

## iSCSI MPIO HowTo

### Preparation of hardware:

please make sure that each, iSCSI server and client, have two working network interfaces.

For simplicity the iSCSI Target in this document will be called server, and iSCSI Initiator – client.

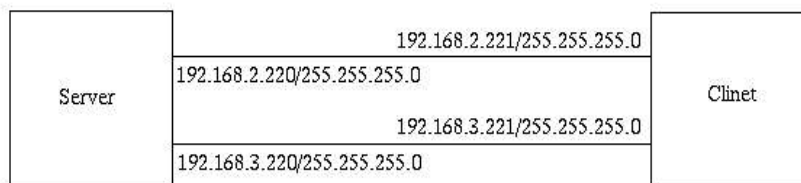
Now please configure on server both network adapters to work in different subnets:  
for example:

- adapter no1: Ip address: 192.168.2.220, NetMask: 255.255.255.0
- adapter no2: Ip address: 192.168.3.220, NetMask: 255.255.255.0

and the configuration of the client network adapters:

- adapter no1: Ip address: 192.168.2.221, NetMask: 255.255.255.0
- adapter no2: Ip address: 192.168.3.221, NetMask: 255.255.255.0

Our installation should look as follows:

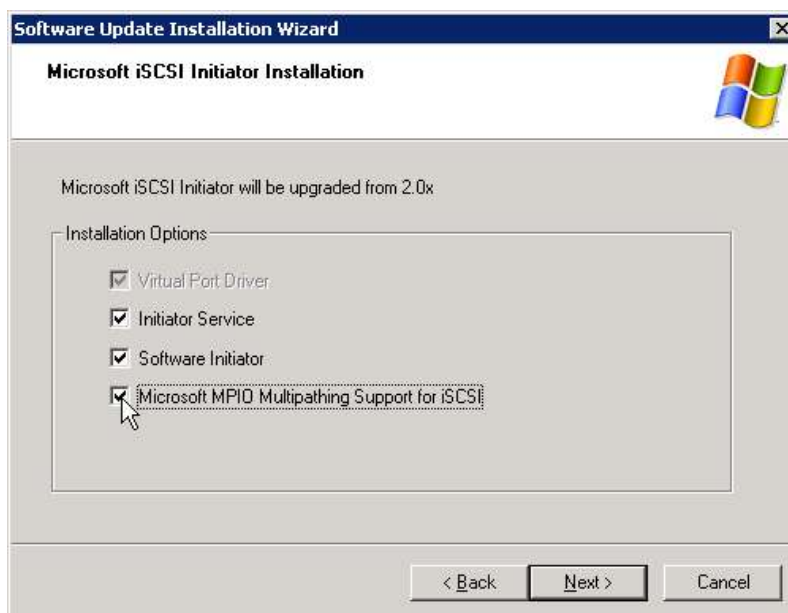


Download Microsoft iSCSI Initiator which is available on Microsoft home page:

