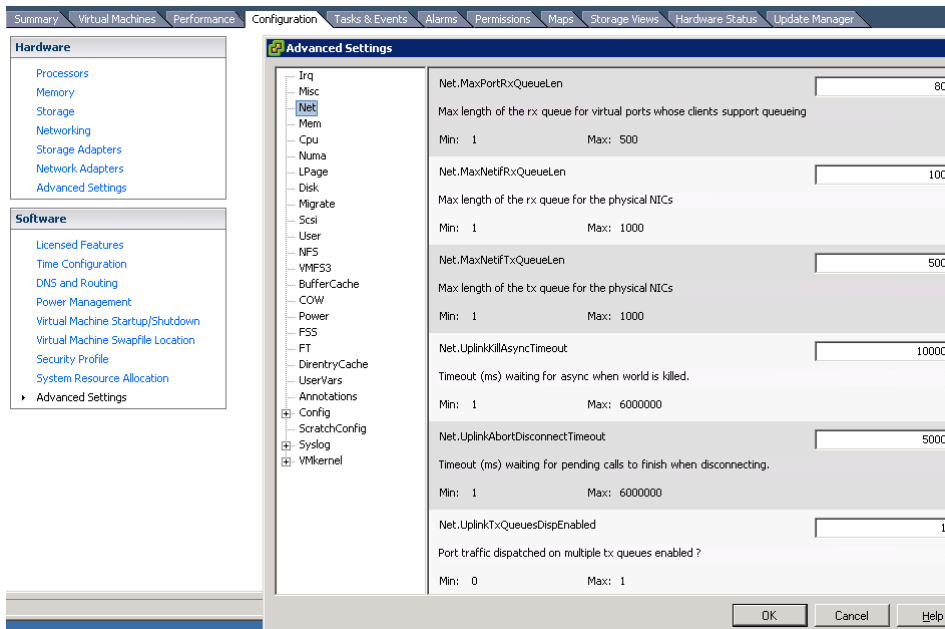


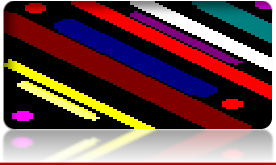
## Performance Tweaks unleashed

Do it at your own risk. This document provides only a reference for performance configs with host. The parameters mentioned here are tested in specific environments. These parameters may vary depending on load that can be handled by various hardware components like Nics, Network Switches, Array processors etc. Also these parameters increases load on CPU, Memory, NIC and Storage array. I would recommend initially, in a test environment for considerable amount of time and conclude appropriate measurements.

To launch advanced settings for host...

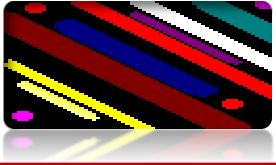
Highlight host in vCenter->Click Configuration->Advanced Settings (under software)





## NETWORK:

Parameters	Dynamic Value	Default Value	Notes
Virtual Hardware	7	7	
Virtual MMU	Enabled	Disabled	KB: 1021095
Ethernet Adapter Type	Vmxnet3	Flexible	KB: 1001805
Logging	Disabled	Enabled	
Multi-Pathing	RoundRobin	Vendor Specific	KB: 1011340
IDE&Floppy	Remove	Exists	
BufferCache.SoftMaxDirty	85	15	VMmark
Disk.SchedNumReqOutstanding	120	32	KB: 1267, 1268
IRQ.RoutingPolicy	0	2	VMmark
Net.MaxNetifRxQueueLen	300	100	VMmark
Net.MaxNetifTxQueueLen	1000	500	VMmark
Net.TcpipHeapMax	120	64	KB: 1007332
Net.EtherswitchHashSize	4	1	VMmark
Net.vmxnetThroughputWeight	255	0	VMmark
Net.netQueueEnabled	False	True	VMmark
CPU.Quantum	75	50	VMmark
Vmfs2 module	Unload	Loaded	
USB Module	Unload	Loaded	
Firewall for COS	Stop	Running	



## STORAGE:

Parameters	Dynamic Value	Default Value	NOTES
Virtual Hardware	7	7	NONE
Disk.DiskMaxIOSize	Reduce it to 16MB	32767 (32MB)	More Info: KB - 1003469
Disk.QFullThreshold	16 Usable range(1-16)	8	More Info: KB - 1008113
Disk.QFullSampleSize	32 Usable range(0-64)	0	More Info: KB - 1008113
Disk.ShedNumReqOutstanding	64	32	Equal Dependency on Queue-depth.

## HBA BIOS Settings:

Parameters	Dynamic Value	Default Value	NOTES
Fibre Channel Tape Support	Disabled	Enabled	Refer vendor notes
Data rate option	3	2	Refer vendor notes
Execution Throttle	64	16	Refer vendor notes

## References:

VMmark benchmark results ([www.vmware.com/products/vmmark](http://www.vmware.com/products/vmmark)).

QLogic Corp, Emulex and VMware KB.