Contents

Introduction

This document describes how to deploy and set up Agent for VMware (Virtual Appliance) in vSphere environments.

Agent for VMware (Virtual Appliance) is provided as an .ovf template ready to be deployed to VMware vSphere ESXi hosts versions 4.1 or higher.

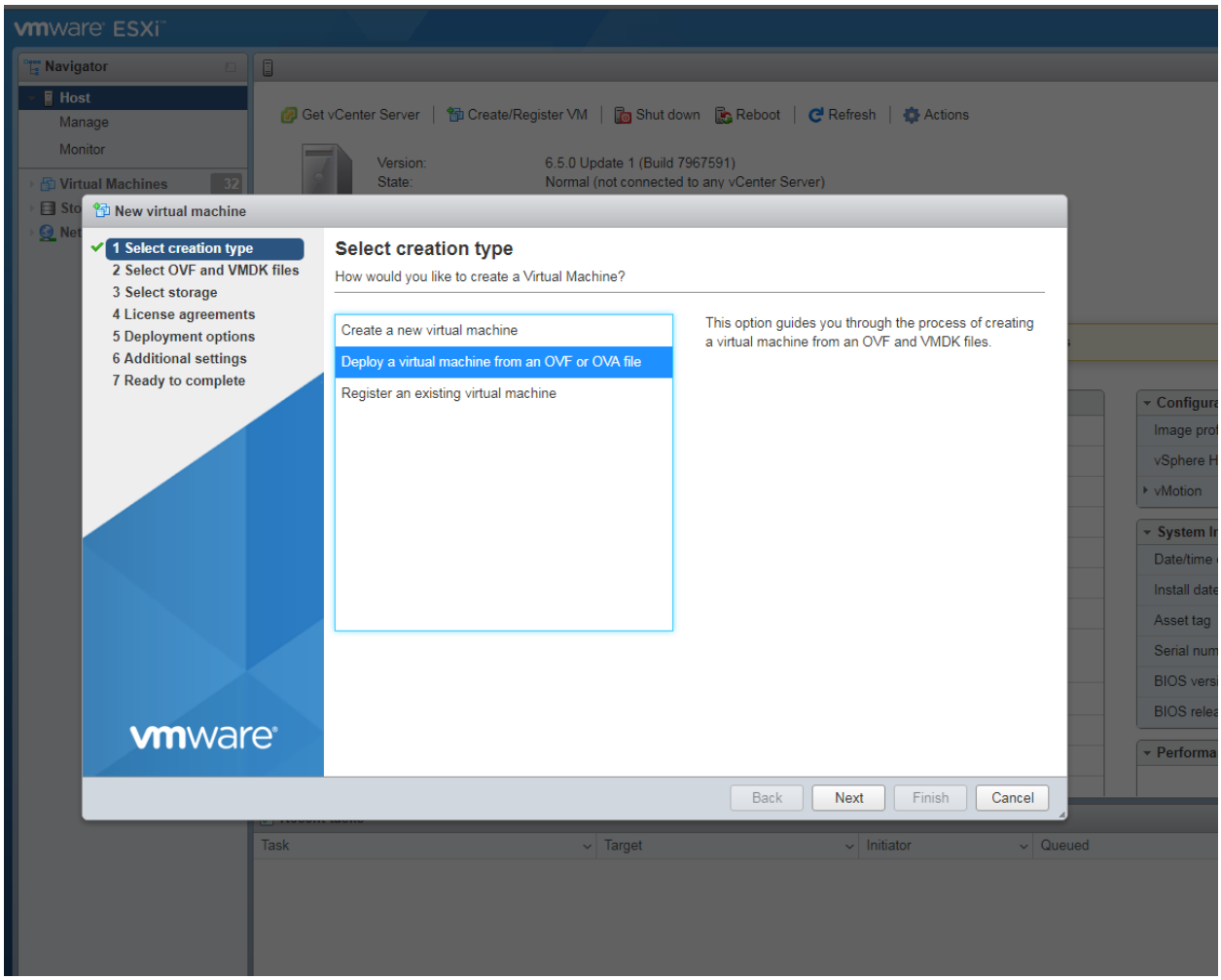
Prerequisites

- Agent for VMware (Virtual Appliance) OVF template including the following files:
  - ESXAppliance.ovf
  - ESXAppliance-disk1.vmdk
  - ESXAppliance-disk2.vmdk
- VMware vSphere ESXi host 4.1 or higher. Both standalone ESXi hosts and the ones managed by VMware vCenter are supported.

