The *Trellis™* Dynamic Infrastructure Optimization Platform

Delivering Confidence through Connection
Is Your Data Center Operating at Peak Performance?

MAINTAIN. MAXIMIZE. OPTIMIZE

There's a simple golden rule for IT and facilities organizations: Make the right decisions to maintain high availability, maximize efficiency and optimize the use of existing capacity. But in the modern data center, this is easier said than done. Constant change, complex infrastructure and rapid growth demand IT and facilities work together to keep the data center running at peak performance.

Too often static and isolated, today’s data centers offer only a fragmented view of the infrastructure between IT and facilities. This leads to more downtime, costly inefficiencies and wasted capacity. For data centers to thrive in the future, they must be able to monitor, manage and measure their assets using an integrated, cost-efficient and real-time solution.

Make Smarter, Faster Decisions with the Trellis™ Platform

Emerson Network Power is revolutionizing data center management with the Trellis™ dynamic infrastructure optimization platform. An entirely new solution for infrastructure management, the Trellis™ platform offers unprecedented visibility into critical infrastructures and the impact of change. The Trellis™ platform monitors everything in the data center, providing a thorough understanding of system dependencies to help your IT and facilities organizations keep the data center running at peak performance. With this unified and complete solution, you gain the power to see the real situation in your data center, make the right decision and take action with confidence.

“The demand for data center services is growing rapidly, and the interactions among applications, IT equipment, power and cooling are getting more complex.”

– John Stanley, Research Analyst for Eco-efficient IT, The 451 Group
Achieve a New Level of Collaboration and Confidence

Only the Trellis™ platform delivers a comprehensive data center monitoring and measurement system, providing all the hardware and software needed to remove the silos between IT and facilities.

The Trellis™ platform erases compartmental decision-making so that you can optimize every aspect of your infrastructure operations—and truly operate the data center as a team. Leveraging Emerson Network Power’s proven expertise in asset, power, cooling, infrastructure management and embedded firmware technologies, the Trellis™ platform provides the information you need to efficiently and effectively manage even the most complex data center.

The result is a new level of accurate decision making and performance that makes it possible for you to achieve the high availability, operational efficiency and effective capacity management your business demands.

“I am especially pleased to learn that Emerson is bridging the gap between Facilities Management and IT Management—two worlds which have been far apart for far too long.

In my own experience, most enterprises in fact maintain separate departments whose employees often don’t even talk to one another. This can cause serious problems both for efficiency and security of data centers.

With the announced release of the Trellis™ platform, Emerson will provide a crucial DCIM platform with integrated, real-time visualization, analysis and control across IT equipment and physical infrastructure. I strongly advise you watch this space!” – Tim Cole, Kuppinger Cole of EMEA

The Trellis™ platform offers unprecedented visibility and control over your critical infrastructure.

See. Visualize all critical data center information and know the real situation (in real time or historical trending)

Act. Take actions with confidence and immediately validate the effects, assessing the impact on data center infrastructure

Decide. Leverage the ability of the Trellis™ platform to analyze data center status information and deliver deep insight into the interplay between efficiency, availability and capacity to make well-grounded decisions
Control Your Data Center Operations

The Trellis™ platform provides comprehensive, real-time insight into your data center and the interplay between IT and facility components.

The Trellis™ platform maps your data center so that all changes can have their effects predicted—from shifting virtual machines between servers to adding loaded racks into a corner of the room—and you can avoid problems and unnecessary downtime.

A modular solution that fits every size company, the Trellis™ platform taps into servers, routers, storage, power distribution units, environmental monitors and more to intelligently aggregate, analyze and react to change and loads placed on the physical infrastructure. And with the multi-functional Avocent® Universal Management Gateway appliance aggregating KVM, serial and service processor functionality with environmental and physical monitoring capabilities, you gain access and control of every device in the data center.

☑️ **Comprehensive data** provides meaningful views to IT and facilities, making it far easier to collaborate, plan and control changes, proactively prevent downtime, discover hidden capacity and calculate actual data center costs.

☑️ **Data center-wide monitoring and logging** visually present information for every asset so that you fully understand the current or likely impact of changes on your operations, power consumption and cooling demands.

☑️ **Advanced event processing** detects user defined events and optionally automates device management, providing immediate insight and remedy so that you can increase data center management efficiency and proactively forestall outages.
Maximize Productivity with Data Center-Focused Tools

A highly visual dashboard provides real-time, “at-a-glance” insight into the state of your data center.

The Avocent® Universal Management Gateway discovers and collects real-time data from a wide variety of IT and facilities data center assets.

Extensive drill-down capabilities deliver detailed information about the status of every infrastructure asset.
Reap the Benefits of a Unified Solution

Maintain Availability
- Understand usage to keep critical services running
- Recognize dependencies to minimize risk associated with change
- Automatically monitor and respond to events to ensure availability

Maximize Efficiency
- Consolidate control over IT and facilities infrastructure
- Leverage existing resources to reduce the cost-per-computing cycle
- Improve productivity with accurate planning and execution

Optimize Capacity
- Extend the life of existing infrastructure with accurate insight into current usage
- Enhance planning with real-time, trend and historical change tracking
- Facilitate collaborative planning between IT and facilities with a unified view

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<thead>
<tr>
<th>TRELLIS™ PLATFORM CAPABILITIES</th>
<th>BENEFITS</th>
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<tbody>
<tr>
<td>Inventory Manager</td>
<td>Reduce time and costs for floor and zone space management with a real-time, comprehensive inventory down to every asset’s floor or rack position.</td>
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<tr>
<td>Change Planner</td>
<td>Increase control over change with real-time data based on actual consumption and capacity, a preview of impact and precise instructions for implementing each change.</td>
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<td>Site Manager</td>
<td>Maintain service-level agreements and assure continuity with detailed real-time data about environment operating status and site conditions combined with event management and alarm notifications.</td>
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<td>Energy Insight</td>
<td>Understand energy use and costs and know exactly where efficiency losses are occurring with current and historical efficiency metrics including PUE and DCiE.</td>
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<td>Power System Manager</td>
<td>Forestall outages, manage and expose power system dependencies with complete views into system resource utilization and capacity.</td>
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<td>Virtual Integration Manager</td>
<td>Integrate with your existing virtual environment to ensure your infrastructure is optimized to both support the demands and understand their dependencies.</td>
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<tr>
<td>Cooling System Manager</td>
<td>Maximize awareness of each device on the cooling system and get a comprehensive view of your resource utilization and capacity.</td>
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Empower Every Member of Your Data Center Team

The Trellis™ platform provides every member of your data center team with the right knowledge at the right time. With a unified view of the infrastructure, your IT and facilities teams can see what has and is occurring in the data center, intelligently decide on the best plan, take the right action and accurately assess the impact.

**IT Management**

Because the Trellis™ platform maps, monitors and provides visualization of all the interdependent pieces of your data center, disconnected IT and facilities operations are a thing of the past.

- Ensure interdependencies are taken into account with one touch-point for evaluating infrastructure.
- Automatically inventory your assets for a complete view with minimal to no manual effort.
- Successfully control change with point-and-click trend analysis that shows where change should (and should not) take place.
- Understand the effect of change with “before and after” real-time loading data.

**Facilities Management**

Details matter, especially since IT is changing the details daily. The Trellis™ platform provides the knowledge you need to know how to best control the environment.

- Diagram your data center from end to end to identify opportunities for increasing efficiency and usage.
- Analyze current loads in real time and model proposed changes to proactively assure availability, influence change and reduce costs.

**Data Center Executive Management**

The key to efficient and lean operations is a smarter, more collaborative data center organization. With the Trellis™ platform, IT and facilities are always on the same page, working together to optimize operations.

- Empower your team with complete, real-time data, mapping and modeling capabilities for smarter planning and change control.
- Understand exactly where your resources are deployed and how they are used to recover unrealized capacity and accurately plan capacity needs.
- Continuously improve collaboration and communication with shared knowledge about the interplay between IT and facilities assets.

- Keep track of exactly where your power is going and why, so that you can optimize power and cooling.
- Exploit hidden efficiencies with automated processes to adjust power and cooling equipment.
Emerson Network Power, a business of Emerson (NYSE:EMR), is the global leader in enabling Business-Critical Continuity™ from grid to chip for telecommunication networks, data centers, health care and industrial facilities. Emerson Network Power provides innovative solutions and expertise in areas including AC and DC power and precision cooling systems, embedded computing and power, integrated racks and enclosures, power switching and controls, infrastructure management, and connectivity. All solutions are supported globally by local Emerson Network Power service technicians. Aperture and Avocent solutions from Emerson Network Power simplify data center infrastructure management by maximizing computing capacity and lowering costs while enabling the data center to operate at peak performance. For more information, visit www.Aperture.com, www.Avocent.com or www.EmersonNetworkPower.com.