GUARDIAN
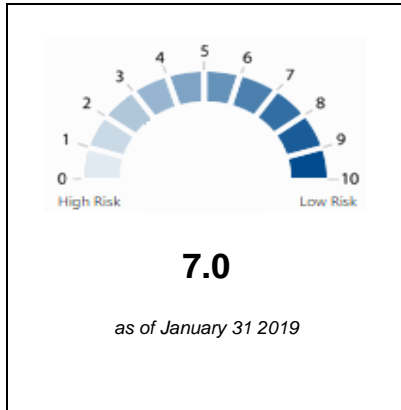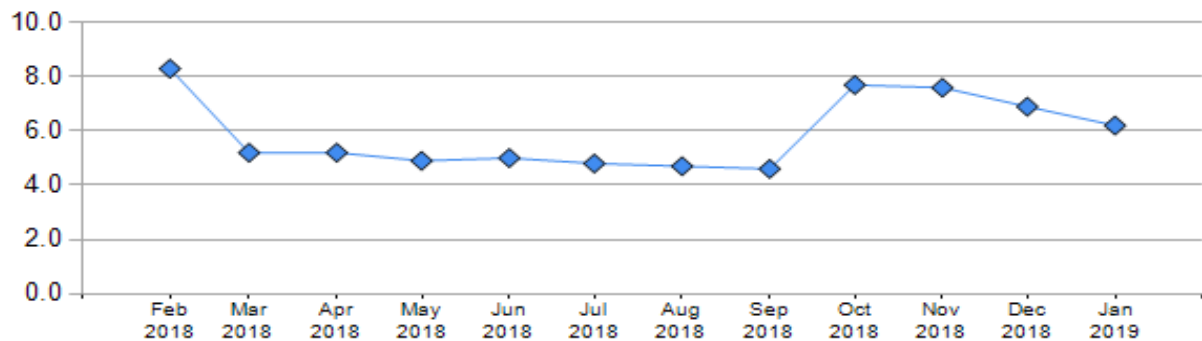
System Analysis Report

Customer: A1 Chemicals, Inc.
Location: Austin, TX, United States

System: Chemical Production Plant (ID : 0001-0002-9868)

Date of Report: February 27, 2019
Reporting Period: August 1, 2018 to January 31, 2019
Emerson Contact: Eggy Ausa
EMERSON (PHILIPPINES)
Email: eggy.ausa@emerson.com
Phone: +63-2-702-1111

System Status

7.0

as of January 31 2019

Knowledge Base Articles *For Review*	46
Software Updates *For Review*	13
Hardware *For Review, Deferred, Acknowledged*	2
Software *For Review, Deferred, Acknowledged*	0
Severity A & B Technical Support Calls *Open*	0
System Health Monitoring *Open*	3
Scheduled System Maintenance *Fail, Warning*	96

About This Report

This report examines the service history and status of the system as recorded in Emerson's service management database. The report is a deliverable of Emerson's Guardian Support Service and was prepared by the Emerson Global Service Center with subsequent review and updates from your local Emerson Service provider.

System Content Data Collection: The method for collecting system content information for this system is the DeltaV System Registration Utility. In this report, Knowledge Base Articles and product lifecycle status changes matched to system content are reviewed and discussed.

Service Event Data Collection: Service events captured and discussed in this report include:
- Technical support calls which were assigned CTS service call numbers
- Health monitor alerts received by the Emerson Global Service Center
- Material return transactions which were assigned Return Authorization numbers
- New product shipments of software media, licenses, or hardware

The System Analysis Report also includes the **System Health Score**[1] which indicates the health of the system based upon a comparison of specific criteria relative to other systems subscribed to Guardian Support on a global basis. The System Health Score included in this report is based on the status of the system at the end of this reporting period. Scores are recorded on a weekly basis, and the highest score of the month is included in the trend.

To learn more about how the System Health Score is calculated, please download the Whitepaper – **Guardian System Health Benchmark** in the *Resources* page. This Whitepaper provides suggestions on how to best use the health score presented in the Guardian Dashboard, its associated risk prioritization and mitigating action management capabilities.

Please contact your local Emerson service provider for further information regarding this customized system health management application.

GUARDIAN COLLATERAL

- What is Guardian Support?
- Guardian Support User Guide
- Guardian Support Quick Guide for DeltaV
- Guardian Support Quick Guide for AMS Device Manager and Syncade
- Guardian Software Update Delivery Service User Guide
- WP Guardian System Health Benchmark
- Instruction on How to Download an ISO Image File
- Software Download FAQ

Current and previous system analysis reports are available on the Emerson Guardian Website. You are encouraged to view the report online where you may use the website's links to inspect the detailed system information upon which this report was based.