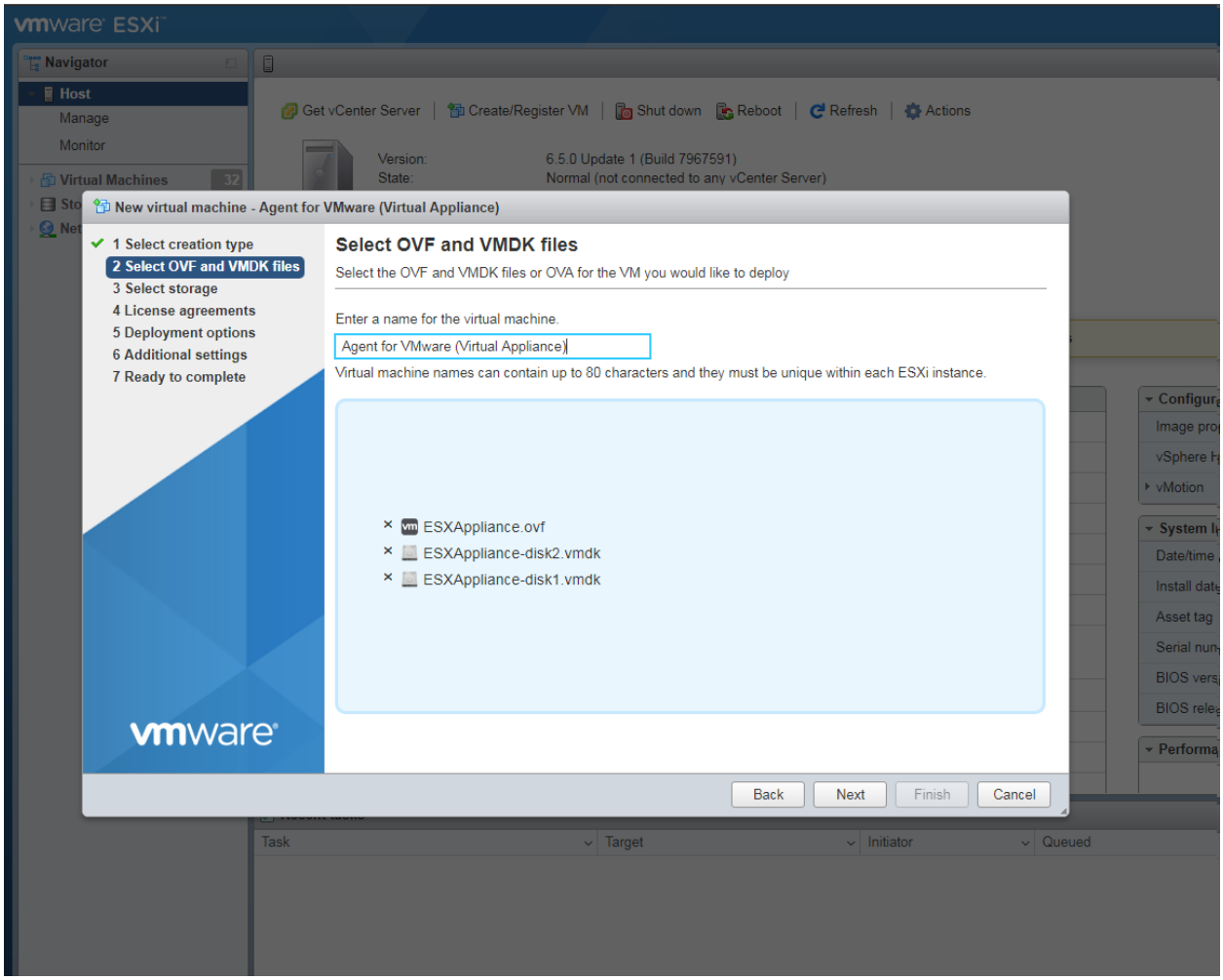
Deploying the OVF template

Note: The instructions are given for VMware vSphere Host Client connected to a standalone VMware ESXi host version 6.5. The OVF deployment steps for other vSphere versions and/or different vSphere setups may vary. For additional details, refer to the VMware documentation.

1. Connect VMware vSphere Host Client to the ESXi host.
2. Click **Create/Register VM**, and then choose **Deploy a virtual machine from an OVF or OVA file**.



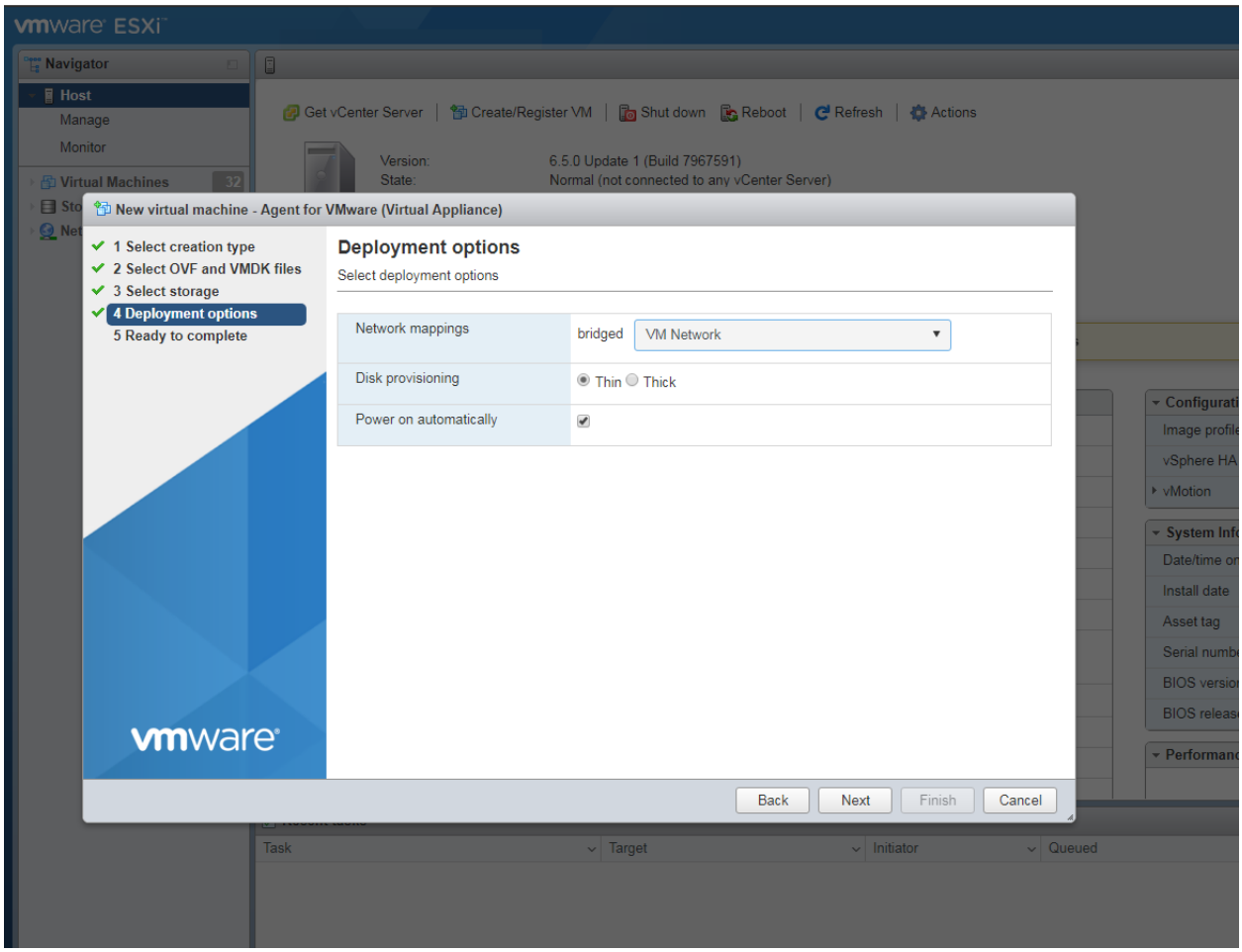
3. Select the .ovf and .vmdk files of Agent for VMware (Virtual Appliance) and specify a name for the deployed virtual machine.



4. Proceed with the remaining steps of the deployment wizard: select storage and other deployment options.

   a. Select a proper virtual network that will allow Agent for VMware (Virtual Appliance) to connect to the Internet for proper registration in the cloud data center.

   b. The **Disk provisioning** type can be set to **Thin**, since the disk format does not affect the appliance performance.

