WISE-PaaS/RMM

IoT Device Remote Monitoring and Management Platform

Features

- Console-Server-Agent structure, where the server can be built in a public or private cloud
- Centralized remote IPC, IoT device HW & SW status monitoring and management
- Remote KVM, and support for Intel® iAMT (i5 and i7)
- Remote power on/off and scheduling
- Hardware, software and gateway threshold rule and notification
- Whitelist system protection (powered by intel Security)
- System backup and one-click recovery (powered by Acronis)
- Web-based management console
- Supports device maps (Google, Baidu, floor map…)
- Data acquisition and data storage
- Historical data statistics and queries
- IoT data visualization and 10+ dashboard widgets supported
- Supports hierarchical server management
- Supports redundant servers to ensure high availability and service continuity
- Supports up to 1000 device connections (IPC, IoT Gateway)
- RESTful API web service for further development and integration with other systems
- WISE Agent framework support with customized device handler for device connectivity

Introduction

WISE-PaaS/RMM is part of Advantech WISE-PaaS cloud solution, and focuses on remote device management and monitoring.

WISE-PaaS/RMM serves as an IoT device management platform that manages connected devices remotely, providing centralized management features, including HW/SW status monitoring, remote control, system backup/recovery, etc. Moreover, it supports server redundancy and hierarchical server management, which increases service reliability and availability.

WISE-PaaS/RMM utilizes standard IoT protocol, like MQTT from IBM, to communicate with IPCs, IoT gateways and sensors, provides WISE Agent framework for data acquisition from devices, and offers RESTful API web service, which allows the user to integrate RMM functions with other applications or do further customization.

Feature Details

Device Management

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

Also provides hierarchical server view, group view, and map view to help the administrator organize and manage the devices more efficiently.

Advanced Server Capability

WISE-PaaS/RMMs support hierarchical server structure view to allow the administrator to manage services/devices across different subnets at the same time (logically) without compromising network segment privacy. Also, RMM allows a server to set 1 or 2 redundant servers, with which all data will be synced continuously and a redundant server will take over when the primary server is down to ensure service availability.

Power Management

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

Protection Management

WISE-PaaS/RMM system protection is powered by intel Security, providing white list protection against unauthorized application execution, and also sending warnings of any unauthorized activities.

Backup & Recovery

WISE-PaaS/RMM system recovery is powered by Acronis, providing hot backup and scheduled backup, and also one-click recovery.

Event & Notification

When events occur, prompt notifications can be sent to administrators by email or SMS.

Data Visualization

Supports multiple types of data sources, e.g.: WebSocket and http stream, to feed in predefined 10+ widgets, including Google maps, gauge, sparkline, progress bar, HTML, picture, indicator, to present as live and statistical device data on dashboard.

WISE-PaaS/RMM Extension

Provides RESTful API Web Service, which allows cross-platform integration of RMM functions, and also open WISE Agent framework, which allows a customized handler to collect and process customer device data not defined by default for more flexible device connectivity.

Software Specifications and Versions:

- **Max. concurrent device connections:** 1000
- **Max. levels of server hierarchy:** 3 (including Root server)
- **Max. sub-server amount at each level:** unlimited
- **Max. redundant server candidate amount:** 2
- **Max. message handling:** 3000m/s, < 1KB

	Standard Version	Professional Version
Device Management		
IPC Device Management	✓	✓
Gateway/Sensor Management	Read-only; unable to set sensor value	✓
Group View	✓	✓
Map View	✓	✓
HW Status Monitoring & Rule Setting	✓*	✓*
SW Process Monitoring & Rule Setting	✓**	✓**
Data Auto Report	▪ Only keeps historic data for 30 days ▪ No support for RESTful API query	✓ (Actual data storage amount is subject to HDD capacity)
Dashboard	Widgets will be discarded after the browser is closed	✓
Hierarchical Server	Only 1 level of sub-server and only 1 sub-server is supported	▪ 2 levels of sub-server supported ▪ No sub-server amount limitation at each layer
Server Redundancy	N/A	Supports at most 2 redundant servers
Remote KVM**		
Remote KVM	✓	✓
Terminal Mode	✓	✓
Intel AMT Integration	✓	✓
Screenshot	✓	✓
Power Management**		
Remote On/Off	✓	✓
Hibernate	✓	✓
Power On/Off Scheduling	✓	✓
System Protection**		
McAfee White List Protection	✓	✓
System Recovery**		
Acronis Backup/Recovery	✓	✓
Backup/Recovery Scheduling	✓	✓
Hot-Key Recovery	✓	✓
Notification Center		
Event Log	✓	✓
Email Notification	✓	✓
SMS Notification	✓	✓
Management Interface		
Account/Role management	✓	✓
Mobile Mode	✓	✓
Web-Based Console	✓	✓
Others		
RESTful API Web Service	✓	✓
WISE Agent SDK	N/A	✓

*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 Console

Web browser that supports HTML5+CSS3+Javascript

- Microsoft Internet Explorer
  - Device Management: IE8+
  - Dashboard: IE10+
- 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

Hardware Minimum Requirement:

- Intel® Core™ i3 2.3 Ghz CPU or above
- 4 GB RAM
- 25 GB root partition for the system
- 100 GB data storage partition for documents and indexing

Operating System:

- Windows Server 2008/2008 R2 64-bit (Recommended and fully tested)
- Windows Server 2012/2012 R2 64-bit (Recommended and fully tested)
- Windows 10 64-bit
- Windows 8/8.1 64-bit
- Windows 7 SP1 64-bit

Database:

- RDBMS: PostgreSQL 9.2
- NoSQL DB: MongoDB 3.0.6

Web Server: Tomcat 7.x

Agent

Hardware:

- Advantech HW with SUSI 3.02/4.0 support; SUSI API is required for HWM (Hardware Monitoring Management) function to work normally.

Operation System:

- Windows Server 2012/2012 R2 64-bit (Limited support for System Protection/ Recovery)
- Windows Server 2008 32-bit/64-bit (Limited support for System Protection/ Recovery)
- Windows Server 2008 R2 64-bit (Limited support for System Protection/Recovery)
- Windows 10 32-bit/64-bit
- Windows IoT Core 32-bit (TBD)
- Windows 8/8.1 32-bit/64-bit
- Windows 7 SP1 32-bit/64-bit
- Windows XP SP3 32-bit
- CentOS 6.5 32-bit
- Others by request

Order Information

Standard Version (fully bundled with Advantech platforms)*

- **968EMLSAP2** WISE-PaaS/RMM Standard Version

*Please confirm with your Advantech contact for availability.

Professional Version*

- **32EMRMP31B** WISE-PaaS/RMM Pro (Max. 10 Agents)
- **32EMRMP31C** WISE-PaaS/RMM Pro (Max. 50 Agents)
- **32EMRMP31D** WISE-PaaS/RMM Pro (Max. 200 Agents)
- **32EMRMP31E** WISE-PaaS/RMM Pro (Site License)

*Professional version license is charged by amount of connected agents, with different price levels depending on maximum agents to be connected.