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(1) 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. The "System Health Score" presented in the Guardian dashboard website indicates the performance of the system based upon a comparison of identified risk area management relative to other systems subscribed to Guardian Support worldwide. The Guardian "System Health Score" considers only what is known to Emerson relative to a limited collection of risk factors (e.g. Knowledge Base Articles, uninstalled hotfixes, etc.) with no consideration of the processes under control, the application/configuration of that system, or the actual actions taken locally to mitigate the identified risks. A high "System Health Score" is a recognition of the efforts taken to mitigate these particular risks Guardian is capable of identifying, but in no way guarantees, or implies, that the operation of the system is risk free in any way.

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

Section 1 – Knowledge Base Articles (KBAs)

Actionable KBAs describe issues identified by Emerson that have the potential to result in unexpected system behavior in a running system. At the time this report was prepared, there were 43 actionable KBAs for review for this system, based on an automated comparison of this system's installed hardware and software against key KBA criteria.

Some issues are configuration or situation dependent, requiring additional review by the customer to completely determine a KBA's relevance to the system. The Guardian website provides a disposition mechanism for the system's Guardian user to close KBAs as appropriate mitigating actions are completed or issue is determined to be not relevant. This report omits KBAs which were marked as complete or not applicable in previous reporting periods.

Emerson strongly recommends that all open actionable KBAs be reviewed with the local Emerson service office. We encourage reviewing not just the product safety notice and security KBAs but also the process KBAs as these are determined by Emerson as something that could cause potential disruptive events.

1.1 Actionable KBAs (Total: 43 For Review; 0 In-Progress)

KBA Number	Title	Category	Disposition Status	User Notes
AK-1800-0034	Controller Locks Up or Crashes When Writing a Dynamic Reference (.$REF) to an External Reference Parameter	Process	**For Review**	
AK-1800-0052	DSN18005-1 -- Hirschmann (Belden) Security Bulletins	Security	**For Review**	
AK-1900-0004	DY01092019 AP KBA matched to DeltaV IO Bus Devices	Security	**For Review**	
AP-0500-0113	Safety Concern: Downloading Alias Table Modifications to Running Phases Could Cause Unexpected Behavior	Process	**For Review**	
AP-0600-0114	Safety Concern: Parameter Update Rate Drops From Expected Update Rate to 60 Seconds When a Parameter is Not Read for More Than 3 Minutes in a Controller	Process	**For Review**	
NA-0800-0031	Standby Controller May Get into Flow Control State when the Redundant Node Loses Communication with the DeltaV Network	Process	**For Review**	

KBA Number	Title	Category	Disposition Status	User Notes
NK-1100-1102	PRODUCT QUALITY CONCERN: Process Systems and Solutions -- M and S Series Serial Cards -- Flash Upgrade or Power Cycling Serial Interface Cards May Result in Failure	Product Safety Notice	**For Review**	[Laurent Berton, 7 Feb 2017 09:52]: Emerson appliquera ces mise à jour [tin de la Cruz, 30 Jan 2018 14:56]: [tin de la Cruz, 30 Jan 2018 15:05]: [Elaine Causon, 10 Jul 2018 14:22]: test deferred
NK-1200-0157	DeltaV Controller Fails to Resolve an External Reference That Results from a Dynamic Reference in a Unit Module, if the ProPlus is Off-line	Process	**For Review**	
NK-1300-0110	Function Blocks May Not Behave as Expected When their Assigned IO Transitions Out of Fault State	Process	**For Review**	[Laurent Berton, 18 Oct 2017 14:35]: point zero
NK-1400-0210	HART Devices are Unable to Perform HART Operations with DeltaV Explorer or AMS Device Manager	Process	**For Review**	
NK-1500-0102	DeltaV Security Notices Catalog	Security	**For Review**	[Laurent Berton, 09 Jan 2018 01:00]: [Elaine Causon, 10 Jul 2018 14:24]: test deferred via Desktop
NK-1600-0336	ICS-CERT ADVISORY ICSA-16-334-02 - Managing USB Storage Devices on DeltaV Computers Using Group Policy	Security	**For Review**	[Laurent Berton, 09 Jan 2018 01:00]:
NK-1700-0182	Security Advisory About Manageability Firmware Vulnerability on the Dell XE2	Security	**For Review**	
NK-1700-0271	DC_STATE of a Device Control Function Block May Immediately Transition to Active After Being Interlocked When RESTART_TIME is Set to Zero	Process	**For Review**	
NK-1700-0354	Controllers May Experience Loss of Communication or Periodically Switch Over	Process	**For Review**	

