

## SSA-102233: SegmentSmack in VxWorks-based Industrial Devices

Publication Date: 2020-04-14  
 Last Update: 2023-04-11  
 Current Version: V2.1  
 CVSS v3.1 Base Score: 7.5

### SUMMARY

The products listed below contain a vulnerability that could allow remote attackers to affect the availability of the devices under certain conditions. The underlying TCP stack can be forced to make very computation expensive calls for every incoming packet which can lead to a Denial-of-Service.

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

### AFFECTED PRODUCTS AND SOLUTION

Affected Product and Versions	Remediation
SCALANCE X200-4P IRT (6GK5200-4AH00-2BA3): All versions < V5.5.0	Update to V5.5.0 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109792534/">https://support.industry.siemens.com/cs/ww/en/view/109792534/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X201-3P IRT (6GK5201-3BH00-2BA3): All versions < V5.5.0	Update to V5.5.0 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109792534/">https://support.industry.siemens.com/cs/ww/en/view/109792534/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X201-3P IRT PRO (6GK5201-3JR00-2BA6): All versions < V5.5.0	Update to V5.5.0 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109792534/">https://support.industry.siemens.com/cs/ww/en/view/109792534/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X202-2IRT (6GK5202-2BB00-2BA3): All versions < V5.5.0	Update to V5.5.0 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109792534/">https://support.industry.siemens.com/cs/ww/en/view/109792534/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X202-2P IRT (6GK5202-2BH00-2BA3): All versions < V5.5.0	Update to V5.5.0 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109792534/">https://support.industry.siemens.com/cs/ww/en/view/109792534/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X202-2P IRT PRO (6GK5202-2JR00-2BA6): All versions < V5.5.0	Update to V5.5.0 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109792534/">https://support.industry.siemens.com/cs/ww/en/view/109792534/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>

SCALANCE X204-2 (6GK5204-2BB10-2AA3): All versions < V5.2.5	Update to V5.2.5 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109801131/">https://support.industry.siemens.com/cs/ww/en/view/109801131/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X204-2FM (6GK5204-2BB11-2AA3): All versions < V5.2.5	Update to V5.2.5 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109801131/">https://support.industry.siemens.com/cs/ww/en/view/109801131/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X204-2LD (6GK5204-2BC10-2AA3): All versions < V5.2.5	Update to V5.2.5 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109801131/">https://support.industry.siemens.com/cs/ww/en/view/109801131/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X204-2LD TS (6GK5204-2BC10-2CA2): All versions < V5.2.5	Update to V5.2.5 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109801131/">https://support.industry.siemens.com/cs/ww/en/view/109801131/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X204-2TS (6GK5204-2BB10-2CA2): All versions < V5.2.5	Update to V5.2.5 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109801131/">https://support.industry.siemens.com/cs/ww/en/view/109801131/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X204IRT (6GK5204-0BA00-2BA3): All versions < V5.5.0	Update to V5.5.0 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109792534/">https://support.industry.siemens.com/cs/ww/en/view/109792534/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X204IRT PRO (6GK5204-0JA00-2BA6): All versions < V5.5.0	Update to V5.5.0 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109792534/">https://support.industry.siemens.com/cs/ww/en/view/109792534/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X206-1 (6GK5206-1BB10-2AA3): All versions < V5.2.5	Update to V5.2.5 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109801131/">https://support.industry.siemens.com/cs/ww/en/view/109801131/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X206-1LD (6GK5206-1BC10-2AA3): All versions < V5.2.5	Update to V5.2.5 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109801131/">https://support.industry.siemens.com/cs/ww/en/view/109801131/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X208 (6GK5208-0BA10-2AA3): All versions < V5.2.5	Update to V5.2.5 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109801131/">https://support.industry.siemens.com/cs/ww/en/view/109801131/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>

SCALANCE X208PRO (6GK5208-0HA10-2AA6): All versions < V5.2.5	Update to V5.2.5 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109801131/">https://support.industry.siemens.com/cs/ww/en/view/109801131/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X212-2 (6GK5212-2BB00-2AA3): All versions < V5.2.5	Update to V5.2.5 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109801131/">https://support.industry.siemens.com/cs/ww/en/view/109801131/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X212-2LD (6GK5212-2BC00-2AA3): All versions < V5.2.5	Update to V5.2.5 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109801131/">https://support.industry.siemens.com/cs/ww/en/view/109801131/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X216 (6GK5216-0BA00-2AA3): All versions < V5.2.5	Update to V5.2.5 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109801131/">https://support.industry.siemens.com/cs/ww/en/view/109801131/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X224 (6GK5224-0BA00-2AA3): All versions < V5.2.5	Update to V5.2.5 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109801131/">https://support.industry.siemens.com/cs/ww/en/view/109801131/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X302-7 EEC (2x 24V) (6GK5302-7GD00-2EA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X302-7 EEC (2x 24V, coated) (6GK5302-7GD00-2GA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X302-7 EEC (2x 230V) (6GK5302-7GD00-4EA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X302-7 EEC (2x 230V, coated) (6GK5302-7GD00-4GA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X302-7 EEC (24V) (6GK5302-7GD00-1EA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>

