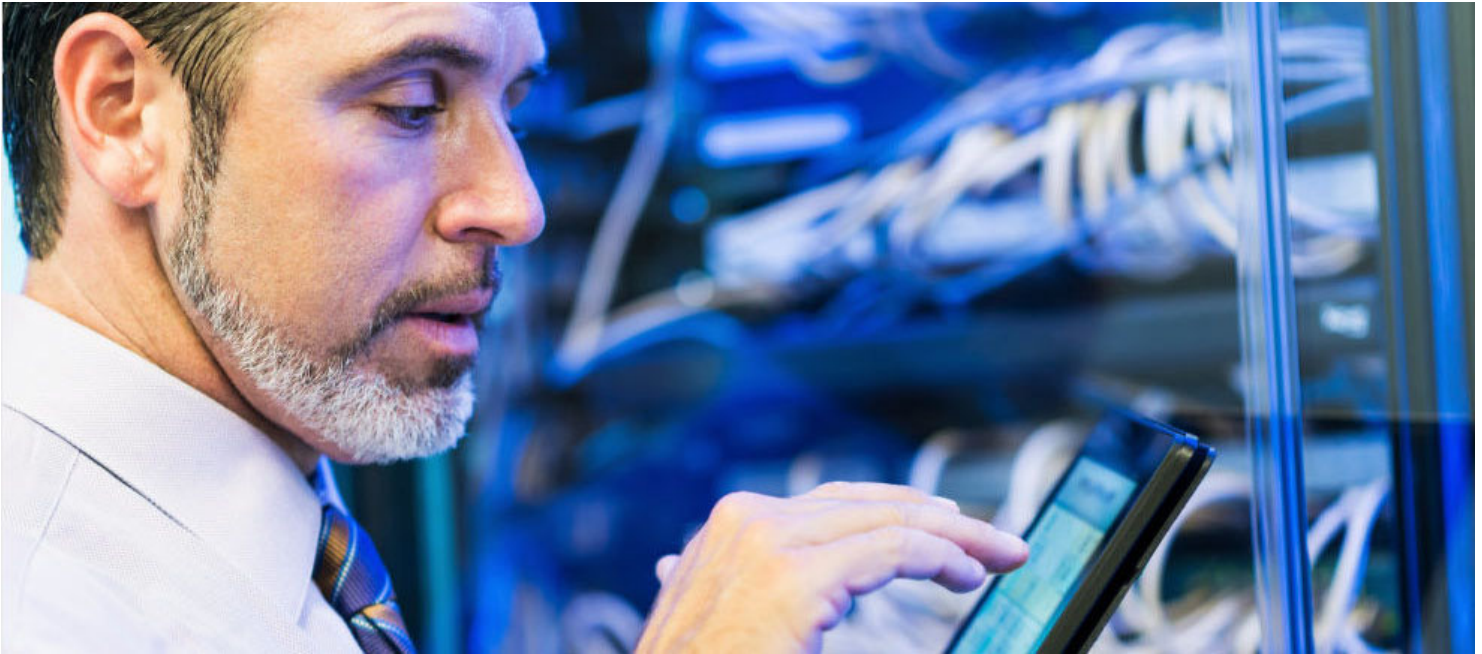# Service Processor Management – With Power Comes Responsibility

How Avocent® Universal Management Gateway Promotes Efficient, Secure In-Band and Out-Of-Band Service Processor Management

Embedded Service Processors have made it a lot easier for IT administrators to remotely access, monitor and maintain servers. In recent years, the power of Service Processors has substantially increased. Today, many of the tasks that used to require physically connecting to a server can be performed remotely through a Service Processor.

But this power comes with great risk if Service Processor management is not performed in a secure, systematic and responsible manner. This is easier said than done, especially for large IT operations which must manage hundreds of Service Processors from multiple vendors. Each vendor supplies its own Service Processor with unique configuration and management requirements, such as requiring a separate set of authentication credentials or a unique configuration for integration with Active Directory (AD). This complex environment requires careful management and well defined procedures designed to:

- Maintain IT efficiency and control costs. Often, IT administrators must learn and use multiple Service Processor interfaces, maintain large spreadsheets with the name and IP address of each processor and perform updates server by server. IT organizations must expend considerable effort to make sure processor management does not eat up too much time, resources and money.

- Reduce vulnerabilities in an IT infrastructure. For example, administrators should update server processor default passwords and configurations because they offer hackers easy entry to the network. User access must also be carefully controlled so that unauthorized users cannot reach Service Processors.

Streamlining Data Center Management and Operation with Avocent UMG

The IT organization for a worldwide technology company embarked on a major global data center consolidation project. The goals were to assure and improve uptime, reduce operational complexity and increase security.

Using the Avocent Universal Management Gateway as the "brain" in the two major data centers as well as several "edge" locations proved an excellent choice. The UMG provides a single point of access and control for all of the assets in the data center, including Service Processors.

Remote access has minimized the need to physically enter the data center, increasing security. The converged view facilitates consolidated infrastructure management that helps the IT staff monitor and maintain hundreds of assets more efficiently.

EMERSON
Network Power

Improving Security and Performance with Avocent Universal Management Gateway

The Avocent Universal Management Gateway (UMG) offers a far more efficient and secure way to manage hundreds of Service Processors. The UMG is a converged access and control appliance that is perfectly suited to the heterogeneous server environment. It enables IT administrators to monitor and manage multiple Service Processors from multiple vendors from a single interface.

Designed for local, remote and out-of-band access, the UMG provides a direct path to Service Processors that is always-on and accessible, providing IT administrators with an effective tool for everyday and emergency Service Processor management. Its unique capabilities solve the problems of increasing inefficiency and vulnerability that can come with the growing power of Service Processors.

Increasing Security through Controlled Service Processor Management

The UMG can also cost efficiently increase the security of providing out-of-band access. With the ability to physically attach up to 40 servers to a single UMG, IT needs far fewer LAN or network ports to provide out-of-band access to all Service Processors. The UMG functions as the central switch and can reside on a separate, isolated network to increase infrastructure security. Since the UMG acts as a gateway between the external network and each system, Service Processors are no longer directly accessible from the network.

Increasing Efficiency through Unified Server Processor Management

The UMG starts simplifying Service Processor management with automated discovery of each processor in a network. Leveraging built-in Service Processor profiles, the UMG can automatically discover new processors, connect to them and immediately populate the new system in its database.

The appliance aggregates all of the functions for each Service Processor, such as console, power control and sensors, and makes them available through a user-friendly single pane of glass view. Because the UMG can manage up to 1024 Service Processors through IP or in a physical tiered switch configuration, one UMG can replace multiple legacy management consoles, saving rack space and simplifying the administrator experience.

With centralized Service Processor management, the UMG reduces the time and effort needed to deploy new servers and eliminates the need to maintain confusing spreadsheets of access data. Finding and accessing a Service Processor is as easy as selecting it from the list in the UMG's database. Maintenance is faster because IT administrators can use the UMG for bulk updates, such as a patch that might be needed for all Dell processors. The UMG automatically disseminates the patch, doing away with the need to make each change server by server.

Using the UMG for Comprehensive Infrastructure Management

While the Avocent Universal Management Gateway offers an effective solution to simplify and streamline Service Processor management, its capabilities are not limited to Service Processors alone. The UMG integrates digital KVM, serial console, Service Processor and environmental management so that IT administrators can monitor and manage hundreds or thousands of assets from a single console.

By providing a single, complete solution to administer complex, heterogeneous IT infrastructures, the Avocent Universal Management Gateway can help IT organizations achieve higher levels of performance, reliability and security.