

## Advisory on Protecting Stryker Navigation Platforms against Cybersecurity Attacks

To: Stryker Navigation Customers  
 Cc: Stryker Navigation Sales Representatives  
 Date: 2017-08-21

### Description

Global cybersecurity attacks continue to threaten networked computers. A recent attack by the cryptoworm WannaCry targets computers running Windows operating systems by encrypting data and demanding ransom payments.

To date, Stryker has received no reports of impacts on Stryker Navigation Systems caused by this malware. However, Stryker continues to monitor the situation that is affecting healthcare facilities across the globe given the widespread impact of WannaCry malware.

Stryker Navigation Systems are equipped with security features, such as antivirus software and a firewall. If operated and maintained correctly, these features effectively prevent the system from being affected by cybersecurity attacks, such as by WannaCry. Microsoft recently made available security patches for the most current Windows operating system versions and for older versions, including Windows XP. This advisory provides instructions on how to apply these patches and describes additional precautions that we recommend you to take to further strengthen the security footprint of your Stryker Navigation System.

### Platform Overview

The following Stryker Navigation Platforms were evaluated for impact:

**Table 1 Stryker Navigation platforms in scope of this advisory**

Catalog Number	Product Name/ Installed Computer	Operating System Version
7700-600-000	Stryker ADAPT Platform / Stryker PC-3.1	Windows 8.1 Embedded Industry Pro
7700-700-000	Stryker NAV3 Platform / Stryker PC-3.1	Windows 8.1 Embedded Industry Pro
7700-800-000	Stryker NAV3i Platform / Stryker PC-3.1	Windows 8.1 Embedded Industry Pro
7700-009-100	NavSuite3 Kit / Stryker PC-3.1	Windows 8.1 Embedded Industry Pro
7700-600-000	Stryker ADAPT Platform / Stryker PC-3	Windows XP Professional Service Pack 3
7700-700-000	Stryker NAV3 Platform / Stryker PC-3	Windows XP Professional Service Pack 3
7700-800-000	Stryker NAV3i Platform / Stryker PC-3	Windows XP Professional Service Pack 3
7700-009-100	NavSuite3 Kit/ Stryker PC-3	Windows XP Professional Service Pack 3
7700-112-004	NavSys II / Stryker PC-3	Windows XP Professional Service Pack 3

To identify your platform type and computer type, check the labels on the platform and on the computer. If you use a platform that is not listed in the table, contact your Stryker sales representative.

### Impact Assessment

- Platforms based on **Windows 8.1 Embedded Industry Pro**: The systems are equipped with an antivirus software. If you keep the virus definition files up-to-date as described below and in the

NAV3i Platform Family IT and Technical Guide (TD7700800750), malware will be detected and eliminated by the antivirus software.

- Platforms based on **Windows XP Professional Service Pack 3**: The systems are equipped with a firewall for which the port necessary for “File and Printer Sharing” is disabled by default (i.e. ports 139, 445, 3389 are blocked by the firewall). The systems are also protected by an antivirus software. If you keep the virus definition files up-to-date as described below, malware will be detected and eliminated by the antivirus software.

## Recommended Mitigations

Stryker recommends you to implement the following measures in order to stay protected from malware:

- If you do not use functions that require network integration, keep the platform disconnected from the network. Otherwise connect the platform only to secured hospital networks.
- Regularly secure offline backups of cases stored on the platform.
- In the hospital firewall, block incoming traffic to the platform on ports 139 and 445.
- Insert only secure USB sticks and CDs/DVDs.
- Control all physical access to the platform.
- Apply Microsoft security updates and regularly update virus definition files as described in the remaining sections of this advisory.

## Apply Microsoft Security Updates

Follow the instructions closely. Only the updates listed below are validated. The installation of other software or additional updates may compromise proper system functioning.

### Instructions for Platforms based on Windows 8.1

Note: This procedure may take up to several minutes depending on your internet connection speed.

1. At a computer with internet access, open the Microsoft update catalog at <http://catalog.update.microsoft.com> in an internet browser.
2. Enter **KB4022726** in the search dialog and click *Search*.
3. Download the file for Windows 8.1 for x64-based systems to a USB Stick (download package size is 235,4 MB):

Title	Products	Classification	Last Updated	Version	Size	Add All
2017-06 Security Monthly Quality Rollup for Windows Server 2012 R2 for x64-based Systems (KB4022726)	Windows Server 2012 R2	Security Updates	6/9/2017	n/a	235.4 MB	Add
2017-06 Security Monthly Quality Rollup for Windows 8.1 for x64-based Systems (KB4022726)	Windows 8.1	Security Updates	6/9/2017	n/a	235.4 MB	Add
2017-06 Security Monthly Quality Rollup for Windows 8.1 for x86-based Systems (KB4022726)	Windows 8.1	Security Updates	6/9/2017	n/a	129.1 MB	Add

4. Insert the USB stick into the platform.
5. Start the platform and log in as *Service User*.
6. In Windows Explorer, navigate to the USB stick.
7. Double-click the downloaded update file. A dialog box appears.
8. Follow the instructions in the dialog box.
9. Restart the system after completion.

### Instructions for Platforms based on Windows XP

1. At a computer with internet access, click each of the download links for the security updates in the following table, and then download the update files to a USB stick (download package size is 18.5 MB). Ensure that you download the update files for *Windows XP* (**not** for *Windows XP Embedded* or *Windows XP x64 Edition*) and that you select the English version.