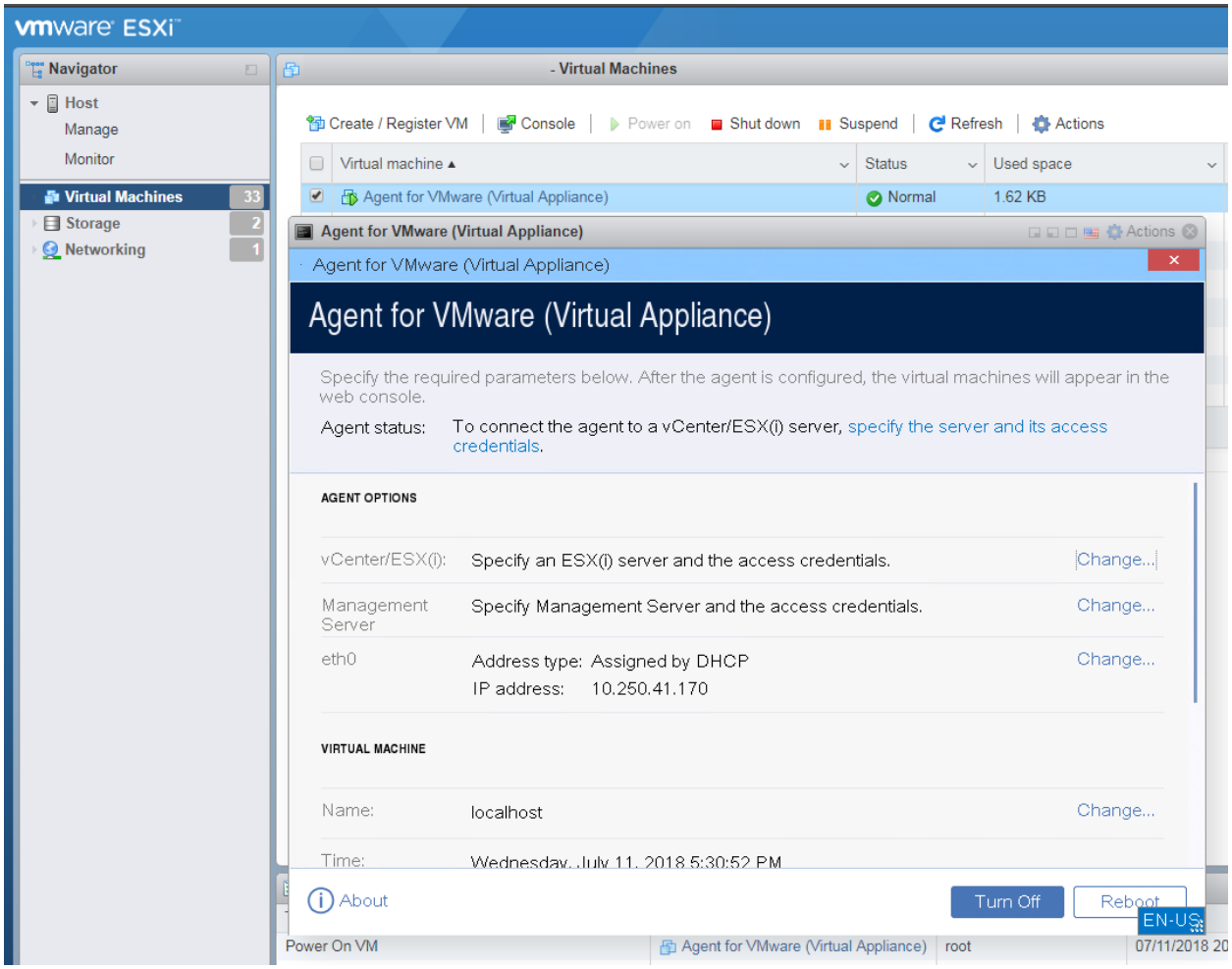


5. Review the summary, and then click **Finish**.

Configuring the virtual appliance

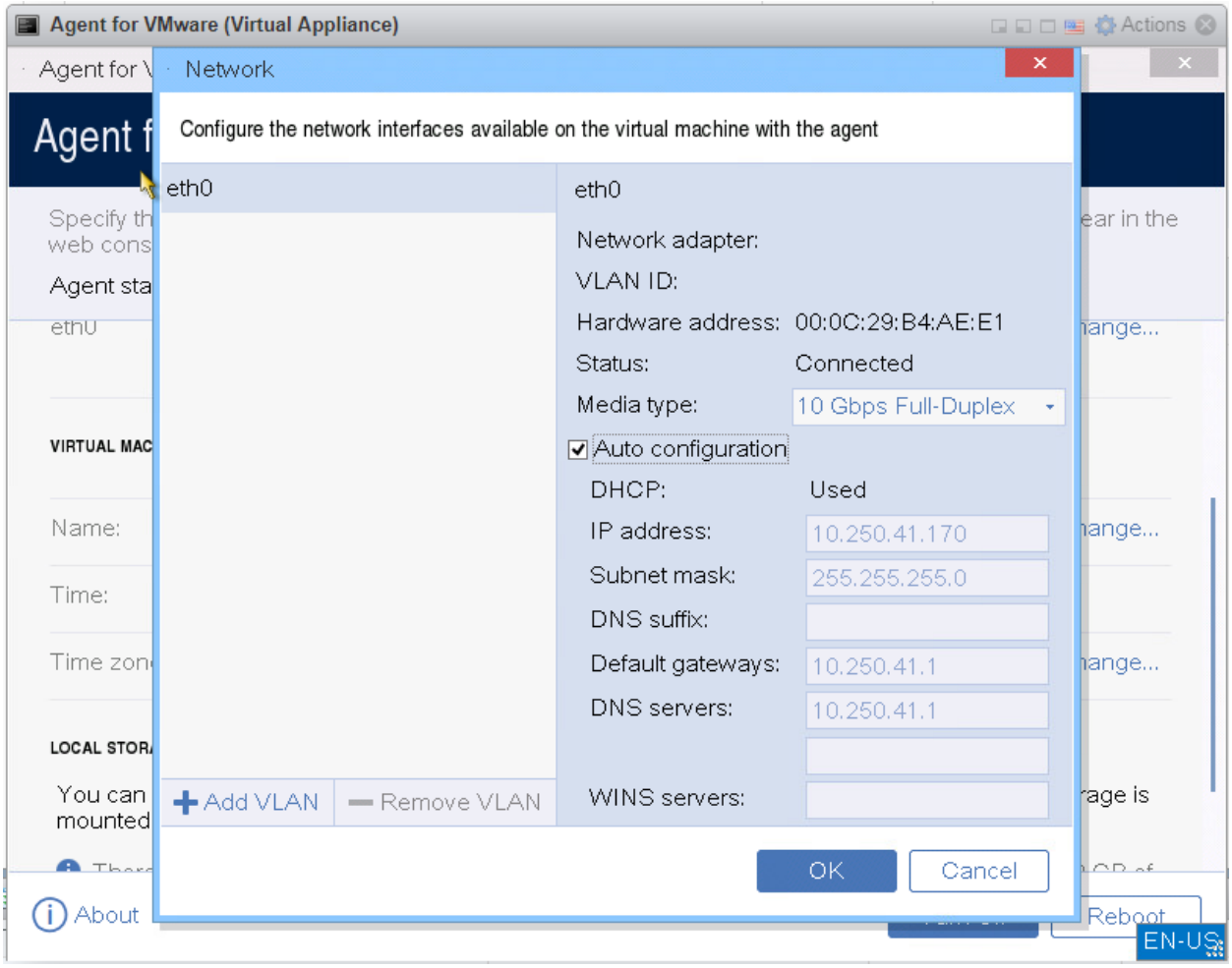
1. **Start the virtual appliance**

   In vSphere Host Client, open the **Virtual Machines** list, find the deployed Agent for VMware (Virtual Appliance) virtual machine, power it on, and then open its console.



2. **Configure the appliance networking**

   The network connection of the appliance is configured automatically by using Dynamic Host Configuration Protocol (DHCP). To change the default configuration, under **Agent options**, in **eth0**, click **Change**, and then specify the desired network settings.



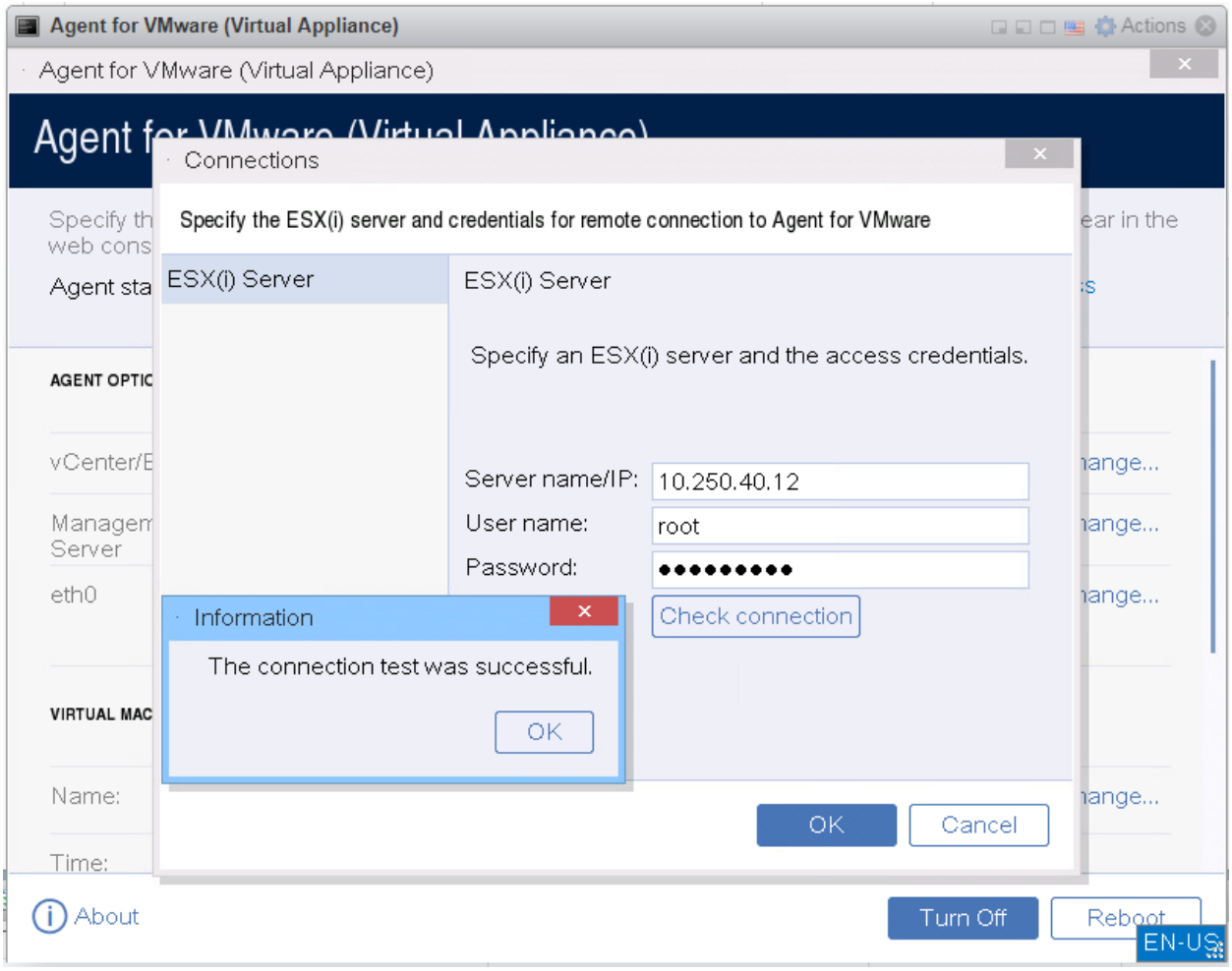
3. **Specify the vCenter Server/ESX(i) host**

   Under **Agent options**, in **vCenter/ESX(i)**, click **Change**, and then specify the vCenter Server or ESXi host name or IP address. The agent will be able to back up and recover any virtual machine managed by the vCenter Server or ESXi host.

   Normally, backups run faster when the agent backs up virtual machines hosted on its own host.

   Specify the credentials that the agent will use to connect to the vCenter Server or ESXi host. We recommend that you use an account that has the Administrator role assigned. Otherwise, refer to the full product documentation to get the list of the required vSphere user privileges on the vCenter Server or ESXi host.

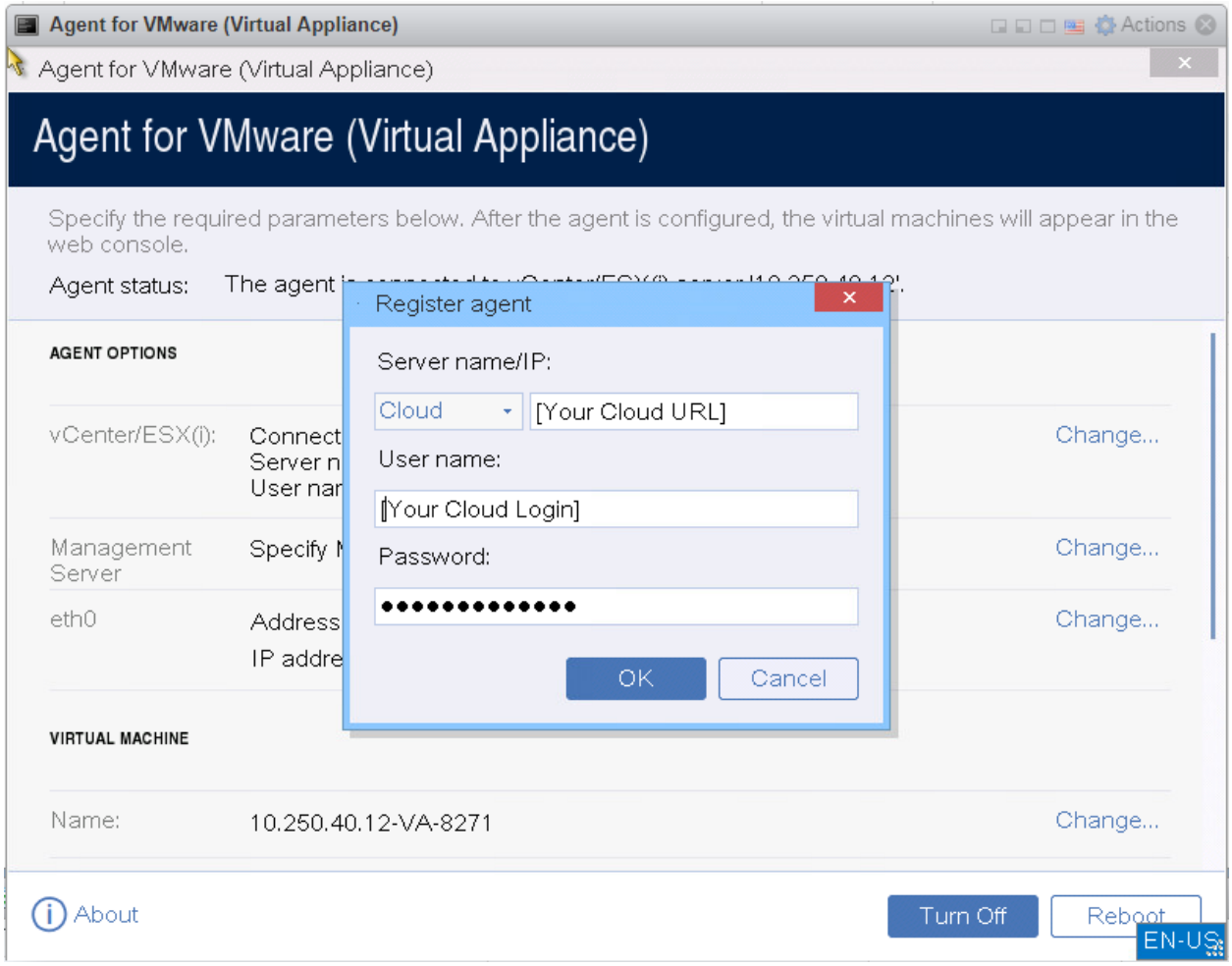
   To verify that the access credentials are correct, click **Check connection**.



