

Advanced Cybersecurity Assessment Service

- A combination of people, technology and Cybersecurity best practices designed to ensure the availability of DeltaV™ distributed control system (DCS) control systems.
- Help assess the vulnerability to Cybersecurity attack of your DeltaV DCS.
- Identify vulnerabilities, remediate protection gaps and secure your process control system from cybersecurity risks.



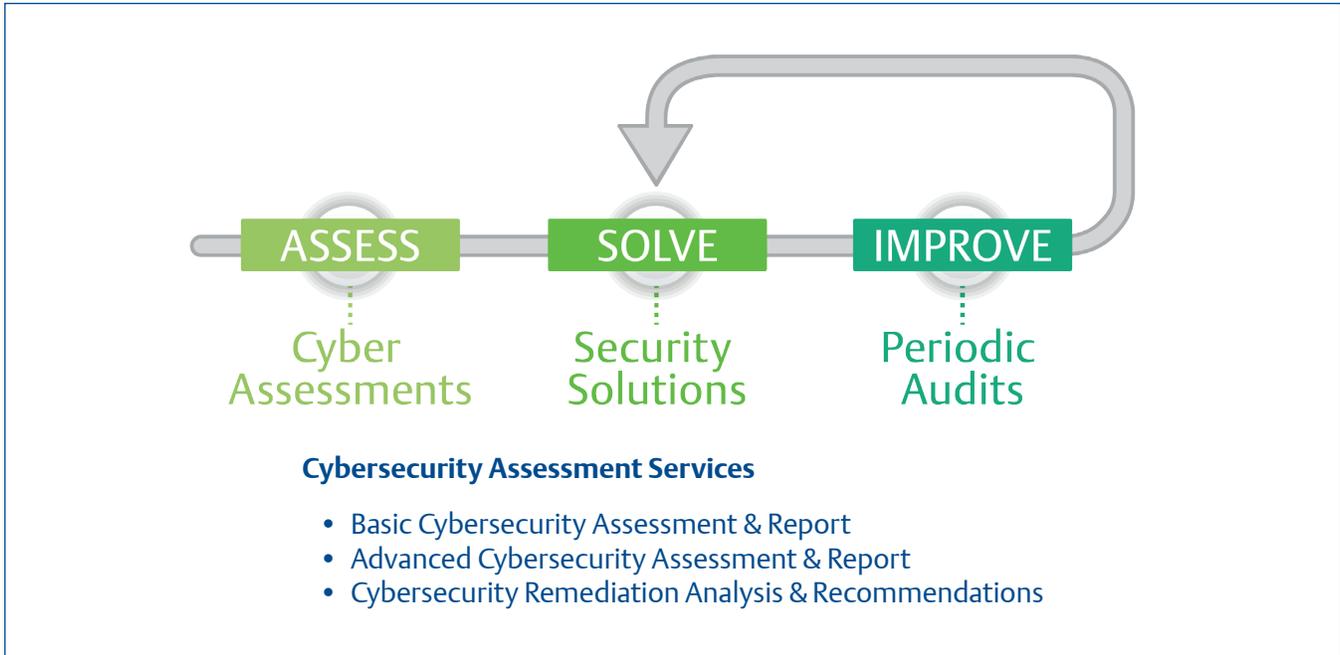
Introduction

Emerson's Advanced Cybersecurity Assessment Service applies to Emerson DeltaV™ DCS control systems and provides expert consultation and assistance with evaluation, testing, and implementation support for cybersecurity enrichment of process controls systems. Advanced Cybersecurity Assessment Service is another way Emerson Process Management is demonstrating our commitment to being the first-choice, best-value solution provider to our clients. Because every customer has their own network architecture, Emerson can provide cybersecurity consulting in a collaborative framework to determine the best overall deployment of cybersecurity products and services for that customer's specific needs and operating practices.

Benefits

An advanced, comprehensive cybersecurity assessment can often uncover security gaps in an existing process control system that, when remediated, can result in the avoidance of a cybersecurity attack or breach. Identification of potential exploit corridors or malware injection points prior to any infection will pay dividends versus the damage and clean-up needed to get a system back on-line post-infection.

Installation of preventative measures along with continued auditing of the system and associated policies and procedures will ensure that the investments made in cybersecurity protection solutions is maintained at its highest levels. Avoidance of a cybersecurity breach is paramount and the peace of mind knowing that utilizing the latest "best practice cybersecurity concepts" provides your system with the best chance of avoiding a cyber-attack.



Cybersecurity Management Solutions

Cybersecurity Consultation and Assessments are an integral part of Emerson’s Cybersecurity Management Solutions portfolio. A comprehensive cybersecurity solution can consist of many different components; each one specific to reducing risks associated with various process control system entities. Cybersecurity Management is an integrated approach to finding the best cyber solutions to fit both your current process control system and existing plant security policies and procedures.

