**Balancing the Target Device Load on Provisioning Servers**

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To achieve optimum server and target device performance within a highly available network configuration, enable load balancing for each vDisk.

1. Right-click on the vDisk in the Console, then select the **Load Balancing...** menu option. The [vDisk Load Balancing](http://support.citrix.com/proddocs/topic/provisioning-56/pvs-vdisks-load-balancing.html#pvs-vdisks-load-balancing) dialog appears.
2. After enabling load balancing for the vDisk, the following additional load balancing algorithm customizations can be set:
	* **Subnet Affinity** – When assigning the server and NIC combination to use to provide this vDisk to target devices, select from the following subnet settings:
		+ **None** – ignore subnets; uses least busy server.
		+ **Best Effort** – use the least busy server/NIC combination from within the same subnet. If no server/NIC combination is available within the subnet, select the least busy server from outside the subnet. If more than one server is available within the selected subnet, perform load balancing between those servers. Best Effort is the default setting.
		+ **Fixed** – use the least busy server/NIC combination from within the same subnet. Perform load balancing between servers within that subnet. If no server/NIC combination exists in the same subnet, do not boot target devices assigned to this vDisk.
	* **Rebalance Enabled** using **Trigger Percent** – Enable to rebalance the number of target devices on each server in the event that the trigger percent is exceeded. When enabled, Provisioning Services checks the trigger percent on each server approximately every ten minutes. For example: If the trigger percent on this vDisk is set to 25%, rebalancing occurs within ten minutes if this server has 25% more load in comparison to other servers that can provide this vDisk.

**Note:** The load balance algorithm takes into account the [Server Power setting](http://support.citrix.com/proddocs/topic/provisioning-56/pvs-server-properties.html%22%20%5Cl%20%22pvs-server-properties) of each server when determining load.

Load balancing will not occur if:

* less than five target devices are using a particular server
* the average number of target devices using all qualifying servers is less than five
* the number of target devices that are booting on a given server is more than 20% of the total number of devices connected to the server (preventing load shift thrashing during a 'boot storm')

Load balancing is also considered when target devices boot. Provisioning Services determines which qualified Provisioning Server, with the least amount of load, should provide the vDisk. Whenever additional qualified servers are brought online, rebalancing will occur automatically.

**To implement load balancing in a HA network configuration**

* Assign a power rating to each Provisioning Server on the [Server Properties' General tab](http://support.citrix.com/proddocs/topic/provisioning-56/pvs-server-properties.html#pvs-server-properties).
* For each vDisk, select the load balancing method and define any additional load balancing algorithm settings on the [vDisk Load Balancing](http://support.citrix.com/proddocs/topic/provisioning-56/pvs-vdisks-load-balancing.html#pvs-vdisks-load-balancing) dialog.

**Note:** Target devices that are not using a vDisk that is in HA mode will not be diverted to a different server. If a vDisk is misconfigured to have HA enabled, but they are not using a valid HA configuration (Provisioning Servers and Store , target devices that use that vDisk can lock up.

**To rebalance Provisioning Server connections manually**

1. In the Console, highlight the Provisioning Servers to rebalance, right-click then select the **Rebalance devices** menu option. The Rebalance Devices dialog appears.
2. Click **Rebalance**. A rebalance results message displays under the Status column.
3. Click **Close** to exit the dialog.