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– Jason Montgomery, IT Manager at AllSouth Federal Credit Union

# AllSouth Federal Credit Union Optimizes Savings with SIOS iQ Machine Learning Analytics

SIOS iQ<sup>™</sup> identifies root causes of performance issues, improves efficiency of VMware environment



AllSouth Federal Credit Union is a financial cooperative with 23 locations serving 8 counties in the Midlands of South Carolina. To meet AllSouth's top priority – delivering excellent, timely service to its members – the AllSouth IT department has to meet stringent requirements for application performance and reliability.

## Delivering Performance for Business Critical Applications

The credit union relies on a business critical banking application running on a cloud-based Windows Server that accesses a large Oracle database hosted in their VMware environment. "Our VMware environment has grown to more than 160 VMs running our critical Oracle database and all of our important applications as well as our test/dev operations," said Jason Montgomery, IT Manager for AllSouth.

The AllSouth IT team had used a variety of traditional analytics tools including VMware vRealize Operations Manager (vROps), Turbonomics, and several others to optimize and manage their virtual environment. As an experienced IT professional, Montgomery, recognized that to meet their stringent requirements for high performance without wasting VM resources, they needed a new approach.

## Traditional Threshold-based Tools Fall Short

"Traditional tools are all hard to use and only gave us a limited "siloed" view of our environment. They provide a lot of broad information that didn't help us find the source of problems or recommend ways to solve them."

Traditional tools require users to manually set – and continuously adjust – a variety of thresholds that track the operating parameters for key functions (i.e., CPU utilization). Each time a threshold is exceeded, the tools generate alerts, often inundating users with hundreds of alerts with no prioritization or correlation to the root causein the infrastructure.

Without a view into the behavior of interrelated objects (application, network,



storage, infrastructure), they do not provide a clear view of the root cause of performance issues – often resulting in rework, over provisioning, and delays in problem resolution for the IT team.

## Machine-Learning-Based Approach

Montgomery investigated SIOS iQ machine learning-based analytics as a solution. "After speaking with the folks at SIOS, and reading their website and white papers, I wanted to test SIOS iQ in our environment," said Montgomery. He downloaded the SIOS iQ software and it automatically began learning the behavior of the AllSouth VMware environment. "SIOS iQ was simple to implement and the dashboard was so user-friendly and intuitive, anyone could use it. I had it running in a few minutes." SIOS iQ immediately provided a holistic view across all of the silos of the operating status of AllSouth's entire virtual environment. After giving SIOS iQ 10 days to learn how their environment behaves through a full business cycle, Montgomery scheduled a call to review the results of its analysis with SIOS.

## Responsive, Knowledgeable Support

"We really appreciate how responsive and knowledgeable the SIOS team has been. From our introduction and demonstration through our current usage of the SIOS iQ product the SIOS team has been extremely helpful to us," said Montgomery.

## SIOS iQ Identifies Wasted Resources

SIOS iQ identified a wasted IT resources in the AllSouth environment and calculated the cost savings that would be realized by eliminating them. "We were particularly impressed with SIOS iQ's ability to identify unnecessary snapshots and rogue VMDK files that had been deleted from VMs but had not been deleted from the disk," said Montgomery. "You can't find those with any other solution that I've used."

## **Unexpected Benefits**

Since implementing SIOS iQ, AllSouth's IT team has used it to address a variety of issues. When a performance issue arises, SIOS iQ instantaneously connects that issue to its source in the infrastructure and provides specific recommendations for resolving it. As a result, AllSouth's IT team solves issues faster without the rework and inefficient trial-and-error process needed with traditional tools. "SIOS iQ has given us a much more precise understanding of how to allocate resources - particularly for applications implemented by third party vendors who often recommend over-provisioning. Now we allocate resources based on fact, not rules of thumb or guesswork."

SIOS iQ's ability to pinpoint and validate sources of performance issues and to calculate potential cost-savings and performance improvements has had unexpected benefits in communicating with management, other departments, and outside vendors. For example, the IT team suspected that their test environment was causing performance issues in their production environment. SIOS iQ validated their suspicions, quantified the performance impact. "SIOS iQ not only enabled us to show the need for new host equipment, but also helped us justify its cost by calculating the specific cost savings and performance improvements in our production environment we could realize by buying it. We could never do that with traditional tools."

By enabling the AllSouth IT staff to visualize the interrelationships of objects in their environment, SIOS iQ's topological mapping also provides both a key training resource and an invaluable diagnostic tool.

In the coming year, the AllSouth team expects that SIOS iQ will play a critical role as they conduct a thorough review of their storage requirements and budget.

## About SIOS Technology Corp.

SIOS Technology Corp. makes software products that provide the insights and guidance IT managers need to optimize and protect business critical applications in large, complex data centers.

SIOS iQ is a machine learning analytics software that helps IT managers optimize performance, efficiency, reliability, and capacity utilization in virtualized environments. SIOS SAN and SANLess software provides the flexibility to build Clusters Your Way<sup>™</sup> 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, California, and has offices throughout the United States, United Kingdom, Singapore and Japan.



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