DeltaV™ System Health Monitoring Service

- Improve asset availability
- Reduce maintenance costs
- Achieve continuous 24/7/365 monitoring
- Integrate with site work practices

Introduction

Manufacturing sites have historically emphasized asset management of their process assets over that of their automation system assets. Often, sites do not have the personnel, technical skills, or the time to effectively manage their automation system assets. The result is manufacturing sites react to incidents rather than prevent them. This increases the labor required to maintain the assets and creates disruptions in the normal work flow.

The DeltaV System Health Monitoring Service automatically checks important health information of system assets such as controllers, DeltaV distributed control system (DCS) servers and workstations, SIS controllers, switches, firewalls, DeltaV Virtualization infrastructure, CIOCs, UPSs, and non-DCS servers and workstations. The solution sends notifications to Emerson when observed health parameters are outside of expected normal operating ranges. Emerson’s remote monitoring solution works 24x7x365 with the goal of diagnosing these critically important health warnings before they escalate into problems — potentially leading to a process disruption. Actionable Alerts enable collaboration between local service experts and site maintenance personnel to ensure corrective action is taken to address the root cause of any problem detected.

DeltaV System Health Monitoring Service puts you in the driver’s seat to centralize monitoring of your control system’s assets. Continuous automated health monitoring eliminates manual health checks and reduces downtime — enabling effective use of plant maintenance resources.

Benefits

**Improve asset availability:** Experience earlier issue detection and quicker resolution, resulting in reduced equipment failures, data loss and downtime. DeltaV System Health Monitoring Service connects local system health data with Emerson’s expertise to diagnose the root causes of problems and quickly notify you of any detected health conditions along with providing recommended actions to mitigate the issue.
**Reduce maintenance costs:** DeltaV System Health Monitoring Service allows maintenance managers and personnel to shift from a reactive maintenance strategy to a proactive strategy. By delegating manual monitoring of a system’s health parameters to Emerson’s automated DeltaV System Health Monitoring Service, site resources can focus on delivering quality product and bottom-line results; spending less time reacting to system issues, and more time focusing on process management and operations.

The continuous online monitoring enables Emerson to quickly detect, diagnose and provide timely resolution of your system’s health warnings.

**Recommended mitigating actions provided**

When a health condition is detected, the local System Health Monitoring appliance alerts Emerson. The alert is diagnosed and analyzed to identify the most likely root causes. Recommended actions are then provided to you and the local service provider to enable a collaborative and quick resolution of the issue. The statuses of the alerts are tracked in Emerson’s Call Tracking System and the Guardian Web Portal to ensure that problems are ultimately resolved.

**Achieve continuous 24/7/365 monitoring:** The DeltaV System Health Monitoring Service connects the right information with the right expertise at the right time. Manual health checks frequently miss anomalies and abnormal events. Continuous system health checking captures intermittent issues that were previously unidentified. These underlying health warnings could lead to a system disruption if left unmitigated. Rest assured that your system is being monitored all day, every day by the experts who built your DeltaV system.

**Integrate with site work practices:** The adaptive response model is designed to integrate with site work practices. Alert management, troubleshooting, and issue resolution can be provided as a service. Alternatively, the Alert-Respond-Resolve steps can be tailored to work with existing site practices to enable local teams to take ownership of system health.

**Service Description**

**Online monitoring of critical system assets**

Hundreds of health checks are repeatedly and automatically performed on control system assets such as controllers, DCS servers and workstations, SIS controllers, switches, firewalls, DeltaV Virtualization infrastructure, CIOCs, UPSs, and non-DCS servers and workstations.

Complementary to Guardian Support

Guardian Support for DeltaV DCS delivers extensive support features including expert technical phone support, DeltaV DCS software updates, Knowledge Base Articles, operating system security update management, lifecycle status information, and many others. DeltaV System Health Monitoring Service provides an excellent complement to Guardian Support through its online diagnostic capabilities and proactive health condition notifications. DeltaV System Health Monitoring Service identified actionable alerts are now integrated into the Guardian Web Portal, and the system also automatically uploads your encrypted DeltaV DCS registration file monthly.
Service Requirements and Ordering Information

- DeltaV DCS version 10.3 or higher required.
- Active Guardian Subscription is required for the annual subscription option. Please contact your local Emerson office for information regarding one-time purchases without Guardian Support.

- A connection to the site’s SMTP (email) server is required.
- Health conditions detected at the site by the System Health Monitoring appliance are reported to Emerson via email, enabling the remote monitoring service. Therefore, the System Health Monitoring appliance is required have a connection to the site’s SMTP (email) server. No remote connectivity is required back into the site.

<table>
<thead>
<tr>
<th>Description</th>
<th>Model Number</th>
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<tbody>
<tr>
<td>Annual subscription, System Health Monitoring for very small systems (up to 500 DST), includes one (1) physical gateway</td>
<td>VF1041XS</td>
</tr>
<tr>
<td>Annual subscription, System Health Monitoring for small systems (501 to 2,000 DST), includes one (1) physical gateway</td>
<td>VF1041S</td>
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<td>Annual subscription, System Health Monitoring for medium systems (2,001 to 5,000 DST), includes one (1) physical gateway</td>
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<td>VF1041L</td>
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<td>Annual subscription, System Health Monitoring for very large systems (above 10,000 DST), includes one (1) physical gateway</td>
<td>VF1041XL</td>
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<td>One-time purchase, System Health Monitoring for customers with Guardian Support; physical gateway</td>
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<tr>
<td>One-time purchase, virtual System Health Monitoring for customers with Guardian Support; two (2) virtual gateways</td>
<td>VF1041V</td>
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</tbody>
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-V1 Model Number can be used for one (1) virtual gateway
-V2 Model Number can be used for two (2) virtual gateways

System availability can be influenced by a variety of factors, and no product or service can guarantee full and continuous system availability. This service is one part of an overall strategy to improve system availability through earlier issue detection and proactive response. This service does not use predictive technology to prevent unplanned downtime; rather, this service captures system health warnings that could be indicative of a current problem. Emerson does not warrant that this service or the use of this service protects the DeltaV system from unplanned downtime or failed system components. Emerson shall not be liable for damages, non-performance, or delay.

To learn more, contact your local Emerson sales office or representative, or visit www.emerson.com/shm.