KBA Number	Title	Category	Disposition Status	User Notes
NK-1800-0067	DSN14001-3 -- OPENSSL (HEARTBLEED) VULNERABILITY	Security	**For Review**	
NK-1800-0068	DSN14002-3 -- HAVEX / DRAGONFLY / ENERGETIC BEAR	Security	**For Review**	
NK-1800-0069	DSN14003-1 -- BASH VULNERABILITY "SHELLSHOCK"	Security	**For Review**	
NK-1800-0070	DSN14004-3 -- BLACKENERGY MALWARE VARIANT	Security	**For Review**	
NK-1800-0072	DSN14005-2 -- SSL 3.0 POODLE VULNERABILITY	Security	**For Review**	
NK-1800-0073	DSN15002-3 -- GHOST VULNERABILITY	Security	**For Review**	
NK-1800-0075	DSN17001-4 -- WANNACRY RANSOMWARE CYBER-THREAT	Security	**For Review**	
NK-1800-0076	DSN17002-1 -- CrashOverride Malware	Security	**For Review**	
NK-1800-0077	DSN17003-1 -- PETYA RANSOMWARE/MALWARE CYBER-THREAT	Security	**For Review**	
NK-1800-0078	DSN17004-1 -- DELTAV PLUG-AND-PLAY SERVICES	Security	**For Review**	
NK-1800-0079	DSN17005-1 -- TRICONEX™ SIS MALWARE	Security	**For Review**	
NK-1800-0080	DSN17006-1 -- INTEL™ FIRMWARE SECURITY VULNERABILITIES	Security	**For Review**	
NK-1800-0081	DSN18001-3 -- Meltdown & Spectre	Security	**For Review**	
NK-1800-0172 **(with hotfix)**	Incorrect DST Assignments for Profibus Device Signals Are Displayed in DeltaV Diagnostics	Process	**For Review**	
NK-1800-0205	Reset button of Analog Tracking (AT) and Device Control Condition (DCC) Faceplates May Not be Visible After a Partial Download	Process	**For Review**	

KBA Number	Title	Category	Disposition Status	User Notes
NK-1800-0209 **(with hotfix)**	Controller May Undergo a Software Reset While Processing Communication with Other DeltaV Nodes	Process	**For Review**	
NK-1800-0228	Attribute Override Failure Message with Non-English Characters Appears in Process History View When Downloading a Control Module	Process	**For Review**	
NK-1800-0253	Dell Computer BIOS Update Mitigation for Meltdown and Spectre Exploits	Security	**For Review**	
NK-1800-0400	DSN18004-1 -- GPS 2019 Week Rollover	Security	**For Review**	
NK-1800-0452 **(with hotfix)**	DeltaV Operate Is Not Opened Successfully After Rebooting a DeltaV Workstation	Process	**For Review**	
NK-1800-0864 **(with hotfix)**	Alarm Description of Control Modules Assigned to a Unit Module does Not Appear in OPC AE Clients	Process	**For Review**	
NK-1800-0874 **(with hotfix)**	Module Attributes on Unsolicited Communication may Fail to Update	Process	**For Review**	
NK-1800-0898	Controller May Reset While Replacing an I/O Card Physically and in the Database	Process	**For Review**	
NK-1800-0975	FAT Sanity Testing December 19	Product Safety Notice	**For Review**	
NK-1800-0979	G13 Regression KBA Replication Test NA	Process	**For Review**	
NK-1900-0005	DY010519 NA DeltaV matched to DeltaV WS (clone of AK-1800-0084)	Product Safety Notice	**For Review**	
NK-1900-0056	G13CR: Test new KBAs with HF after PP All Versions	Product Safety Notice	**For Review**	
NK-1900-0057	G13CR: Test new KBAs with HF after PP All Versions (Console)	Process	**For Review**	

Table – Actionable KBAs

1.2 Deferred KBAs (Total: 0 KBAs)

Commentary: No deferred KBAs within the report period.

