TXOne Release Note-Firmware



Product type Industrial EdgeIPS Release Date 2020/08/24

1. Release Version

• Firmware Name: ips.fw.g02_IPS_G02_1.1.7.acf

• **Version:** IPS_G02_1.1.7

Revision: ddc71ffeSHA256 Checksum:

35ad8dd65b21ec53e443b2951feeee9d830d7efb13cee7cc7169eb7b81eb249a

• 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 Feature] New options below added in "Security > Policy Enhancement"
 - 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: