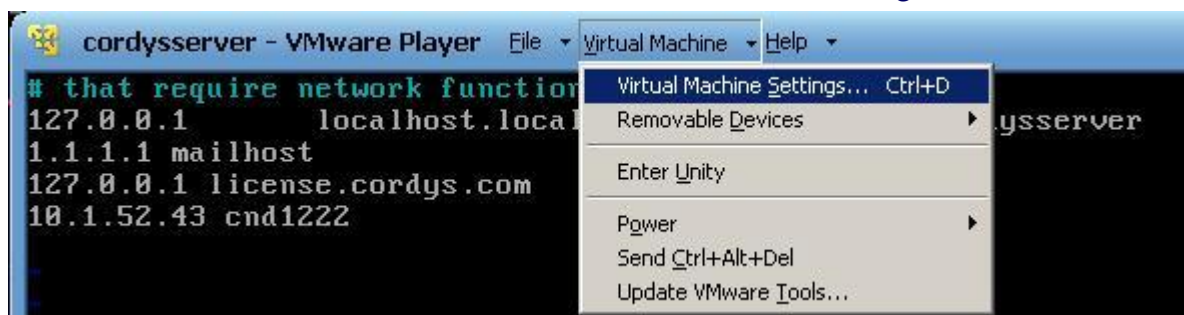You can use system-config-keyboard --help to find your keyboard type.
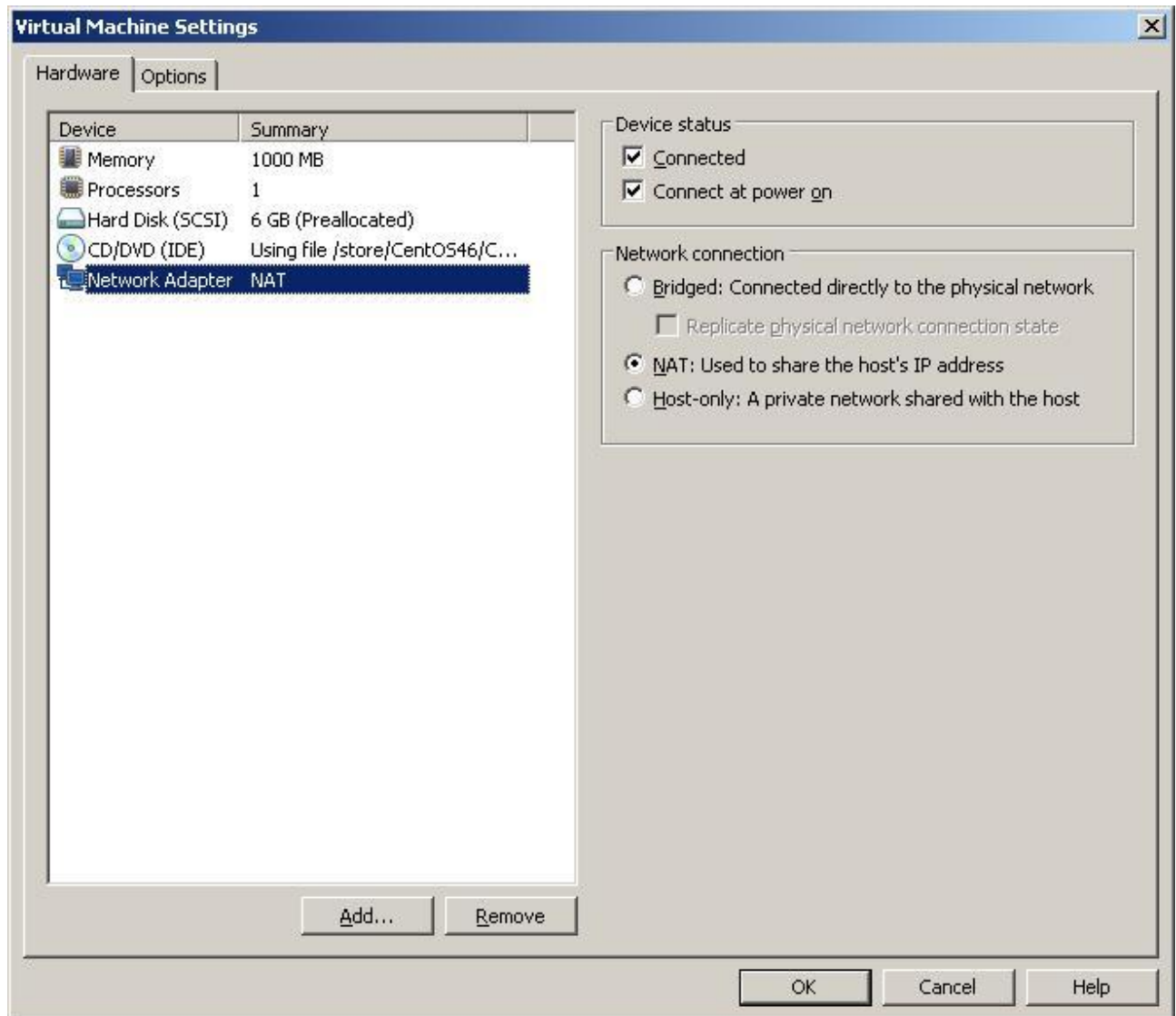
2.8 The VM does not get an IP Address