4. **Specify the Management Server**

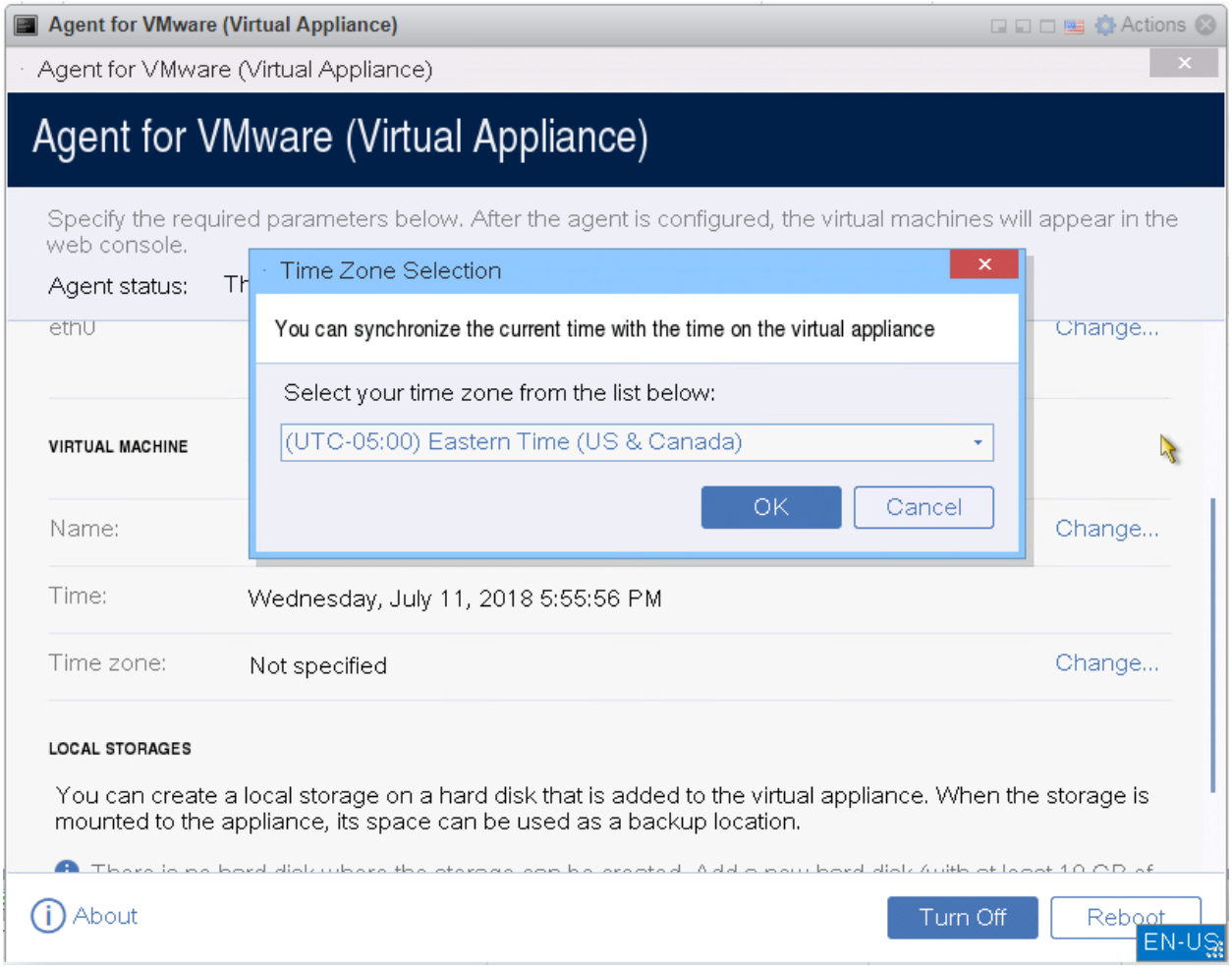
Under **Agent options**, in **Management Server**, click **Change**. From the drop-down menu, choose **Cloud** server type, and then provide the URL of your cloud data center, for example: https://yourcloud.com.

Then, provide the access credentials for your cloud account.



5. **Select the time zone**

   Under **Virtual machine**, in **Time zone**, click **Change**. Select the time zone of your location to ensure that the scheduled operations run at the proper time.



   The Agent for VMware (Virtual Appliance) is ready to work and the virtual machines managed by it will appear in your Cyber Protection service console. The corresponding new agent record will be added to the **Settings** > **Agents** section of the Cyber Protection service console.

6. **[Optional] Configure local storages**

   You can attach an additional disk to the virtual machine so that Agent for VMware (Virtual Appliance) can back up to this locally attached storage. This kind of backup is normally faster than a backup via LAN and it does not consume the network bandwidth.

   The virtual disk size must be at least 10 GB.

   Add the disk by editing the settings of the virtual machine, and then click **Refresh**. The **Create storage** link becomes available. Click this link, select the disk, and then specify a **Label** for it.

Updating and re-deploying the virtual appliance

Agent for VMware (Virtual Appliance) version 12.5.23094 and later can be updated via the Cyber Protection service console (web interface). To check the agent version, in the Cyber Protection service console, select the desired machine, and then click **Details**.

