TXOne Release Note- Firmware

Product type	Industrial EdgeIPS	**Release Date**	2021/05/06

1. Release version
- **Firmware name:** ips.fw.g02_IPS_G02_1.2.4.acf
- **Version:** IPS_G02_1.2.4
- **Revision:** 9f6ff942
- **SHA256 Checksum:**
  212c6bab1e71ec932701a374923e3819285016dcd986cb6d41a75bd70b7efe33
- **Signature info:** TM 210222_07

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

3. Release info
- **TOS:** ips_g02_1.2.4
- **Platform (imx8mm):** ips_g02_1.2.1
- **Import:** ips_g02_1.2.1
- **TDTS:** ics/2.5.15

A. Support Features (since FW 1.1.7)
- [New Feature] - Suspicious Objects supported in "Security > Suspicious Objects"
- [New Feature] - MELSOFT protocol advanced filtering:
  - Added 10 new command codes
    - (0x0401) Device Batch Read
    - (0x0402) Device Random Read
    - (0x0403) Device Random Read
    - (0x0410) Device Memory Read
    - (0x0411) Device Random Read
    - (0x0412) Device Random Read
    - (0x1401) Device Batch Write
    - (0x1402) Device Random Write
    - (0x1410) Device Memory Write
    - (0x1411) Device Random Write
  - Added new 51 device codes for selection when one of the above 10 command code is chosen in MELSOFT protocol advanced filtering.
- [New Feature] - TACACS+ authentication supported in "Administration > Auth Services" and "Administration > Account Management"
- [New Feature] - Zero Configuration supports the below actions from the front panel of EdgeIPS
  - On-demand configuration backup to USB drive
  - Load pattern from USB drive to EdgeIPS
  - Load configuration from USB drive to EdgeIPS
  - Load firmware from USB drive to EdgeIPS

B. Improvement
- [Enhancement] - User Experience Improvement in IPS Profile
  - User can select multiple items in IPS profile for configuration instead of be limited to select to the item in one page for editing.
- [Enhancement] - Suspicious Object Logs
- [Enhancement] - Added "Accept and Log" option in the action list of Policy Enforcement

and Protocol Filter Action.

C. Bug Fix

- Device kernel panic when system time is changed and Active Query enabled.

  [TXN-3176] - [PP][Enhance] asset_core_do_act_query meet panic when cleaning asset info

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 cannot 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 previous pattern of which the version < 200723_15
- [TXN-2956] - Login failed after FW switch partition from 1.0.8 to 1.2.0

E. SW limitation

- Policy enforcement cannot block ICMP rules which are based on 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
    - Fixed service ports are used: 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. Notes

- In current design, when service object to 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 :