



Integrating Device Management Function into Industrial Weighing Scales

LANTRONIX  

This solution brief explains how MACH10® Global Device Manager is the fastest, most cost-effective and safest route to market for developing a cloud-enabled connected weighing scale solution. The brief will also demonstrate the advantages of partnering with an experienced IoT solution provider as opposed to developing your software stack from scratch using the nuts and bolts provided by AWS® or Azure®. There is currently a significant gap between the raw components provided by these platforms and the functionality of a finished product that can be easily integrated with a manufacturer's existing and next-generation connected devices.

WHAT IS MACH10® GLOBAL DEVICE MANAGER?

MACH10® Global Device Manager is a customizable device management software platform for delivering modern multi-tenant, multi-user web-based management, automated monitoring and maintenance applications for weighing scales. MACH10® Global Device Manager enables OEMs to:

- Reduce their customer service costs through centralized management
- Easily manage customers and dealers as they expand their business
- Turn weighing scale status and usage data into business opportunities
- Migrate applications and business logic to the cloud, lowering overall investment

REDUCE CUSTOMER SERVICE COSTS THROUGH CENTRALIZED MANAGEMENT

MACH10® Global Device Manager enables an OEM's customer support service teams to access its globally installed base of weighing scales and dimensioners through a cloud-based centralized management platform. Technicians around the world can visualize weighing scale status through an intuitive graphical user interface in real-time, receive SMS or Push notifications on their smart-phones from predetermined event triggers, run remote diagnostics to troubleshoot problems or send quick configuration updates for a specific scale sensor.

Having real-time visibility of connected weighing scales will empower an OEM's remote service technicians to proactively resolve issues as well as schedule on-site maintenance for more difficult cases at a time that is convenient for their end customers.

The goal of every manufacturer is to achieve maximum process efficiency. However, unforeseeable circumstances like equipment failures and downtime can affect essential time-critical operations such as the weighing, measuring, packaging and shipping of products, impacting the bottom line. Service technicians can perform proactive and preventative maintenance services for your products to minimize the impacts on production workflows and manufacturing lines.

With MACH10® Global Device Manager, an OEM's customers remain operational with less downtime, which increases their operational efficiency; thereby, reducing their total cost of ownership, improving profitability. Providing these positive outcomes for their customers will enhance overall brand loyalty and generate future business opportunities.

Integrating MACH10® Global Device Manager with connected weighing scales can also reduce the number of truck rolls, saving OEMs hundreds to thousands of dollars in on-site visits for simple fixes such as a quick configuration change or software update—a task that would typically require an on-site visit by field technician. Through one secure, centralized platform, OEMs can easily reduce support costs, directly improving their bottom line.

EASILY MANAGE CUSTOMERS AND DEALERS AT SCALE

The projected economic impact of the Internet of Things on the industrial segment is approximately \$3-\$6T per annum by 2025. Since weighing instruments are critical to the production of all goods and services, industrial weighing scale OEMs that choose to IoT-enable their products now stand to benefit the most from this economic impact.

As the pace of innovation continues to increase, MACH10® Global Device Manager allows OEMs to capitalize on IoT's technological improvements without worrying about falling behind their competition. Instead, OEMs can focus on growing their customer base by launching new products and services or improving existing offerings.

The MACH10® Global Device Manager application provides OEMs with a complete web-scale, multi-tenant software platform that enables them to scale and grow with their expanding installed base of customers and dealers. Whether the OEM is a start-up with only a few customers, or an established multi-national corporation with hundreds of customers, the platform quickly onboards users, reassigns equipment from one dealer partner to another and provides customers and dealers with centralized device lifecycle management.



TURN WEIGHING SCALE STATUS AND USAGE DATA INTO BUSINESS OPPORTUNITIES

MACH10® Global Device manager provides granular scale status and usage data from end customers so you, as the OEM, can gain valuable insights that benefit your business. Marketing, engineering and customer support departments will be able to evaluate trends over time and develop statistical models that identify opportunities to improve their product, making them more competitive.

