

SIOS iQ Resource Optimization

SIOS iQ™ enables IT staff to quickly and easily identify wasted resources in their VMware environment, such as idle VMs and unnecessary snapshots. In one click, SIOS iQ recommends changes for improvement and predicts the cost savings that can be achieved if recommendations are implemented. The following describes a typical use case scenario.

The Environment

A large enterprise hosts its IT operations in a VMware environment comprising hundreds of hosts, thousands of VMs and hundreds of thousands of objects.

The Challenge

The company’s IT environment is growing rapidly. They have experienced unexpected budget over runs and they have run low on key IT resources including CPU and storage. The IT team wanted to find and eliminate wasted and unused resources in two key areas: idle VMs and snapshots.

The Traditional Solution

The traditional process of identifying idle VM resources is time-consuming and error prone. IT administrators have to run and analyze reports of CPU and network utilization and manually compare results to identify VMs that are presumed idle.

This process does not factor in the interactions between VMs or other infrastructure resources which may indicate that they not idle, but are actually important components of most production workloads.

Identifying snapshot waste can be similarly difficult. Snapshots provide a change log for a virtual disk. They are a convenient way to restore a VM to a particular point in time after a failure or system error occurs.

Backup tools are often the source of significant undetected wasted resources. These tools create and use snapshots for their own purposes that may be unknown to the IT staff. Long chains of snapshots with numerous “siblings” can quickly drain CPU resources, slow performance, and waste expensive storage. The IT staff needs an easy way to identify and eliminate these snapshots.

Snapshot	VM Name	VM State	Potential Monthly Savings	Size (GB)	Databases	Age (Days)	Siblings	Created
server-snap-4-yesterday	dev_test_server	suspended	80.00	138	my_datastore_4 72% my_data...	1	22	06/20/2014 02:05:17 PM
snapshot_1_pre-upgrade	Corp_Web_Server	stopped	500.00	64	my_datastore_1 53% my_data...	8	8	06/27/2014 08:59:07 PM
my-snap2	Corp_Web_Server	running	325.00	32	my_datastore_2 43% my_data...	312	8	04/26/2017 02:19:04 AM
full-snap3	dev_test_server	running	1320.00	854	my_datastore_3 31% my_data...	112	1	06/16/2014 05:38:33 PM

SIOS iQ learns the complex interactions and behavior of objects (CPU, storage, network, applications) in the enterprise’s VMware environment and delivers a simple, intelligent identification of the root cause and specific recommendations for resolution.



Simple, Intelligent SIOS iQ Solution

SIOS iQ Idle VM Analyzer easily identifies under-used virtual machines and shows the potential cost savings that may result from deleting them. It enables IT to view key parameters that indicate that a VM was idle over their choice of time periods: 24 hours, 7 days, or 30 days. This information enables IT staff to identify under-used VMs that can be deleted.

SIOS iQ also identifies unnecessary and unused snapshots quickly and easily. The SIOS iQ Snapshot overview provides a wide range of information: VM name, size, data store connected to it, data-store utilization percentage, age of snapshot, number of siblings under the same VM, date connected and the potential monthly savings for deleting snapshots.

Conclusion

In a single click SIOS iQ identifies under-used virtual machines and unnecessary snapshots and provides the potential monthly savings for eliminating them. The IT manager is able to remove VMs and snapshots that are not needed, improving performance and capacity utilization without adding CPU or storage.

About SIOS

SIOS Technology Corp. makes software products that provide the insights and guidance IT managers need to manage and protect business critical applications in large, complex data centers. SIOS iQ is a machine learning analytics software platform that helps IT managers optimize performance, efficiency, reliability, and capacity utilization in VMware environments. SIOS SAN and SANLess software is an essential part of any cluster solution that provides the flexibility to build Clusters Your Way™ to protect your choice of Windows or Linux environment in any configuration (or combination) of physical, virtual and cloud (public, private, and hybrid) without sacrificing performance or availability.

Founded in 1999, SIOS Technology Corp. (<http://us.sios.com>) is headquartered in San Mateo, CA, and has offices throughout the United States, the United Kingdom and Japan.



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