

Steelgate VMware Plug-in

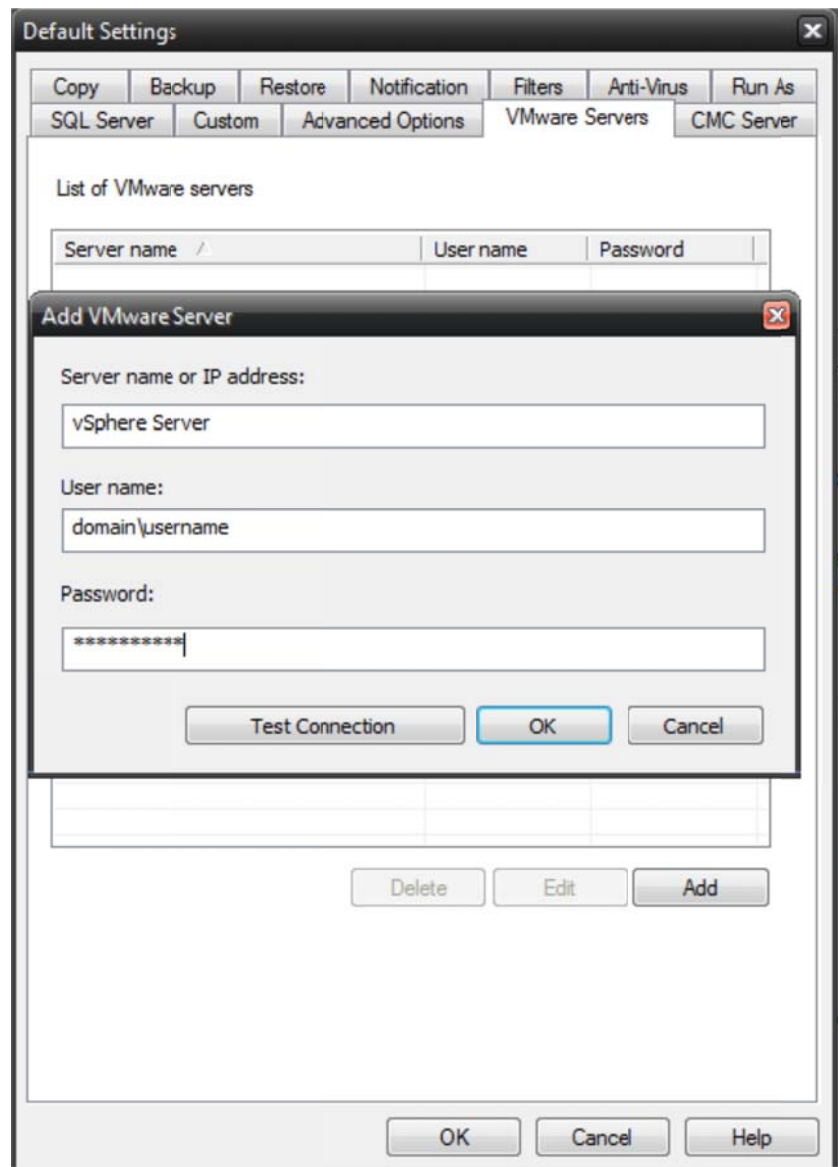


Requirements

Steelgate must be installed on a supported operating system. The machine where Steelgate is installed must have connectivity to either the vSphere server or the ESX(i) server. Steelgate can alternatively be installed on the vSphere server, or on a Virtual Machine. Version 4.0 and 4.1 of ESX(i) and vSphere licensed with the vStorage APIs are the currently supported versions of software that the VMware plug-in for Steelgate will communicate with. In order to do incremental or differential backups the communication must go through vSphere. The machine that has Steelgate installed on also has to have enough local disk space to temporarily hold all the Virtual Machines that you want to backup in one backup job.

Configuration of Steelgate

After Steelgate has been installed, open the software and click on the Default Settings link on the left hand side of the Home screen. Then go to the VMware Server tab in the dialog that comes up, and click Add to add a new connection to a ESX(i) or vSphere server. Default username is root.



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Backing up Virtual Machines

After the ESX(i) or vSphere server connections have been added to the Steelgate configuration, the backup tab will need to be refreshed, so that a connection to the ESX(i) or vSphere server can be established. This may be accomplished by either pressing F5 on the keyboard or closing and reopening the software in the Backup tab. Once properly refreshed, the screen should appear as below, and the VMware node should be selectable. Navigating to this node will show all the ESX(i) or vSphere servers configured in Steelgate. Clicking on each ESX(i) or vSphere server node will display the Virtual Machines that are available to backup.

These machines may be backed up individually, or all of them may be backed up at once.

Restore a Virtual Machine

Restoring a Virtual Machine is quite easy. Simply select the Virtual Machine to restore in the Restore UI and click the restore button. If a Virtual Machine of the same name that you are going to restore already exists on the ESX(i) or vSphere server that you are restoring to, the Steelgate software will automatically create the Virtual Machine in your inventory with the name of the Virtual Machine that you are restoring along with a timestamp at the end of the name of the Virtual Machine as to not cause conflicts with the existing Virtual Machine.

How the backup and restore process works

Steelgate first contacts the ESX(i) or vSphere server and begins a snapshot of the Virtual Machine(s) that are being backed up. After that is completed, Steelgate then starts to stage the Virtual Machine to a temporary location on the local machine Steelgate is installed on. This temporary location is configured in the Advanced Settings tab of the Default Settings that can be accessed on the Home tab of the Steelgate software, a restart of the Steelgate service is needed to apply the change, if this folder is changed. The temporary file that is created in this folder will have an extension of ".nvm" in a Vdata folder for each selected Virtual Machine in the backup job.

Finally, Steelgate will backup this temporary file to the device that is selected in the backup job and once that has completed, the temporary files will be cleaned up.

The restore operation of the Steelgate first restores the Virtual Machine to the temporary file that it was originally backed up as. Steelgate will then contact the ESX(i) or vSphere server, and tell the server to create a Virtual Machine with the parameters that the original Virtual Machine was backed up with. Next, Steelgate will stream the Virtual Machine to the server. Once that is done Steelgate will then do clean up on both the ESX(i) or vSphere server along with the temporary file it created during the restore.

Considerations and known issues

If you plan on using the built in incremental or differential options that VMware exposes you need to add 'nvm' to the CompressedFileTypes.txt in the configuration of the xSP device you will be backing up to. This will make the xSP device not use compression or FastBIT on the VMware file. This is needed only when you are going to use the incremental and differential backup option with the VMware plug-in. If full backups are always done (Steelgate Recommendation) then FastBIT3 will determine the differences between the two full backups and only send the changed parts of the full backups. Doing it that way will take more local storage, and can conceivably take longer, but restoring is very easy as you would just have to restore the latest file and not have to deal with restoring different versions to get to the current version.

Virtual machines that are contained in a Vapp container cannot be seen or backed up when connected to a vSphere server, instead if you connect directly to the ESX(i) server you will be able to see and backup those VMs.

Restoring directly to an alternate ESX(i) or vSphere server is only supported if the name of the server is the same as when the VM was backed up currently.

If you have any questions please email Support@steelgate.com.

The Steelgate Support Team

"Don't take your data for granted, back it up with Steelgate.com"