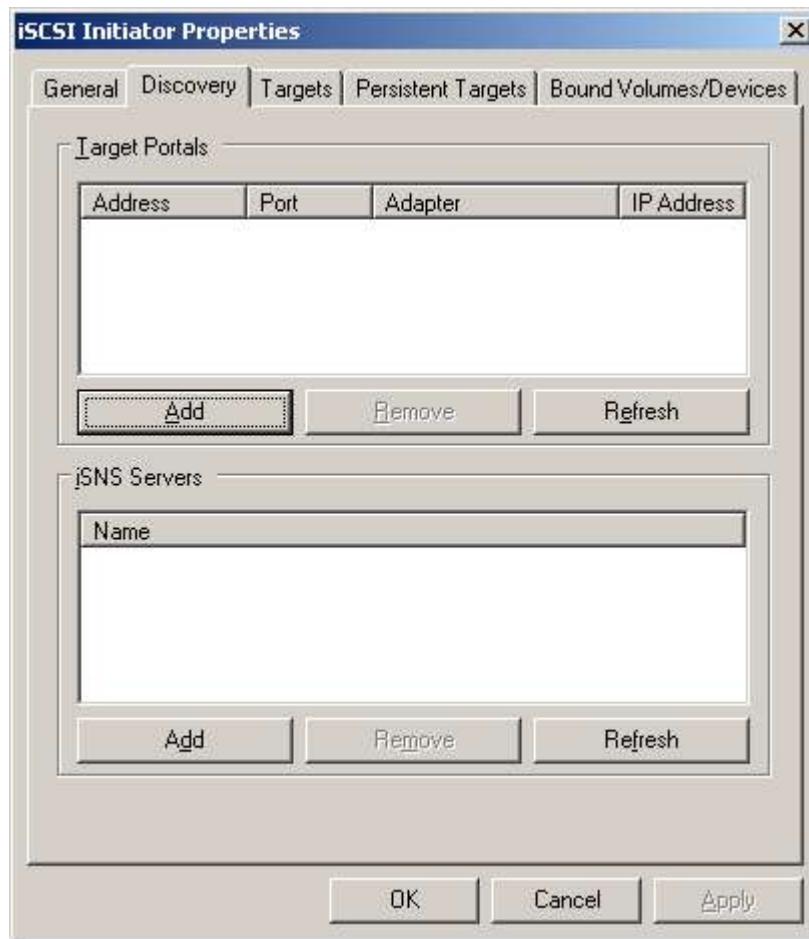
<http://www.microsoft.com/downloads/details.aspx?familyid=12CB3C1A-15D6-4585-B385-BEFD1319F825&displaylang=en>

All system requirements and help about installation of this tool are available also on this page.

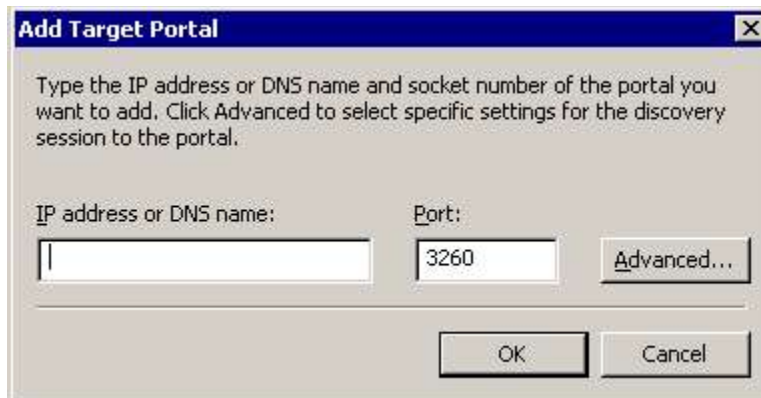
While installation of Microsoft iSCSI Initiator enable MPIO support.



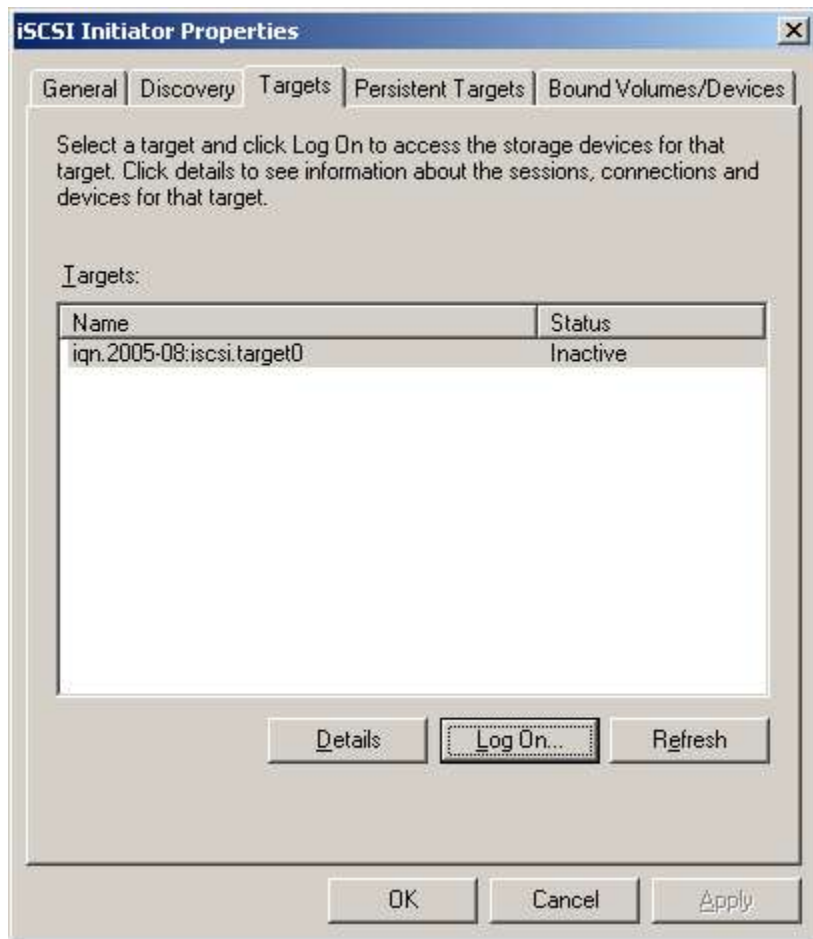
When installation is complete and successful on the Desktop should appear new icon: Microsoft iSCSI Initiator. Double click on it. New window should appear. Enter tab "Discovery".