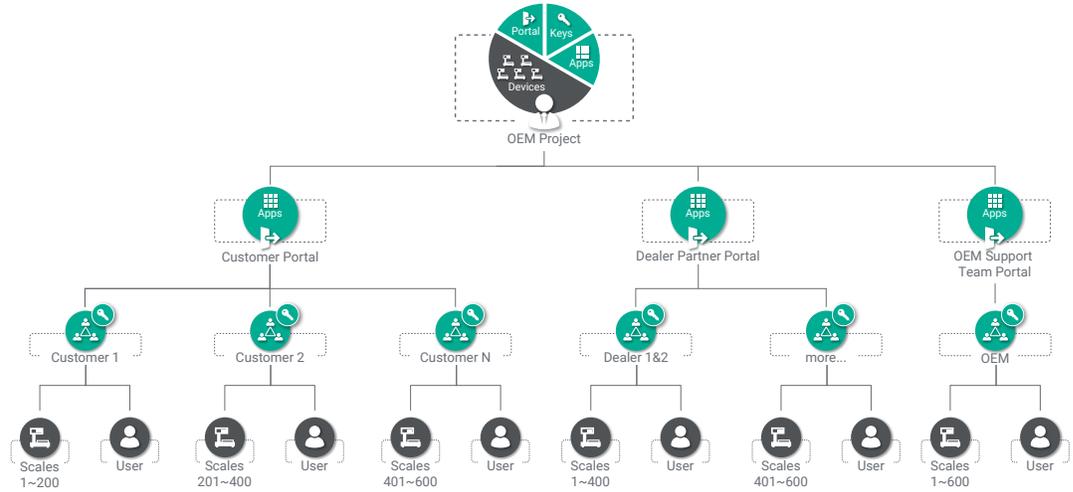
Customer support and service teams can view weighing scale performance and health data over time to reduce overhead while continuing to improve customer service procedures. Product management teams can analyze data and enhance current products or develop new features and functionalities for future products. Engineering teams can design-in new enhancements tailored to specific use cases aimed at reducing costs, improving performance and making products more robust.

Also, OEMs can monetize their data by providing data-as-a-service packages to their customers that will deliver better inventory management and production floor flow for optimal resource planning.

REDUCE THE COSTS OF MIGRATING APPLICATIONS AND BUSINESS LOGIC TO THE CLOUD

MACH10® Global Device Manager's industry-standard APIs enable OEMs to quickly connect scales to the cloud. Once connected, centralized management is available for the connected scales. OEMs can begin monitoring their devices, receive notifications, visualize alarms and other device parameters and perform software updates.

By taking full advantage of the Lantronix IoT platform and its ready-to-use applications, OEMs can focus on their core competencies and what they do best. With MACH10® Global Device Manager, there is no need to invest copious amounts of time and resources building a sophisticated software platform that manages users, devices, portals, storage and many other services.



THE LANTRONIX SOLUTION

The Lantronix MACH10® Platform is the industry’s first multi-dimensional IoT application development and deployment software platform built for OEMs and developed with over 30 person-years of engineering effort.

MACH10® addresses the unique challenges of building and deploying scalable IoT applications that provide secure device access and superior user experiences for all IoT project stakeholders.

Available as a hosted platform, on industry-standard public cloud platforms, or a virtual machine image for on-premise deployments, MACH10® provides a suite of pre-tested and hardened IoT-optimized microservices.

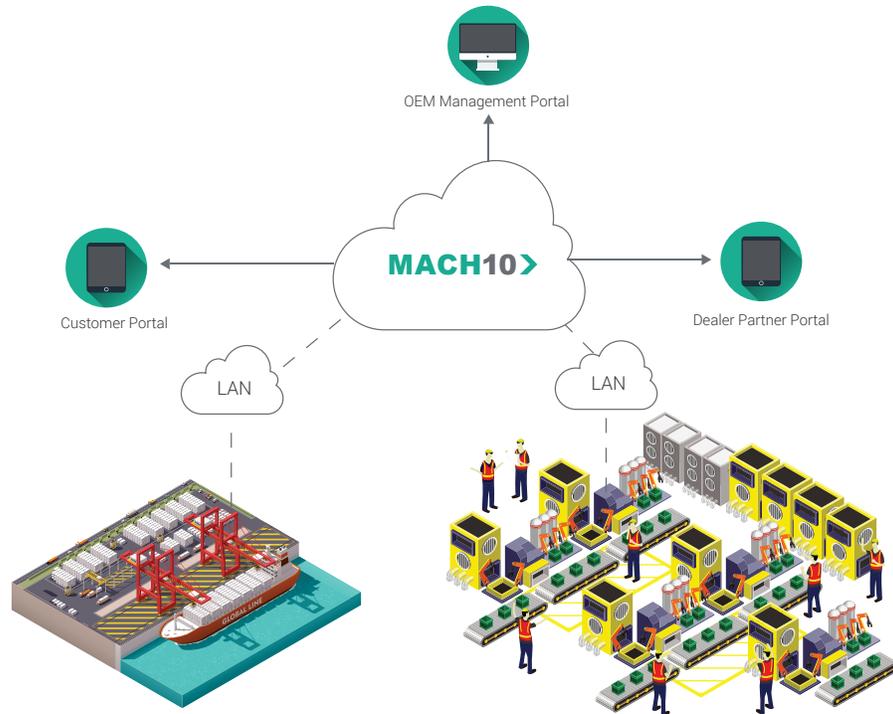
These IoT-optimized microservices help weighing scale OEMs and their vertical market solution partners augment their existing legacy management applications with new features or jump-start the development of new IoT applications without starting from scratch.