My VM is started but it does not have an IP Address

Check the following:

1) Make sure the VM ware is configured in NAT (or Host only mode)

    a. Select *Virtual Machine → Virtual Machine Settings...*.

b. Select *Network Adapter.*

2) Make sure the VM related services are started on the operating system.
    a. Right click My Computer (on the windows desktop)
    b. Select **Services** below **Services and Applications**.
    c. Start the VMWare DHCP Service and VMWare NAT service
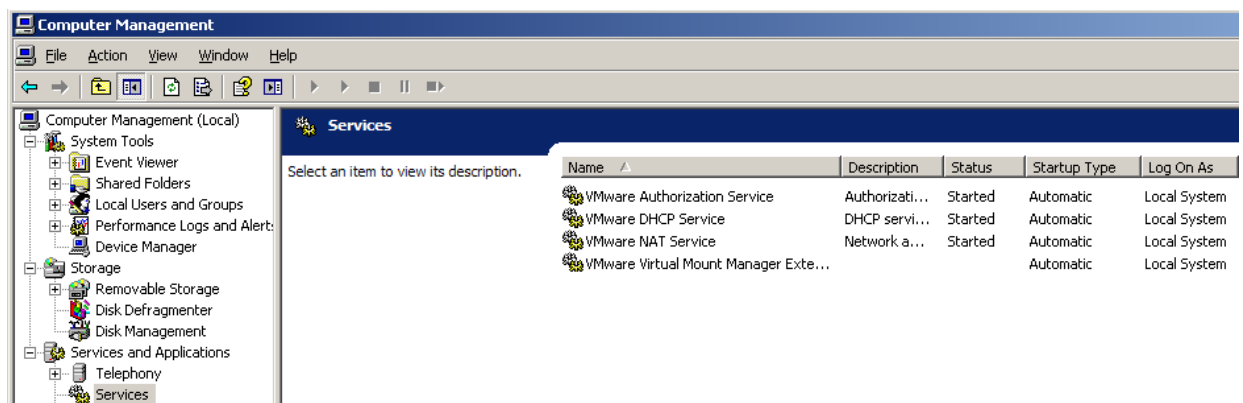
2.9 Determining IP information for eth0… failed

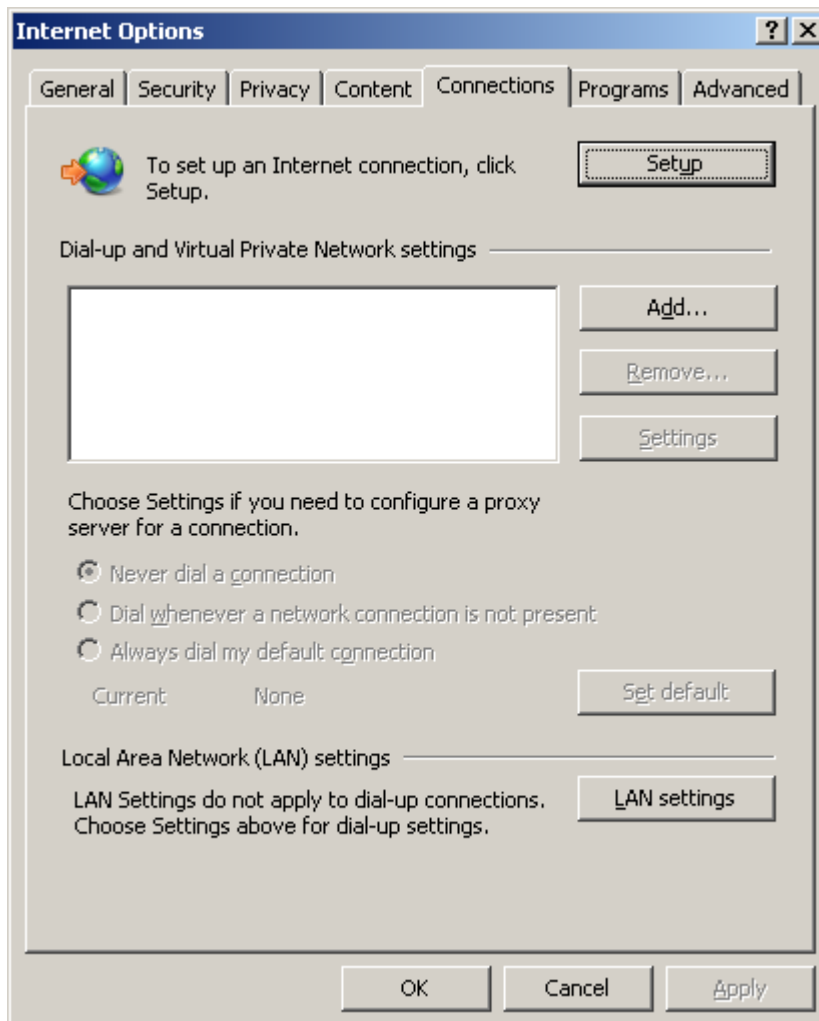During the startup of the system the IP Address cannot be determined.