SCALANCE X302-7 EEC (24V, coated) (6GK5302-7GD00-1GA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X302-7 EEC (230V) (6GK5302-7GD00-3EA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X302-7 EEC (230V, coated) (6GK5302-7GD00-3GA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X304-2FE (6GK5304-2BD00-2AA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X306-1LD FE (6GK5306-1BF00-2AA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X307-2 EEC (2x 24V) (6GK5307-2FD00-2EA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
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SCALANCE X307-3 (6GK5307-3BL00-2AA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X307-3 (6GK5307-3BL10-2AA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X307-3LD (6GK5307-3BM00-2AA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X307-3LD (6GK5307-3BM10-2AA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X308-2 (6GK5308-2FL00-2AA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X308-2 (6GK5308-2FL10-2AA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X308-2LD (6GK5308-2FM00-2AA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>

SCALANCE X308-2LD (6GK5308-2FM10-2AA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X308-2LH (6GK5308-2FN00-2AA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X308-2LH (6GK5308-2FN10-2AA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X308-2LH+ (6GK5308-2FP00-2AA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X308-2LH+ (6GK5308-2FP10-2AA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X308-2M (6GK5308-2GG00-2AA2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X308-2M (6GK5308-2GG10-2AA2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X308-2M PoE (6GK5308-2QG00-2AA2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X308-2M PoE (6GK5308-2QG10-2AA2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X308-2M TS (6GK5308-2GG00-2CA2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>

SCALANCE X308-2M TS (6GK5308-2GG10-2CA2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X310 (6GK5310-0FA00-2AA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X310 (6GK5310-0FA10-2AA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X310FE (6GK5310-0BA00-2AA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X310FE (6GK5310-0BA10-2AA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X320-1 FE (6GK5320-1BD00-2AA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X320-1-2LD FE (6GK5320-3BF00-2AA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE X408-2 (6GK5408-2FD00-2AA2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XF201-3P IRT (6GK5201-3BH00-2BD2): All versions < V5.5.0	Update to V5.5.0 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109792534/">https://support.industry.siemens.com/cs/ww/en/view/109792534/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XF202-2P IRT (6GK5202-2BH00-2BD2): All versions < V5.5.0	Update to V5.5.0 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109792534/">https://support.industry.siemens.com/cs/ww/en/view/109792534/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>

SCALANCE XF204 (6GK5204-0BA00-2AF2): All versions < V5.2.5	Update to V5.2.5 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109801131/">https://support.industry.siemens.com/cs/ww/en/view/109801131/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XF204-2 (6GK5204-2BC00-2AF2): All versions < V5.2.5	Update to V5.2.5 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109801131/">https://support.industry.siemens.com/cs/ww/en/view/109801131/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XF204-2BA IRT (6GK5204-2AA00-2BD2): All versions < V5.5.0	Update to V5.5.0 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109792534/">https://support.industry.siemens.com/cs/ww/en/view/109792534/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XF204IRT (6GK5204-0BA00-2BF2): All versions < V5.5.0	Update to V5.5.0 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109792534/">https://support.industry.siemens.com/cs/ww/en/view/109792534/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XF206-1 (6GK5206-1BC00-2AF2): All versions < V5.2.5	Update to V5.2.5 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109801131/">https://support.industry.siemens.com/cs/ww/en/view/109801131/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XF208 (6GK5208-0BA00-2AF2): All versions < V5.2.5	Update to V5.2.5 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109801131/">https://support.industry.siemens.com/cs/ww/en/view/109801131/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XR324-4M EEC (2x 24V, ports on front) (6GK5324-4GG00-2ER2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XR324-4M EEC (2x 24V, ports on front) (6GK5324-4GG10-2ER2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XR324-4M EEC (2x 24V, ports on rear) (6GK5324-4GG00-2JR2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XR324-4M EEC (2x 24V, ports on rear) (6GK5324-4GG10-2JR2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>