1.3 Addressed KBAs (Total: 5 KBAs)

KBA Number	Title	Category	Disposition Status	User Notes
AK-1800-0084	DY122018 AP DeltaV matched to DeltaV WS	Product Safety Notice	Action Complete	
AK-1800-0088 **(with hotfix)**	DY122818 AP DeltaV matched to DeltaV WS (Article Matching)	Product Safety Notice	Action Complete	[Carlo Israel, 7 Jan 2019 18:34]: ???????? ???????
NA-0900-0054	Product Advisory: Configuration Considerations for Profibus, Device Net and AS-i Output Signal Tags	Process	Action Complete	[Laurent Berton, 18 Oct 2017 14:35]: point zero
NK-1800-0117 **(with hotfix)**	DeltaV Diagnostics May Cause Controller Communication Performance Issues When the System Has Serial Cards with Bad Device Status	Process	Action Complete	
NK-1800-0981	DY122218 NA DeltaV matched to DeltaV WS	Product Safety Notice	Action Complete	

Table – Addressed KBAs

Tip: *To simplify and accelerate your risk mitigation processes, Guardian provides:*
- *An executive summary to clarify trigger conditions and identify related system node names.*
- *A user note feature where you can record your mitigation actions or determination of non-applicability.*

Section 2 – Technical Support Calls

Calls opened from previous reporting period: 0
Calls opened in this reporting period: 3
Calls closed in the reporting period: 2
Open calls as of end of the reporting period: 1

> Impact Classifications: A - Plant down, B – Process is up; yield, rate or quality jeopardized, C – Process is up; minimal risk to yield, rate or quality, D – Off-line/Non-control/demo, E – Enhancement request

2.1 Open Technical Support Calls (Total: 0 Severity A & B; 1 Severity C, D & E; 0 Requested for Closure)

Call Number	Brief Description	Severity	Status	Days Open
GC-1900-0021	adada	C	Open	28

Table – Open Technical Support Calls

2.2 Closed Technical Support Calls (Total: 2 Closed)

Call Number	Brief Description	Severity	Days Open	Resolution
GC-1800-4621	j'ai un gros problème avec la yellow page	C	1	end of test from Guardian Mobile
GC-1800-4600	Test CTS Do not reply	C	0	On peut fermer la peine problème résolu

Table – Closed Technical Support Calls

Tip: Use the Guardian online call submission feature to ask questions concerning the smaller items that you might now want to take time calling us about. With over 6,000 DeltaV systems in service, it's possible we have the answer or can offer a suggestion.

Section 3 – Maintenance Services

3.1 System Health Monitoring (Total: 3 Open Alerts)

Call Number	Brief Description	Days Open
NC-1500-6521	Service: SHM__OMSA_Global_Status in ALERT Status on node 16OPA04	1451
NC-1500-6512	Service: SHM__CH_Storage_Process_Load in ALERT Status on node DV-SPF-CHS01	1451
NC-1500-6504	Service: SHM__CPU_Usage in ALERT Status on node 02DVCU-1	1451

Table – Open Alerts

Commentary: No closed alerts within the report period.

3.2 Scheduled System Maintenance (Total: 86 Failed; 10 Warning)

Below is the summary of results of the last Scheduled System Maintenance checklist collected for your system last 29 Dec 2016. For more details, please download the SSM report located in your Guardian Support website.

Failed Parameters	Warning Parameters	Incomplete Parameters	Passed Parameters
86	**10**	0	150

Table – Scheduled System Maintenance Results

Section 4 – Support Status

Emerson classifies product lifecycle stages into four support statuses for hardware and three support statuses for software:

Hardware Product Support				
		10-year Support Commitment		
Status	**Current**	**Active**	**Supported**	**Retired**
Definition	Most current offering	Replaced by Current offering, transition to Active status starts 10-year support commitment	Maintenance, products may transition from Active to Supported during 10-year support commitment	End of Support Commitment
Use	New Systems, Major Expansions	Minor expansions where consistency more important than new features and future support	Replacement parts for failures or critical spares	Subject to material availability
Support	Full support	Full support	Available, parts may be refurbished	Limited, may require special agreement
Ordering	Published pricing, Standard ordering process, Normal lead time	Published pricing, Standard ordering process, Normal lead time	Special order handling, Longer lead time	Special order handling (if available), Longer lead time

Software Support			
	Conventional Software Support - 5 Years		
Status	**Current**	**Active**	**Retired**
Definition	Most current offering	Replaced by Current offering	End of CSS Commitment
Use	New Systems, Major Expansions	Expansions where consistency more important than new features and future support	Systems where hotfixes and OS Security Updates are not a major concern
Support	Technical support, remote diagnostics, DeltaV hotfixes, Microsoft Security Update testing	Technical support, remote diagnostics, DeltaV hotfixes, Microsoft Security Update testing	Technical support, remote diagnostics, may require upgrade to resolve request
Training	Available	Available	Not offered

The latest revision of each DeltaV major version will be supported. Customers should install any DeltaV Service Pack within nine (9) months after it is released. After the nine-month period ends, DeltaV hotfixes will only be created for the most current Service Pack.
**5-Year Conventional Software Support clock begins with the release of the first Service Pack for the major version.*

Workstation and server support is provided via Dell ProSupport for units under warranty. The warranty status can be accessed with the service tag number. Extended warranties may be available through a special agreement between the end user and Dell. To see currently available workstation/server models with the DeltaV software compatibility, go here.

