Wind River Helix Device Cloud

Wind River® Helix™ Device Cloud is a cloud-based Software-as-a-Service (SaaS) IoT device management platform. With the proliferation of connected devices in the Internet of Things (IoT), companies face new challenges as their business extends into the end customer's environment. Customers want to know that their devices and network are protected. Avoiding service interruptions and meeting changing business needs are mission-critical for companies delivering better customer service with IoT.

Device Cloud enables users to reduce the complexities of building and operating large-scale device deployments. With its ability to connect machines and devices, manage machine-generated data, and remotely execute software updates, organizations can lower development costs, accelerate deployment timelines, and free resources to work on creating differentiated products.

With Device Cloud, you can:
• Maintain secure two-way connectivity to gateways and embedded systems that power smart devices
• Keep mission-critical IoT devices fully operational, with tools for remote diagnosis and repair
• Manage the inventory of device configurations and software to be aware of what is running in the field
• Upgrade new devices when first activated in the field and push new updates out as released
• Integrate with other enterprise systems to monitor and share device status

Device Cloud solves the problem of connecting and managing devices remotely. It automatically collects and integrates data from thousands of disparate devices, machines, and systems, enabling operators to track device status and content, be aware of issues, and proactively determine when updates are needed. Using an embedded software agent, device properties and data can be securely transmitted to the cloud. Operators can view device information through a web-based management console, diagnose a situation, and take prompt corrective action.

Use Cases

Gateway Management
Headless industrial computers are often deployed as local data collection points for legacy systems expanding into IoT. These makeshift gateways are an integral part of the IoT strategy and require resources to confirm operation, keep up-to-date, and maintain security. Device Cloud provides the tools to monitor, diagnose, service, and update gateways deployed in the field—eliminating field service calls that can add costs to an IoT program.

Proactive Maintenance
Companies have historically sent field technicians out on fixed schedules to perform routine diagnostic inspections and preventive maintenance on deployed equipment. This is not only a costly and labor-intensive process but also one that doesn't address failures occurring between inspections. By collecting machine data, decisions can be made based on the condition of equipment in the field and technicians alerted when a problem needs to be addressed. With Device Cloud, maintenance becomes real-time, and truly proactive.

Security Updates
Fielded devices are subject to a continuous evolution of security threats and changing customer expectations. Companies need to protect devices from threats known and unknown. Device Cloud provides the tools to securely deliver updates for content, software applications, and operating systems remotely to devices on an immediate or scheduled basis. Tracking enables confirmation of update status and a record of what updates have been delivered to each device.