SCALANCE XR324-4M EEC (2x 100-240VAC/60-250VDC, ports on front) (6GK5324-4GG00-4ER2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XR324-4M EEC (2x 100-240VAC/60-250VDC, ports on front) (6GK5324-4GG10-4ER2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XR324-4M EEC (2x 100-240VAC/60-250VDC, ports on rear) (6GK5324-4GG00-4JR2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XR324-4M EEC (2x 100-240VAC/60-250VDC, ports on rear) (6GK5324-4GG10-4JR2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XR324-4M EEC (24V, ports on front) (6GK5324-4GG00-1ER2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XR324-4M EEC (24V, ports on front) (6GK5324-4GG10-1ER2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XR324-4M EEC (24V, ports on rear) (6GK5324-4GG00-1JR2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XR324-4M EEC (24V, ports on rear) (6GK5324-4GG10-1JR2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XR324-4M EEC (100-240VAC/60-250VDC, ports on front) (6GK5324-4GG00-3ER2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XR324-4M EEC (100-240VAC/60-250VDC, ports on front) (6GK5324-4GG10-3ER2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>

<p>SCALANCE XR324-4M EEC (100-240VAC/60-250VDC, ports on rear) (6GK5324-4GG00-3JR2): All versions &lt; V4.1.4</p>	<p>Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a></p>
<p>SCALANCE XR324-4M EEC (100-240VAC/60-250VDC, ports on rear) (6GK5324-4GG10-3JR2): All versions &lt; V4.1.4</p>	<p>Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a></p>
<p>SCALANCE XR324-4M PoE (24V, ports on front) (6GK5324-4QG00-1AR2): All versions &lt; V4.1.4</p>	<p>Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a></p>
<p>SCALANCE XR324-4M PoE (24V, ports on rear) (6GK5324-4QG00-1HR2): All versions &lt; V4.1.4</p>	<p>Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a></p>
<p>SCALANCE XR324-4M PoE (230V, ports on front) (6GK5324-4QG00-3AR2): All versions &lt; V4.1.4</p>	<p>Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a></p>
<p>SCALANCE XR324-4M PoE (230V, ports on rear) (6GK5324-4QG00-3HR2): All versions &lt; V4.1.4</p>	<p>Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a></p>
<p>SCALANCE XR324-4M PoE TS (24V, ports on front) (6GK5324-4QG00-1CR2): All versions &lt; V4.1.4</p>	<p>Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a></p>
<p>SCALANCE XR324-12M (24V, ports on front) (6GK5324-0GG00-1AR2): All versions &lt; V4.1.4</p>	<p>Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a></p>
<p>SCALANCE XR324-12M (24V, ports on front) (6GK5324-0GG10-1AR2): All versions &lt; V4.1.4</p>	<p>Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a></p>
<p>SCALANCE XR324-12M (24V, ports on rear) (6GK5324-0GG00-1HR2): All versions &lt; V4.1.4</p>	<p>Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a></p>

SCALANCE XR324-12M (24V, ports on rear) (6GK5324-0GG10-1HR2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XR324-12M (230V, ports on front) (6GK5324-0GG00-3AR2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XR324-12M (230V, ports on front) (6GK5324-0GG10-3AR2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XR324-12M (230V, ports on rear) (6GK5324-0GG00-3HR2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XR324-12M (230V, ports on rear) (6GK5324-0GG10-3HR2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XR324-12M TS (24V) (6GK5324-0GG00-1CR2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SCALANCE XR324-12M TS (24V) (6GK5324-0GG10-1CR2): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SIMATIC CP 343-1 Advanced (6GK7343-1GX31-0XE0): All versions	Currently no fix is planned See recommendations from section <a href="#">Workarounds and Mitigations</a>
SIMATIC CP 442-1 RNA (6GK7442-1RX00-0XE0): All versions < V1.5.18	Update to V1.5.18 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808794/">https://support.industry.siemens.com/cs/ww/en/view/109808794/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SIMATIC CP 443-1 (6GK7443-1EX30-0XE0): All versions < V3.3	Update to V3.3 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109817938/">https://support.industry.siemens.com/cs/ww/en/view/109817938/</a> See recommendations from section <a href="#">Workarounds and Mitigations</a>