Follow the procedure of The VM does not get an IP Address on page 17.

2.10 The VM has an IP Address but I can't connect

The VMware starts and gets an IP address but from my desktop (Internet explorer) I cannot connect to http://<<ipadrress>>/cordys.

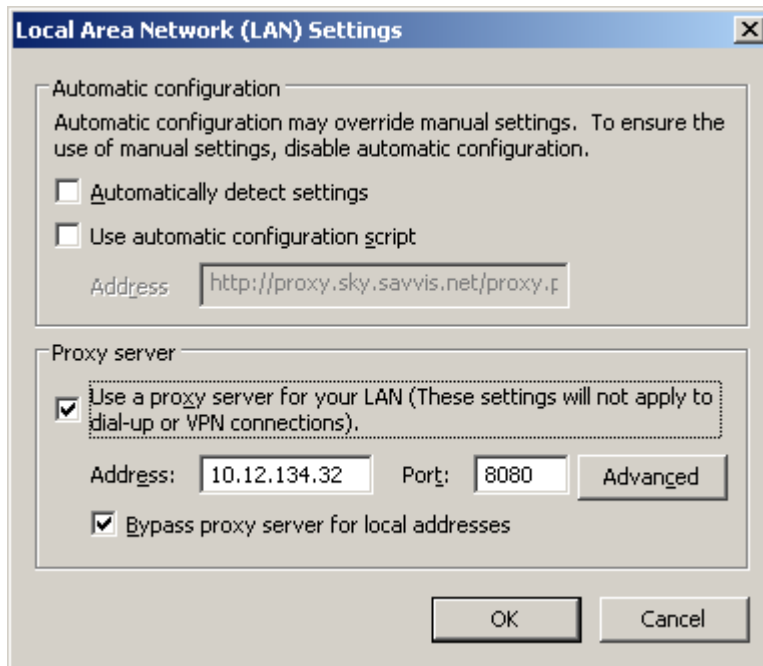### 2.10.1 Proxy Server

1) Open your internet explorer browser
2) Go to menu option *Tools → Internet Options*
3) Tab Connections
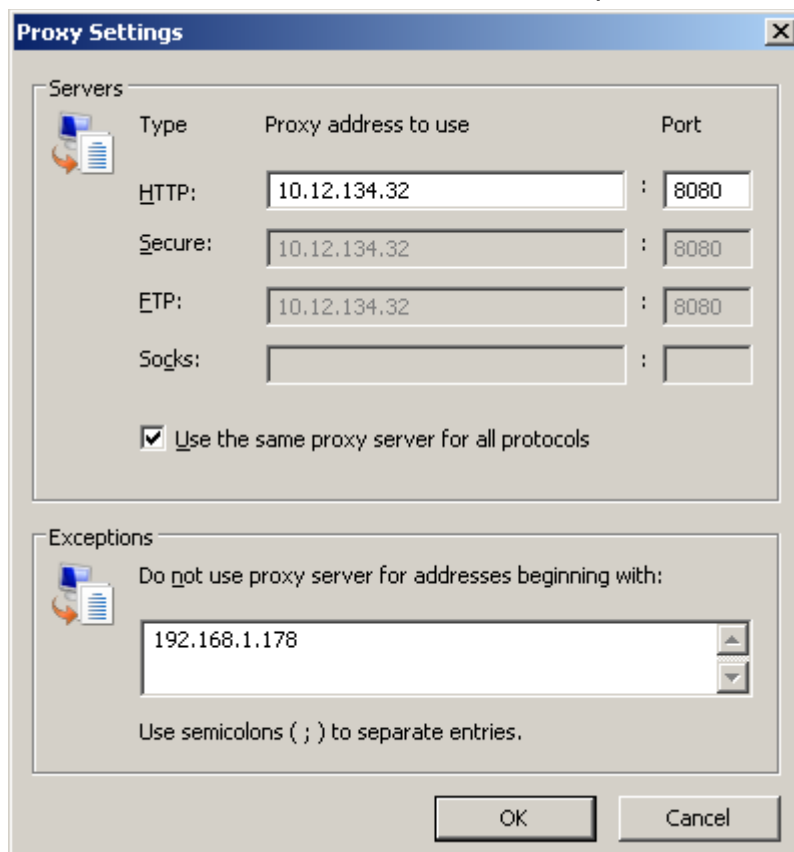
4) Click **LAN settings**

5) **If Use a proxy is checked:**

Local Area Network (LAN) Settings

Automatic configuration

Automatic configuration may override manual settings. To ensure the use of manual settings, disable automatic configuration.

☐ Automatically detect settings

