WISE-DeviceOn

IoT Device Operation Management Software



Features

- Cloud and on-premise deployment options
- Quick, easy, and secure device onboarding
- Real-time device monitoring, notification, and remote control
- Automated alerts and real-time actions via predictive analysis of historical data
- Over-the-air updates of firmware and software
- System security and health assurance powered by McAfee and Acronis
- RESTful API web service for 3rd party system integration

Introduction

As IoT deployment often requires connecting hundreds of thousands of devices spread over multiple sites, it is essential to track, monitor, and manage connected industrial IoT devices. Users need to ensure devices work properly and securely after they have been deployed—without physical site visits. Secure device access is essential for monitoring, detection, management, and remotely performing time-critical actions.

WISE-DeviceOn makes it easy to onboard, visualize, operate, and manage your industrial IoT devices. With WISE-DeviceOn easy-to-use interface, users can monitor device health and take real-time actions to power on/off, troubleshoot problems, and send software and firmware updates over-the-air (OTA) on-site and remotely, at scale.

Feature Details

Device Management

Monitor remote device status, including device temperature, internet connection, CPU temperature, fan speed, voltage, SW process, and CPU/memory usage. System will detect device HW capability while displayed items can be monitored.

Power Management

Set the power on/off schedule for remotely located devices. Schedule can be set on daily, weekly, monthly or yearly basis.

Protection

WISE-DeviceOn system protection is powered by **McAfee**, providing white list protection against unauthorized application execution and sending warnings regarding any unauthorized activities.

Backup & Recovery

WISE-DeviceOn system recovery is powered by **Acronis**, providing hot backup and scheduled backup, and also one-click recovery.

Automated Alert Notification

Create alert and real-time actions based on device threshold rules and predictive analytics. Prompt notifications will be sent to administrators (Email, SMS, Line, WeChat, WhatApp).

Data Visualization

Built-In Dashboard supports multiple types of data sources. Ex: websocket and http stream, to feed in customized widgets, including online map, gauge, sparkline, progress bar, HTML, picture, indicator, to present live and statistical device data on dashboard.

Software Development Kit (SDK)

Provides RESTful API Web Service which allows cross-platform integration of DM functions, open WISE Agent framework which allows customized plugins to collect and process customer device data not defined by default for more flexible device connectivity, UI Extension Framework which allows a customized application page to be embedded into the DM management console to streamline field applications.

Software Specifications and Versions:

- Max. Device Connections: 1000 (Standalone), Unlimited (Cloud deployment)
- Max. Message Handling: 3000m/s, < 1KB, Unlimited (Cloud deployment)

	Free Bundle	Monthly Subscription	Perpetual License
Deployment	Advantech Hosted Service Six Month Trial	WISE-PaaS/EnSaaS First month free trial (Contact us)	Standalone installation Azure IoT PaaS, VM Kubernetes (Contact us)
Zero-Touch Onboarding		✓	
Role-Based Access Control		✓	
Device & Device Group Management		✓	
Device Threshold Detection (Rule-Based Engine)	N/A	•	(
Notification & Alert Service (Mail, SMS, LINE, WeChat, WhatsApp)	N/A	✓	
Device Real-time & Historical Data Monitoring	Real-time Data	✓	
*OTA, Software, Firmware Provisioning	N/A	✓ (BIOS Update for Advantech HW)	
*Power Control	✓	✓ (Advantech HW)	
Terminal, Screenshot, Remote Desktop		✓	
**Backup/Recovery, Protection	N/A	✓ (Windows, Ubuntu)	
Remote Troubleshooting	✓	✓	
Device Data with Zero-Downtime	N/A	✓	
Operation Management (Batch Control & Statistical Analysis)	N/A	•	(
**Audio Volume Control	✓ (Win)		
*Hardware Watchdog Monitoring	✓ (Advantech HW)		
*Brightness & Backlight Control	✓ (Advantech HW)		
*Hardware Status Monitoring	✓ (Advantech HW)		
**USB Drive Block	✓ (Win 10)		
**Keyboard Lock & Filter	✓ (Win 10)		
**Touch Screen & Gesture Lock	✓ (Win 10)		
**Windows Notification Block	✓ (Win 10)		
**UWF Protection	✓ (Win 10)		

^{*}HW status includes CPU/system temperature, fan speed, voltage, CPU/memory usage, system information, HDD monitoring, depending on HW capability

^{**}Support depends on device type, OS, and account permission

Minimum Requirements

Web browsers that support HTML5+CSS3+Javascript:

Microsoft Edge

■ Google Chrome: 9.0+

■ Firefox: 15.0+

Safari: 5.1+

Note:

Cookies must be enabled. Accept cookies per session must be enabled (Accept all cookies or only accept cookies from this server)

Browser must support HTTPS (SSL)

Server (Standalone Installation):

Minimum Hardware Requirements:

- Intel Core i5 2.3 Ghz CPU or above
- 8 GB RAM
- 25 GB root partition for the system
- 100 GB data storage partition for documents and indexing
- · Operation System:
- Windows Server 2012/2012 R2 64-bit (Recommended and fully tested)
- Windows Server 2016/2019 Standard 64-bit (Recommended and fully tested)

Agent:

Hardware:

 Advantech HW with SUSI driver 3.02/4.0, which is required for HWM (Hardware Monitoring Management) function to work normally.

Operation System:

- Windows 10 Enterprise 2016 LTSB 64-bit
- Windows 10 Enterprise 2016 LTSC 64-bit
- Windows 10 Enterprise (1809) 64-bit
- Windows 10 Professional (1809) 64-bit
- Windows 8/8.1 64-bit
- Windows 7 SP1 32-bit/64-bit
- Ubuntu 16.04/18.04
- CentOS 7/7.5
- Android 6.0/8.0 RISC
- Yocto
- Upon project request for others

Order Information

Free Bundle License (fully bundled with Advantech platforms)*

*Please confirm availability with your Advantech contact

Monthly Subscription (via Marketplace)

• 9806WPD001 (EnSaaS Deployment)

Perpetual License (via Marketplace):

- 32WSWPD0AZURA1 (Azure IoT PaaS)
- 32WSWPD0AZ01A1 (Azure VM)
- 32WSWPD00P01A1 (WISE-Stack)
- 32WSWPD00P02A1 (Data Service Server)
- 32WSWPD00P03A1 (Standalone Server)

Perpetual License:

- **32WSWPD00010A1 (10 devices)**
- 32WSWPD00100A1 (100 devices)
- 32WSWPD00500A1 (500 devices)

