

NET-SNMP- VULNERABILITIES

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Summary

A number of Net-SNMP vulnerabilities can impact management plane services on ACOS devices that can cause crashes SNMP services in ACOS devices resulting in potential, transient Denial-of Service (DoS) or other security impacts by malicious SNMP actors. These vulnerabilities are addressed in this document.

| Item # | Vulnerability ID | Source | Score | Summary |
|--------|------------------|--------|----------|--|
| 1 | CVE-2019-20892 | CVSSv3 | 6.5 Med | net-snmp: double free in usm_free_usmStateReference function in snmplib/snmpusm.c via an SNMPv3 GetBulk request |
| 2 | CVE-2018-18065 | CVSSv3 | 6.5 Med | net-snmp: NULL pointer exception in _set_key in agent/helpers/table_container.c resulting in a denial of service |
| 3 | CVE-2018-18066 | CVSSv3 | 7.5 High | net-snmp: NULL pointer exception in snmp_oid_compare in snmplib/snmp_api.c resulting in a denial of service |
| 4 | CVE-2012-6151 | CVSSv2 | 4.3 Med | net-snmp: snmpd crashes/hangs when AgentX subagent times-out |
| 5 | CVE-2012-2141 | CVSSv2 | 3.5 Low | net-snmp: Array index error, leading to out-of heap-based buffer read (snmpd crash) |

Affected Releases

The table below indicates releases of ACOS exposed to this vulnerability and ACOS releases that address them. ACOS release families not indicated below are unaffected by these vulnerabilities.

Customers using affected ACOS releases can overcome vulnerability exposures by updating to the indicated resolved release. If the table does not list a corresponding resolved or unaffected release, then no ACOS release update is currently available.

| Releases Affected | | Releases Resolved or Unaffected | |
|-------------------|---|---------------------------------|---------------|
| 5.0.0 | – | 5.2.1-P6 | 5.2.1-P7 |
| 5.0.1 TPS | – | 5.0.2-P2 TPS | 5.0.2-P3-TPS |
| 4.1.4-GR1 | – | 4.1.4-GR1-P11 | 4.1.4-GR1-P12 |
| 3.2.3-P1 | – | 3.2.5-P6 | 5.0.2-P3 TPS |

Workarounds and Mitigations

None

Software Updates

Software updates that address these vulnerabilities are or will be published at the following URL:

<https://support.a10networks.com/>

Vulnerability Details

The following table shares brief descriptions for the vulnerabilities addressed in this document.

| Vulnerability ID | Description |
|------------------|--|
| CVE-2019-20892 | net-snmp before 5.8.1.pre1 has a double free in <code>usm_free_usmStateReference</code> in <code>snmplib/snmpusm.c</code> via an SNMPv3 GetBulk request. NOTE: this affects net-snmp packages shipped to end users by multiple Linux distributions, but might not affect an upstream release. |
| CVE-2018-18065 | <code>_set_key</code> in <code>agent/helpers/table_container.c</code> in Net-SNMP before 5.8 has a NULL Pointer Exception bug that can be used by an authenticated attacker to remotely cause the instance to crash via a crafted UDP packet, resulting in Denial of Service. |
| CVE-2018-18066 | <code>snmp_oid_compare</code> in <code>snmplib/snmp_api.c</code> in Net-SNMP before 5.8 has a NULL Pointer Exception bug that can be used by an unauthenticated attacker to remotely cause the instance to crash via a crafted UDP packet, resulting in Denial of Service. |
| CVE-2012-6151 | Net-SNMP 5.7.1 and earlier, when AgentX is registering to handle a MIB and processing GETNEXT requests, allows remote attackers to cause a denial of service (crash or infinite loop, CPU consumption, and hang) by causing the AgentX subagent to timeout. |
| CVE-2012-2141 | Array index error in the <code>handle_nsExtendOutput2Table</code> function in <code>agent/mibgroup/agent/extend.c</code> in Net-SNMP 5.7.1 allows remote authenticated users to cause a denial of service (out-of-bounds read and <code>snmpd</code> crash) via an SNMP GET request for an entry not in the extension table. |

Related Links

| Ref # | General Link |
|-------|--|
| [1] | NIST NVD, CVE-2019-20892 |
| [2] | NIST NVD, CVE-2018-18065 |
| [3] | NIST NVD, CVE-2018-18066 |
| [4] | NIST NVD, CVE-2012-6151 |
| [5] | NIST NVD, CVE-2012-2141 |

Acknowledgements

None

Modification History

| Revision | Date | Description |
|----------|------------|---------------------|
| 1.0 | 2022-11-08 | Initial Publication |

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