☐ Use automatic configuration script

Address   http://proxy.sky.savvis.net/proxy.p

Proxy server

☑ Use a proxy server for your LAN (These settings will not apply to dial-up or VPN connections).

Address: 10.12.134.32   Port: 8080   Advanced

☑ Bypass proxy server for local addresses

OK   Cancel

a. Click **Advanced**

b. Add the IP-address of the VM to the Exceptions list

Proxy Settings

Servers

	Type	Proxy address to use		Port
	HTTP:	10.12.134.32	:	8080
	Secure:	10.12.134.32	:	8080
	FTP:	10.12.134.32	:	8080
	Socks:		:	

☑ Use the same proxy server for all protocols

Exceptions

Do not use proxy server for addresses beginning with:

192.168.1.178
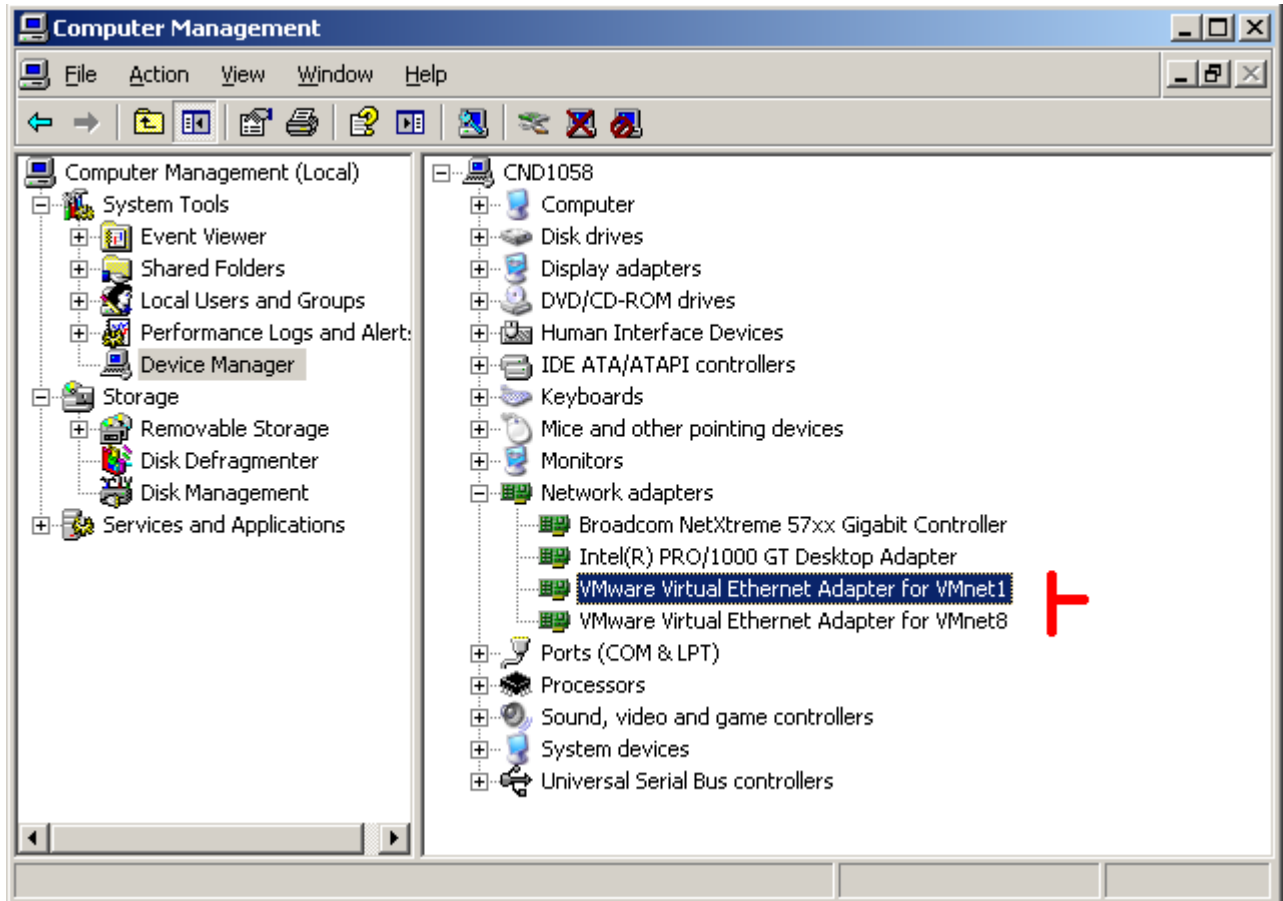
Use semicolons (;) to separate entries.

