**TXOne Release Note - Firmware**

<table>
<thead>
<tr>
<th>Product type</th>
<th>Industrial Edge IPS</th>
<th>Release Date</th>
<th>2020/08/24</th>
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</table>

### 1. Release Version
- **Firmware Name:** ips.fw.g02_IPS_G02_1.1.7.acf
- **Version:** IPS_G02_1.1.7
- **Revision:** ddc71ffe
- **SHA256 Checksum:** 35ad8dd65b21ec53e443b2951f0ee0d830d7efb13cee7cc7169eb7b81eb249a
- **Signature Info:** TM_200806_16

### 2. Applied Models
- **Platform:** ARM64
  - IPS-102-BP-TM

### 3. Release Info
- **TOS:** ips_g02_1.1.7
- **Platform (imx8mm):** ips_g02_1.1.5
- **Import:** ips_g02_1.1.5
- **TDTS:** ics/2.3.5

#### A. Support Features
- [New Feature] - Active Query supported in “Visibility Page > Asset View”.
- [New Feature] - IPS Profile (Rule Editing) supported in “Object Profiles > IPS Profiles”.
- [New Feature] - New OT protocols and options below are supported in “Object Profiles > Protocol Filter Profiles.”
  - Added OT protocols support (Basic Settings) - SECS/GEM and IEC61850-MMS
  - Added OT protocols support (Advanced Settings) - CIP, Siemens S7COMM, Siemens S7COMM PLUS, SLMP, MELSOFT, and TOYOPUC.
  - Added “Drop Malformed” for strictly packet format checking.
  - The maximum profile number increases from 16 to 32.
  - New object types support - IPS profile (New) and protocol filter profiles (New OT Protocols).
  - Added VLAN support (Up to 5 VLAN ID).
  - The maximum rule number increases from 64 to 512.

#### B. Improvement
- [Enhancement] - New design of web console.
- [Enhancement] - OT protocol monitoring available in offline mode.
- [Enhancement] - The maximum capacity concurrent session increases from 10,000 to 30,000.
- [Enhancement] - Firmware downgrade feature supported.
- [Enhancement] - LEEF log format supported.
- [Enhancement] - New log information supported.
  - Cyber Security Logs: Interface, Attacker and VLAN ID
  - Policy Enforcement Logs: VLAN ID
  - Protocol Filter Logs: VLAN ID and Interface
● [Enhancement] – Configuration interface of date and time is optimized in “Administration > System Time”.

C. Bug Fix

● [TXN-1763] - [CPU high utilization] After IPS connected to ODC, IPS CPU utilization spikes.
● [TXN-1769] - asset_store has fd leakage

D. Known Issues

● [TXN-1743] - Show maintenance page in short time after upgrade from 1.0.8 to 1.1.5.
● [TXN-1760] - ODC 1.0.x can apply config to IPS devices w/ new 1.1.x FW.
● [TXN-1767] - Command/function category of the OT protocols will get wrong mapping when IPS 1.1 uses the previous pattern of which the version < 200723_15.

E. Software Limitation

● Policy enforcement cannot block ICMP rules based on the reversed direction.
● EdgeIPS doesn’t support VLAN QinQ traffic.
● Active Query of assets in inline mode
  • The subnets of MGMT and data MUST be the same.
  • Service ports are fixed for detection: MODBUS (TCP: 502), CIP (TCP: 44818), FINS (TCP: 9600) and SMB (TCP: 445).
  • The queried asset MUST be a server and can send back expected responses to EdgeIPS according to our query commands.

F. Note

● In the current design, when a service object is set to ‘ICMP’ and action is set to ‘Deny,’ it won’t work if ‘Type/Code’ are set as response categories, or they are related to the other connection.

Comments: