

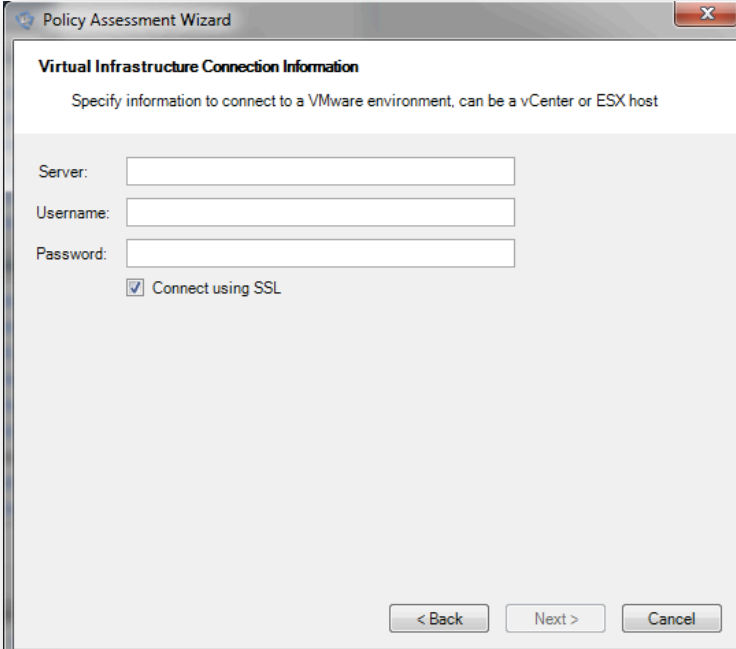
Trouble shooting

The following document takes you through some trouble shooting steps if you are experiencing problems getting VMInformer to work in your virtual environment.

Connection Issues

Please follow these trouble shooting steps if you are having difficulty connecting VMInformer to an individual ESX, ESXi or vCenter.

1. The most common issue when connecting is that the wrong credentials are being used. Numerous support calls are resolved at this point. **Please check you are putting the right credentials in the assessment wizard!**
 - a. When connecting directly to an ESX or ESXi host the ROOT user is the only account that can be used. This account is used to connect to the VMware Web Services API. (**See note 3 concerning ESXi**)
 - b. When connecting to vCenter however depending on the account role and associated permissions this will effect what can and cannot be seen. So when connecting to a vCenter you need to connect with an account that has either:
 - i. Admin privileges to the entire tree e.g. datacenter down; or
 - ii. An account that has access to the entire tree datacenter down. Can be a read only account.



Policy Assessment Wizard

Virtual Infrastructure Connection Information

Specify information to connect to a VMware environment, can be a vCenter or ESX host

Server:

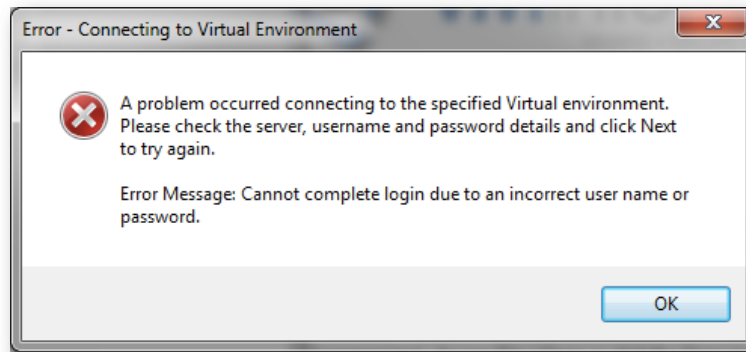
Username:

Password:

Connect using SSL

< Back Next > Cancel

In the screen shot shown above you must enter in the username and password fields the correct credentials to connect to either your ESX/ESXi host as mentioned in point a) or the vCenter credentials as mentioned in point b). If the credentials are entered incorrectly then you will experience the following error:



2. Versions of VMInformer before version 2.0.2 (and including) do not connect to ESXi hosts. VMInformer versions 2.2 onwards will connect to ESXi hosts. Please ensure you are connecting to either a v3.5 or v4.x ESX/ESXi host or vCenter v2.5. **Earlier versions are not currently supported.**
3. If your target ESXi servers are configured in lock down mode, then when you initially try to connect the following error will be seen:

"Permission to perform this operation was denied".

(Lock down mode means that the target host will not allow the root user to connect either via ssh or https remotely)

You will also need to enable SSH access if you wish to perform any of the OS checks specific to ESXi. To enable SSH access refer to the support site article 'Enabling SSH access on ESXi'

4. Next check you have connectivity to the vim API.
 - a. On the machine VMInformer is installed on open up a standard web browser and connect to the IP address or DNS hostname of the ESX/ESXi Host or vCenter using a URL address of <https://ipaddress/mob>
 - b. If you are connecting to an ESX or ESXi host you will need the ROOT credentials to authenticate.
 - c. If you are connecting to vCenter they you will need an admin level account.

In both case you will be presented with the following information:

Managed Object Type: ManagedObjectReference:ServiceInstance		
Managed Object ID: ServiceInstance		
Properties		
NAME	TYPE	VALUE
capability	Capability	capability
content	ServiceContent	content
serverClock	dateTime	"2010-06-21T15:01:24.371297Z"
Methods		
RETURN TYPE	NAME	
dateTime	currentTime	
HostVMotionCompatibility[]	QueryVMotionCompatibility	
ServiceContent	RetrieveServiceContent	
ProductComponentInfo[]	RetrieveProductComponents	
Event[]	ValidateMigration	

If the above works then VMInformer should work too. In these circumstances, VMInformer should at least connect and give you the inventory of hosts and virtual Machines.

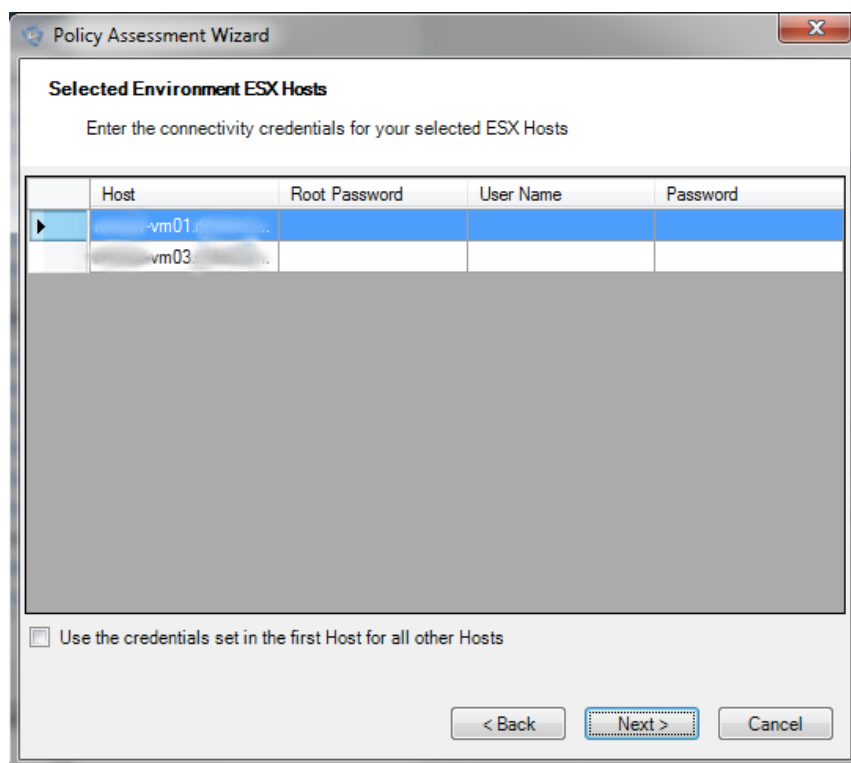
If you can not connect then typically a firewall is blocking connectivity either on the host or in between.

