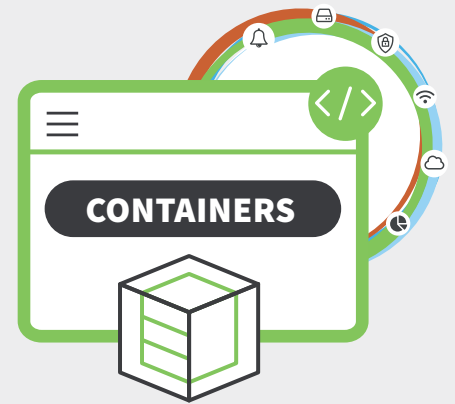# Digi Containers

Digi Remote Manager enables deployment of custom applications via containers

Digi Containers simplify and centralize the process of building, deploying and running custom applications on devices managed with **Digi Remote Manager**® (Digi RM) as the central portal.

Containers with custom programs or Python applications can be loaded via Digi RM on any device running the Digi Accelerated Linux operating system (DAL OS).

THE DIGI ADVANTAGE — FROM DEVELOPMENT TO DEPLOYMENT

As an add-on service to Digi Remote Manager, Digi Containers offer a powerful capability implemented via Lightweight Linux Containers (LXC).

LXC tools enable developers to package up a custom application, with its dependencies and configuration, into a lightweight, portable bundle that shares only the running kernel with the host device.

Using Digi RM to manage containers leverages our proven cloud-based platform that offers a single point of command to securely monitor, control and update programs running on connected Digi routers.

What's more, developers aren't limited to x86-based products: Digi offers dozens of DAL OS-based devices that can run Digi Containers.

More device options for containers with DAL OS

Enterprise routers	Industrial routers	Transportation routers	Console servers	USB-connected devices

To support the full range of IoT applications and environments today, Digi offers dozens of hardware solutions that can run containers.

Key benefits of Digi Containers

- **Portability:** A containerized application holds everything it needs to run and can be deployed in private and public clouds to easily move workloads among environments and providers.

- **Scalability:** Containers can scale horizontally to expand capacity/throughput as needed. By running only what you need when you need it, you can decrease costs significantly.

- **Security:** By design, containers and the host system are inherently isolated from one another, so if one is compromised, others won't be affected.

- **Speed:** Autonomy from the operating system results in greater control, with the ability to start or stop a containerized application in seconds, achieve faster development and operational speed, and deliver a smoother user experience.

- **Efficiency:** Since a separate operating system isn't required, containers require fewer resources than virtual machines to run several containers on a single server, and less hardware means lower costs and fewer points of failure.
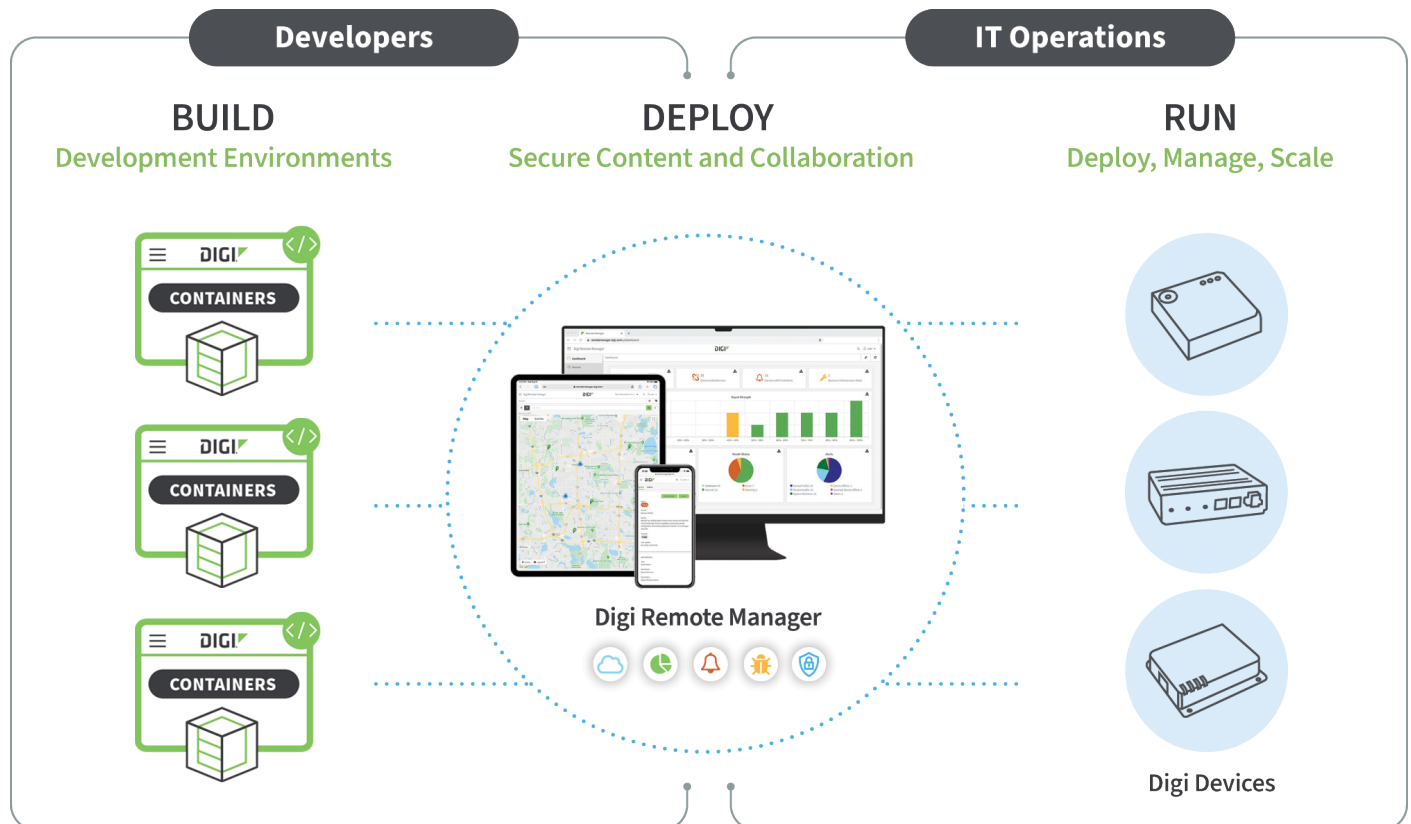
Digi Containers