SIMATIC CP 443-1 (6GK7443-1EX30-0XE1): All versions < V3.3	Update to V3.3 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109817938/">https://support.industry.siemens.com/cs/ww/en/view/109817938/</a> See recommendations from section <a href="#">Workarounds and Mitigations</a>
SIMATIC CP 443-1 Advanced (6GK7443-1GX30-0XE0): All versions < V3.3	Update to V3.3 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109817938/">https://support.industry.siemens.com/cs/ww/en/view/109817938/</a> See recommendations from section <a href="#">Workarounds and Mitigations</a>
SIMATIC CP 443-1 RNA (6GK7443-1RX00-0XE0): All versions < V1.5.18	Update to V1.5.18 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808796/">https://support.industry.siemens.com/cs/ww/en/view/109808796/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>
SIMATIC RF180C (6GT2002-0JD00): All versions	Currently no fix is planned See recommendations from section <a href="#">Workarounds and Mitigations</a>
SIMATIC RF182C (6GT2002-0JD10): All versions	Currently no fix is planned See recommendations from section <a href="#">Workarounds and Mitigations</a>
SIPLUS NET CP 343-1 Advanced (6AG1343-1GX31-4XE0): All versions	Currently no fix is planned See recommendations from section <a href="#">Workarounds and Mitigations</a>
SIPLUS NET CP 443-1 (6AG1443-1EX30-4XE0): All versions < V3.3	Update to V3.3 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109817938/">https://support.industry.siemens.com/cs/ww/en/view/109817938/</a> See recommendations from section <a href="#">Workarounds and Mitigations</a>
SIPLUS NET CP 443-1 Advanced (6AG1443-1GX30-4XE0): All versions < V3.3	Update to V3.3 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109817938/">https://support.industry.siemens.com/cs/ww/en/view/109817938/</a> See recommendations from section <a href="#">Workarounds and Mitigations</a>
SIPLUS NET SCALANCE X308-2 (6AG1308-2FL10-4AA3): All versions < V4.1.4	Update to V4.1.4 or later version <a href="https://support.industry.siemens.com/cs/ww/en/view/109808359/">https://support.industry.siemens.com/cs/ww/en/view/109808359/</a> See further recommendations from section <a href="#">Workarounds and Mitigations</a>

## **WORKAROUNDS AND MITIGATIONS**

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

- In all other cases please follow the General Security Recommendations
- For SIMATIC RF180C and RF182C: migrate to a successor product within the [SIMATIC RF18xC/CI family, V1.3](#) or later version. For details refer to the [phase-out announcement](#).

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**

SCALANCE X switches are used to connect industrial components like Programmable Logic Controllers (PLCs) or Human Machine Interfaces (HMIs).

SIMATIC CP 343-1 and CP 443-1 are communication processors (CP) designed to enable Ethernet communication for SIMATIC S7-300/S7-400 CPUs.

SIMATIC RF180C is an RFID communication module for direct connection of SIMATIC identification systems to PROFINET IO/Ethernet. SIMATIC RF180C is superseded by the SIMATIC RF18xC devices (RF185C, RF186C, RF188C).

SIMATIC RF182C is an RFID communication module for direct connection of SIMATIC identification systems to Ethernet/IP. SIMATIC RF182C is superseded by the SIMATIC RF18xC devices (RF185C, RF186C, RF188C).

SIMATIC RF185C, RF186C/CI, and RF188C/CI are communication modules for direct connection of SIMATIC identification systems to PROFINET IO/Ethernet and OPC UA.

SIPLUS extreme products are designed for reliable operation under extreme conditions and are based on SIMATIC, LOGO!, SITOP, SINAMICS, SIMOTION, SCALANCE or other devices. SIPLUS devices use the same firmware as the product they are based on.

## **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-2019-19301**

The VxWorks-based Profinet TCP Stack can be forced to make very expensive calls for every incoming packet which can lead to a denial of service.

CVSS v3.1 Base Score	7.5
CVSS Vector	<b>CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:N/A:H/E:P/RL:U/RC:C</b>
CWE	CWE-400: Uncontrolled Resource Consumption

## **ADDITIONAL INFORMATION**

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 (2020-04-14): Publication Date
- V1.1 (2020-08-11): Added SCALANCE S-600 family and informed about successor products for it
- V1.2 (2020-09-08): Informed about successor products for SIMATIC RF180C and RF182C
- V1.3 (2020-12-08): Updated information regarding successor products for SIMATIC RF180C and RF182C
- V1.4 (2021-01-12): Errata: Removed SCALANCE S-600 family as they are not affected by CVE-2019-19301
- V1.5 (2021-02-09): Added update information for SCALANCE X-200IRT switch family
- V1.6 (2021-09-14): Added solution for SCALANCE X-200 switch family
- V1.7 (2022-02-08): Added affected products SIMATIC CP 442-1 RNA and SIMATIC CP 443-1 RNA
- V1.8 (2022-04-12): Added solution for SCALANCE X-300 switch family (incl. X408 and SIPLUS NET variants)
- V1.9 (2022-05-10): Added solution for SIMATIC CP 442-1 RNA and SIMATIC CP 443-1 RNA; added affected product SIMATIC CP 343-1 Advanced
- V2.0 (2022-06-14): No fix planned for SIMATIC NET CP 443-1 Advanced
- V2.1 (2023-04-11): Added fix for SIMATIC CP 443-1 and CP 443-1 Advanced

## **TERMS OF USE**

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