

## EMERSON CYBER SECURITY NOTIFICATION

<b>ID number and revision</b>	EMR.EPM14001, revision 1A
<b>Product(s) addressed</b>	Annex 1
<b>Status and date</b>	Jan 12, 2015
<b>References:</b>	
<b>CVSS Score:</b>	1.2
<b>NERC:</b>	NA
<b>CVE:</b>	CVE-2014-9191
<b>DHS:</b>	NA
<b>US-CERT/ICS-CERT:</b>	ICSA-15-008-01

### Risk Assessment

Emerson has been made aware of a vulnerability affecting any HART Device Type Manager (DTM) built using CodeWrights DTMSudio. The Emerson products listed in Annex 1 have DTMs which were developed using CodeWrights DTMSudio.

DTMs are used by device configuration software for field device configuration purposes only. This vulnerability can be used to crash an FDT (Field Device Tool) frame application under specific circumstances, requiring a restart of the FDT frame application (not the computer) to resolve. No loss of information or loss of control or view by the control system results from an attacker successfully exploiting this vulnerability. Note that an attacker would require physical access to the HART loop in order to execute this attack. The vulnerability is exploited by connecting a rogue device to the HART loop and sending malformed data to the frame. If the end user has adequate physical protection of the HART loop in place, exploitation is not possible. Field devices and WirelessHART installations are unaffected.

### Recommendations

Emerson recommends having physical protection of the end users' entire infrastructure. In addition, Emerson has updated [Rosemount 644 Temperature Transmitter Rev 8 HART DTM](#), DTM version 1.4.181 / 2014-11-17 to address this vulnerability. **Installing this DTM will resolve this vulnerability for all Emerson HART DTMs, as listed on Annex 1, on the target system** (Note: This updated DTM will NOT fix other vendors DTMs affected by this issue).

### Software Update

Emerson recommends that you update DTM by downloading from <http://www2.emersonprocess.com/en-US/documentation/deviceinstallkits/Pages/deviceinstallkitsearch.aspx>




## Legal Disclaimer

The urgency and severity ratings of this notification are not tailored to individual users; users may value notifications differently based upon their system or network configurations and circumstances. THIS NOTIFICATION, AND INFORMATION CONTAINED HEREIN, IS PROVIDED ON AN "AS IS" BASIS AND DOES NOT IMPLY ANY KIND OF GUARANTEE OR WARRANTY, INCLUDING THE WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE. THE USE OF THIS NOTIFICATION, AND INFORMATION CONTAINED HEREIN, OR MATERIALS LINKED FROM THIS NOTIFICATION, IS AT YOUR OWN RISK. EMERSON RESERVES THE RIGHT TO CHANGE OR UPDATE NOTIFICATIONS AT ANY TIME.

## Technical Details

Refer to Annex 1 for affected products.

## Emerson Cyber Security Notification Categories

	Alert	Alerts are issues that could have immediate, direct, and serious impact on Emerson systems. Alerts require immediate action to mitigate the risk and prevent disruption to operation. Alert notifications typically have a CVSS Score of 7.0 to 10
	Advisory	Advisories are issues that have the potential to be exploited against an Emerson system. The only action typically required would be the verification that the Emerson system is configured as recommended. Advisory notifications typically have a CVSS score of 4.0 to 6.9.
	Informational	Informational bulletins provide clarification on issues that cannot be used as an exploit against an Emerson system. Informational notifications typically have a score of 0 to 3.9

## Acronyms

<b>CVE</b>	Common Vulnerabilities and Exposures
<b>CVSS</b>	The Common Vulnerability Scoring System (CVSS) provides an open framework for communicating the characteristics and impacts of IT vulnerabilities
<b>DHS</b>	Department of Homeland Security
<b>ICS-CERT</b>	Industrial Control Systems Cyber Emergency Response Team
<b>NERC</b>	North American Electric Reliability Corporation
<b>US-CERT</b>	United States Computer Emergency Readiness Team

## Contact Information

Please contact your local Emerson Process Management sales representative directly with any questions regarding this issue or for technical support. For additional assistance, please contact Emerson by any of the methods below.

### 1. Emerson Process Management Global Response Center (24/7 Support)

Phone: +1 314 679 8984

E-mail: [ResponseCenter.ProcessManagement@Emerson.com](mailto:ResponseCenter.ProcessManagement@Emerson.com)

### 2. Device Installation Kits Technical support

E-Mail: [AskPlantWeb@Emerson.com](mailto:AskPlantWeb@Emerson.com)

## Annex 1: Products Addressed

The HART DTMs of the following products are addressed.