Emerson endeavors to forecast changes in lifecycle status well in advance of the actual status change, typically providing an 18 months advance forecast. Emerson recommends that particular attention be given to products in supported status and products which are not compatible with planned future DeltaV software versions.

For more information, please refer to the Emerson Product Support Guideline, available online either from the Guardian website or from the DeltaV product support website.

4.1 Supported and Retired Hardware (Total: 2 Devices)

Product Name	Support Status	Disposition Status	DeltaV Compatibility	Currently Installed	Remaining Months in Supported State
DeltaV MD Plus Controller	Supported	Deferred - 05 Jun 2019	v7.3, v6.3.4, v7.4, v7.4.1, v8.4, v8.4.1, v9.3, v8.4.2, v7.4.2, v9.3.1, v10.3, v10.3.1, v11.3, v11.3.1, v12.3, v12.3.1, v13.3, v13.3.1, v14.3	43	56
Profibus DP Card, 1 Port, Series 2	Supported	Acknowledged	v5.3.2, v6.3.2, v7.3, v6.3.4, v7.4, v7.4.1, v8.4, v8.4.1, v9.3, v8.4.2, v7.4.2, v9.3.1, v10.3, v10.3.1, v11.3, v11.3.1, v12.3, v12.3.1, v13.3, v13.3.1, v14.3	9	2

Table – Supported and Retired Hardware

4.2 Other Hardware (Total: 8 Current; 1 Active; 4 Unclassified)

Product Name	Support Status	DeltaV Compatibility	Currently Installed
AI Card, 16 Ch., 4-20 mA, HART, Series 2	Current	v7.3, v6.3.4, v7.4, v7.4.1, v8.4, v8.4.1, v9.3, v8.4.2, v7.4.2, v9.3.1, v10.3, v10.3.1, v11.3, v11.3.1, v12.3, v12.3.1, v13.3, v13.3.1, v14.3	182
AO Card, 8 Ch., 4-20 mA, HART, Series 2	Current	v4.2.3, v5.3.2, v6.3.2, v7.3, v6.3.4, v7.4, v7.4.1, v8.4, v8.4.1, v9.3, v8.4.2, v7.4.2, v9.3.1, v10.3, v10.3.1, v11.3, v11.3.1, v12.3, v12.3.1, v13.3, v13.3.1, v14.3	68
DeltaV Smart 24-port Switch	Current	N/A	5
DeltaV Smart 8-port Switch	Current	N/A	2
DeltaV Smart 8-port Switch with Expansion Bays	Current	N/A	13
DeviceNet Card, 1 Port, Series 2	Current	v6.3.2, v7.3, v6.3.4, v7.4, v7.4.1, v8.4, v8.4.1, v9.3, v8.4.2, v7.4.2, v9.3.1, v10.3, v10.3.1, v11.3, v11.3.1, v12.3, v12.3.1, v13.3, v13.3.1, v14.3	2

Product Name	Support Status	DeltaV Compatibility	Currently Installed
DI Card, 32 Ch., High Density, Series 2	**Current**	v4.2.3, v5.3.2, v6.3.2, v7.3, v6.3.4, v7.4, v7.4.1, v8.4, v8.4.1, v9.3, v8.4.2, v7.4.2, v9.3.1, v10.3, v10.3.1, v11.3, v11.3.1, v12.3, v12.3.1, v13.3, v13.3.1, v14.3	119
DO Card, 32 Ch., High Density, Series 2	**Current**	v4.2.3, v5.3.2, v6.3.2, v7.3, v6.3.4, v7.4, v7.4.1, v8.4, v8.4.1, v9.3, v8.4.2, v7.4.2, v9.3.1, v10.3, v10.3.1, v11.3, v11.3.1, v12.3, v12.3.1, v13.3, v13.3.1, v14.3	93
Prog. Serial Card, 2 Ports, RS232/RS485, Series 2	**Active**	v4.2.3, v5.3.2, v6.3.2, v7.3, v6.3.4, v7.4, v7.4.1, v8.4, v8.4.1, v9.3, v8.4.2, v7.4.2, v9.3.1, v10.3, v10.3.1, v11.3, v11.3.1, v12.3, v12.3.1, v13.3, v13.3.1, v14.3	23
Controller	**Unclassified**	Unknown	1
HART	**Unclassified**	Unknown	35
Power Supply	**Unclassified**	Unknown	3
PROFIBUS	**Unclassified**	Unknown	3

Table – Other Hardware

Devices that are tagged as UNKNOWN are those whose lifecycle status information are missing from our database. Reasons for this include:
- Those automatically detected devices that are not manufactured by Emerson;
- Those that are manually (and incorrectly) entered devices in our database causing a mismatch in lifecycle status data.

4.3 Dell Workstations and Servers

Node Name	Product Name	Support Status	DeltaV Compatibility	OEM Shipment Date	OEM Warranty Date
APLWS	PowerEdge T630	**Under Warranty**	v11.3, v11.3.1, v12.3, v12.3.1, v13.3, v13.3.1, v14.3	06 Jun 2016	07 Jun 2019
OPRWS10	OptiPlex XE2	**Under Warranty**	v11.3.1, v12.3, v12.3.1, v13.3, v13.3.1, v14.3	06 Jun 2016	07 Jun 2019

Node Name	Product Name	Support Status	DeltaV Compatibility	OEM Shipment Date	OEM Warranty Date
OPRWS11	OptiPlex XE2	**Under Warranty**	v11.3.1, v12.3, v12.3.1, v13.3, v13.3.1, v14.3	06 Jun 2016	07 Jun 2019
OPRWS12	OptiPlex XE2	**Under Warranty**	v11.3.1, v12.3, v12.3.1, v13.3, v13.3.1, v14.3	06 Jun 2016	07 Jun 2019
OPRWS13	OptiPlex XE2	**Under Warranty**	v11.3.1, v12.3, v12.3.1, v13.3, v13.3.1, v14.3	06 Jun 2016	07 Jun 2019
OPRWS14	OptiPlex XE2	**Under Warranty**	v11.3.1, v12.3, v12.3.1, v13.3, v13.3.1, v14.3	06 Jun 2016	07 Jun 2019
OPRWS15D	OptiPlex XE2	**Under Warranty**	v11.3.1, v12.3, v12.3.1, v13.3, v13.3.1, v14.3	06 Jun 2016	07 Jun 2019
OPRWS1D	OptiPlex XE2	**Under Warranty**	v11.3.1, v12.3, v12.3.1, v13.3, v13.3.1, v14.3	06 Jun 2016	07 Jun 2019
OPRWS2	OptiPlex XE2	**Under Warranty**	v11.3.1, v12.3, v12.3.1, v13.3, v13.3.1, v14.3	06 Jun 2016	07 Jun 2019
OPRWS3	OptiPlex XE2	**Under Warranty**	v11.3.1, v12.3, v12.3.1, v13.3, v13.3.1, v14.3	06 Jun 2016	07 Jun 2019
OPRWS4	OptiPlex XE2	**Under Warranty**	v11.3.1, v12.3, v12.3.1, v13.3, v13.3.1, v14.3	06 Jun 2016	07 Jun 2019
OPRWS4D	Dell Workstation	**Under Warranty**	v14.3	08 Jun 2016	09 Sep 2019
OPRWS5	OptiPlex XE2	**Under Warranty**	v11.3.1, v12.3, v12.3.1, v13.3, v13.3.1, v14.3	06 Jun 2016	07 Jun 2019
OPRWS6	OptiPlex XE2	**Under Warranty**	v11.3.1, v12.3, v12.3.1, v13.3, v13.3.1, v14.3	06 Jun 2016	07 Jun 2019
OPRWS7	OptiPlex XE2	**Under Warranty**	v11.3.1, v12.3, v12.3.1, v13.3, v13.3.1, v14.3	06 Jun 2016	07 Jun 2019
OPRWS9	OptiPlex XE2	**Under Warranty**	v11.3.1, v12.3, v12.3.1, v13.3, v13.3.1, v14.3	06 Jun 2016	07 Jun 2019
PROPLUS	PowerEdge T630	**Under Warranty**	v11.3, v11.3.1, v12.3, v12.3.1, v13.3, v13.3.1, v14.3	06 Jun 2016	07 Jun 2019

Table – Dell Workstations and Servers

4.4 Software

| Installed Version	Latest Distribution Build for the Installed Version	Support Status	Support Notes
13.3.1	13.3.1	**Active**	Build 13.3.1, the landing zone (final build) for Version 13, remains an active version. Version 14 is the current version of DeltaV software for English. Build 14.3 is the latest for Version 14.

