

Increasing the amount of RAM assigned to the ESX Server service console

Purpose

The workload of an ESX host may require an increased amount of RAM assigned to the ESX host service console to ensure correct operation of the server.

Knowledge Base

This article provides you with steps to increase the amount of RAM that has been assigned to the ESX host service console.

Resolution

Overview

Typically, the service console on an ESX host is not configured by default to utilize the maximum amount of RAM. The default values are as follows:

- ESX 2.x hosts - the amount of RAM is assigned from the install and is based on the number of virtual machines that you plan to run. During the installation, the default RAM selection is 192MB, configurable to a maximum of 800MB
- ESX 3.x hosts - the default amount of RAM is configured to 272MB, configurable to a maximum of 800MB
- ESX 4.x hosts - the default amount of RAM is configured to 358MB, configurable to a maximum of 800MB

Note: Depending on the total amount of physical memory, the default amount of memory allocated for the service console can also be 300 MB.

Note: VMware ESXi does not have a service console, therefore there is no method to change the amount of RAM assigned to it. Tech Support Mode is only a running state of the system and does not require additional resources.

The default values are usually sufficient, however there are several instances where VMware recommends to increase the RAM assigned:

- When third-party system management agents are installed or crashing on the service console
- When a backup agent is installed on the service console
- When heavy swap file utilization is noticed on the service console.
- When the ESX host is part of a VMware High Availability (HA) cluster

Changing the amount of RAM assigned to the ESX 3.x or ESX 4.x Service Console

To change the amount of RAM assigned to the service console:

1. Log in to VirtualCenter from the VMware Infrastructure (VI) Client with a user that has administrative rights.

Note: If you do not have VirtualCenter, log in directly to the ESX host as `root`.

2. From the Inventory select the ESX host.
3. Click the **Configuration** tab.

4. Click **Memory**.
5. Click **Properties**.
6. On the Memory window enter a value between 256MB and 800MB for the service console parameter.

Note: For troubleshooting purposes, VMware recommends that you increase the service console RAM to 800MB.

7. Click **OK**.

Changes do not take effect until the ESX host is rebooted. For more information on rebooting an ESX host, see [Rebooting an ESX Server \(1003530\)](#) (<http://kb.vmware.com/kb/1003530>).

Changing the amount of RAM assigned to the ESX 2.x Service Console

To change the amount of RAM assigned to the service console:

1. Log in as `root` to the MUI of your ESX host.
2. Click on the **Options** tab.
3. Click **Startup Profile**.
4. Change the **Reserved Memory** parameter in the new window to a value between 190MB and 800MB.

Note: For troubleshooting purposes, VMware recommends that you increase the service console RAM to 800MB.

5. Click **OK**.

Alternatively, you can change this parameter from the service console of the ESX host using the `vmkpcidivv` command as follows:

1. Log in to the ESX host service console as `root` from an SSH session or directly from the console of the server.
2. Type `vmkpcidivv -i`.
3. Press Enter when prompted for the boot image configuration.
4. Press Enter when prompted for the name of the configuration.
5. Type a value between 192MB and 800MB when prompted for the Amount of Memory for the service console.
6. Press Enter.
7. Continue to press Enter making no changes, until *Configuration complete* displays.
8. Type `y` to commit changes.
9. Press Enter.

Changes do not take effect until the ESX host is rebooted. For more information on rebooting an ESX host, see [Rebooting an ESX Server \(1003530\)](#) (<http://kb.vmware.com/kb/1003530>).

Additional Information

For related information, see:

- [Checking for resource starvation of the ESX Server service console \(1003496\)](#) (<http://kb.vmware.com/kb/1003496>)
- [ESX host settings for environments with up to 80 virtual machines per host in a VMware HA Cluster \(1012002\)](#) (<http://kb.vmware.com/kb/1012002>)

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