To update an agent whose version is below 12.5.23094, you need to download the newest agent and re-deploy it manually.

To update an agent via the Cyber Protection service console

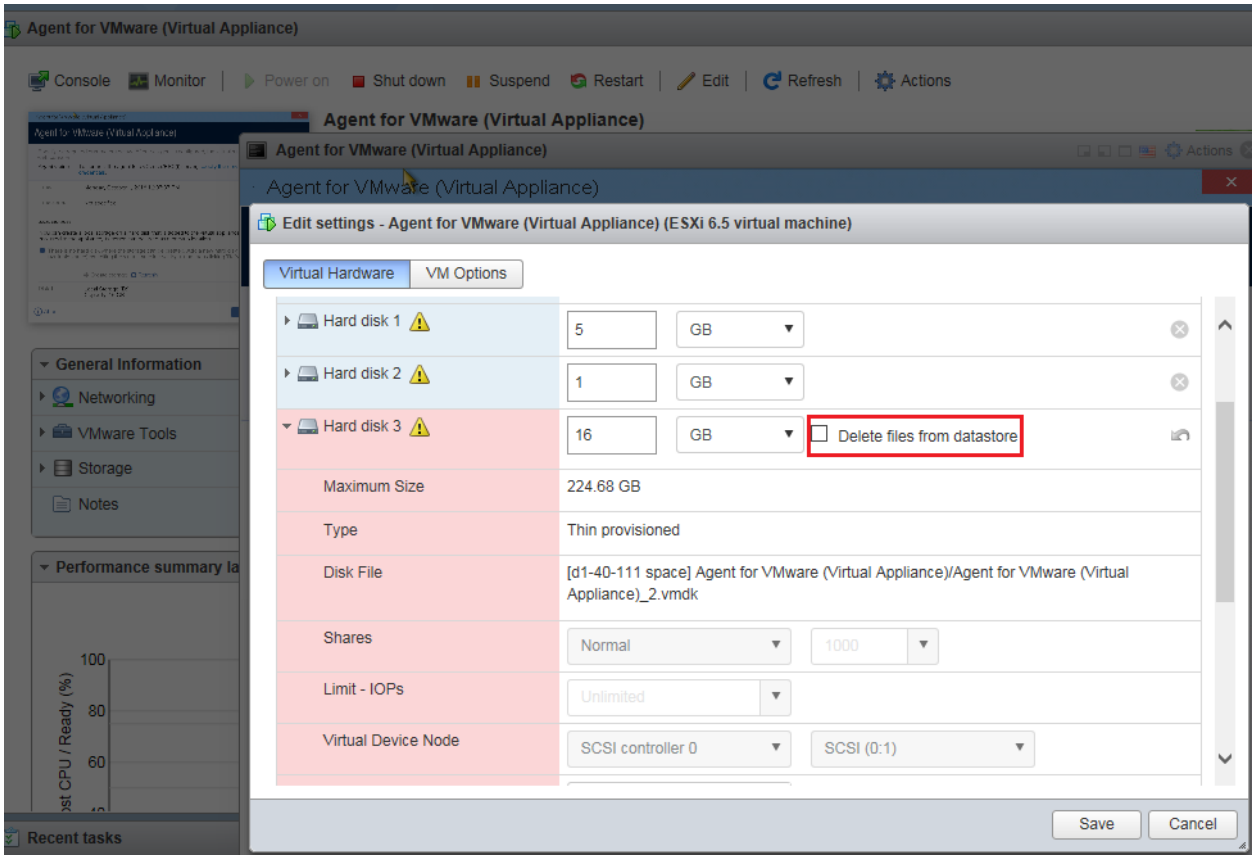
1. In the Cyber Protection service console, click **Settings** > **Agents**.
   The machines with outdated agents are indicated with an orange exclamation mark.
2. Select one or more machines on which you want to update the agent. These machines must be online.
3. Click **Update agent**.

(!) IMPORTANT During the update, any backups that are in progress will fail.