Table – Software

Section 5 – System Registration

Uploads throughout the Reporting Period: 1
Last Registration Upload: **01 Oct 2018**
Average Interval between Uploads: **every 434 days**

> Taking frequent snapshots of system content creates a valuable change history to use in problem resolution scenarios. It also ensures you receive the earliest possible notification for Knowledge Base Articles matching your actual system content.

Commentary: Emerson recommends submitting updates to system content at least once every 90 days, and anytime significant changes are made to system hardware or software content. Submitting an information update is simple. Use the System Registration Utility to capture system content, and then upload it to the DeltaV Support website as illustrated below:
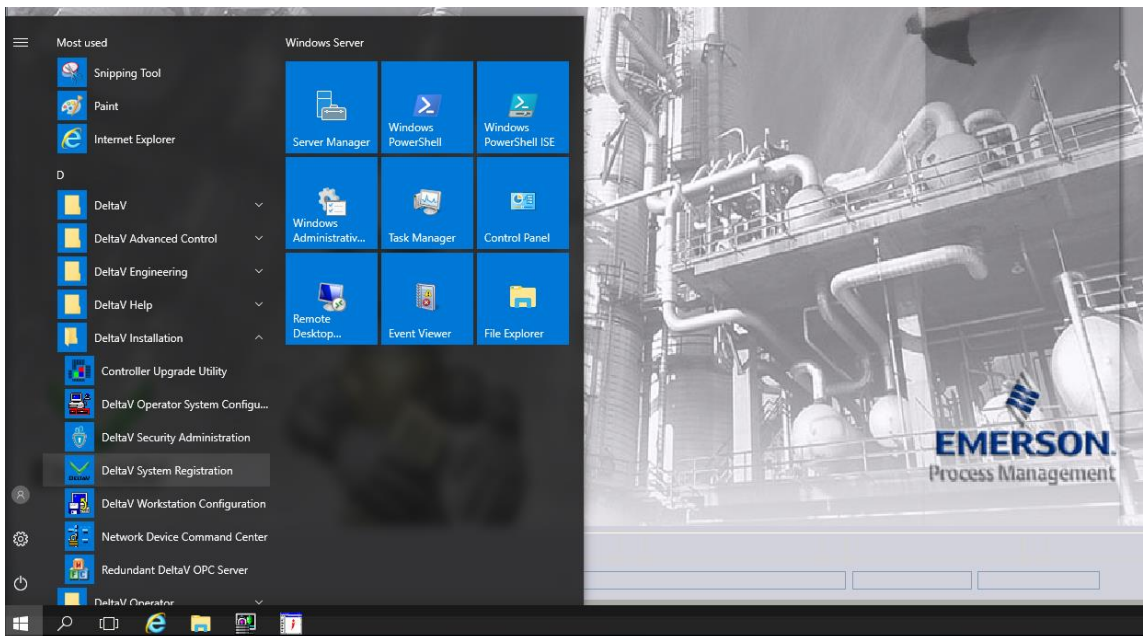
Figure – Run the Registration Utility from the Professional Plus

Guardian users can upload the registration file directly from their Guardian website:
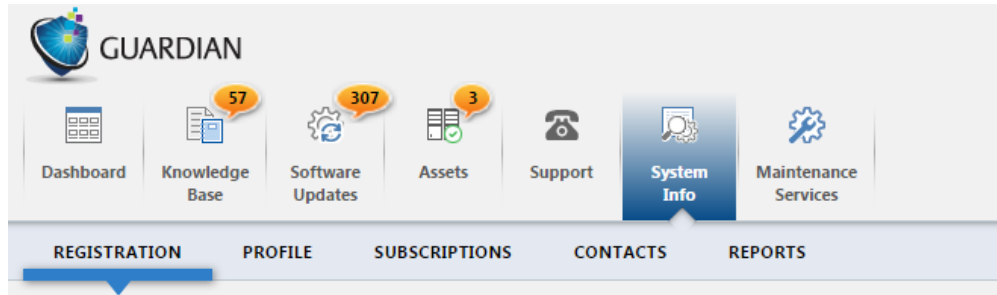
Figure – Go to the Registration page under the System Info tab

Figure – Registration File Upload page

Section 6 – Service Subscriptions

6.1 Subscriptions

Service Subscription Name	Expiration	Remaining
Foundation Support	01 Aug 2018	Expired
System Health Monitoring	01 Mar 2019	1 month
Upgraded System Create	01 Jul 2020	17 months
[EC-NA-REG-01] Factory Module Replacement	01 Jul 2020	17 months
DeltaV System Analysis Reports	01 Aug 2020	18 months
Guardian Support for DeltaV Systems	01 Sep 2020	19 months

