



## **CVE-2021-34527 (“PrintNightMare”) Windows Print Spooler Remote Code Execution Vulnerability Boston Scientific iLAB™, POLARIS™ & AVVIGO™ Systems**

The remote code execution (RCE) vulnerability identified in the Microsoft Windows Print Spooler Service known as PrintNightMare or CVE-2021-34527 has low risk of impacting the Boston Scientific iLAB™ Ultrasound Imaging System, POLARIS™ Multi-Modality Guidance System, and AVVIGO™ Guidance System. After an evaluation of devices currently in use, we can confirm that, to date, we have not received any feedback that the aforementioned products have been affected by the PrintNightMare vulnerability.

### **Vulnerability Detail:**

The iLAB, POLARIS, and AVVIGO Systems are built on the Microsoft Windows operating system. According to Microsoft, a remote code execution vulnerability exists when the Windows Print Spooler Service improperly performs privileged file operations. An attacker who successfully exploits this vulnerability could run arbitrary code with SYSTEM privileges. An attacker could then install programs, view, change, delete data, or create new accounts with full user rights.

Note: While first-generation AVVIGO systems are vulnerable to this CVE, the AVVIGO Guidance System II is not vulnerable to CVE-2021-34527 PrintNightmare Windows Print Spooler Remote Code Execution Vulnerability.

### **Recommendations:**

Customers who are concerned about the susceptibility of iLAB, POLARIS, and AVVIGO Systems in their Cath Lab can employ the following temporary measure to reduce the likelihood of exposure:

1. Disconnect the system from the clinic network. This will disable the connection to the PACS system, but will have no effect on the clinical use of the system. Data can still be archived to PACS using removable media as described in the IFUs.

Customers in a region in which POLARIS 2.14 software and beyond is approved, we recommend contacting your local sales team to schedule an update.

Please contact your field service representative with any questions about these precautionary measures or any other concerns regarding our response to this matter.

Note: Concerned customers with POLARIS and/or AVVIGO systems, we recommend contacting your Boston Scientific sales representatives to discuss AVVIGO upgrade options.

**Full List of Affected Products:**

| AVVIGO Product # | AVVIGO Product Name      |
|------------------|--------------------------|
| H7490097610      | AVVIGO 1.0 Tablet US     |
| H7490097620      | AVVIGO 1.0 Tablet Europe |
| H7490097630      | AVVIGO 1.0 Tablet Japan  |

| Polaris Product # | POLARIS Model Name                       |
|-------------------|------------------------------------------|
| H74939322220CCD0  | POLARIS MOBILE CHINA 220V EVAL           |
| H74939322240CD0   | POLARIS MOBILE 240V EVAL                 |
| H74939322220CD0   | POLARIS MOBILE 220V EVAL                 |
| H74939322100CD0   | POLARIS MOBILE 100V EVAL                 |
| H7493932212BI0    | POLARIS INTEGRATED BRAZIL 120V           |
| H7493932212BIZ0   | POLARIS INTEGRATED BRAZIL 120V           |
| H74939322240IZ0   | POLARIS INTEGRATED 240V ZERO C           |
| H74939322220IZ0   | POLARIS INTEGRATED 220V ZERO C           |
| H74939322120IZ0   | POLARIS INTEGRATED 120V ZERO C           |
| H74939322100IH0   | POLARIS Integrated 100V Hospital         |
| H74939322100CH0   | POLARIS Mobile 100V Hospital             |
| H7493932212BCZ0   | POLARIS MOBILE BRAZIL 120V ZER           |
| H74939322100CZ0   | POLARIS MOBILE 100V ZERO COST            |
| H74939322100IZ0   | POLARIS INTEGRATED 100V ZERO C           |
| H74939322120CD0   | POLARIS MOBILE 120V EVAL                 |
| H74939322100I0    | POLARIS INTEGRATED 100V                  |
| H74939322100C0    | POLARIS MOBILE 100V                      |
| H74939322240I0    | POLARIS INTEGRATED 240V                  |
| H74939322220C0    | POLARIS MOBILE 220V                      |
| H74939322220CCZ0  | POLARIS MOBILE CHINA 220V ZERO           |
| H7493932222CI0    | POLARIS INTEGRATED CHINA 220V            |
| H74939322220I0    | POLARIS INTEGRATED 220V                  |
| H7493932222CC0    | POLARIS MOBILE CHINA 220V                |
| H7493932212BC0    | POLARIS MOBILE BRAZIL 120V               |
| H74939322240CZ0   | POLARIS MOBILE 240V ZERO COST            |
| H74939322220CZ0   | POLARIS MOBILE 220V ZERO COST            |
| H74939322120C0    | POLARIS MOBILE 120V                      |
| H74939322120I0    | POLARIS INTEGRATED 120V                  |
| H74939322120CZ0   | POLARIS MOBILE 120V ZERO COST            |
| H74939322240C0    | POLARIS MOBILE 240V                      |
| H7493932222CCM0   | POLARIS MOBILE CHINA 220V (MAH)          |
| H7493932222CCMZ0  | POLARIS MOBILE CHINA 220V ZEROCOST (MAH) |
| H7493932222CIM0   | POLARIS INTGD CHINA 220V (MAH)           |