MACH10® essentially turns the general-purpose IT infrastructure provided by public cloud providers into production-ready, IoT-optimized building blocks so that OEMs can focus on their core business logic, dramatically accelerating their time-to-revenue while reducing development risks. MACH10® also includes ready-to-use customizable management applications that can be deployed into production within weeks instead of months.

THE PLATFORM

MACH10® is architected from the ground up with multi-tenancy and role-based access control, allowing OEMs to deliver custom self-service portals tailored to different stakeholders’ needs and multiple user hierarchies.

MACH10’s multi-tenant architecture allows weighing scale OEMs to provide applications and services that can be used by their customers and vertical market solution partners, all from a single platform.



One of the applications provided via the MACH10® platform is MACH10® Global Device Manager. MACH10® Global Device Manager's unique multi-tenant, multi-user architecture allows OEMs to quickly deliver secure device management applications for their weighing scales that keep their customers' data private and safe. Weighing scale system manufacturers can easily create self-service web-based portals for device management at scale.

These portals allow fine-grained access control and can be tailored uniquely for the manufacturer's and partner operation teams and customers with different access privileges and experiences while controlling, monitoring or maintaining their entire global pool of connected weighing scales.

SOLUTION COMPONENTS

- MACH10® IoT Application Development and Deployment Platform
- MACH10® Global Device Manager
- Lantronix portfolio of wired and wireless modules and IoT gateways

Cost-effective, scalable, centralized, multi-tenant, secure management for any weighing scale system is now possible. Lantronix's IoT solutions for weighing scale systems offer:

- Industry-standard protocols for flexibility and scalability
- Wired or wireless connectivity to suit any architectural need
- Centralized remote access to connected equipment across one site or multiple sites, and across one customer or many customers
- Easy integration with weighing scales to provide additional remote monitoring, calibration and maintenance opportunities
- Production-ready scalable device management application for a variety of vertical market weighing scales
- Self-service portals and dashboards that support the unique needs of various stakeholders such as solution partners and customers

WHY LANTRONIX?

Established in 1989, Lantronix is an Industrial IoT solutions company and networking industry veteran. The company is a trusted partner to some of the largest and most respected companies in the industrial space for the following reasons:

Market Leadership

Established leader in machine-to-machine (“M2M” connectivity solutions and networking solutions for 25 years. With millions of devices network enabled, Lantronix is a market and technology leader in device servers, console servers and connectivity modules, IoT gateways and IoT and management software.

Vertical Sector Experience

Lantronix has extensive experience in the industrial, medical, retail, financial, smart home, and consumer connectivity spaces with industry-specific certifications and a solid customer base using our IoT gateways for wireless device connectivity in many environments.

Financial Strength

Lantronix is a financially sound and stable company. The company is a publicly traded company listed on NASDAQ exchange: LTRX.

Trusted by Customers Worldwide

Lantronix is a trusted partner to some of the largest and most respected companies in the industry with more than 20,000 customers in more than 50 countries worldwide.

Global Coverage, Local Support

Lantronix is headquartered in Southern California with regional United States presence in Boston, Chicago, and Washington DC. Global presence includes International offices in UK, Netherlands, Germany, India, Japan, and China. Our true global reach ensures that all of our clients will always have access to subject matter experts and local technical support.

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