

## **SSA-966341: SMBv1 Vulnerabilities in Molecular Diagnostics Products from Siemens Healthineers**

Publication Date 2017-05-17  
Last Update 2017-05-17  
Current Version V1.0  
CVSS v3.0 Base Score 9.8

### **SUMMARY**

Select Molecular Diagnostics products from Siemens Healthineers are affected by the Microsoft Windows SMBv1 vulnerabilities. The exploitability of the vulnerabilities depends on the actual configuration and deployment environment of each product.

Siemens is working on updates for the affected products listed below, and recommends specific countermeasures until fixes are available.

### **AFFECTED PRODUCTS**

- VERSANT kPCR Molecular System: All versions
- VERSANT kPCR Sample Prep: All versions
- Tissue Preparation System: All versions

### **DESCRIPTION**

Molecular Diagnostics products from Siemens Healthineers are used for in vitro diagnostic testing in laboratory environments for the extraction of nucleic acids from a variety of clinical sample types using magnetic bead extraction technology, and, separately, for the automated amplification and detection of nucleic acids using kPCR (real time) technology.

Detailed information about the vulnerabilities is provided below.

### **VULNERABILITY CLASSIFICATION**

The vulnerability classification has been performed by using the CVSS scoring system in version 3.0 (CVSS v3.0) (<http://www.first.org/cvss/>). The CVSS environmental score is specific to the customer's environment and will impact the overall CVSS score. The environmental score should therefore be individually assessed by the customer to accomplish final scoring.

#### Vulnerability 1 (CVE-2017-0143)

An unauthenticated remote attacker could execute arbitrary code via specially crafted requests sent to the SMBv1 server of affected Microsoft Windows systems.

CVSS Base Score 9.8

CVSS Vector CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:H/I:H/A:H/E:H/RL:O/RC:C

#### Vulnerability 2 (CVE-2017-0144)

An unauthenticated remote attacker could execute arbitrary code via specially crafted requests sent to the SMBv1 server of affected Microsoft Windows systems.

CVSS Base Score 9.8

CVSS Vector CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:H/I:H/A:H/E:H/RL:O/RC:C

#### Vulnerability 3 (CVE-2017-0145)

An unauthenticated remote attacker could execute arbitrary code via specially crafted requests sent to the SMBv1 server of affected Microsoft Windows systems.

CVSS Base Score 9.8

CVSS Vector CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:H/I:H/A:H/E:H/RL:O/RC:C

#### Vulnerability 4 (CVE-2017-0146)

An unauthenticated remote attacker could execute arbitrary code via specially crafted requests sent to the SMBv1 server of affected Microsoft Windows systems.

CVSS Base Score 9.8

CVSS Vector CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:H/I:H/A:H/E:H/RL:O/RC:C

#### Vulnerability 5 (CVE-2017-0147)

An authenticated remote attacker could potentially disclose information from the server by sending specially crafted packets to the SMBv1 server of affected Microsoft Windows systems.

CVSS Base Score 5.3

CVSS Vector CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:L/I:N/A:N/E:H/RL:O/RC:C

#### Vulnerability 6 (CVE-2017-0148)

An unauthenticated remote attacker could execute arbitrary code via specially crafted requests sent to the SMBv1 server of affected Microsoft Windows systems.

CVSS Base Score 9.8

CVSS Vector CVSS:3.0/AV:N/AC:L/PR:N/UI:N/S:U/C:H/I:H/A:H/E:H/RL:O/RC:C

### **SOLUTION**

Siemens Healthineers is preparing updates for the affected products and recommends to isolate affected products that are listening on network ports 139/tcp, 445/tcp or 3389/tcp from any infected system within its respective network segment (e.g. by firewall blocking access to above network ports.)

If the above cannot be implemented we recommend the following:

- If patient safety and treatment is not at risk, disconnect the uninfected product from the network and use in standalone mode.
- Reconnect the product only after the provided patch or remediation is installed on the system.

In addition, Siemens Healthineers recommend:

- Ensure you have appropriate backups and system restoration procedures.
- For specific patch and remediation guidance information contact your local Siemens Healthineers Customer Service Engineer, portal or our Regional Support Center.

### **ADDITIONAL RESOURCES**

[1] Customer Information on WannaCry Malware for Siemens Healthineers Imaging and Diagnostics Products is available here:  
[https://www.siemens.com/cert/pool/cert/siemens\\_security\\_bulletin\\_ssb-412479.pdf](https://www.siemens.com/cert/pool/cert/siemens_security_bulletin_ssb-412479.pdf)

[2] For further inquiries on vulnerabilities in Siemens products and solutions, please contact the Siemens ProductCERT:  
<https://www.siemens.com/cert/advisories>

### **HISTORY DATA**

V1.0 (2017-05-17): Publication Date

### **DISCLAIMER**

See: [https://www.siemens.com/terms\\_of\\_use](https://www.siemens.com/terms_of_use)