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| H7493932222CIMZ0 | POLARIS INTGD CHINA 220V ZERO COST (MAH) |
| H74939322220CR0  | POLARIS MOBILE 220V REFURB               |
| H74939322100CR0  | POLARIS MOBILE 100V REFURB               |
| H74939322240CR0  | POLARIS MOBILE 240V REFURB               |
| H74939322120CR0  | POLARIS MOBILE 120V REFURB               |

| iLab Product #     | iLab Product Name              |
|--------------------|--------------------------------|
| H749ILAB100C270    | ILAB CART 100V 2.7             |
| H749ILAB100C27H0   | ILAB CART 100V 2.7 CUST OWNED  |
| H749ILAB100C27R0   | ILAB CART 100V 2.7 REFURB      |
| H749ILAB100C27Z0   | iLab CART 100V 2.7 ZERO        |
| H749ILAB100CART0   | iLab CART SYSTEM 100V          |
| H749ILAB100CARTD0  | iLab CART SYSTEM 100V DEMO     |
| H749ILAB100CARTH0  | ILAB CART 100V CUST OWNED      |
| H749ILAB100CARTR0  | ILAB CART SYSTEM 100V REFURB   |
| H749ILAB100CARTRN0 | iLab CART SYSTEM 100V RTN      |
| H749ILAB100CARTZ0  | iLab CART SYSTEM 100V ZERO COS |
| H749ILAB100INS0    | iLab INSTL BASIC SYSTEM 100V   |
| H749ILAB100INSR0   | iLab INSTL BASIC SYSTEM 100V   |
| H749ILAB100INSRN0  | iLab INSTL BASIC SYSTEM 100V   |
| H749ILAB100INSZ0   | iLab INSTL BASIC SYSTEM 100V Z |
| H749ILAB100N270    | ILAB INSTALL 100V 2.7          |
| H749ILAB100N27Z0   | iLab INSTALL 100V 2.7 ZERO     |
| H749ILAB120C270    | ILAB CART 120V 2.7             |
| H749ILAB120C2710   | ILAB CART 120V 2.7.1           |
| H749ILAB120C271R0  | ILAB CART 120V 2.7.1 REFURB    |
| H749ILAB120C271Z0  | iLab CART 120V 2.7.1 ZERO      |
| H749ILAB120C27B0   | ILAB CART 120V 2.7 BRAZIL      |
| H749ILAB120C27BZ0  | iLab CART 120V 2.7 BRAZIL ZERO |
| H749ILAB120C27R0   | ILAB CART 120V 2.7 REFURB      |
| H749ILAB120C27Z0   | iLab CART 120V 2.7 ZERO        |
| H749ILAB120CART0   | iLab CART SYSTEM 120V          |
| H749ILAB120CARTB0  | iLab CART SYSTEM 120V BRA      |
| H749ILAB120CARTBD0 | iLab CART SYSTEM 120V DEMO BRA |
| H749ILAB120CARTBZ0 | iLab CART SYSTEM 120V ZERO BRA |
| H749ILAB120CARTD0  | iLab CART SYSTEM 120V DEMO     |
| H749ILAB120CARTR0  | ILAB CART SYSTEM 120V REFURB   |
| H749ILAB120CARTRN0 | iLab CART SYSTEM 120V RTN      |
| H749ILAB120CARTZ0  | iLab CART SYSTEM 120V ZERO     |
| H749ILAB120INS0    | iLab INSTL BASIC SYSTEM 120V   |
| H749ILAB120INSB0   | iLab INSTL BASIC SYSTEM 120V B |
| H749ILAB120INSR0   | iLab INSTL BASIC SYSTEM 120V R |
| H749ILAB120INSRN0  | iLab INSTL BASIC SYSTEM 120V R |
| H749ILAB120INSZ0   | iLab INSTL BASIC SYSTEM 120V Z |
| H749ILAB120N270    | iLab INSTALL 120V 2.7          |