5. If the above works then check the ssh connectivity to the ESX or ESXi host.
6. Use an industry standard ssh client such as the free open source client PUTTY.
 - a. Check that you can login to the host from the VMInformer machine firstly with a lower level account and then SU to root.

If this cannot be done then again check firewalls both in between and on the ESX/ESXi host itself. You may need to create a lower level account if one does not exist.

If the above works then VMInformer will work.

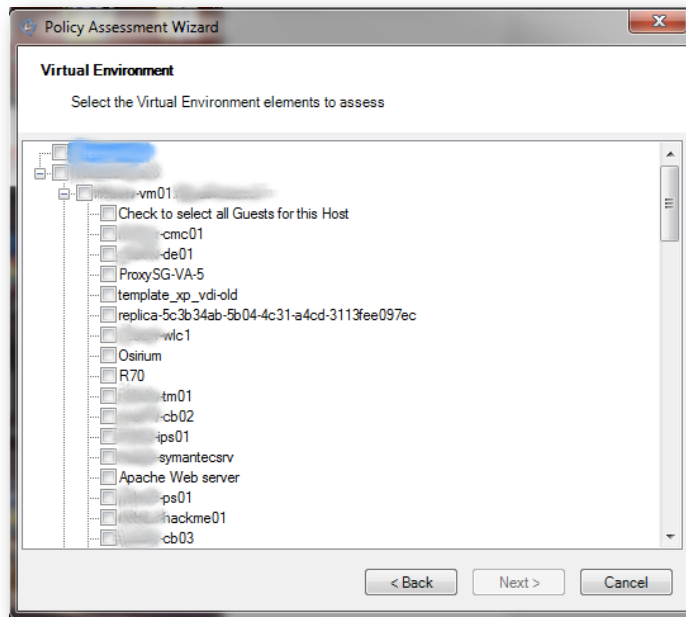
The screenshot below shows the step in the assessment wizard where you are required to enter the ssh credentials to connect to your ESX or ESXi host. Note that you need the ROOT account password as well as the username and password of a lower level account. If this account does not exist then the Policy rules will not run and the scan will fail. If all credentials are the same for all hosts you can select the check box in the bottom left corner to save having to retype the information.



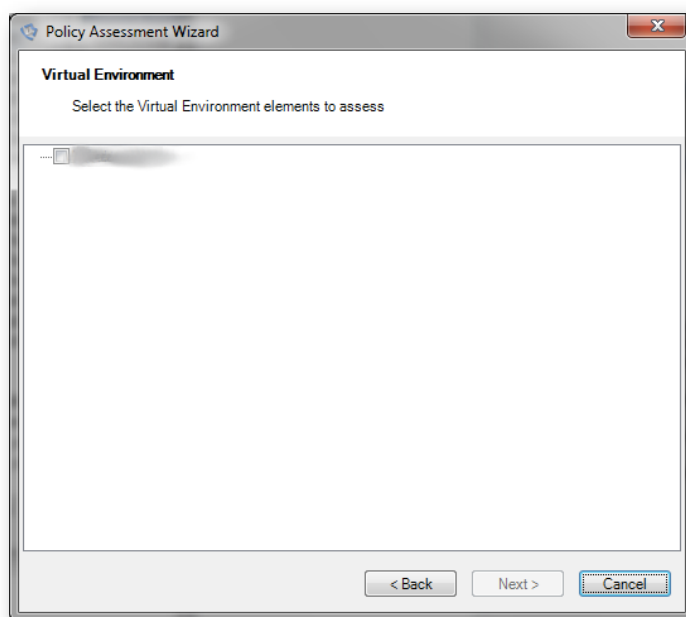
Permissions

When connecting to an vCenter it is important that the account being used has the correct role and permissions in order to see the entire virtual infrastructure. This can either be an admin level account or a read only account so long as the level of access has been allowed to propagate from the vCenter or Datacenter downwards.

The screenshot below shows a typical virtual inventory that will be presented when connecting to a vCenter with the correct credentials.