Here you have to enter both Ip address of the server, so please click on Add button. Enter 192.168.2.220 and leave the port unchanged. Please add now the other address of the server: 192.168.3.220 still leaving the port unchanged.



Proceed now to tab "Targets" and click Refresh button.

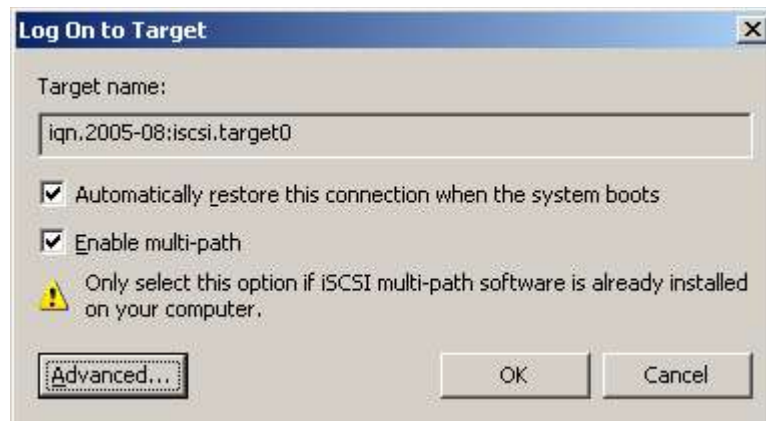


New targets existing on a server should appear.

