

VMWARE PULSE IoT CENTER

A secure, enterprise-grade, end-to-end IoT infrastructure management solution for both OT and IT organizations

AT A GLANCE

VMware Pulse IoT Center is a secure, enterprise-grade, end-to-end IoT infrastructure management solution which enables IT and OT to have complete control of their IoT implementations, from the edge to the cloud.

KEY BENEFITS

- **Manage Broader:** Simplify IoT complexity by managing various heterogeneous environments as easily as one.
- **Operate Smarter:** Improve reliability of your IoT infrastructure by providing accurate and real-time visibility of thing “health” and acting on anomalies as they arise.
- **Protect Better:** Provide peace of mind by securing your IoT infrastructure across things, edge, network, and applications.
- **Innovate Faster:** Accelerate ROI with a standardized method to onboard devices and provide ease of scalability.

The Internet of Things (IoT) is rapidly transforming traditional business models and operational processes to boost innovation and growth. An IoT-ready infrastructure has unique requirements with onboarding, configuring, managing, and securing connected devices, and as a tidal wave of IoT use cases reaches your organization, your IT and Operational Technology (OT) departments may struggle to keep up. VMware can help organizations achieve IoT infrastructure excellence and deliver successful business outcomes that meet the needs of both your IT and OT organizations.

What Is VMware Pulse IoT Center?

VMware Pulse™ IoT Center™ is a secure, enterprise-grade, end-to-end IoT infrastructure management solution that allows OT and IT to have complete control over their IoT use cases, from the edge all the way to the cloud. It helps companies to onboard, manage, monitor, and secure all things and infrastructure for IoT.

Key Features

- **Edge device management** – Ability to support heterogeneous things and gateways with different hardware, operating systems, and communication protocols
- **Infrastructure analytics** – Ability to identify anomalies with real-time monitoring and perform infrastructure analytics
- **Single point console** – A single point of monitoring and management for the IoT infrastructure (composed of edge systems and connected devices) for both IT and OT users
- **OTA updates** – Ability to provide over-the-air updates to connected edge systems and things
- **Security across IoT value chain** – Provides secure onboarding, authentication and authorization for ongoing communication, over the air updates on secure channels and the ability to contain threats using enterprise wipe
- **Visualize relationships between things and gateways** – Provides pictorial representation of the topology of the IoT infrastructure—2 tier or 3 tier—in a parent-child relationship diagram
- **On-premises support** – Offered as an on-premises solution for deployment flexibility and security; future versions will also be offered as cloud-hosted
- **Enterprise integrations** – Quick and easy integration with existing server-side monitoring and alerting capability through REST APIs along with flexible client-side integration through Python-based SDK

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For more information on VMware Pulse IoT Center, call 1-877-VMWARE (outside North America, dial +1-650-427-5000) or visit the [VMware IoT solutions page](#) on VMware.com.

Key Components

Pulse IoT Center (Figure. 1) is composed of two primary components:

- **A management console (server-side)** – The server-side component includes the following set of services:
 - Admin Console for dashboard and setting alerts and notifications
 - APIs for enterprise integrations and extensibility for monitoring and alerting
 - Infrastructure Monitoring module for alerts and symptom configuration
 - OTA software lifecycle management
 - eMQTT message broker for onboarding and configuration
- **An agent (client-side) that sits on IoT gateways and edge systems**
 - The client-side component includes:
 - An open-source SDK that can be customized to interface with and ingest telemetry from any edge systems or connected devices
 - An agent that delivers data samples from devices to the server and receives packages, such as configuration changes and software updates

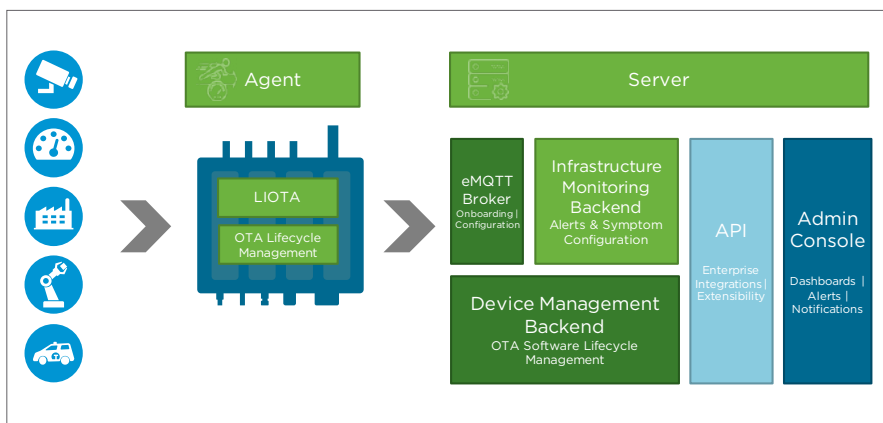


Figure 1. VMware Pulse IoT Center

Technical Specifications

- Liota open source SDK for solution developers to create IoT edge system data orchestration applications
- API abstraction layer for monitoring and alerts
- MQTT protocols supported for message management from the agent to the server side