If you connect with the wrong credentials then you will experience either no inventory at all or only a subset of virtual machines as shown below:



DNS

Ensure that the ESX hostnames are fully resolvable from the machine VMInformer is installed on. If the ESX hostnames are not resolvable in DNS then connectivity will fail. A typical error message will be:

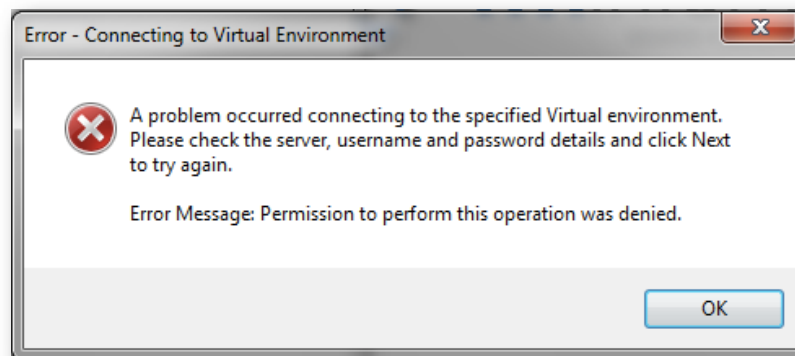
“Client Closed”

To ensure this doesn't happen make sure the ESX hostnames are resolvable or as a work around put the IP and Hostname of all ESX/ESXi hosts in the local host file of the machine where VMInformer is installed.

Lockdown Mode ESXi

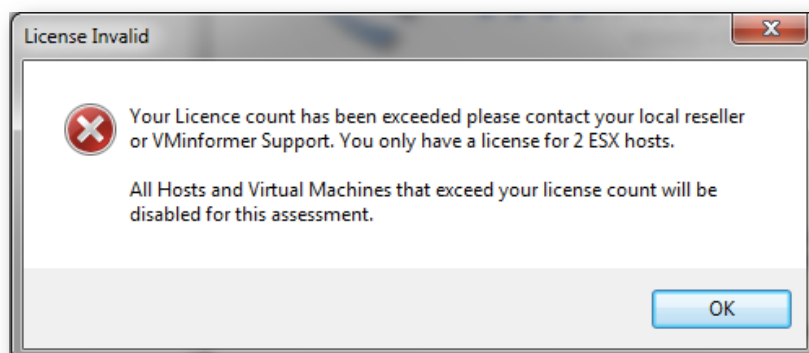
If ESXi is configured in lockdown mode then all connections using the ROOT user credentials will fail.

If you try and connect to an ESXi host in lock down mode you will receive the following error:



License Issues

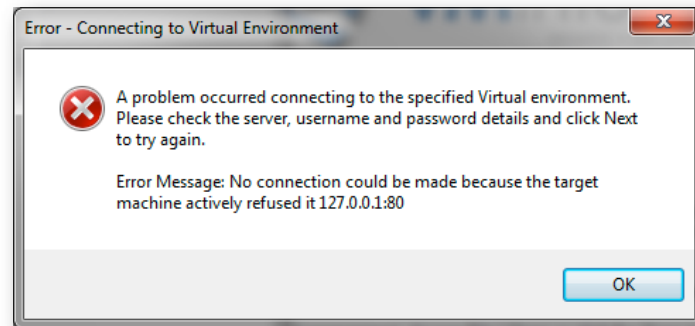
All VMInformer Pro license has a defined license count for the number of ESX/ESXi hosts that it can support. If the license count is exceeded then you will see the following message:



The scan will continue but all ESX/ESXi hosts and associated virtual machines that exceed the license count will be greyed out.

Proxy Settings

VMInformer uses the Microsoft Cryptographic driver as a result of this if you have proxy settings defined in your web browser these may need to be disabled or you alternatively define a bypass entry for the vCenter or ESX host you are connecting to. The following screenshot shows the error you will typically get if you have proxy settings defined.



Note: The IP address will be the IP address of your proxy server and not the IP as shown above which is purely for illustrative purposes.