

SSA-264814: Timing Based Side Channel Vulnerability in the OpenSSL RSA Decryption in SIMATIC Products

Publication Date: 2023-08-08
 Last Update: 2023-12-12
 Current Version: V1.3
 CVSS v3.1 Base Score: 5.9

SUMMARY

Several SIMATIC products are affected by a timing based side channel vulnerability in the OpenSSL RSA Decryption (CVE-2023-4304), as disclosed on 2023-02-07 at <https://www.openssl.org/news/secadv/20230207.txt>.

Siemens has released updates for several affected products and recommends to update to the latest versions. Siemens is preparing further updates and recommends specific countermeasures for products where updates are not, or not yet available.

AFFECTED PRODUCTS AND SOLUTION

Affected Product and Versions	Remediation
SIMATIC Cloud Connect 7 CC712 (6GK1411-1AC00): All versions < V2.2	Update to V2.2 or later version https://support.industry.siemens.com/cs/ww/en/view/109822278/ See further recommendations from section Workarounds and Mitigations
SIMATIC Cloud Connect 7 CC716 (6GK1411-5AC00): All versions < V2.2	Update to V2.2 or later version https://support.industry.siemens.com/cs/ww/en/view/109822278/ See further recommendations from section Workarounds and Mitigations
SIMATIC Drive Controller CPU 1504D TF (6ES7615-4DF10-0AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109773914/ See further recommendations from section Workarounds and Mitigations
SIMATIC Drive Controller CPU 1504D TF (6ES7615-4DF10-0AB0): All versions >= V3.0.1 < V3.0.3	Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109773914/ See further recommendations from section Workarounds and Mitigations
SIMATIC Drive Controller CPU 1507D TF (6ES7615-7DF10-0AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109773914/ See further recommendations from section Workarounds and Mitigations

<p>SIMATIC Drive Controller CPU 1507D TF (6ES7615-7DF10-0AB0): All versions \geq V3.0.1 < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109773914/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC ET 200pro IM154-8 PN/DP CPU (6ES7154-8AB01-0AB0): All versions < V3.2.19</p>	<p>Update to V3.2.19 or later version As a mitigation for vulnerable versions: disable the web server https://support.industry.siemens.com/cs/ww/en/view/47354502/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC ET 200pro IM154-8F PN/DP CPU (6ES7154-8FB01-0AB0): All versions < V3.2.19</p>	<p>Update to V3.2.19 or later version As a mitigation for vulnerable versions: disable the web server https://support.industry.siemens.com/cs/ww/en/view/47354578/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC ET 200pro IM154-8FX PN/DP CPU (6ES7154-8FX00-0AB0): All versions < V3.2.19</p>	<p>Update to V3.2.19 or later version As a mitigation for vulnerable versions: disable the web server https://support.industry.siemens.com/cs/ww/en/view/62612377/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC ET 200S IM151-8 PN/DP CPU (6ES7151-8AB01-0AB0): All versions < V3.2.19</p>	<p>Update to V3.2.19 or later version As a mitigation for vulnerable versions: disable the web server https://support.industry.siemens.com/cs/ww/en/view/47353723/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC ET 200S IM151-8F PN/DP CPU (6ES7151-8FB01-0AB0): All versions < V3.2.19</p>	<p>Update to V3.2.19 or later version As a mitigation for vulnerable versions: disable the web server https://support.industry.siemens.com/cs/ww/en/view/47354354/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC ET 200SP Open Controller CPU 1515SP PC2 (incl. SIPLUS variants): All versions < V21.9.7</p>	<p>Update to V21.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109759122/ See further recommendations from section Workarounds and Mitigations</p>