As indicated in the flowchart illustration above, Cybersecurity Management Services can utilize both services and products in the assessment of vulnerabilities on the control system as well as the application of services and products used in the cybersecurity protection of those systems. It is a four step process:

- **Assess** - On-site consultation and/or a Basic or Advanced comprehensive base-line vulnerability assessment.
- **Solve** - The application of security products and/or remediation/consulting services.
- **Improve** - Finally, in order to protect the customer investment and keep current with changes in the cyber-attack scenarios, continuous auditing will maintain the high standards installed and prompt customers to make changes to protect the system from new threats.

Cybersecurity Management Solutions Cover:

- Backup & Recovery
- Automated/Manual Patch Management
- System Health Monitoring
- Smart Firewalls with Intrusion Prevention Software
- Smart Switches and Controller Firewalls
- On-site Spare Parts Management
- Security Consultation and Remediation Services

Reduction of risks associated with the use of these solution components reduces the time spent on controllable issues and allows focus on other important day-to-day issues.

Cybersecurity Assessment Service Architecture

The following bullets provide a general description for each of the above steps.

Cybersecurity Assessment Service (Assess)

- *Basic Cybersecurity Assessment: A limited basic on-site assessment conducted by Emerson-certified system specialists, off-site data analysis and a findings report complete with remediation suggestions.*
- *Advanced Cybersecurity Assessment: A complete comprehensive baseline DeltaV DCS cybersecurity vulnerability assessment and report to identify control system security vulnerabilities and recommend mitigating actions to help achieve the site's control system cybersecurity integrity requirements. This involves an on-site assessment conducted by Emerson-certified cybersecurity specialists, off-site analysis and a comprehensive findings report.*

Security Solutions Portfolio and Services (Solve)

- *Post assessment findings will utilize selections from the Security Solutions Portfolio to remediate findings:*
 - Automated Patch Management
 - Backup & Recovery
 - System Health Monitoring (SHM)
 - Smart Firewall w/ Intrusion Protection Software
 - Smart Switches & Controller Firewalls
 - Guardian Support
 - Evergreen System Upgrades
 - Consulting & Remediation Services

Cybersecurity Follow-up Audit Services (Improve)

- *Annual, semi-annual or quarterly cybersecurity audits that help to preserve the customer's installed cybersecurity best practices and standards investment and keep current with emerging cyber-attack strategies.*

Advanced Cybersecurity Assessment Service Description

Content

- Validation of system architecture from a cybersecurity and TR99 perspective – Control System, Safety System (Process), AMS, Tank Management System, Machine Monitoring, etc. The TR99 verification includes operations, maintenance and engineering implementation.
- Reviewing existing policy documents for coverage.
- Review of built in DeltaV DCS security features and Industrial Control System cybersecurity best practices.
- Effects of typical security mitigations on DeltaV DCS operation.
- Efficacy of typical security mitigations in industrial control system environments.
- Microsoft Active Directory options / implications in DeltaV DCS environments.
- Cost effectiveness of various security mitigations.
- Advice on fitness of other Emerson engineered solutions to meet specific needs
- Validation of firewall placement based on customer's technical documents. The customer project team provides the DCS, SOE, and AMS firewall architectures for review.
- Guidelines in establishing DMZs for DCS, AMS, and SOE; including firewall rules.
- Guidelines in preventing an intrusion.
- Guidelines in implementing wireless security and constraints in deploying a wireless network.
- Best practices for cyber forensics including tools for cyber forensics.
- Evaluate the feasibility of using the Emerson Smart Firewall with Intrusion Prevention Software.
- Identify the technical risk in implementing the FDS, if any.
- Emerson support implications of various security mitigations (recommended by Emerson or others).

Deliverables:

- Comprehensive report with details on what was reviewed and what the assessment level for that item was.
- Prioritized listing of the outstanding issues and recommendations for mitigation.

Ordering Information

Description	Model Number
Advanced Cybersecurity Assessment Service	Please Contact Your Local Emerson Sales Office
Cybersecurity Consultation Services	Please Contact Your Local Emerson Sales Office

To learn how comprehensive Cybersecurity Management Services address your cybersecurity needs, contact your local Emerson sales office or representative, or visit www.EmersonProcess.com.

Emerson Process Management
Asia Pacific: 65.777.8211
Europe, Middle East: 41.41.768.6111
North America, Latin America:
+1 800.833.8314 or
+1 512.832.3774
www.EmersonProcess.com

©2015, Emerson Process Management. All rights reserved.

The Emerson logo is a trademark and service mark of Emerson Electric Co. DeltaV is a mark of one of the Emerson Process Management family of companies. All other marks are the property of their respective owners.

The contents of this publication are presented for informational purposes only, and while every effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available on request. We reserve the right to modify or improve the designs or specifications of our products at any time without notice.