Digi Containers plus Digi Remote Manager

Optimize and extend the capabilities of your Digi connectivity solution in several use cases.

Developers

IT Operations

BUILD
Development Environments

DEPLOY
Secure Content and Collaboration

RUN
Deploy, Manage, Scale

Digi Remote Manager

Digi Devices

Container-based applications

Digi Containers offer a cloud-centric architecture that enables users to build, deploy and run container-based applications. Added to a Digi Remote Manager license, a Digi Containers license enables companies to orchestrate and manage a complex series of containers in various structures and configurations across enterprise, industrial, transportation and other use cases.

Secure end-to-end environment

Implementing via Lightweight Linux Containers gives users of DAL OS-based Digi routers a secure environment to develop, distribute, and run custom programs or Python applications.

Built-in capabilities with DAL OS

With DAL OS embedded in Digi devices, developers can leverage an extensive set of software features and capabilities built into firmware that is signed, vetted, and distributed as part of our **Digi TrustFence**®-approved standards.

To run applications not already in the distributed firmware, the most streamlined and standardized option is to create a virtual space through Lightweight Linux Containers (LXC).

Management

Digi Accelerated Linux (DAL OS) and Digi Remote Manager (Digi RM)

DAL OS

DAL OS is Digi's standard operating system integrated into **Enterprise** (EX), **Industrial** (IX) and **Transportation** (TX) routers, **console servers** and **USB-connected devices**.

Developed for speed and simplicity, DAL OS enables advanced capabilities that support today's demanding applications.

Learn more at www.digi.com/DAL.

Digi Remote Manager

Digi Remote Manager is a proven technology platform that brings networks to the next level, empowering networks — and the people who manage them — to work smarter. Digi RM transforms a multitude of dispersed IoT devices into a dynamic, intelligent network. It's easy to deploy, monitor and diagnose thousands of mission-critical devices from a single point of command on a desktop, tablet or phone. All the while, software-defined security diligently safeguards the entire Digi ecosystem.

Learn more at www.digi.com/digi-remote-manager.

Infrastructure

- Hosted in a commercial-grade cloud server environment that meets SOC 1®, SOC 2® and SOC 3® standards
- Superior availability, operating to 99.9% or greater
- Open APIs are available to support application development

Security

- More than 175 security controls in place to protect your data
- Member of the Center for Internet Security® (CIS®)
- Enables compliance with security frameworks like ISO27002, HIPAA, NIST and more
- Earned Skyhigh's CloudTrust™ Program highest rating of Enterprise-Ready

Features

- **DAL OS with Digi Remote Manager:** Remote console access, profile Configuration Manager, HTTP proxy, device event logs, configurable maintenance window
- **I/O ports:** Pulse counter, custom Digi device Python library
- **Serial:** Digi RealPort®, Modbus, serial-over-TCP/UDP
- **Customization:** Python 3, Python pip, PyCharm integration, shell scripting, containers, MQTT client
- **Troubleshooting tools:** iPerf and nuttcp bandwidth testing, Find Me tool
- **GNSS:** NMEA/TAIP location forwarding to multiple servers, geo-fencing