SIMATIC ET 200SP Open Controller CPU 1515SP PC2 (incl. SIPLUS variants): All versions >= V30.0.0	Currently no fix is available See recommendations from section Workarounds and Mitigations
SIMATIC Logon V1.6: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
SIMATIC PDM V9.1: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
SIMATIC PDM V9.2: All versions < V9.2 SP2 Upd1	Update to V9.2 SP2 Upd1 or later version https://support.industry.siemens.com/cs/ww/en/view/109812242/ See further recommendations from section Workarounds and Mitigations
SIMATIC Process Historian 2019 OPC UA Server: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
SIMATIC Process Historian 2020 OPC UA Server: All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
SIMATIC Process Historian 2022 OPC UA Server: All versions < V2022 SP1	Update to V2022 SP1 or later version In the context of SIMATIC PCS neo, update to SIMATIC PCS neo V4.1 or later version https://support.industry.siemens.com/cs/ww/en/view/109825230/ See further recommendations from section Workarounds and Mitigations
SIMATIC S7-300 CPU 314C-2 PN/DP (6ES7314-6EH04-0AB0): All versions < V3.3.19	Update to V3.3.19 or later version As a mitigation for vulnerable versions: disable the web server https://support.industry.siemens.com/cs/ww/en/view/51466769/ See further recommendations from section Workarounds and Mitigations
SIMATIC S7-300 CPU 315-2 PN/DP (6ES7315-2EH14-0AB0): All versions < V3.2.19	Update to V3.2.19 or later version As a mitigation for vulnerable versions: disable the web server https://support.industry.siemens.com/cs/ww/en/view/40360647/ See further recommendations from section Workarounds and Mitigations

<p>SIMATIC S7-300 CPU 315F-2 PN/DP (6ES7315-2FJ14-0AB0): All versions < V3.2.19</p>	<p>Update to V3.2.19 or later version As a mitigation for vulnerable versions: disable the web server https://support.industry.siemens.com/cs/ww/en/view/40944925/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-300 CPU 315T-3 PN/DP (6ES7315-7TJ10-0AB0): All versions < V3.2.19</p>	<p>Update to V3.2.19 or later version As a mitigation for vulnerable versions: disable the web server https://support.industry.siemens.com/cs/ww/en/view/85049260/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-300 CPU 317-2 PN/DP (6ES7317-2EK14-0AB0): All versions < V3.2.19</p>	<p>Update to V3.2.19 or later version As a mitigation for vulnerable versions: disable the web server https://support.industry.siemens.com/cs/ww/en/view/40362228/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-300 CPU 317F-2 PN/DP (6ES7317-2FK14-0AB0): All versions < V3.2.19</p>	<p>Update to V3.2.19 or later version As a mitigation for vulnerable versions: disable the web server https://support.industry.siemens.com/cs/ww/en/view/40945128/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-300 CPU 317T-3 PN/DP (6ES7317-7TK10-0AB0): All versions < V3.2.19</p>	<p>Update to V3.2.19 or later version As a mitigation for vulnerable versions: disable the web server https://support.industry.siemens.com/cs/ww/en/view/85059804/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-300 CPU 317TF-3 PN/DP (6ES7317-7UL10-0AB0): All versions < V3.2.19</p>	<p>Update to V3.2.19 or later version As a mitigation for vulnerable versions: disable the web server https://support.industry.siemens.com/cs/ww/en/view/85063017/ See further recommendations from section Workarounds and Mitigations</p>

<p>SIMATIC S7-300 CPU 319-3 PN/DP (6ES7318-3EL01-0AB0): All versions < V3.2.19</p>	<p>Update to V3.2.19 or later version As a mitigation for vulnerable versions: disable the web server https://support.industry.siemens.com/cs/ww/en/view/44442927/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-300 CPU 319F-3 PN/DP (6ES7318-3FL01-0AB0): All versions < V3.2.19</p>	<p>Update to V3.2.19 or later version As a mitigation for vulnerable versions: disable the web server https://support.industry.siemens.com/cs/ww/en/view/44443101/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1200 CPU family (incl. SIPLUS variants): All versions</p>	<p>Currently no fix is available See recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1510SP F-1 PN (6ES7510-1SJ00-0AB0): All versions</p>	<p>Currently no fix is planned See recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1510SP F-1 PN (6ES7510-1SJ01-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1510SP F-1 PN (6ES7510-1SK03-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1510SP-1 PN (6ES7510-1DJ00-0AB0): All versions</p>	<p>Currently no fix is planned See recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1510SP-1 PN (6ES7510-1DJ01-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1510SP-1 PN (6ES7510-1DK03-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>

