July 20, 2018

# TDSCSA00436 : Multiple Vulnerabilities in CANVIO Network Storage Products

Toshiba Electronic Devices & Storage Corporation

■ Overview

There are multiple vulnerabilities including remote arbitrary code execution in the CANVIO (STOR.E) wireless products and NAS products (the "Affected Network Storage Product"). Please stop using them or apply the workarounds so that these may mitigate the impact of these vulnerabilities.

■ Affected Network Storage Products

| Product Category | Product Name (varied by location) | Model No. | Firmware Version |
|---|---|---|---|
| Wireless products | CANVIO AeroCast  /  CANVIO AeroCast wireless HDD | HDTU110*KWC1 | 1.2.8 or earlier |
| | CANVIO Wireless Adapter /  STOR.E Wireless Adapter  /  CANVIO Cast Wireless Adapter | HDWW100*KW*1 | 2.0.7 or earlier |
| NAS products | CANVIO  PERSONAL CLOUD /  CANVIO  HOME | HDNB1*0*E*1 | 0011.3050 or  earlier |

Note: An asterisk mark (*) is an alphanumeric character.

■ Impact

OSS modules in the Affected Network Storage Products, including samba, have known vulnerabilities including CVE-2017-7494. The details are shown in the following "OSS module list".

These vulnerabilities allow remote attackers to cause information leakage / modification, and to potentially take control of the Affected Network Storage Products.

<Vulnerabilities OSS module list>

**TOSHIBA**
Leading Innovation ≫

■ Workarounds

・Please understand that the impact may occur if you continue to use the Affected Network Storage Products.

・The following workarounds may mitigate the impact of these vulnerabilities in the Affected Network Storage Products.

| Connection types | Method to mitigate the impact of these vulnerabilities | |
|---|---|---|
| | **NAS product** | **Wireless product** |
| Via home broadband network | Filter traffic related to the vulnerabilities using a firewall device, such as a broadband router. | Set Wireless product up to AP mode.　*1 *2 |
| Via wireless LAN | Confirm that there are no wireless communication devices within your local network. | 1. Update the latest firmware that fixed WPA2 vulnerabilities of Wireless product. <br> 2. Change the default password to a unique password. |
| Via mobile broadband network (smart phone, tablet, WWAN-equipped PC, etc.) *3 | | Disconnect from WWAN　*3 |

*1: Please be sure to download the user manual and read it carefully prior to setup.

*2: Please be sure to update the latest firmware that addressed WPA2 vulnerabilities.

*3: WWAN means "Wireless Wide Area Network".

Note: Toshiba Electronic Devices & Storage Corporation terminates the software update for the Affected Network Storage Product.

Note: Please be sure to apply the appropriate firmware update according to the information provided by the manufacturer of any devices that are connected to the Affected Network Storage Product.

<Vulnerabilities attack route>



<Wireless products>
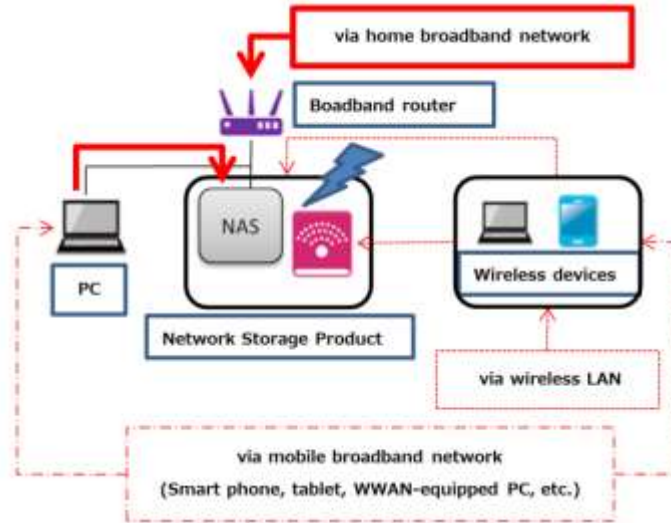
Different connection modes

・AP (access point) mode is to mitigate the impact of these vulnerabilities.

・Please be aware that it is possible that in station and bridge mode vulnerabilities can occur.



※1:You cannot use Chromecast™ function after the setup".

※ Chromecast is trademark of Google, Inc.

| Product Name | Manual |
|---|---|
| CANVIO AeroCast  /<br>CANVIO AeroCast wireless HDD | > Download |
| CANVIO Wireless Adapter /<br>STOR.E Wireless Adapter  /<br>CANVIO Cast Wireless Adapter | > Download |

■ Reference

・The latest firmware to address WPA2 vulnerability

・ Common Vulnerability Scoring System SIG

・Software Update Service Termination for CANVIO Network Storage Products

■Contact Information

Please visit the following website and choose Consumer Storage Solutions website in your region.

**About Toshiba Electronics Asia (Singapore)**

Toshiba Electronics Asia (Singapore) is under Toshiba Storage and Electronic Devices Solutions Company, a subsidiary of Toshiba Corporation. TEA was founded in 1990, and is responsible for the sales, marketing and services for Toshiba's wide range of storage solutions in Asia Pacific. TEA is the best partner to consumers and enterprises, and its mission is to offer the best services and products that embodies the highest quality and cutting edge technology. To find out more about TEA, visit https://www.toshiba-storage.asia/

**About Toshiba**

Toshiba Corporation is a world-leading diversified manufacturer, solutions provider and marketer of advanced electronic and electrical products and systems. Toshiba Group brings innovation and imagination to a wide range of businesses: digital products, including LCD TVs, notebook PCs, retail solutions and MFPs; electronic devices, including semiconductors, storage products and materials; industrial and social infrastructure systems, including power generation systems, smart community solutions, medical systems and escalators & elevators; and home appliances. Toshiba was founded in 1875, and today operates a global network of consolidated companies, with 200,000 employees worldwide and annual sales surpassing US$63 billion. To find out more about Toshiba, visit www.toshiba.co.jp/index.htm

---

[1] One Gigabyte (1GB) means $10^9$ = 1,000,000,000 bytes and One Terabyte (1TB) means $10^{12}$ = 1,000,000,000,000 bytes using powers of 10. A computer operating system, however, reports storage capacity using powers of 2 for the definition of 1GB = $2^{30}$ = 1,073,741,824 bytes and 1TB = $2^{40}$ = 1,099,511,627,776 bytes, and therefore shows less storage capacity. Available storage capacity (including examples of various media files) will vary based on file size, formatting, settings, software, operating system and other factors.