

Security Bulletin

No: M-08-19-03-V2

Category: Cybersecurity

Date: October 2019

WARNING - IMPORTANT - PLEASE READ

"URGENT/11" Vulnerabilities in PACSystems RX3i and RSTi-EP

Summary

As part of the US-CERT vulnerability disclosure process, Wind River® recently disclosed multiple vulnerabilities affecting the Wind River® VxWorks operating system., VXWorks is the real time operating system used in the PACSystems RX3i and RSTi-EP products. These vulnerabilities are known collectively as "URGENT/11" and arise from defects in the TCP/IP implementation. Successful exploitation of these vulnerabilities may allow attackers to execute denial of service (DoS) and/or remote code execution (RCE) attacks.

At Emerson, we are committed to developing secure and reliable products and have taken a *Defense in Depth* approach. As part of our development process, we actively monitor and adapt to cybersecurity vulnerabilities such as this one and recommend mitigation actions to our customers to help you secure your control networks.

Part Number	Affected Version
EPSCPE100	PACSystems RSTi-EP CPE100/CPE115
EPSCPE115	Firmware Versions 9.71 and prior
IC695CPE302	
IC695CPE305	
IC695CPE310	PACSystems RX3i CPE3xx/CPE4xx/CPL410
IC695CPE330	Firmware Version 9.75 and prior
IC695CPE400	
IC695CPL410	
IC695PNS001	PACSystems RX3i PNS001/PNS101
IC695PNS101	Firmware Version 3.15 and prior
IC695PNC001	PACSystems RX3i PNC001
	Firmware Version 3.11 and prior
IC695ECM850	PACSystems RX3i ECM850
	Firmware Version 1.00 and prior

Products Affected

Vulnerabilities

Details of URGENT/11vulnerabilities are available from US-CERT in the <u>ICS-CERT Advisory</u> <u>ICSA-19-211-01</u>. Additional details are available from Wind River's <u>Security Advisory</u>.

Resolution

Emerson has carefully reviewed the security vulnerabilities and have concluded that updating the affected products is the best course of action.

The firmware that resolves this depends on the part number.

Part Number	Hardware Version	Firmware Update Version	
EPSCPE100 EPSCPE115	All Versions	9.85	
IC695CPE302 IC695CPE305 IC695CPE310 IC695CPE330 IC695CPE400 IC695CPL410	All Versions	9.90	
IC695PNS001	Bxxx	3.20	
IC695PNS101	All Versions	3.20	
IC695PNC001	Bxxx	Pending **	
IC695ECM850	Pending **	Pending **	

** Products identified as pending are still under evaluation to determine the appropriate next steps.

- 1) Watch for the security bulletin update confirming Emerson has completed the validation of the hardware and/or firmware update for the pending products.
- 2) Once available, download the Updates and apply these to the affected products.

Action Recommended

Emerson recommends that customers update product firmware using the appropriate firmware download links, which can be accessed from our product Landing Pages.

Product Landing Pages

EPSCPE100 - https://digitalsupport.ge.com/en_US/Article/EPSCPE100-Landing-Page - Upgrade Kit: 41G2393-MS10-000-A5.zip EPSCPE115 - https://digitalsupport.ge.com/en_US/Article/EPSCPE115-Landing-Page - Upgrade Kit: 41G2556-MS10-000-A2.zip IC695CPE302 - https://digitalsupport.ge.com/en_US/Article/IC695CPE302-Landing-Page - Upgrade Kit: CPE302_FW9_90_41G2552-FW01-000-A3.zip IC695CPE305 - https://digitalsupport.ge.com/en US/Article/IC695CPE305-Landing-Page - Upgrade Kit: CPE305 FW9 90 41G1733-MS10-000-A20.zip IC695CPE310 - https://digitalsupport.ge.com/en US/Article/IC695CPE310-Landing-Page - Upgrade Kit: CPE310_FW9_90_41G1734-MS10-000-A20.zip IC695CPE330 - https://digitalsupport.ge.com/en_US/Article/IC695CPE330-Landing-Page - Upgrade Kit: CPE330 FW9 90 41G2016-FW01-000-A16.zip IC695CPE400 - https://digitalsupport.ge.com/en_US/Article/IC695CPE400-Landing-Page - Upgrade Kit: CPE400 FW9 90 41G2376-FW01-000-A7.zip IC695CPL410 - https://digitalsupport.ge.com/en_US/Article/IC695CPL410-Landing-Page - Upgrade Kit: CPL410_FW9_90_41G2617-FW01-000-A3.zip IC695PNS001 - https://digitalsupport.ge.com/en US/Article/IC695PNS001-Landing-Page - Upgrade Kit: 41G2416-FW01-000-A4.zip IC695PNS101 - https://digitalsupport.ge.com/en US/Article/IC695PNS101-Landing-Page - Upgrade Kit: 41G2416-FW01-000-A4.zip

Note: A customer support account is required to access firmware.

Defense in Depth

To minimize the risk of exposure to this and any other vulnerabilities, Emerson recommends a defense in depth approach to protecting critical process control equipment. Guidance on technology and best practices to secure Emerson controllers from cyber-attack can be found in the published Secure Deployment Guides for each of the platforms located at:

https://digitalsupport.ge.com/en_US/Documentation/PACSystems-RXi-RX3i-and-Rx7i-Controller-Secure-Deployment-Guide-GFK-2830

Emerson Contact Information

You can also contact our Technical Support team with any technical questions. Detailed contact information is provided on the following page. Make sure you have a Customer Service Number (CSN) when calling us. If you don't have one, sign up here: <u>https://ge-ip.force.com/communities/CC_SignupPassword.</u>

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.

Revision History

Revision #	Changes	Date
2	IC695CPE302, IC695CPE305, IC695CPE310, IC695CPE330, IC695CPE400, IC695CPL410, IC695PNS001, IC695PNS101upgrade kits	04OCT2019
1	EPSCPE100 & EPSCPE115 upgrade kits	27AUG2019
0	Original	16AUG2019

Contact Details

<u>Submit a support case online at</u>: <u>https://ge-</u> ip.force.com/communities/CC_CommercialViewCases?type=all

Technical Support (Americas)

Online: <u>https://ge-ip.force.com/communities/CC_CommercialViewCases?type=all</u> Phone: 1-800-433-2682 780-420-2010 (if toll free 800 option is unavailable) *Primary language of support: English*

Technical Support (Europe, Middle East, & Africa)

Online: <u>https://ge-ip.force.com/communities/CC_CommercialViewCases?type=all</u> Phone: +800-1-433-2682 (Choose Language> Option 2> CSN>Option 2) +352-26-722-780 (if toll free 800 option is unavailable or dialing from a mobile telephone) *Primary languages of support: English, French, German, Italian, Spanish*

Technical Support (Asia)

Online: <u>https://ge-ip.force.com/communities/CC_CommercialViewCases?type=all</u> Phone: +86-400-820-8208 +86-21-3217-4826 (India, Indonesia & Pakistan) *Primary language of support: Standard Mandarin*

Customer Care (Americas)

Phone: (800) 433-2682 or 780-420-2010 Option 1 (Automation), Option 2 (Enter CSN) ... then Option 1 (Customer Care), Option 5 (Speak to Advocate) Email: <u>customercare.ip@ge.com</u> Primary language of support: English

Customer Care (Europe, Middle East, and Africa)

Phone: +800-1-433-2682 Choose Language> Option 2> CSN>Option 2 General Email: <u>customercare.emea.ip@ge.com</u> Primary languages of support: English, French, German, Italian, Czech, Spanish

Customer Care (Asia)

Phone: +86-400-820-8208 Phone: +86 21-3217-4826 (for India, Indonesia and Pakistan) Greater China: <u>Customercare.cn.ip@ge.com</u> Rest of Asia: <u>Customercare.apo.ip@ge.com</u>