SIMATIC S7-1500 CPU 1511-1 PN (6ES7511-1AK00-0AB0): All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
SIMATIC S7-1500 CPU 1511-1 PN (6ES7511-1AK01-0AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIMATIC S7-1500 CPU 1511-1 PN (6ES7511-1AK02-0AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIMATIC S7-1500 CPU 1511-1 PN (6ES7511-1AL03-0AB0): All versions < V3.0.3	Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIMATIC S7-1500 CPU 1511C-1 PN (6ES7511-1CK00-0AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIMATIC S7-1500 CPU 1511C-1 PN (6ES7511-1CK01-0AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIMATIC S7-1500 CPU 1511F-1 PN (6ES7511-1FK00-0AB0): All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
SIMATIC S7-1500 CPU 1511F-1 PN (6ES7511-1FK01-0AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIMATIC S7-1500 CPU 1511F-1 PN (6ES7511-1FK02-0AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations

<p>SIMATIC S7-1500 CPU 1511F-1 PN (6ES7511-1FL03-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1511T-1 PN (6ES7511-1TK01-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1511T-1 PN (6ES7511-1TL03-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1511TF-1 PN (6ES7511-1UK01-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1511TF-1 PN (6ES7511-1UL03-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1512C-1 PN (6ES7512-1CK00-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1512C-1 PN (6ES7512-1CK01-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1512SP F-1 PN (6ES7512-1SK00-0AB0): All versions</p>	<p>Currently no fix is planned See recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1512SP F-1 PN (6ES7512-1SK01-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>

<p>SIMATIC S7-1500 CPU 1512SP F-1 PN (6ES7512-1SM03-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1512SP-1 PN (6ES7512-1DK00-0AB0): All versions</p>	<p>Currently no fix is planned See recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1512SP-1 PN (6ES7512-1DK01-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1512SP-1 PN (6ES7512-1DM03-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1513-1 PN (6ES7513-1AL00-0AB0): All versions</p>	<p>Currently no fix is planned See recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1513-1 PN (6ES7513-1AL01-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1513-1 PN (6ES7513-1AL02-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1513-1 PN (6ES7513-1AM03-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1513F-1 PN (6ES7513-1FL00-0AB0): All versions</p>	<p>Currently no fix is planned See recommendations from section Workarounds and Mitigations</p>

<p>SIMATIC S7-1500 CPU 1513F-1 PN (6ES7513-1FL01-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1513F-1 PN (6ES7513-1FL02-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1513F-1 PN (6ES7513-1FM03-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1513R-1 PN (6ES7513-1RL00-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1513R-1 PN (6ES7513-1RM03-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1514SP F-2 PN (6ES7514-2SN03-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1514SP-2 PN (6ES7514-2DN03-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1514SPT F-2 PN (6ES7514-2WN03-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>

<p>SIMATIC S7-1500 CPU 1514SPT-2 PN (6ES7514-2VN03-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1515-2 PN (6ES7515-2AM00-0AB0): All versions</p>	<p>Currently no fix is planned See recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1515-2 PN (6ES7515-2AM01-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1515-2 PN (6ES7515-2AM02-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1515-2 PN (6ES7515-2AN03-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1515F-2 PN (6ES7515-2FM00-0AB0): All versions</p>	<p>Currently no fix is planned See recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1515F-2 PN (6ES7515-2FM01-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1515F-2 PN (6ES7515-2FM02-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1515F-2 PN (6ES7515-2FN03-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>

<p>SIMATIC S7-1500 CPU 1515R-2 PN (6ES7515-2RM00-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1515R-2 PN (6ES7515-2RN03-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1515T-2 PN (6ES7515-2TM01-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1515T-2 PN (6ES7515-2TN03-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1515TF-2 PN (6ES7515-2UM01-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1515TF-2 PN (6ES7515-2UN03-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1516-3 PN/DP (6ES7516-3AN00-0AB0): All versions</p>	<p>Currently no fix is planned See recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1516-3 PN/DP (6ES7516-3AN01-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1516-3 PN/DP (6ES7516-3AN02-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>

<p>SIMATIC S7-1500 CPU 1516-3 PN/DP (6ES7516-3AP03-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1516F-3 PN/DP (6ES7516-3FN00-0AB0): All versions</p>	<p>Currently no fix is planned See recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1516F-3 PN/DP (6ES7516-3FN01-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1516F-3 PN/DP (6ES7516-3FN02-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1516F-3 PN/DP (6ES7516-3FP03-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1516T-3 PN/DP (6ES7516-3TN00-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1516TF-3 PN/DP (6ES7516-3UN00-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1517-3 PN/DP (6ES7517-3AP00-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1517F-3 PN/DP (6ES7517-3FP00-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>

<p>SIMATIC S7-1500 CPU 1517H-3 PN (6ES7517-3HP00-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1517T-3 PN/DP (6ES7517-3TP00-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1517TF-3 PN/DP (6ES7517-3UP00-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1518-4 PN/DP (6ES7518-4AP00-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1518-4 PN/DP MFP (6ES7518-4AX00-1AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1518F-4 PN/DP (6ES7518-4FP00-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1518F-4 PN/DP MFP (6ES7518-4FX00-1AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1518HF-4 PN (6ES7518-4JP00-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>

<p>SIMATIC S7-1500 CPU 1518T-4 PN/DP (6ES7518-4TP00-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU 1518TF-4 PN/DP (6ES7518-4UP00-0AB0): All versions < V3.0.3</p>	<p>Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU S7-1518-4 PN/DP ODK (6ES7518-4AP00-3AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 CPU S7-1518F-4 PN/DP ODK (6ES7518-4FP00-3AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 ET 200pro: CPU 1513PRO F-2 PN (6ES7513-2GL00-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 ET 200pro: CPU 1513PRO-2 PN (6ES7513-2PL00-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 ET 200pro: CPU 1516PRO F-2 PN (6ES7516-2GN00-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 ET 200pro: CPU 1516PRO-2 PN (6ES7516-2PN00-0AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>

<p>SIMATIC S7-1500 Software Controller V2: All versions < V21.9.7</p>	<p>Update to V21.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478528/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-1500 Software Controller V3: All versions</p>	<p>Currently no fix is available See recommendations from section Workarounds and Mitigations</p>
<p>SIMATIC S7-PLCSIM Advanced: All versions < V6.0</p>	<p>Update to V6.0 or later version https://support.industry.siemens.com/cs/ww/en/view/109821388 See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS ET 200S IM151-8 PN/DP CPU (6AG1151-8AB01-7AB0): All versions < V3.2.19</p>	<p>Update to V3.2.19 or later version As a mitigation for vulnerable versions: disable the web server https://support.industry.siemens.com/cs/ww/en/view/47353723/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS ET 200S IM151-8F PN/DP CPU (6AG1151-8FB01-2AB0): All versions < V3.2.19</p>	<p>Update to V3.2.19 or later version As a mitigation for vulnerable versions: disable the web server https://support.industry.siemens.com/cs/ww/en/view/47354354/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS ET 200SP CPU 1510SP F-1 PN (6AG1510-1SJ01-2AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS ET 200SP CPU 1510SP F-1 PN RAIL (6AG2510-1SJ01-1AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS ET 200SP CPU 1510SP-1 PN (6AG1510-1DJ01-2AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>

<p>SIPLUS ET 200SP CPU 1510SP-1 PN (6AG1510-1DJ01-7AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS ET 200SP CPU 1510SP-1 PN RAIL (6AG2510-1DJ01-1AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS ET 200SP CPU 1510SP-1 PN RAIL (6AG2510-1DJ01-4AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS ET 200SP CPU 1512SP F-1 PN (6AG1512-1SK00-2AB0): All versions</p>	<p>Currently no fix is planned See recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS ET 200SP CPU 1512SP F-1 PN (6AG1512-1SK01-2AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS ET 200SP CPU 1512SP F-1 PN (6AG1512-1SK01-7AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS ET 200SP CPU 1512SP F-1 PN RAIL (6AG2512-1SK01-1AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS ET 200SP CPU 1512SP F-1 PN RAIL (6AG2512-1SK01-4AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS ET 200SP CPU 1512SP-1 PN (6AG1512-1DK01-2AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>