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| H749ILAB120N2710   | ILAB INSTALL 120V 2.7.1        |
| H749ILAB120N271Z0  | iLab INSTALL 120V 2.7.1 ZERO   |
| H749ILAB120N27B0   | ILAB INSTALL 120V 2.7 BRAZIL   |
| H749ILAB120N27Z0   | iLab INSTALL 120V 2.7 ZERO     |
| H749ILAB220C270    | ILAB CART 220V 2.7             |
| H749ILAB220C2710   | iLab CART 220V 2.7.1           |
| H749ILAB220C271R0  | ILAB CART 220V 2.7.1 REFURB    |
| H749ILAB220C271Z0  | iLab CART 220V 2.7.1 ZERO      |
| H749ILAB220C27R0   | iLab CART 220V 2.7 REFURB      |
| H749ILAB220C27Z0   | iLab CART 220V 2.7 ZERO        |
| H749ILAB220CART0   | iLab CART SYSTEM 220V          |
| H749ILAB220CARTD0  | iLab CART SYSTEM 220V DEMO     |
| H749ILAB220CARTR0  | ILAB CART SYSTEM 220V REFURB   |
| H749ILAB220CARTRN0 | iLab CART SYSTEM 220V RTN      |
| H749ILAB220CARTZ0  | iLab CART SYSTEM 220V ZERO COS |
| H749ILAB220INS0    | iLab INSTL BASIC SYSTEM 220V   |
| H749ILAB220INSR0   | iLab INSTL BASIC SYSTEM 220V R |
| H749ILAB220INSRN0  | iLab INSTL BASIC SYSTEM 220V R |
| H749ILAB220INSZ0   | iLab INSTL BASIC SYSTEM 220V Z |
| H749ILAB220N270    | ILAB INSTALL 220V 2.7          |
| H749ILAB220N2710   | iLab INSTALL 220V 2.7.1        |
| H749ILAB220N271Z0  | iLab INSTALL 220V 2.7.1 ZERO   |
| H749ILAB220N27Z0   | iLab INSTALL 220V 2.7 ZERO     |
| H749ILAB240C270    | ILAB CART 240V 2.7             |
| H749ILAB240C2710   | ILAB CART 240V 2.7.1           |
| H749ILAB240C271R0  | ILAB CART 240V 2.7.1 REFURB    |
| H749ILAB240C271Z0  | iLab CART 240V 2.7.1 ZERO      |
| H749ILAB240C27B0   | iLab CART 240V 2.7 BRAZIL      |
| H749ILAB240C27BZ0  | iLab CART 240V 2.7 BRAZIL ZERO |
| H749ILAB240C27R0   | ILAB CART 240V 2.7 REFURB      |
| H749ILAB240C27Z0   | iLab CART 240V 2.7 ZERO        |
| H749ILAB240CART0   | iLab CART SYSTEM 240V          |
| H749ILAB240CARTB0  | iLab CART SYSTEM 240V BRA      |
| H749ILAB240CARTBD0 | iLab CART SYSTEM 240V DEMO BRA |
| H749ILAB240CARTBZ0 | iLab CART SYSTEM 240V ZERO COS |
| H749ILAB240CARTD0  | iLab CART SYSTEM 240V DEMO     |
| H749ILAB240CARTP0  | iLab CART SYSTEM 240V Premium  |
| H749ILAB240CARTR0  | ILAB CART SYSTEM 240V REFURB   |
| H749ILAB240CARTRN0 | iLab CART SYSTEM 240V RTN      |
| H749ILAB240CARTZ0  | iLab CART SYSTEM 240V ZERO COS |
| H749ILAB240INS0    | iLab INSTL BASIC SYSTEM 240V   |
| H749ILAB240INSB0   | iLab INSTL BASIC SYSTEM 240V B |
| H749ILAB240INSR0   | iLab INSTL BASIC SYSTEM 240V R |
| H749ILAB240INSRN0  | iLab INSTL BASIC SYSTEM 240V R |
| H749ILAB240INSZ0   | iLab INSTL BASIC SYSTEM 240V Z |
| H749ILAB240N270    | ILAB INSTALL 240V 2.7          |

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|--------------------|---------------------------------------|
| H749ILAB240N2710   | iLab INSTALL 240V 2.7.1               |
| H749ILAB240N271Z0  | iLab INSTALL 240V 2.7.1 ZERO          |
| H749ILAB240N27B0   | iLab INSTALL 240V 2.7 BRAZIL          |
| H749ILAB240N27Z0   | iLab INSTALL 240V 2.7 ZERO            |
| H749ILABCARTINDEC0 | iLab CART SYSTEM 100V W/ INDEC        |
| H749ILABINSINDEC0  | iLab INSTL BASIC SYSTEM 100V W/ INDEC |
| H749ILABLOC24MM    | Location Mensuelle ILAB 24M           |
| H749ILABLOC24MT    | Location Trimestrielle ILAB 24M       |
| H749ILABLOC36MM    | Location Mensuelle ILAB 36M           |
| H749ILABLOC36MT    | Location Trimestrielle ILAB 36M       |
| H749ILABLOC48MM    | Location Mensuelle ILAB 48M           |
| H749ILABLOC48MT    | Location Trimestrielle ILAB 48M       |
| H749ILABLOC60MM    | Location Mensuelle ILAB 60M           |

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