Fisher Controls DVC6000 Digital Valve Controller Rev 2.01  
Fisher Controls International DVC2000 Digital Valve Controller Rev 1.01  
Micro Motion 1500 Rev 5  
Micro Motion 1500 Rev 6  
Micro Motion 1700 Analog Rev 5  
Micro Motion 1700 Analog Rev6  
Micro Motion 1700 IS Rev 6  
Micro Motion 1700 Rev 5  
Micro Motion 1700IS Rev 5  
Micro Motion 2000 Config I/O Rev5  
Micro Motion 2200S Rev 1  
Micro Motion 2400S Analog Rev 2  
Micro Motion 2400S Analog Rev 3  
Micro Motion 2400S Analog Rev 4  
Micro Motion 2500/2700 Config I/O Rev 5  
Micro Motion 2500/2700 Config I/O Rev 6  
Micro Motion 2700 Analog Rev 5  
Micro Motion 2700 Analog Rev 6  
Micro Motion 2700 IS Rev 5  
Micro Motion 2700IS Rev 6  
Micro Motion RFT9739 Rev 4  
Micro Motion Series 3000 Rev 7  
Rosemount 1151 Pressure Transmitter Rev 5  
Rosemount 1151 Pressure Transmitter Rev 6  
Rosemount 2051 Pressure Transmitter Rev 10  
Rosemount 2051 Pressure Transmitter Rev 3  
Rosemount 2051 Pressure Transmitter Rev 9  
Rosemount 2088 Pressure Transmitter Rev 10  
Rosemount 2088 Pressure Transmitter Rev 3  
Rosemount 2088 Pressure Transmitter Rev 9  
Rosemount 2090 Pressure Transmitter Rev 3  
Rosemount 248 Temperature Transmitter Rev 2  
Rosemount 3051 Pressure Transmitter Rev 10  
Rosemount 3051 Pressure Transmitter Rev 3  
Rosemount 3051 Pressure Transmitter Rev 7  
Rosemount 3051 Pressure Transmitter Rev 9  
Rosemount 3051S Advanced Diagnostics Rev 2  
Rosemount 3051S Advanced Diagnostics Rev 3  
Rosemount 3051S Electronic Remote Sensors Rev 1  
Rosemount 3051S Pressure Transmitter Rev 7  
Rosemount 3051SMV Direct Process Variable Rev 1  
Rosemount 3051SMV MultiVariable Mass Energy Flow Rev 1  
Rosemount 3095M MultiVariable™ Mass Flow Rev 2  
Rosemount 3100 Ultrasonic Level Transmitter Rev 5

Rosemount 3144P Temperature Transmitter Rev 3  
Rosemount 3144P Temperature Transmitter Rev 4  
Rosemount 3144P Temperature Transmitter Rev 5  
Rosemount 3144P Temperature Transmitter Rev 6  
Rosemount 3300 Radar Level and Interface Transmitter Rev 3  
Rosemount 333 Triloop Rev 1  
Rosemount 4500 Pressure Transmitter Rev 7  
Rosemount 4600 Pressure Transmitter Rev 1  
Rosemount 5300 Radar Level and Interface Transmitter Rev 1  
Rosemount 5300 Radar Level and Interface Transmitter Rev 2  
Rosemount 5300 Radar Level and Interface Transmitter Rev 3  
Rosemount 5400 Radar Level Transmitter Rev 1  
Rosemount 5400 Radar Level Transmitter Rev 2  
Rosemount 644 Temperature Transmitter Rev 6  
Rosemount 644 Temperature Transmitter Rev 7  
Rosemount 644 Temperature Transmitter Rev 8  
Rosemount 644 Temperature Transmitter Rev 9  
Rosemount 8712D Magnetic Flowmeter Rev 1  
Rosemount 8712E Magnetic Flowmeter Rev 3  
Rosemount 8712H Magnetic Flowmeter Rev 1  
Rosemount 8732C Magnetic Flowmeter Rev 7  
Rosemount 8732E Magnetic Flowmeter Rev 2  
Rosemount 8800C Vortex Flowmeter Rev 3  
Rosemount 8800D Vortex Flowmeter Rev 1  
Rosemount 8800D Vortex Flowmeter Rev 2  
Rosemount Analytical 1056 Rev 1  
Rosemount Analytical 1056 Rev 2  
Rosemount Analytical 5081A Rev 2  
Rosemount Analytical 5081CT Rev 1  
Rosemount Analytical 5081p Rev 2  
Rosemount Analytical 54eA Rev 2  
Rosemount Analytical 54eC Rev 1  
Rosemount Analytical 54epH Rev 2  
Rosemount Analytical OCT4000 Rev 3  
Rosemount Analytical OCX8800 Rev 3  
Rosemount Analytical XmtA Rev 1  
Rosemount Analytical XmtCT Rev 1  
Rosemount Analytical XmtpH Rev 1  
Rosemount Metran 150 Pressure Transmitter Rev 9  
Rosemount Metran 150 Pressure Transmitter Rev 10  
Rosemount Metran 75 Pressure Transmitter Rev 9  
Rosemount Metran 75 Pressure Transmitter Rev 10