<p>SIPLUS ET 200SP CPU 1512SP-1 PN (6AG1512-1DK01-7AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS ET 200SP CPU 1512SP-1 PN RAIL (6AG2512-1DK01-1AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS ET 200SP CPU 1512SP-1 PN RAIL (6AG2512-1DK01-4AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS S7-300 CPU 314C-2 PN/DP (6AG1314-6EH04-7AB0): All versions < V3.3.19</p>	<p>Update to V3.3.19 or later version As a mitigation for vulnerable versions: disable the web server https://support.industry.siemens.com/cs/ww/en/view/51466769/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS S7-300 CPU 315-2 PN/DP (6AG1315-2EH14-7AB0): All versions < V3.2.19</p>	<p>Update to V3.2.19 or later version As a mitigation for vulnerable versions: disable the web server https://support.industry.siemens.com/cs/ww/en/view/40360647/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS S7-300 CPU 315F-2 PN/DP (6AG1315-2FJ14-2AB0): All versions < V3.2.19</p>	<p>Update to V3.2.19 or later version As a mitigation for vulnerable versions: disable the web server https://support.industry.siemens.com/cs/ww/en/view/40944925/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS S7-300 CPU 317-2 PN/DP (6AG1317-2EK14-7AB0): All versions < V3.2.19</p>	<p>Update to V3.2.19 or later version As a mitigation for vulnerable versions: disable the web server https://support.industry.siemens.com/cs/ww/en/view/40362228/ See further recommendations from section Workarounds and Mitigations</p>

<p>SIPLUS S7-300 CPU 317F-2 PN/DP (6AG1317-2FK14-2AB0): All versions < V3.2.19</p>	<p>Update to V3.2.19 or later version As a mitigation for vulnerable versions: disable the web server https://support.industry.siemens.com/cs/ww/en/view/40945128/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS S7-1500 CPU 1511-1 PN (6AG1511-1AK00-2AB0): All versions</p>	<p>Currently no fix is planned See recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS S7-1500 CPU 1511-1 PN (6AG1511-1AK01-2AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS S7-1500 CPU 1511-1 PN (6AG1511-1AK01-7AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS S7-1500 CPU 1511-1 PN (6AG1511-1AK02-2AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS S7-1500 CPU 1511-1 PN (6AG1511-1AK02-7AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS S7-1500 CPU 1511-1 PN T1 RAIL (6AG2511-1AK01-1AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS S7-1500 CPU 1511-1 PN T1 RAIL (6AG2511-1AK02-1AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>

SIPLUS S7-1500 CPU 1511-1 PN TX RAIL (6AG2511-1AK01-4AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIPLUS S7-1500 CPU 1511-1 PN TX RAIL (6AG2511-1AK02-4AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIPLUS S7-1500 CPU 1511F-1 PN (6AG1511-1FK00-2AB0): All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
SIPLUS S7-1500 CPU 1511F-1 PN (6AG1511-1FK01-2AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIPLUS S7-1500 CPU 1511F-1 PN (6AG1511-1FK02-2AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIPLUS S7-1500 CPU 1513-1 PN (6AG1513-1AL00-2AB0): All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
SIPLUS S7-1500 CPU 1513-1 PN (6AG1513-1AL01-2AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIPLUS S7-1500 CPU 1513-1 PN (6AG1513-1AL01-7AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIPLUS S7-1500 CPU 1513-1 PN (6AG1513-1AL02-2AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations

<p>SIPLUS S7-1500 CPU 1513-1 PN (6AG1513-1AL02-7AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS S7-1500 CPU 1513F-1 PN (6AG1513-1FL00-2AB0): All versions</p>	<p>Currently no fix is planned See recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS S7-1500 CPU 1513F-1 PN (6AG1513-1FL01-2AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS S7-1500 CPU 1513F-1 PN (6AG1513-1FL02-2AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS S7-1500 CPU 1515F-2 PN (6AG1515-2FM01-2AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS S7-1500 CPU 1515F-2 PN (6AG1515-2FM02-2AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS S7-1500 CPU 1515F-2 PN RAIL (6AG2515-2FM02-4AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS S7-1500 CPU 1515F-2 PN T2 RAIL (6AG2515-2FM01-2AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>
<p>SIPLUS S7-1500 CPU 1515R-2 PN (6AG1515-2RM00-7AB0): All versions < V2.9.7</p>	<p>Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations</p>