OK   Cancel

c. Click **OK** (3 times)

2.10.2 VM Devices enabled

1) Right click My Computer (on the windows desktop)
2) Select Manage.
3) Click On Device Manager

4) On the right navigate to Network Adapters

5) Right click on the VMware**xxxxx** network adapters and select Enable.

2.10.3 VPN Client

When a VPM client is active is can block communication to the VMware

1) Close the VPN Connection

2.11 Other IP/Network Issues with the VMware

If the solutions mentioned above are not applicable or did not help you in getting the VM started, please contact your local IT department and/or visit www.vmware.com. Various other system configurations might interfere with working with VMWare. These configurations might even be intentionally applied by your IT department for working with other applications on your computer
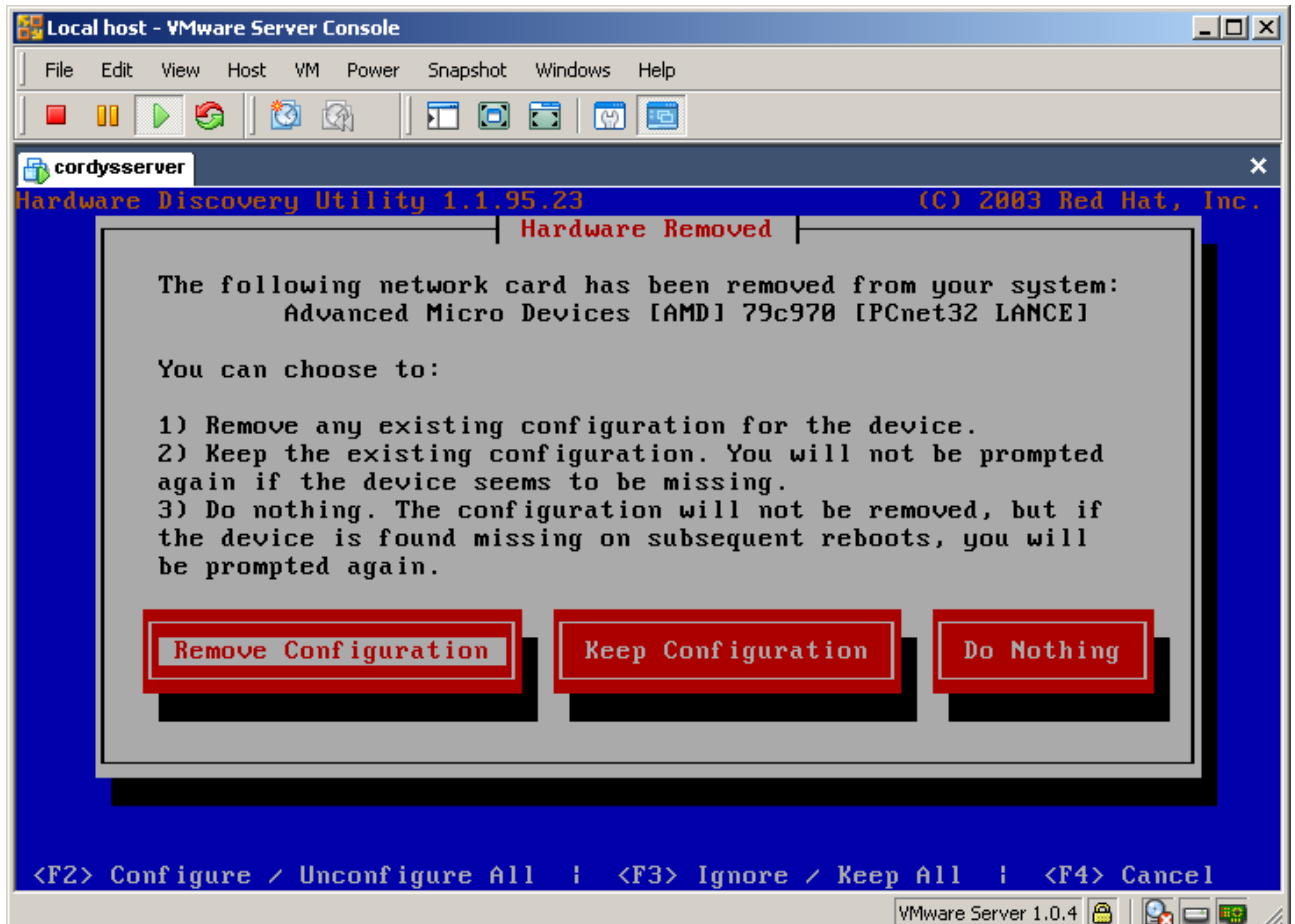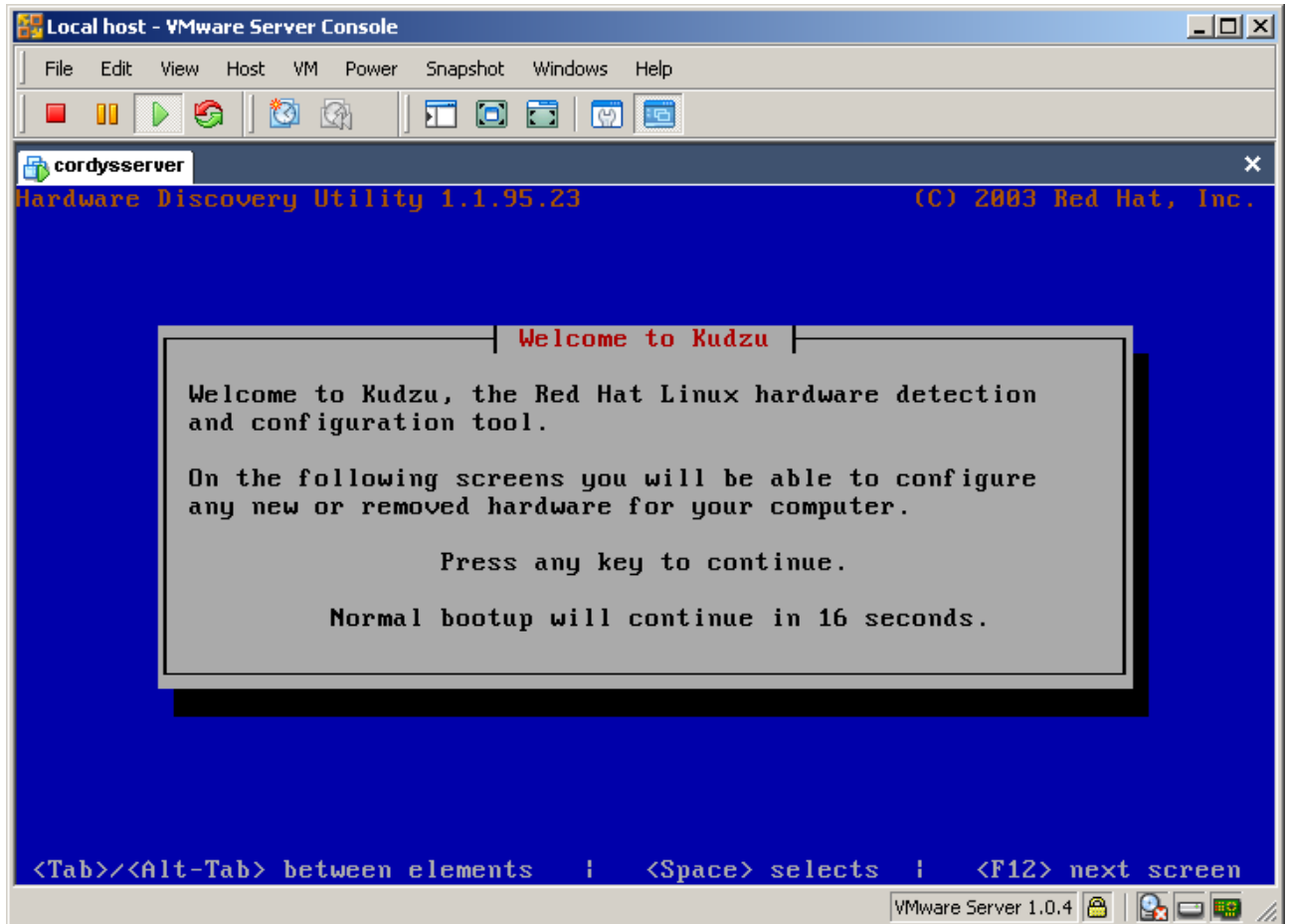
2.12 Hardware detection screen is started during boot sequence

