

vOPS™ Capacity Manager

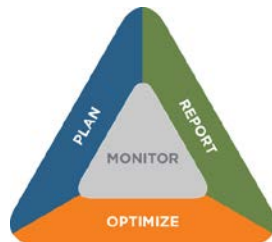
vOPS™ Capacity Manager, part of the VKernel vOperations Suite™, allows VM administrators to perform capacity planning for Microsoft Hyper-V, Red Hat Enterprise Virtualization (RHEV) and VMware vSphere by:

- Calculating available VM slots remaining across server and storage resources
- Forecasting capacity bottlenecks
- Predicting how many more hardware resources will be needed at a future date

Capacity Manager is simple to download, easy to install, and provides immediate value.

Part of the vOperations Suite

Capacity Manager is one of four applications that make up the VKernel vOperations Suite – an award-winning set of integrated products for monitoring, planning, optimization, reporting, and chargeback for virtual environments.



How Capacity Manager Works

Capacity Manager is integrated into VKernel's vOperations Suite which collects information from Microsoft Systems Center and VMware vCenter. vOPS™ then feeds the data into VKernel's Capacity Analytics Engine™ which analyzes thousands of data points across the entire virtual environment in order to:

- Automatically profile each VM's workload and its consumption of CPU, memory, disk throughput, IOPS and latency over time
- Provide specific recommendations on where to deploy new virtual machines without

jeopardizing HA failover based on calculations of disk throughput, CPU, storage and memory

- Predict future performance problems across the virtual infrastructure using historic performance and capacity utilization data
- Reserve capacity for known VM deployments to exclude those resources from modeling

Visualize Host Capacity Issues at a Glance

Capacity Manager features the vScope Capacity Heat Map that displays the capacity status of all hosts in an environment across multiple sites and hypervisors on a single screen.

Administrators can select any host and drill down for details including issue resolution steps.

Calculate Remaining Available VM Slots

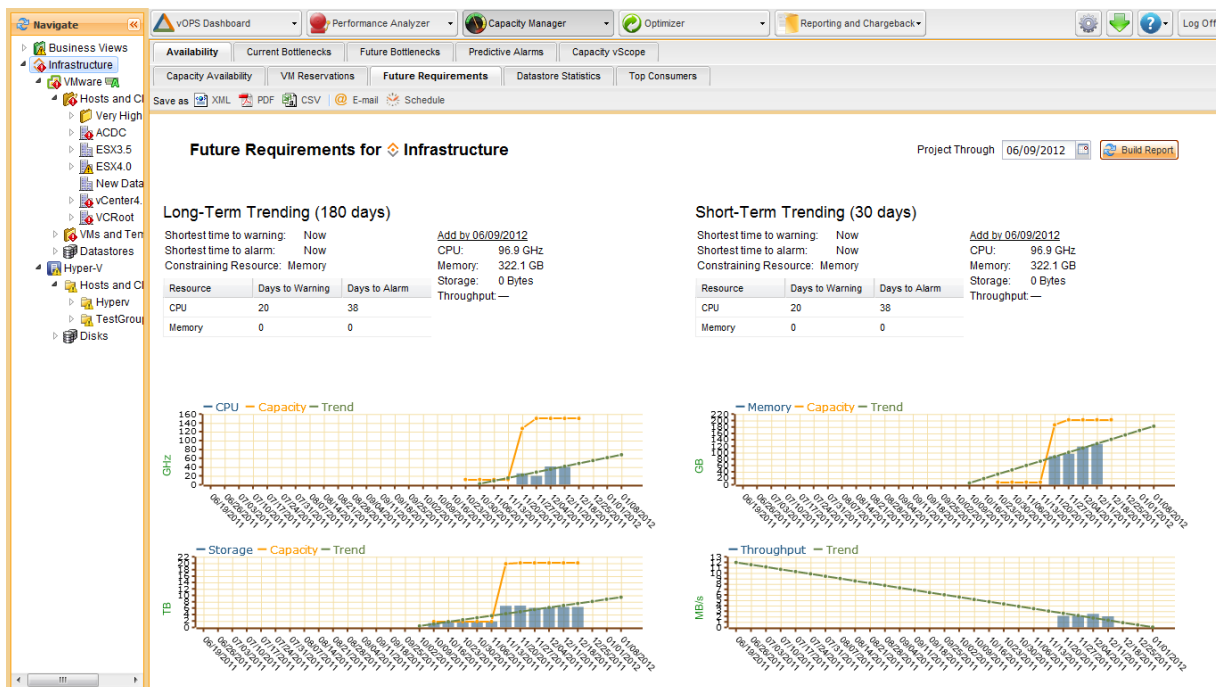
Capacity Manager examines HA settings and CPU, memory, storage space, and disk throughput loads from VMs deployed in an environment to create a Capacity Availability Map. Administrators can then calculate how many VM slots remain in the environment based on the allocation sizing of existing VMs, average or maximum sizes, or a customized load signature. This information provides a baseline for the availability in existing equipment.

Forecast Future Resource Requirements

Based on the observed growth in an environment, Capacity Manager will forecast additional resource requirements at any point in the future to aid in budgeting and procurement.

Reserve Capacity for Future VMs

Capacity Manager allows virtualization



administrators to reserve capacity needed for VMs that are planned for deployment. This capacity can then be masked while modeling.

Predict Future Capacity Bottlenecks

Using mathematical extrapolation, Capacity Manager can accurately predict performance problems that will develop in VMs.

Model Multiple VM Deployment Scenarios

Capacity Manager provides Advanced What If Analysis to assess the impacts of adding multiple VMs. With every deployment added, Capacity Manager calculates how many VM slots still remain available. Modeled VMs can be immediately converted into reserved VMs.

Receive Alerts on Predicted Problems

Capacity Manager generates alerts for predicted performance problems. Capacity alerts are customizable for every VM and environment and can be sent through email, RSS feed and to Microsoft's SCVMM.

Assess Datastore and RDM Capacity

Capacity Manager examines vSphere, RHEV and Hyper-V datastores and RDM information to reveal the amount of available and used storage, how many hosts and VMs are drawing on each datastore, and importantly, the percent of storage that has been committed and utilized.

System Requirements

vOPS (includes Capacity Manager) requires:

- 4 vCPUs
- 8 GB of memory
- 64 GB of storage space
- VMware ESX 3.0 or vCenter 2.5 or higher (if installed as a VMDK)
- Microsoft Systems Center Operations Manager 2007 R2 (if installed as a VHD)
- Microsoft Systems Center Virtual Machine Manager 2008 R2 U1 (if installed as a VHD)

Support

For technical support please visit <http://www.vkernel.com/support>, email support@vkernel.com or call +1 978 289 6300.

VKernel
300 Brickstone Square, Suite 503
Andover, MA 01810
Phone +1 (978) 289-6300
Fax +1 (978) 289-6301



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