SIPLUS S7-1500 CPU 1515R-2 PN TX RAIL (6AG2515-2RM00-4AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIPLUS S7-1500 CPU 1516-3 PN/DP (6AG1516-3AN00-2AB0): All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
SIPLUS S7-1500 CPU 1516-3 PN/DP (6AG1516-3AN00-7AB0): All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
SIPLUS S7-1500 CPU 1516-3 PN/DP (6AG1516-3AN01-2AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIPLUS S7-1500 CPU 1516-3 PN/DP (6AG1516-3AN01-7AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIPLUS S7-1500 CPU 1516-3 PN/DP (6AG1516-3AN02-2AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIPLUS S7-1500 CPU 1516-3 PN/DP (6AG1516-3AN02-7AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIPLUS S7-1500 CPU 1516-3 PN/DP RAIL (6AG2516-3AN02-4AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIPLUS S7-1500 CPU 1516-3 PN/DP TX RAIL (6AG2516-3AN01-4AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations

SIPLUS S7-1500 CPU 1516F-3 PN/DP (6AG1516-3FN00-2AB0): All versions	Currently no fix is planned See recommendations from section Workarounds and Mitigations
SIPLUS S7-1500 CPU 1516F-3 PN/DP (6AG1516-3FN01-2AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIPLUS S7-1500 CPU 1516F-3 PN/DP (6AG1516-3FN02-2AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIPLUS S7-1500 CPU 1516F-3 PN/DP RAIL (6AG2516-3FN02-2AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIPLUS S7-1500 CPU 1516F-3 PN/DP RAIL (6AG2516-3FN02-4AB0): All versions < V2.9.7	Update to V2.9.7 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIPLUS S7-1500 CPU 1517H-3 PN (6AG1517-3HP00-4AB0): All versions < V3.0.3	Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIPLUS S7-1500 CPU 1518-4 PN/DP (6AG1518-4AP00-4AB0): All versions < V3.0.3	Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIPLUS S7-1500 CPU 1518-4 PN/DP MFP (6AG1518-4AX00-4AC0): All versions < V3.0.3	Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
SIPLUS S7-1500 CPU 1518F-4 PN/DP (6AG1518-4FP00-4AB0): All versions < V3.0.3	Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations

SIPLUS S7-1500 CPU 1518HF-4 PN (6AG1518-4JP00-4AB0): All versions < V3.0.3	Update to V3.0.3 or later version https://support.industry.siemens.com/cs/ww/en/view/109478459/ See further recommendations from section Workarounds and Mitigations
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WORKAROUNDS AND MITIGATIONS

Siemens has identified the following specific workarounds and mitigations that customers can apply to reduce the risk:

- If possible, avoid the use of RSA based certificates in TLS communication and use ECC based certificates instead

Product-specific remediations or mitigations can be found in the section [Affected Products and Solution](#). Please follow the [General Security Recommendations](#).

GENERAL SECURITY RECOMMENDATIONS

As a general security measure, Siemens strongly recommends to protect network access to devices with appropriate mechanisms. In order to operate the devices in a protected IT environment, Siemens recommends to configure the environment according to Siemens' operational guidelines for Industrial Security (Download: <https://www.siemens.com/cert/operational-guidelines-industrial-security>), and to follow the recommendations in the product manuals. Additional information on Industrial Security by Siemens can be found at: <https://www.siemens.com/industrialsecurity>

PRODUCT DESCRIPTION

SIMATIC Process Historian is the long term archive system for SIMATIC PCS 7, SIMATIC WinCC and SIMATIC PCS neo. It stores process values, alarms and batch data of production plants in its database and offers historical process data to reporting and visualization applications.

SIMATIC Cloud Connect 7 is an IoT Gateway to connect programmable logic controllers to cloud services and enables the connection of field devices with OPC UA server Interface as OPC UA clients.

SIMATIC Drive Controllers have been designed for the automation of production machines, combining the functionality of a SIMATIC S7-1500 CPU and a SINAMICS S120 drive control.