Capabilities

- Activate, monitor and diagnose your mission-critical devices from a single point of command and control
- Schedule key operations — including firmware updates and file management — on a single device or on a group of devices, keeping your network functionality up-to-date and maintaining compliance standards
- Manage edge devices out-of-band via console terminal access
- Keep tabs on device health and connectivity across device deployments of any size
- Create detailed reports and enable real-time alerts for specified conditions
- Integrate device data through open APIs to gain deeper insights and control with third-party applications
- Report and alert on performance statistics, including connection history, signal quality, latency, data usage and packet loss

Digi TrustFence

Digi TrustFence is a device security framework that simplifies the process of securing connected devices.

Built-in Security. Delivered.

Designed for mission-critical applications, Digi TrustFence enables users to easily integrate device security, device identity, and data privacy capabilities into product design. Digi TrustFence security for IoT devices is designed to grow and adapt with new and evolving threats.

Learn more at www.digi.com/trustfence.

Proven global connectivity and reliability

With over 35 years of industry leadership and experience enabling millions of globally connected products, Digi is a trusted IoT solutions provider, simplifying the way customers design, build, deploy and manage connected devices and applications. Digi also offers cellular integration support, certification assistance, and custom design and build services to get products to market smarter and faster.

Capabilities

Profile Secure Boot

- Programs and code running on the device are validated to be from an approved source or manufacturer.

Protected Hardware Ports

- Internal and external I/O ports are hardened and access-controlled to prevent unwanted local intrusion.

Authentication

- Provides data authentication and device identity management options and ensures that products are not shipped with default user and password settings.

Secure Connections

- These connections utilize the latest encryption protocols for data in motion and over-the-air (OTA) transmissions to ensure the integrity of data flowing across a network.

Ongoing Monitoring and Support

- Provides ongoing threat measurement and monitoring services and performs external security audits.
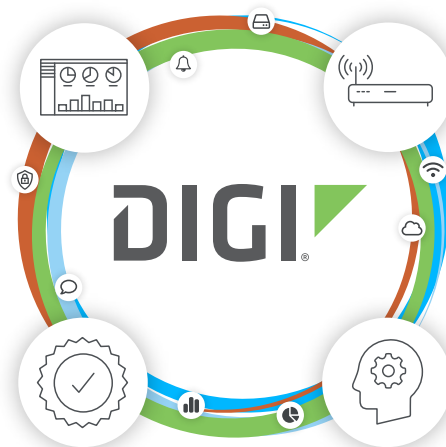
Digi Containers

DIGI CONTAINERS WITH DIGI REMOTE MANAGER

FEATURES AND BENEFITS OF DIGI CONTAINERS

	DEPLOYMENT	MANAGEMENT	MONITORING	ALERTING	VISUALIZATION
DIGI CONTAINERS	• Easily add custom or third-party applications to a Digi device • Add containers en-masse to devices via Digi RM	• Update apps as part of device configuration/firmware • Included in Digi RM Configuration Manager	• Control when and how apps are run • Monitor Digi RM metrics and API datastreams	• Proactive actions to keep your critical business running • Digi RM alerts for specified conditions and security threats	• Insights into your critical business logic • Digi RM dashboard summaries

DIGI CONTAINERS KEY MARKETS, APPLICATIONS AND TOOLS

	CUSTOM APPLICATIONS	THIRD-PARTY TOOLS
APPLICATIONS FOR DIGI CONTAINERS	• Custom application setup, deployment, ongoing firmware updates and management • Transportation infrastructure	• App store marketplace • Infrastructure OEM
KEY MARKETS	• Oil and gas, buses and trains	• Managed service solution providers

PART NUMBERS — DIGI CONTAINERS

VALUE-ADDED SUBSCRIPTION WITH DIGI REMOTE MANAGER PREMIER

DIGI-RM-PRM-CS	Digi Containers subscription

Digi Containers are available as a subscription added to Digi Remote Manager Premier.

PART NUMBERS — DIGI REMOTE MANAGER

DIGI REMOTE MANAGER PREMIER

DIGI-RM-PRM-1YR	Digi Remote Manager Premier — 1-year subscription
DIGI-RM-PRM-3YR	Digi Remote Manager Premier — 3-year subscription
DIGI-RM-PRM-5YR	Digi Remote Manager Premier — 5-year subscription

For more information about Digi Containers,
visit **www.digi.com/containers**

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