

# Site Evaluation Service

- Make better, more informed decisions
- Reduce unexpected hardware obsolescence
- Lower operating costs for the system
- Improve safety, security and asset reliability



*Achieve and sustain peak operational performance and reliability from control systems assets.*

## Introduction

Emerson has developed an innovative, proactive evaluation process for customers wanting to achieve the maximum operational performance and reliability from their DeltaV™ distributed control system (DCS).

The Site Evaluation Service will enable customers to assess the configuration state and performance of the main elements of their system against Emerson's best practices, determining areas for improved performance and highlighting potential issues to process performance and uptime.

The Site Evaluation Service is available for the DeltaV DCS. This assesses the site across several dimensions and provides a quantitative measure of performance covering:

- Health of installed hardware and software
- Product lifecycle and continued serviceability status
- Backup and restore activities
- Status of cyber security protection for optimal performance
- Performance of alarms against best practice
- Status of control loop performance

- Power and Grounding issues
- Workforce Training and Development

Control System Site Evaluation Service uses a three step process and includes these deliverables:

- Detailed site report, with presentation and discussion of the findings to the site team.
- Support to deliver the report to management, including a consultative presentation, providing rationale for releasing funds for remedial and improvement activities.

## Benefits

**Make better, more informed decisions:** Site Evaluation Service helps you understand the issues related to system availability and reliability, security and performance. The understanding of these issues will form the basis to make informed and better business decisions.

**Reduce unexpected hardware obsolescence:** Through the assessment of the system lifecycle and health, Site Evaluation Service will provide a diagnostic of the current system's state to determine the required improvements needed to mitigate risk of potential system failures due to hardware obsolescence.

**Lower operating costs for the system:** A direct result of the preventive approach of Site Evaluation Service that can typically be seen is the 5% reduction of corrective maintenance effort & cost and 5% to 10% lifecycle planning cost decrease.

**Improve safety, security and asset reliability:** Unaddressed hardware and software maintenance, systems configuration and operations changes, legacy or aging systems, hardware/software compatibility, anti-virus and security updates can all have an effect on control system performance possibly resulting in disruptive events and downtime. For Site Evaluation Service, the system data is being proactively analyzed and compared to Emerson current support recommendations, and benchmark standards. The objective is to proactively identify and fix shortcomings that can impact system continuity and availability.

## Service Description

The service uses a three-step process, which includes initial field service consultation and data collection, analysis and report generation, then presentation and discussion of findings with the customer.

- 1. Initial field service consultation and data collection:** This is performed during a customer site visit by an Emerson field service specialist. Scope of work includes non-invasive data gathering with Emerson systems tools, a Q&A session and health checks.
- 2. Analysis and report generation:** Site visit data is transferred to Emerson services specialists team. Data is analyzed, compared to Emerson current support recommendations, and benchmark standards. A Site Evaluation Report is prepared including – evaluation scope, findings, KPI ratings, explanations, findings, and priority. recommendations.

- 3. Discussion of findings with the customer:** The evaluation report is presented back to the site. The customer receives a hard and soft copy of the detailed report. Then, the customer and the local Emerson services team discuss the findings and develop an action plan, timeline and responsibilities.

The Emerson team has identified and understands issues using performance and best practice methods. Knowledge is gained, and improvements can be planned for the following items:

- Control hardware lifecycle status, compatibility and performance
- Control software lifecycle status and performance
- Updates and product hot-fixes installed
- Integrity of Active and Standby controllers
- Hardware releases against supported status
- Primary and secondary communications
- Cabinets and enclosures conditions
- Protection of the hardware and software from potential cybersecurity-attacks and virus penetration
- Server and Workstation integrity, antivirus updates, Microsoft OS security updates
- Spares strategy, inventory and verification
- Data protection strategy. Backup and restore functionality and status for actual alarm system performance and benchmarking to ISA 18.2 recommendations

## Site Evaluation Report

There are five basic dimensions of the Evaluation:

1. Lifecycle status and overall system health
2. Cybersecurity management
3. Spare Parts Management
4. Data Protection
5. Alarm Management

There are three optional dimensions :

- Power and Grounding
- Control Loop Performance
- Workforce Development

The report with analysis of each dimension covers:

- System ID and Location specifics
- Results of evaluation and interpretation
- Heat map to focus attention
- Overall system composite score (out of 10)
- Dimension score (out of 10)
- Issues at current rating for each dimension
- Specific recommendations to address each issue

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## Service Availability

Site Evaluation Service is a Lifecycle Services offering for Emerson Process Management DeltaV (DCS). The Lifecycle services portfolio consists of service modules, each designed to address specific support requirements. These modules can be combined to customize a support program for your plant that is tailored to fit just right, meeting your support needs while providing value and peace of mind.

## Ordering Information

- To learn more, contact your local Emerson sales office or representative, or visit [www.emerson.com](http://www.emerson.com).

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