When you started the VM you were asked if you want to create or keep the UUID. You have selected Create.
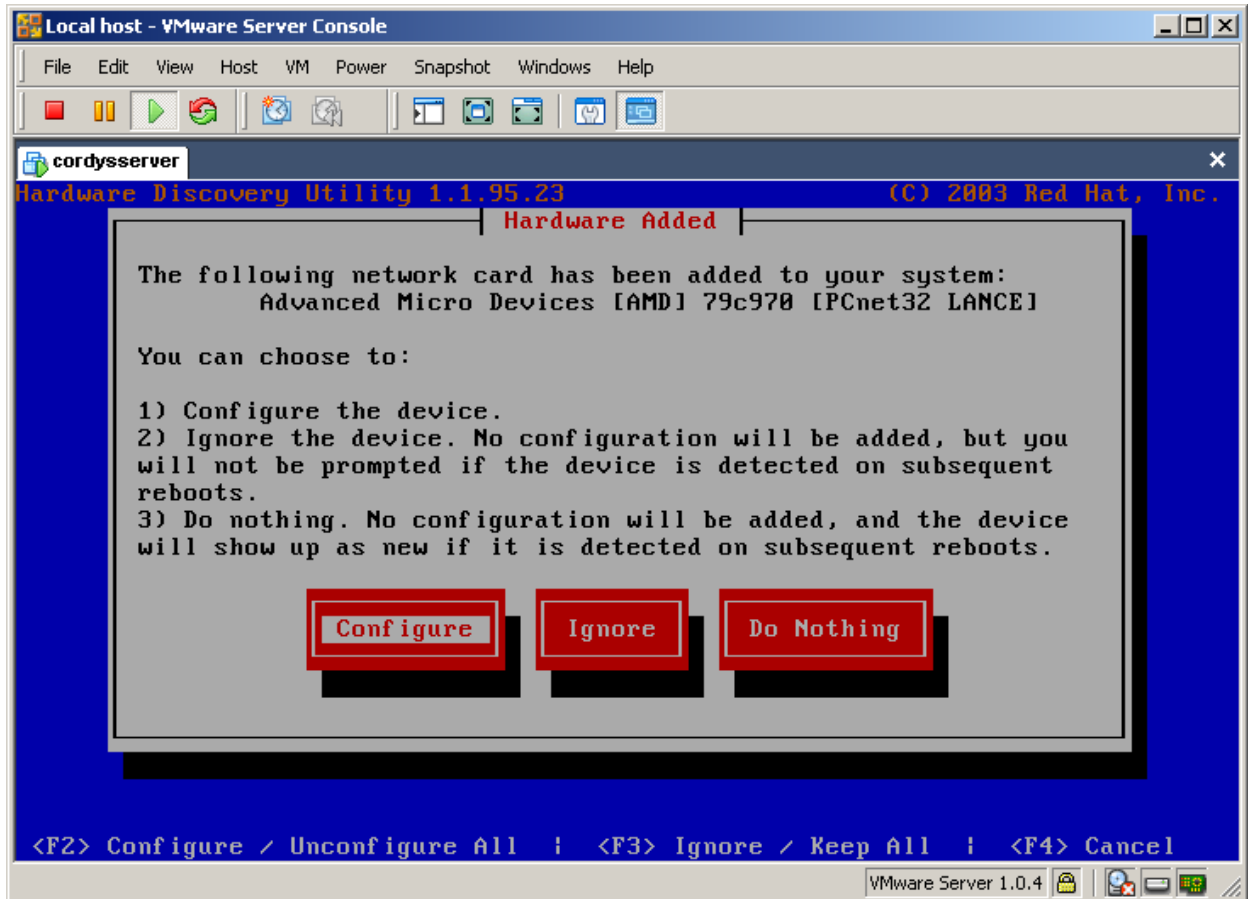
You can extract the zip file again and select keep or follow the below instructions.
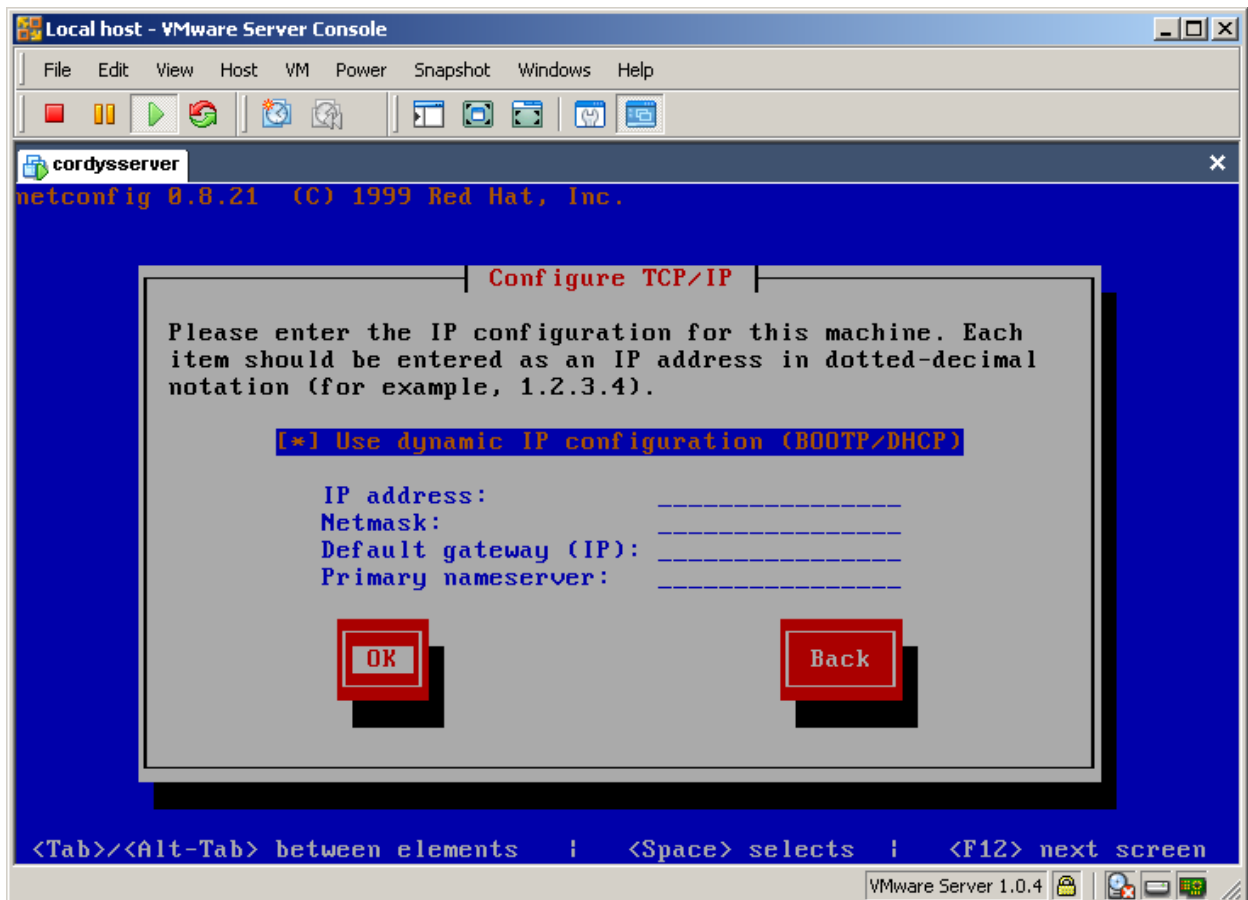
To correct:

1) Press any key in the hardware detection screen

    a. Select Remove Configuration

b. Select Configure

c. Press the spacebar in the **Use Dynamic IP configuration**, to select it.

d. Select OK.

2) The boot process continues