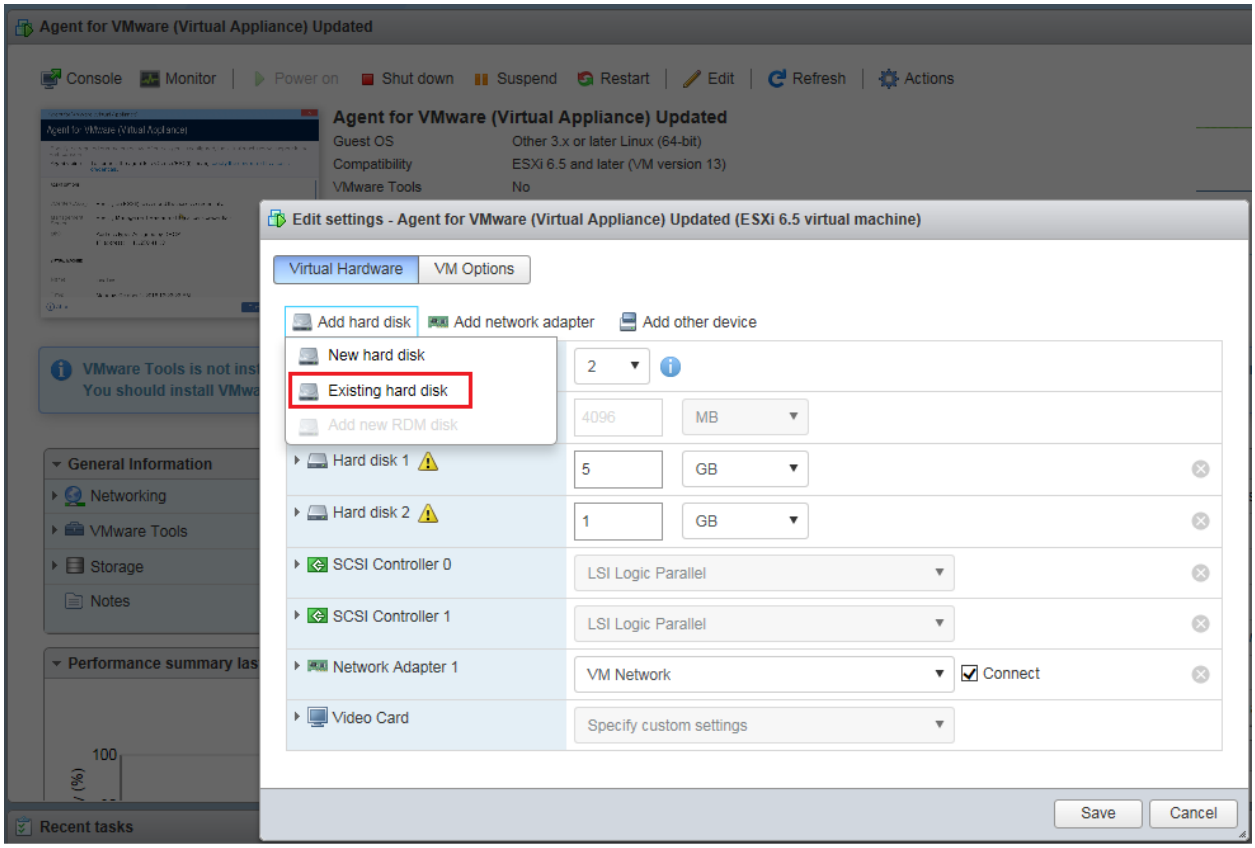
To re-deploy the virtual appliance

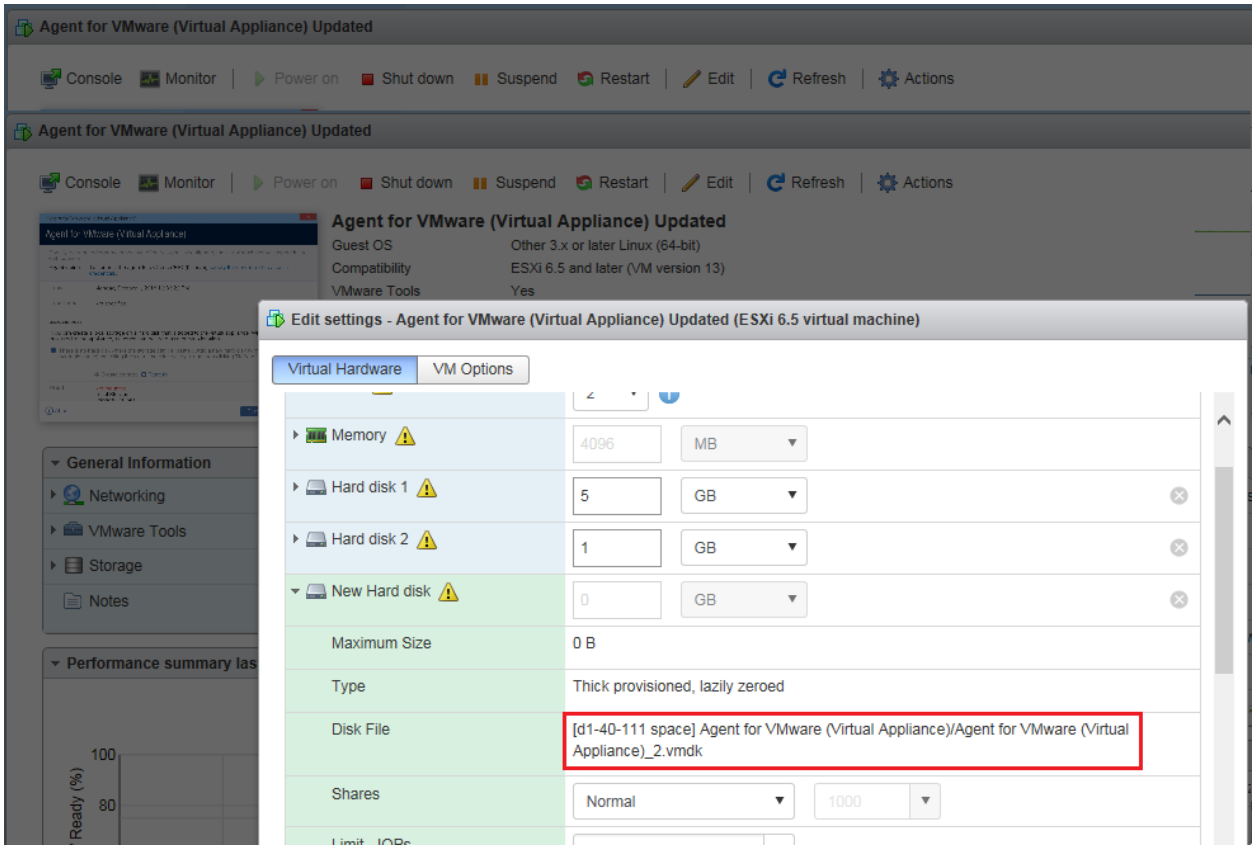
1. In the Cyber Protection service console, go to **Settings** > **Agents**.
2. Remove the currently registered Agent for VMware (Virtual Appliance).
   The protection plans configuration is stored on the management server, so this action will not cause configuration loss.
3. [Only if you have configured local storage on the appliance] In vSphere Host Client, open the **Virtual machines** list, and then find the originally deployed Agent for VMware (Virtual Appliance). Edit the virtual machine configuration in order to remove the locally attached storage disk from it.

   (!) IMPORTANT Keep the **Delete files from datastore** check box clear when removing the disk from the configuration.



4. Deploy a new Agent for VMware (Virtual Appliance) as described in the Deploying the OVF template section in this document.
5. Configure the new Agent for VMware (Virtual Appliance) as described in the Configuring the virtual appliance section in this document.
6. [Only if you have configured local storage on the appliance] Reconnect the virtual disk used as local storage on the old appliance to the new Agent for VMware (Virtual Appliance) via vSphere Host Client.
   To do so:
   a. Right-click the appliance virtual machine, and then click **Edit settings** > **Add hard disk** > **Existing hard disk.**
   b. Browse to the virtual disk used by the old appliance.

