

NAME

rrd-vmware – description of the VMware monitoring graphs

DESCRIPTION

The *vmware.xml* file in the **rrdmon** package describes a couple of data channels retrieved from the host operating system of a virtual machine.

CPU ALLOCATION

This graph shows how much CPU time the guest operating system has executed and how much was available to it.

CPU seconds

The CPU seconds actually consumed by the guest operating system. For each second of wallclock time passed, the number of seconds of CPU time executed is displayed in orange. The maximum this graph can reach is the number of cores available to the virtual machine.

available

This is the time available to the virtual machine, displayed as a green area atop the yellow CPU seconds area. It cannot go higher than the number of cores and decreases with the time consumed (the orange graph).

cpu contention

The VM host cannot always immediately satisfy a request for CPU time by the guest machine, because other VMs keep all cores of the host busy. This is called CPU contention. The red *cpu contention* graph shows the number of milliseconds per second the guest could not run because of CPU contention. The graph multiplies the values by 100 to give a somewhat more intuitive measure for contention. If the red and orange graphs coincide, then 1% of the time consumed by the client, the client could not run because of CPU contention. If the red curve is n times higher than the orange area, then $n\%$ of the time consumed was actually blocked because of contention.

mem contention

Memory contention measures the number of milliseconds per second that the client cannot run because the host could not provide the memory for the client. This graph is scaled by a factor 100 just as the *cpu contention* graph.

SEE ALSO

rrdsetup(8), **rrdupdate(8)**,

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