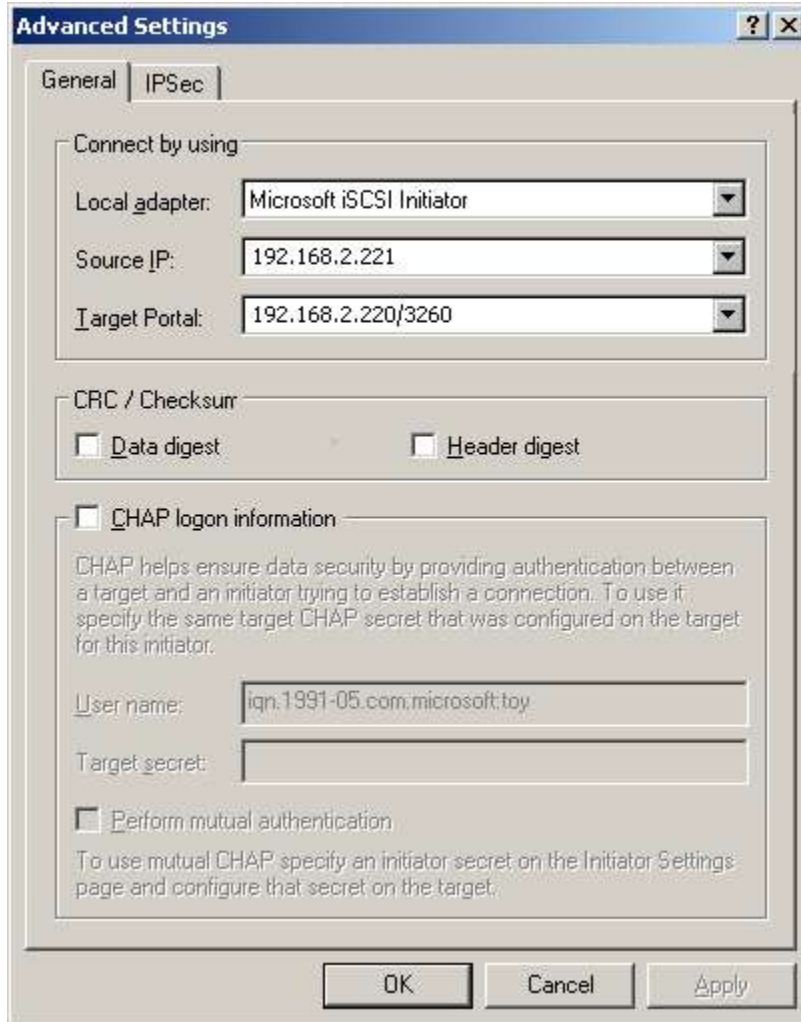
Select one target and click

"Log on..." button.

Check "Enable multi-path" and optionally "Automatically restore this connection when the system boots"



and hit "Advanced ..." button.



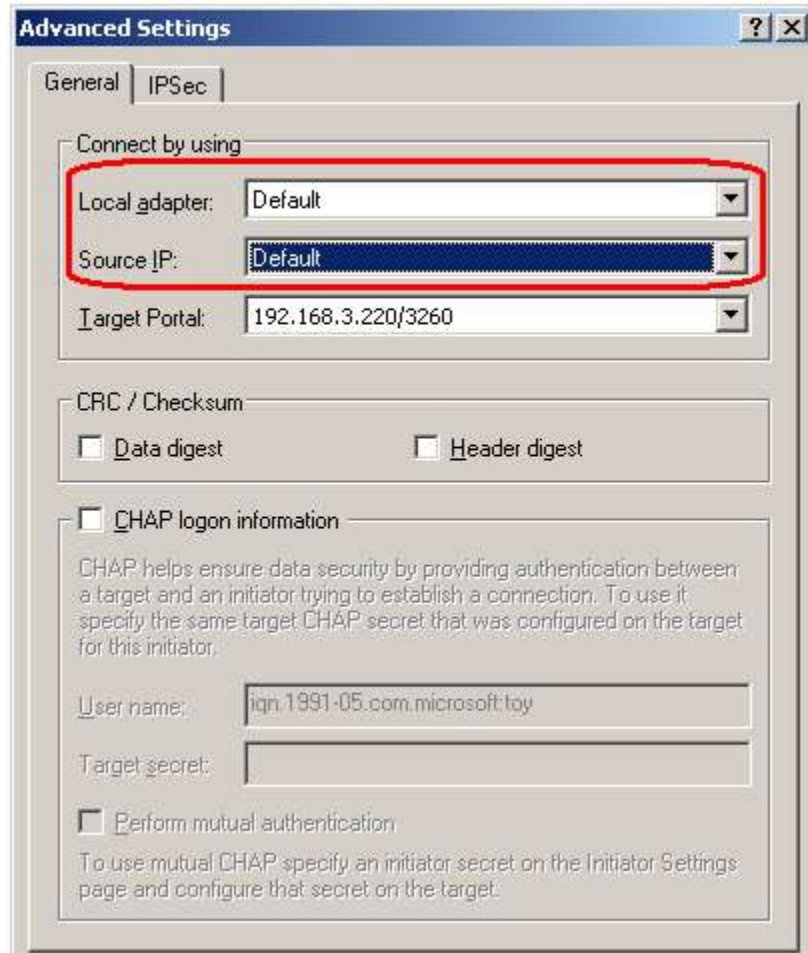
Set configuration as below:

- "Local adapter" set as "Microsoft iSCSI Initiator"
- "Source IP" set as "192.168.2.221"
- "Target Portal" should be set to: "192.168.2.220/3260"

Click on "OK" button and again in previous window hit "OK" button.

