

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

August 17, 2021

SECURITY ADVISORY FOR POWER REACTORS, INCLUDING THOSE UNDER CONSTRUCTION; NONPOWER PRODUCTION AND UTILIZATION FACILITIES; DECOMMISSIONING REACTORS, INCLUDING THOSE THAT ARE PERMANENTLY DEFUELED BUT HAVE NOT TRANSITIONED TO DECOMMISSIONING; FUEL FABRICATION, ENRICHMENT, AND CONVERSION/DECONVERSION FACILITIES; INDEPENDENT SPENT FUEL STORAGE INSTALLATIONS; LICENSEES POSSESSING SPECIAL NUCLEAR MATERIAL UNDER TITLE 10 OF THE CODE OF FEDERAL REGULATIONS PART 70; LICENSEES REGULATED UNDER TITLE 10 OF THE CODE OF FEDERAL REGULATIONS PART 37; AND ALL RADIATION CONTROL PROGRAM DIRECTORS AND STATE LIAISON OFFICERS

SA 2021-10

SUBJECT: SITUATIONAL AWARENESS—BLACKBERRY QNX VULNERABILITY

On August 17, 2021, the U.S. Department of Homeland Security Cybersecurity and Infrastructure Security Agency (DHS/CISA) published Alert AA21-229A, "BadAlloc Vulnerability Affecting BlackBerry QNX RTOS" (https://us-cert.cisa.gov/ncas/alerts/aa21-229a). This alert describes an exploitable vulnerability in the BlackBerry QNX real-time operating system (RTOS). The QNX RTOS is used in a variety of applications, including industrial control systems. An RTOS with exploitable vulnerabilities may enable actors to deny system availability, exfiltrate data, and move laterally within the systems in which they are installed. The U.S. Nuclear Regulatory Commission (NRC) is issuing this security advisory to provide situational awareness to its licensees and Agreement States.

The NRC recommends that all licensees review the CISA alert and associated releases and take appropriate mitigative actions in accordance with licensee procedures and, where applicable, cyber security plans.

Reporting suspicious activity is important to the U.S. Government's security mission. The NRC encourages its licensees to remain vigilant and report cyber-related suspicious activity to CISA. Licensees subject to Title 10 of the *Code of Federal Regulations* (10 CFR) 73.54, "Protection of digital computer and communication systems and networks," are reminded of their obligation to report to the NRC certain cyber-related events under 10 CFR 73.77, "Cyber security event notifications."

If you have any questions concerning this advisory, contact the technical point of contact below.

Backfit Analysis Statement: This security advisory does not amend or impose new requirements or constitute a new or different regulatory staff position interpreting Commission rules and, therefore, does not constitute backfitting as defined in 10 CFR 50.109, "Backfitting," or 10 CFR 70.76, "Backfitting," or 10 CFR 72.62, "Backfitting." Consequently, the staff did not perform a backfit analysis.

Paperwork Reduction Act Statement: This security advisory does not contain information collections and, therefore, is not subject to the requirements of the Paperwork Reduction Act of 1995 (Title 44 of the *United States Code*, Section 3501, et seq.).

/RA/

Approved by:

James T. Keene, Acting Director Division of Security Operations Office of Nuclear Security and Incident Response

Technical Contact: Brian Yip, NSIR

301-415-3154 brian.yip@nrc.gov

SUBJECT: SITUATIONAL AWARENESS—BLACKBERRY QNX VULNERABILITY; DATED: August 17, 2021

OFFICE	NSIR/DPCP/CSB	NSIR/DSO/SOSB	NSIR/DPCP/CSB	NSIR/DSO/ILTAB	QTE
NAME	BYip	SSullivan	JBeardsley	DDavis	KAzariah-Kribbs
DATE	8/5/2021	8/5/2021	8/6/2021	8/6/2021	08/10/2021
OFFICE	OGC/GCRPS/HLWFCNS/NLO	NMSS/MSST	NSIR/DPCP	NRR/DNRL	NPR/DNRL
NAME	JMaltese	KWilliams	SHelton	ABradford	MShams
DATE	8/11/2021	08/09/2021	08/9/2021	8/6/2021	08/6/2021
OFFICE	NMSS/DUWP	NSIR/DPR	NSIR/DSO	NSIR	NMSS/DUWP
OFFICE NAME	NMSS/DUWP PBo	NSIR/DPR KBrock	NSIR/DSO SAtack	NSIR SLee	NMSS/DUWP PHolahan
			-		
NAME DATE	РВо	KBrock	SAtack	SLee	PHolahan
NAME DATE	PBo 8/9/2021	KBrock 8/6/2021	SAtack 8/10/2021	SLee	PHolahan

OFFICIAL RECORD COPY