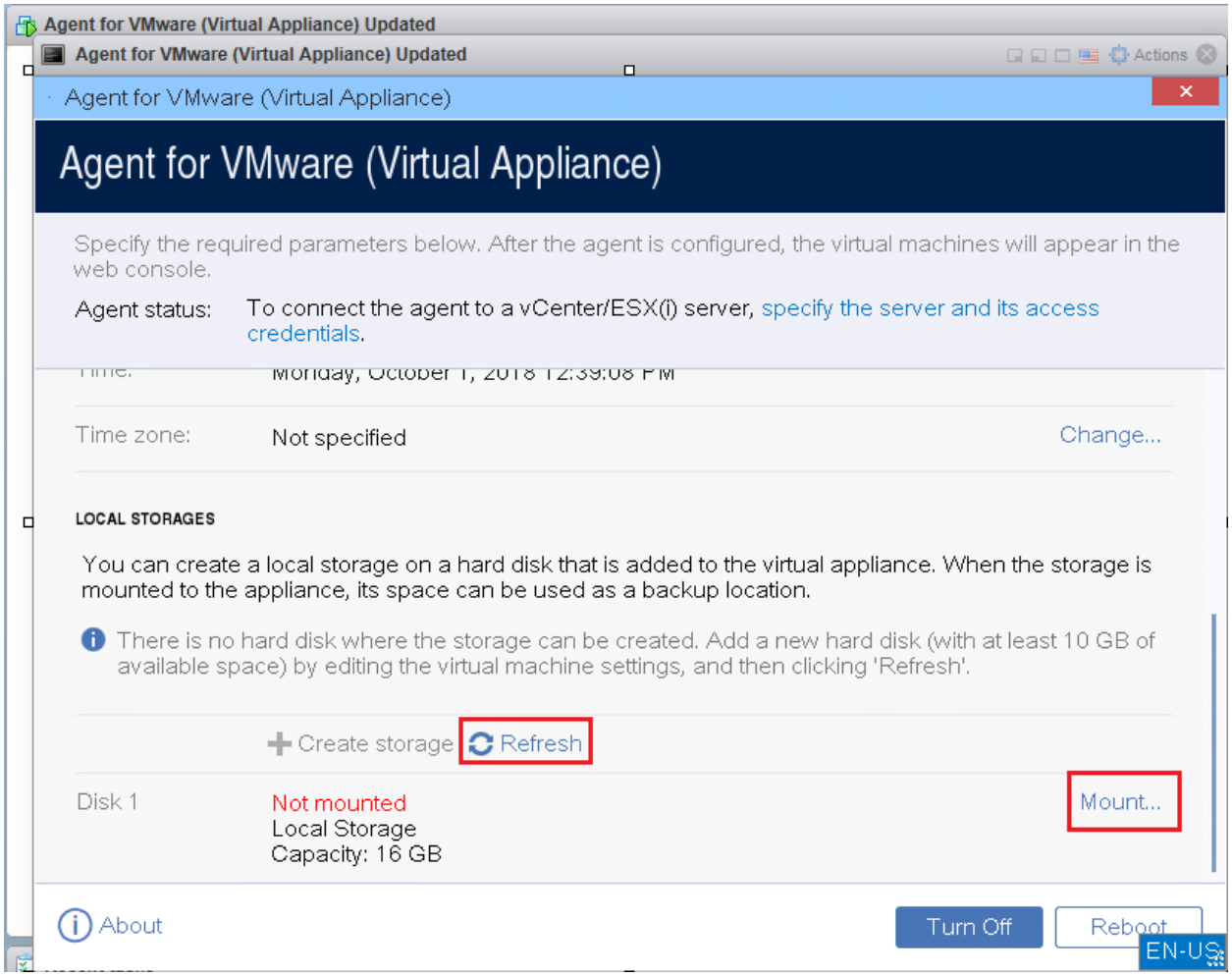




Note the path to the virtual disk – it must be taken from the old appliance configuration.

c. In the Agent for VMware (Virtual appliance) GUI, refresh the storage configuration, and then mount the connected storage.

(!) IMPORTANT Do not change the original storage label when performing the **Mount** operation.



7. Remove the old Agent for VMware (Virtual Appliance) from the ESXi host by deleting this virtual machine via vSphere Host Client.

   As a result, the existing protection plans, including the plans that stored backups on the locally attached storage, will be performed by the new appliance.

(!) IMPORTANT:

- After re-deployment, any protection plan with the **application protection** option enabled will require the guest OS credentials to be re-entered. You need to edit the protection plan and re-enter these credentials.
- After re-deployment, any protection plan for **ESXi configuration** protection (in the **What to backup** section of the protection plan) will require the root password to be re-entered. You need to edit the protection plan and re-enter the password.

Additional recommendations

Resourcess

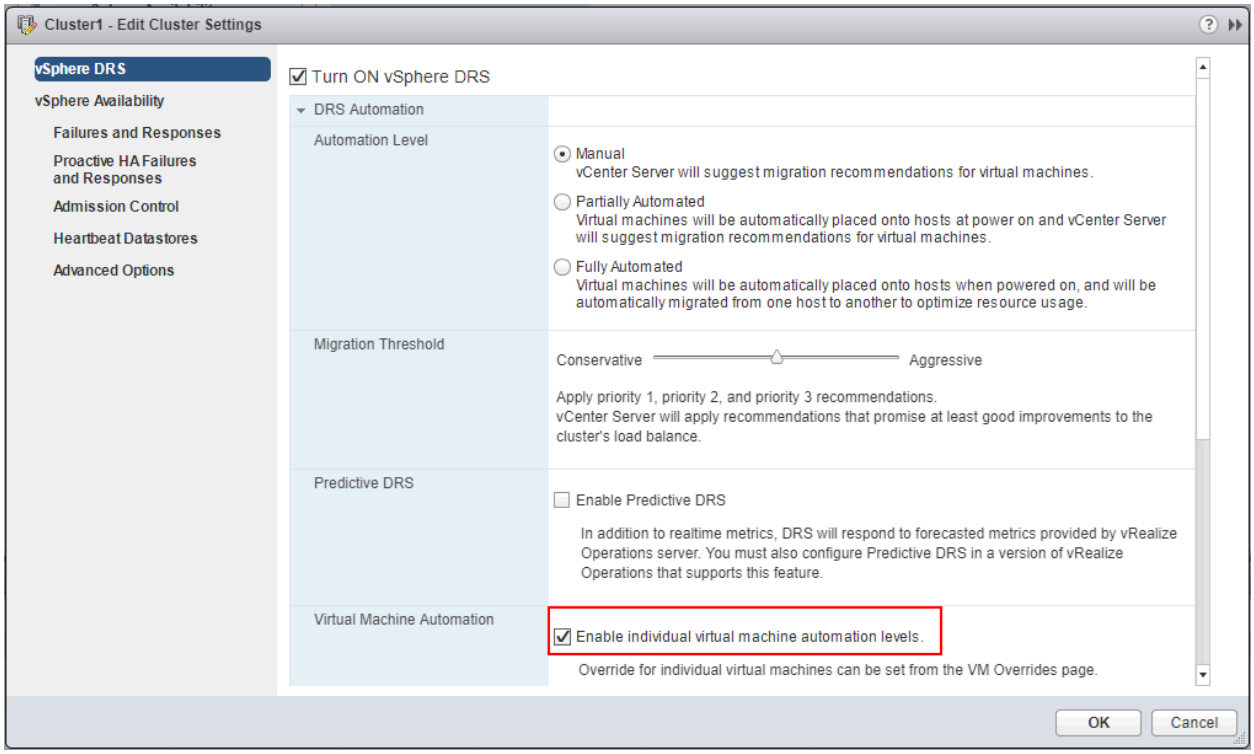
By default, the virtual machine deployed from the OVF template is assigned **4 GB of RAM** and **2 vCPUs**, which is optimal and sufficient for most operations.

It is recommended that you increase these resources up to **8 GB of RAM** and **4 vCPUs** if the estimated backup traffic bandwidth is expected to exceed 100 MB per second, for example in 10 GBit networks, in order to improve backup performance.

VMware vMotion

If you deploy Agent for VMware (Virtual Appliance) in a vSphere cluster environment, it is recommended that you disable the automatic vSphere vMotion for this virtual machine. To do so:

1. In vSphere Cluster properties, navigate to **vSphere DRS** > **Virtual Machine Automation**, and then select the **Enable individual virtual machine automation levels** check box.



2. Add the Agent for VMware (Virtual Appliance) virtual machine to the **Configuration** >**VM Overrides** list.