**Table 2 Security updates for Windows XP**

Title	Last Updated	Download Link
Security Update for Windows XP SP3 (KB4012598)	5/13/2017	<a href="http://catalog.update.microsoft.com/v7/site/Search.aspx?q=KB4012598%20Windows%20XP%20">http://catalog.update.microsoft.com/v7/site/Search.aspx?q=KB4012598%20Windows%20XP%20</a>
Security Update for Windows XP SP3 (KB4024402)	6/10/2017	<a href="http://catalog.update.microsoft.com/v7/site/Search.aspx?q=KB4024402%20Windows%20XP%20">http://catalog.update.microsoft.com/v7/site/Search.aspx?q=KB4024402%20Windows%20XP%20</a>
Security Update for Windows XP SP3 (KB4024323)	6/10/2017	<a href="http://catalog.update.microsoft.com/v7/site/Search.aspx?q=KB4024323%20Windows%20XP%20">http://catalog.update.microsoft.com/v7/site/Search.aspx?q=KB4024323%20Windows%20XP%20</a>
Security Update for Windows XP SP3 (KB4022747)	6/10/2017	<a href="http://catalog.update.microsoft.com/v7/site/Search.aspx?q=KB4022747%20Windows%20XP%20">http://catalog.update.microsoft.com/v7/site/Search.aspx?q=KB4022747%20Windows%20XP%20</a>
Security Update for Windows XP SP3 (KB4019204)	6/10/2017	<a href="http://catalog.update.microsoft.com/v7/site/Search.aspx?q=KB4019204%20Windows%20XP%20">http://catalog.update.microsoft.com/v7/site/Search.aspx?q=KB4019204%20Windows%20XP%20</a>
Security Update for Windows XP SP3 (KB4018466)	6/10/2017	<a href="http://catalog.update.microsoft.com/v7/site/Search.aspx?q=KB4018466%20Windows%20XP%20">http://catalog.update.microsoft.com/v7/site/Search.aspx?q=KB4018466%20Windows%20XP%20</a>
Cumulative Security Update for Internet Explorer 8 for Windows XP SP3 (KB4018271)	6/10/2017	<a href="http://catalog.update.microsoft.com/v7/site/Search.aspx?q=KB4018271%20Windows%20XP%20">http://catalog.update.microsoft.com/v7/site/Search.aspx?q=KB4018271%20Windows%20XP%20</a>
Security Update for Windows XP Service Pack 3 (KB4012583)	6/10/2017	<a href="http://catalog.update.microsoft.com/v7/site/Search.aspx?q=KB4012583%20Windows%20XP%20">http://catalog.update.microsoft.com/v7/site/Search.aspx?q=KB4012583%20Windows%20XP%20</a>
Security Update for Windows XP Service Pack 3 (KB3197835)	6/10/2017	<a href="http://catalog.update.microsoft.com/v7/site/Search.aspx?q=KB3197835%20Windows%20XP%20">http://catalog.update.microsoft.com/v7/site/Search.aspx?q=KB3197835%20Windows%20XP%20</a>
Security Update for Windows XP SP3 (KB4025218)	6/12/2017	<a href="http://catalog.update.microsoft.com/v7/site/Search.aspx?q=KB4025218%20Windows%20XP%20">http://catalog.update.microsoft.com/v7/site/Search.aspx?q=KB4025218%20Windows%20XP%20</a>
Security Update for Windows XP (KB982316)	5/19/2017	<a href="https://www.microsoft.com/en-us/download/details.aspx?id=18770">https://www.microsoft.com/en-us/download/details.aspx?id=18770</a>

2. Insert the USB stick into the platform.
3. Start the platform and log in with the service account: On NavSys II platforms, enter **NavigationService**. On Stryker NAV3i/NavSuite3/NAV3/ADAPT platforms, select *Service*.
4. In Windows Explorer, navigate to the USB stick.
5. For each update file, double-click the update file to execute the update, and then follow the instructions in the dialog box.
6. Restart the system after completion.

Update of Virus Definition Files

Update the virus definition files of the antivirus software to the most current level and keep them updated in regular intervals.

**Instructions for Platforms based on Windows 8.1**

1. At a computer with internet access, open <http://www.microsoft.com/security/portal/definitions/adl.aspx> in an internet browser.
2. Scroll to the table that contains the antivirus and antispyware definitions, and then click the link for the 64-bit version of Windows Defender for Windows 8.1 to download the file. Save the file to a USB stick.
3. Insert the USB stick into the platform.
4. Start the platform and log in as *Service User*.
5. In Windows Explorer, navigate to the USB stick.
6. Right-click the downloaded update definition file, and then click *Run as administrator*.
7. After completion, verify that the update was successful: Go to the Windows Control Panel, and then click Windows Defender. Click the *Update* tab and verify that the entry under *Virus and spyware definitions* is *Up to date*.
8. Restart the system.

## Instructions for Platforms based on Windows XP

1. At a computer with internet access, open <http://www.mcafee.com/apps/downloads/security-updates/security-updates.aspx> in an internet browser.
2. Download the V2 virus definition \*.exe file to a USB stick.
3. Insert the USB stick into the platform.
4. Start the platform and log in with the service account: On NavSys II platforms, enter **NavigationService**. On Stryker NAV3i/NavSuite3/NAV3/ADAPT platforms, select *Service*.
5. Execute the \*.exe file from the USB stick.
6. Restart the system after completion.

In case of additional questions, contact your Stryker sales representative.

Thank you.