# TXOne Release Note - Firmware

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<th>Product type</th>
<th>Industrial EdgeIPS</th>
<th>Release Date</th>
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<td>2021/05/06</td>
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## 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 codes 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 being limited to select to items on 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: