FAQ for the GRUB2 issue

Q:

After performing BIOS update to the latest version, the system can't boot and hangs up with the following error message:

"The system boot stopped: caused by secure boot detecting an invalid secure boot signature. Please check the FAQ at https://www.supermicro.com/support/secureboot.pdf"

What are the proper procedures to upgrade BIOS that contains the above error message? What is a proper procedure to upgrade to GRUB2 that contains the fix for vulnerability CVE-2020-10713 (also known as "BootHole" or a "Hole in the Boot")?

A:

American Megatrends (AMI) released Security advisory SA-50085 with the following enhancement: "3rd-party UEFI CA signature" added to the DBx (Forbidden Signature Database) due to known vulnerability (CVE-2020-10713 with severity 8.2) in Linux "GRUB2 loader" which can potentially allow for Secure Boot bypass.

For a Secure Boot enabled system, a new version BIOS will block affected GRUB2 (prior to version 2.06) from booting, thus upgrading GRUB2 prior to BIOS update is required to guarantee system normal operation. If BIOS is already upgraded and runs into the unbootable situation, a temporary solution is to disable Secure Boot, then be able to boot into OS and apply GRUB2 fix.

This is the CVE definition: https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2020-10713

Solution: please downgrade BIOS to previous version and upgrade GRUB2 loader. Then perform BIOS upgrade to the latest BIOS firmware level.

Please check below linkage for more information about this vulnerability from OS perspective, and find procedures to update GRUB2 for each different OS distribution.

Microsoft

https://portal.msrc.microsoft.com/en-US/security-guidance/advisory/ADV200011

Ubuntu/Canonical CVE-2020-10713

https://ubuntu.com/security/notices/USN-4432-1

Debian

CVE-2020-10713

https://www.debian.org/security/2020-GRUB-UEFI-SecureBoot/

Redhat

CVE-2020-10713

https://access.redhat.com/security/vulnerabilities/grub2bootloader

SUSE

CVE-2020-10713

https://www.suse.com/c/suse-addresses-grub2-secure-boot-issue/

VMware

https://kb.vmware.com/s/article/80181