Table – Service Subscription

Section 7 – License Assignment

7.1 System Wide License Utilization

License Name		Units	Capacity	Configured	Difference	Utilization
System Size		DSTs	13600	7509	6091	**55.21%**
Configuration Audit Trail		DSTs	9500	0	9500	**0.00%**
Detailed Usage of system DSTs: **** (Shortage of lower-tiered license is covered by any of the tiers above them)*						
Tier 1	Analog Outputs	DST	1175	339	836	**28.85%**
Tier 2	Analog Inputs	DST	3275	2350	925	**71.76%**
Tier 3	Discrete Outputs	DST	2950	2062	888	**69.90%**
Tier 4	Discrete Inputs	DST	3800	2758	1042	**72.58%**

Table – License Assignment

Commentary:

- Licensee company and licensee location are the same as the End-user Company and End-User location.

- Licenses issued for the system are not exceeded by the user's system configuration as of 01 Oct 2018.

Section 8 – Material Returns

Commentary: No material returns from customer relating to the DeltaV product.

Section 9 – Software Updates

Emerson recommended that you review:

Approval Status	Description
Do Not Install	It has been determined that the update is <u>NOT COMPATIBLE</u> with DeltaV systems. The update should not be installed.
Not Approved	It has been determined that the vulnerability does not exist on DeltaV systems. The update will not be tested for compatibility with the DeltaV software and it should not be installed on DeltaV systems.
Approved	It has been determined that the vulnerability will exist on DeltaV systems, and the update has been tested and approved for installation on DeltaV systems.
Approved As Needed	It has been determined that the vulnerability will only exist when optional Microsoft products or operating system components are in use.

The table below shows the breakdown of For Review software updates matched to the nodes of your system. From all these nodes, there are a total of *13 distinct software updates for review.*

Node Name	Do Not Install	Not Approved	Approved	Approved As Needed
APLWS	0	0	9	44
OPRWS10	0	0	9	28
OPRWS11	0	0	9	28
OPRWS12	0	0	9	28
OPRWS13	0	0	9	28
OPRWS14	0	0	9	28
OPRWS15D	0	0	9	28
OPRWS1D	0	0	9	28
OPRWS2	0	0	9	28
OPRWS3	0	0	9	28
OPRWS4	0	0	9	28
OPRWS4D	0	0	9	28
OPRWS5	0	0	9	28
OPRWS6	0	0	9	28
OPRWS7	0	0	9	28
OPRWS9	0	0	9	28
PROPLUS	0	0	9	44

Table – OS Security Updates

Node Name	Approved
APLWS	2
OPRWS10	2
OPRWS11	2
OPRWS12	2
OPRWS13	2
OPRWS14	2
OPRWS15D	2
OPRWS1D	2
OPRWS2	2
OPRWS3	2
OPRWS4	2
OPRWS4D	2
OPRWS5	2
OPRWS6	2
OPRWS7	2
OPRWS9	2
PROPLUS	2
System	2

Table – DeltaV Hotfixes

{End of Report}

Global Service Center – Online and Email Contact Information

Your Single Point-of-Contact for Factory Support and Service.

Web: Guardian Support: https://guardian.emerson.com
Guardian Support coverage required.

E-Mail: ap-sms@emerson.com

Hours of Operation

For DeltaV, DeltaV SIS, AMS Device Manager, Handheld Field Communicators, Syncade, Machinery Health, and CSI brand products – 24 hours a day, 7 days a week.

For CSI 4500 – 24 hours a day, 7 days a week. Technical Support may require a Sustain Support plan.

For RS3 & PRoVOX – Regular hours of support are 7:30 AM to 5:30 PM Mon.-Fri. Caller's Local Time.*
Technical Support may require a Sustain Support plan.

Hours listed above are for customers located in North and Latin America. Regular hours of operation for PRoVOX and RS3 Support in other world areas may vary depending on local country guidelines.

Emergency Support is available 24 hours a day. *Please use telephone access to obtain support for emergency situations after normal business hours. Requests for assistance via email or the Internet support web site are only monitored during regular hours of operation.*

Please note that you will be asked to provide the following information for verification process and call ticket creation:
- **Product Line** *(DeltaV, AMS Device Manager, Syncade, Machinery Health and CSI brand products, Field Communicators)*
- **Product Version**
- **Serial Number** *(For Field Communicators, Machinery Health and CSI brand products, other devices)*; or **System ID** *(For DeltaV, AMS Device Manager, Syncade, Machinery Health and CSI brand products)*
- Is the system in Testing/Commissioning/New Project phase? If YES, provide Target Completion Date

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