SIMATIC ET 200SP Open Controller is a PC-based version of the SIMATIC S7-1500 Controller including optional visualization in combination with central I/Os in a compact device.

SIMATIC Logon is used for central user administration and access control in other SIMATIC applications.

SIMATIC PDM (Process Device Manager) is an universal, manufacturer-independent tool for configuration, parameter assignment, commissioning, diagnostics and maintenance of intelligent process devices (actors, sensors) and automation components (remote I/Os, multiplexer, process control units, compact controller).

SIMATIC S7-1200 CPU products have been designed for discrete and continuous control in industrial environments such as manufacturing, food and beverages, and chemical industries worldwide.

SIMATIC S7-1500 CPU products have been designed for discrete and continuous control in industrial environments such as manufacturing, food and beverages, and chemical industries worldwide.

SIMATIC S7-1500 ODK CPUs provide functionality of standard S7-1500 CPUs but additionally provide the possibility to run C/C++ Code within the CPU-Runtime for execution of own functions / algorithms implemented in C/C++. They have been designed for discrete and continuous control in industrial environments such as manufacturing, food and beverages, and chemical industries worldwide.

SIMATIC S7-1500 Software Controller is a SIMATIC software controller for PC-based automation solutions. SIMATIC S7-300 controllers have been designed for discrete and continuous control in industrial environments such as manufacturing, food and beverages, and chemical industries worldwide.

SIMATIC S7-PLCSIM Advanced simulates S7-1200, S7-1500 and a few other PLC derivatives. Includes full network access to simulate the PLCs, even in virtualized environments.

VULNERABILITY CLASSIFICATION

The vulnerability classification has been performed by using the CVSS scoring system in version 3.1 (CVSS v3.1) (<https://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 defined by the customer to accomplish final scoring.

An additional classification has been performed using the CWE classification, a community-developed list of common software security weaknesses. This serves as a common language and as a baseline for weakness identification, mitigation, and prevention efforts. A detailed list of CWE classes can be found at: <https://cwe.mitre.org/>.

Vulnerability CVE-2022-4304

A timing based side channel exists in the OpenSSL RSA Decryption implementation which could be sufficient to recover a plaintext across a network in a Bleichenbacher style attack. To achieve a successful decryption an attacker would have to be able to send a very large number of trial messages for decryption. The vulnerability affects all RSA padding modes: PKCS#1 v1.5, RSA-OEAP and RSASVE. For example, in a TLS connection, RSA is commonly used by a client to send an encrypted pre-master secret to the server. An attacker that had observed a genuine connection between a client and a server could use this flaw to send trial messages to the server and record the time taken to process them. After a sufficiently large number of messages the attacker could recover the pre-master secret used for the original connection and thus be able to decrypt the application data sent over that connection.

CVSS v3.1 Base Score	5.9
CVSS Vector	CVSS:3.1/AV:N/AC:H/PR:N/UI:N/S:U/C:N/I:H/A:N/E:U/RL:O/RC:C
CWE	CWE-326: Inadequate Encryption Strength

ADDITIONAL INFORMATION

For SIMATIC S7-1500 CPUs, S7-1200 CPUs, Drive Controller CPUs, S7-1500 Software Controller, and ET200 SP Open Controller CPUs:

- In default configuration only OPC-UA interfaces are affected, as RSA certificates are created.
- Other interfaces (Web service and secure PG/PC and HMI communication) use ECC certificates by default.

Refer to the OpenSSL advisory (<https://www.openssl.org/news/secadv/20230207.txt>) for further details regarding the vulnerability CVE-2022-4304.

For further inquiries on security vulnerabilities in Siemens products and solutions, please contact the Siemens ProductCERT:

<https://www.siemens.com/cert/advisories>

HISTORY DATA

- V1.0 (2023-08-08): Publication Date
- V1.1 (2023-09-12): Added fix information for SIMATIC ET 200SP Open Controller CPU 1515SP PC2 and SIMATIC S7-1500 Software Controller V2
- V1.2 (2023-11-14): Added fix for SIMATIC Process Historian 2022 OPC UA Server
- V1.3 (2023-12-12): Added fix for SIMATIC S7-PLCSIM Advanced

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