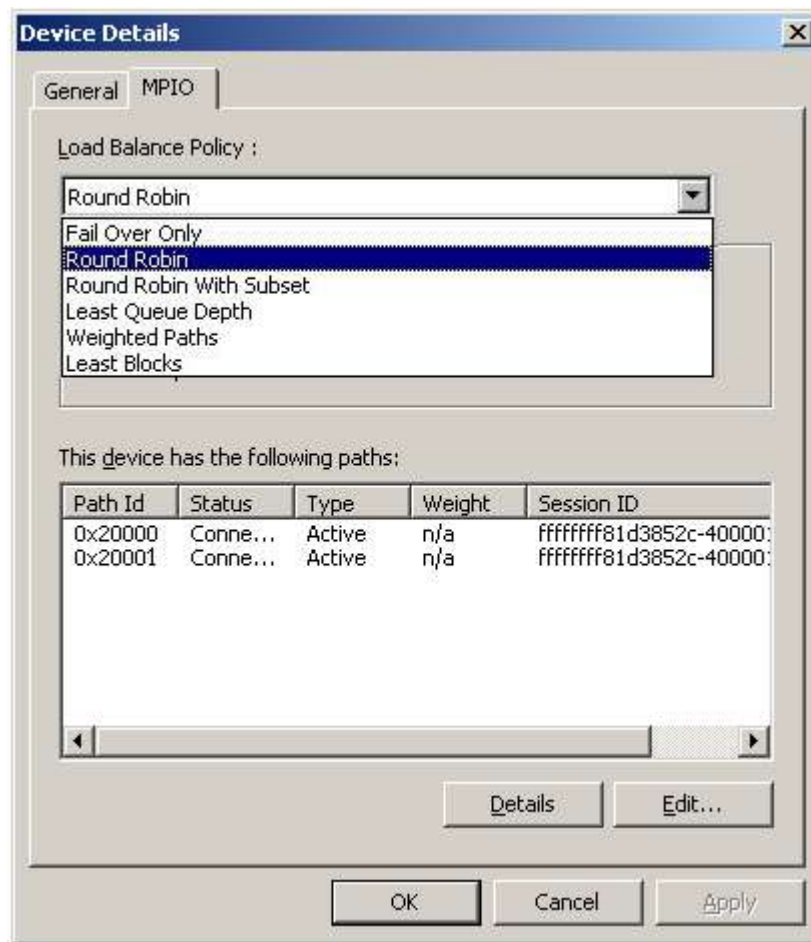
One connection to the server is already working and configured. But we have to add another one. So please again select the same target in "Targets" tab and repeat above activities, but in Window "Advance settings" we have to set:

- "Local adapter" choose: "default" (**other setting will cause problems with choosing "Target Portal"**)
- "Source IP" also leave as "default"
- "Target Portal" should be set to: "192.168.3.220/3260"



To check whether MPIO really works in window "iSCSI Initiator Properties" select our target, click on "details", open the "Devices" tab, click on "Advanced", enter "MPIO" tab, and there by selecting one of the entries in "The device has the following paths" and clicking "Details" button we can see whats connections are made to make MPIO work.

There should be two such connections!



Now please proceed to "Disk Management", and create a file system on new unit.

**Computer Management**

File Action View Window Help

Computer Management (Local)

- System Tools
  - Event Viewer
  - Shared Folders
  - Performance Logs and Alerts
  - Device Manager
- Storage
  - Removable Storage
  - Disk Defragmenter
  - Disk Management
- Services and Applications

Volume	Layout	Type	File System	Status	Capacity	Free Space	% Free	Fault Tolerant
(C:)	Partition	Basic	NTFS	Healthy (System)	9.77 GB	7.56 GB	77 %	No
(F:)	Partition	Basic		Formatting : (...)	40.59...	40.59 GB	100 %	No
2003SP1_BIN1 (D:)	Partition	Basic	CDFS	Healthy	696 MB	0 MB	0 %	No
New Volume (E:)	Partition	Basic	NTFS	Healthy	667 MB	661 MB	99 %	No

<b>Disk 0</b> Basic 232.84 GB Online	<b>(C:)</b> 9.77 GB NTFS Healthy (System)	223.07 GB Unallocated
<b>Disk 1</b> Basic 667 MB Online	<b>New Volume (E:)</b> 667 MB NTFS Healthy	
<b>Disk 2</b> Basic 40.59 GB Online	<b>(F:)</b> 40.59 GB Formatting : (100%)	
<b>CD-ROM 0</b>		

Unallocated     Primary partition