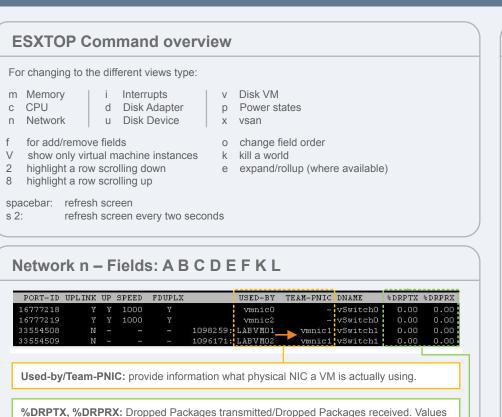
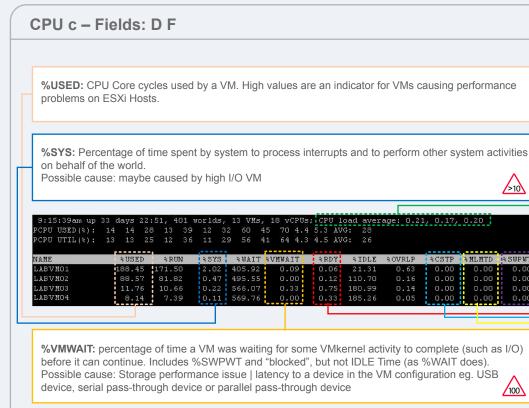
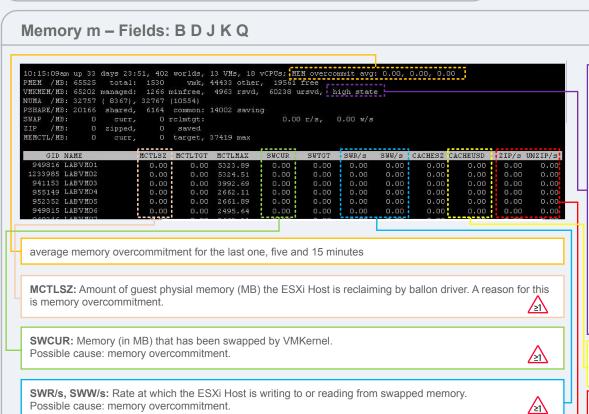
# vSphere 6 ESXTOP quick Overview for Troubleshooting





**%RDY:** Percentage of time a VM was waiting to be scheduled. If you note values between five and ten percent take care. Possible reasons: too many vCPUs, too many vSMP VMs or a CPU limit setting Note: for SMP VMs with multiple vCPUs ESXTOP accumulate %rdy for all vCPUs, resulting in higher values. If you want to see the values for each dedicated vCPU, press "e" to Expand/Rollup CPU statistics and insert the GID of the VM you want to CPU load average for the last one, five and 15 minutes **%CSTP:** This value is interesting if you are using vSMP virtual machines. It shows the percentage of time a ready to run VM has spent in co-deschedule state. If value is >3 decrease the number of vCPUs from the VM concerned. \_≥3 **%MLMTD:** Counter showing percentage of time a ready to run vCPU was not scheduled because of a CPU limit setting. Remove limit for better performance. ∠≥1 **%SWPWT**: Counter showing how long a VM has to wait for swapped pages read

from disk. A reason for this could be memory overcommitment. Pay attention if



### **Memory State:**

high enough free memory available (normal TPS cycles)

<100% of minFree: ESXi actively calls TPS to collapse pages <64% of minFree: Host reclaims

memory by balloon driver + TPS <32% of minFree: Host starts to swap, compress + TPS / no more ballooning

<16% of minFree: ESXi blocks VMs from allocating more RAM +

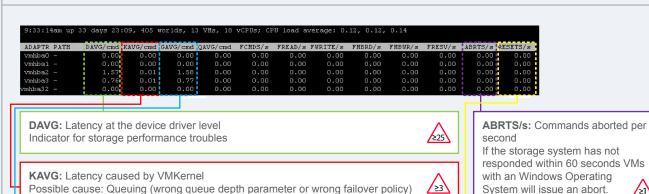
How to calculate minFree: minFree depends on the host memory configuration: for the first 28 GB RAM minFree = 899 MB + 1% from the remaining RAM Eq. a host with 100 GB RAM: 899 MB +720 MB (1% of 72 GB RAM) = minFree

CACHEUSD: Memory (in MB) compressed by ESXi Host

**ZIP/s:** Values larger 0 indicate that the host is actively compressing memory. UNZIP/s: Values larger 0 indicate that the host is accessing compressed memory. Reason: memory overcommitment.

### Disk d - Fields: A B G J

>10



%SWPWT is >5!

Possible cause: Queuing (wrong queue depth parameter or wrong failover policy)

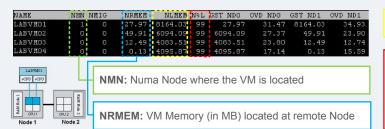
≥25 GAVG: GAVG = DAVG + KAVG

Resets/s: number of commands reset per second \_≥1

\_≥5

<u>≥1</u>

## NUMA m (change to memory view) – Fields: D G



**NLMEM:** VM Memory (in MB) located at local Node

N%L: Percentage of VM Memory located at the local NUMA Node. If this value is less than 80 percent the VM will experience performance



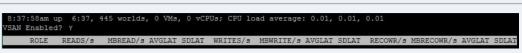
#### running-system.com

larger 0 are a sign for high network utilization





### **VSAN** x



READS/s Number of read operations completed per second.

MBREAD/s WRITE/s

Megabytes read per second. Number of write operations completed per second.

MNWRITF/s RECOWR/s MBRECOWR/s **SDLA AVGLAT** 

Megabytes written per second.

Number of recovery write operations completed per second. Megabytes written per second for recovery

Standard deviation of latency in millisecs for read, write and recovery write. Average latency in millisecs for read, write and recovery write.



**<**80**\**