WOODWARD

Security Bulletin **01666**
(12/2019)

Urgent/11 Patch – MicroNet P1020 CPU

Issue

As announced in August of 2019 (see Security Bulletin 01661), a set of vulnerabilities known as "Urgent/11" were discovered in the network stack (IPnet) within the Wind River VxWorks Real-Time Operating System software versions 6.5 and later. This operating system is used on the MicroNet Plus P1020 CPUs.

Woodward has integrated patches provided by Wind River into the CPU Footprint software and is now in the final stages of verification testing. This security bulletin addresses how to patch the P1020 CPUs (the "Affected Unit") and to make the necessary changes to the system to accommodate the updated CPU.

Description

The patching and update process described in this bulletin addresses the following vulnerabilities:

CVE-2019-12255, CVE-2019-12260, CVE-2019-12261, CVE-2019-12263 CVE-2019-12256, CVE-2019-12257, CVE-2019-12258, CVE-2019-12262, CVE-2019-12264, CVE-2019-12259, CVE-2019-12265

Affected Units

MicroNet Plus: 5466-1510 and 5466-1520 CPU

Please note that these CPUs may be components in systems or cabinet assemblies manufactured by the turbine OEM, by Woodward or by Woodward Partners

Corrective Action

These CPUs previously used VxWorks version 6.9.4.5. A patch was not available for this version of VxWorks so it is necessary to update the CPU Footprint to a newer version of VxWorks.

- To patch these CPUs, a new Service Pack is installed containing 6.9.4.11. The Service Pack can be installed on site using AppManager.
- A new Coder (version 1.02-0) has been released for the MicroNet Plus. Because the VxWorks version number match is enforced by Coder, it is necessary to update the GAP Application software on the system at the same time the Service Pack is installed.
- If the system uses a Woodward Core, updated Core software must be incorporated into the GAP Application.

Please contact your system support resource (turbine OEM, Woodward Channel Partner or Woodward) for assistance in performing this upgrade.

The CPU part numbers with the patched Footprint are 5466-1511 and 5466-1521. Your support resource can also log the upgrade into Woodward's system so that our serial number records are correctly updated. Woodward can provide you with an updated nameplate showing the new part numbers if desired.

If a customer does not want to install the patch and upgrade the application, or desires a temporary solution until the upgrade can be implemented, a third party security device capable of blocking TCP packets containing the URG flag can be installed. Installation and setup of such devices should be managed by trained IT professionals.

Reference Information

- Service Pack to upgrade the CPUs: 9927-2763
- Coder version required: MicroNet 1.02-0 or later

Additional Information
ICS Advisory 19-211-01: https://www.us-cert.gov/ics/advisories/icsa-19-211-01

Wind River Security Advisory: https://www.windriver.com/security/announcements/tcp-ip-network-stack-ipnet-urgent11/security-advisory-ipnet/

Copyright © Woodward, Inc. 2019
All Rights Reserved

WOODWARD

PO Box 1519, Fort Collins CO 80522-1519, USA
1041 Woodward Way, Fort Collins CO 80524, USA
Phone +1 (970) 482-5811

Email and Website—www.woodward.com

Woodward has company-owned plants, subsidiaries, and branches, as well as authorized distributors and other authorized service and sales facilities throughout the world.

Complete address / phone / fax / email information for all locations is available on our website.