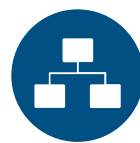


kontron

The Power of IoT

Kontron AIS GmbH



KontronGrid

The complete fleet management solution for edge devices

KontronGrid is specifically developed to manage and simplify the deployment of applications for edge devices. With the ISO 27001-certified software, you lay the foundation for the development of your individual IoT solutions and automate tasks such as secure fleet updates at operating system and application level with just a few clicks, monitoring devices in the field and setting up fast remote support to minimize downtime. This allows you to manage thousands of device connections – globally and at a glance.

Added value for device and component manufacturers



IT managers

- Minimize complexity for IT teams and free up IT resources
- 24/7 overview of globally distributed device fleet
- Meet the highest security standards and compliance requirements



Software architects

- Secure data exchange with comprehensive end-to-end encryption mechanisms
- Continuous deployment during operation
- Easily build and manage containers for scalable applications



Product managers and owners

- Monetization opportunities through software licensing and custom application solutions
- Increase machine turnover through digital service
- Ensure competitiveness through accelerated product development cycles and faster time to market

Your advantages



Complete IoT solution

Benefit from seamless integration through software and hardware. With KontronOS and matched hardware, you benefit from speed of integration and cost efficiency without compromise.



Flexible and scalable

Our solution grows with you. Manage fleets of any size worldwide and scalable down to the machine level.



Start right away

Forget about hidden costs or additional development. With our system, you can get started right away and experience fast onboarding.



Less complexity, more efficiency

Manage and update your edge devices with just a few clicks – easily and automatically.



Boost development team productivity

We provide the infrastructure your development team needs to focus on application development.



Maximum security, minimum effort

With our company-level ISO 27001 certification and simplified entry to IEC 62443 certifications, you can secure your projects at the highest level.



„By using Docker containers, KontronGrid enables easy device management and fast software updates to quickly respond to security vulnerabilities and provide security updates.“

Patrick Bauer, Design and Development at VOLLMER WERKE Maschinenfabrik GmbH

This is where KontronGrid is used



Global monitoring

KontronGrid makes it much easier to manage, monitor and operate your fleet of devices. This means that you can keep track of thousands of device connections at any given time.

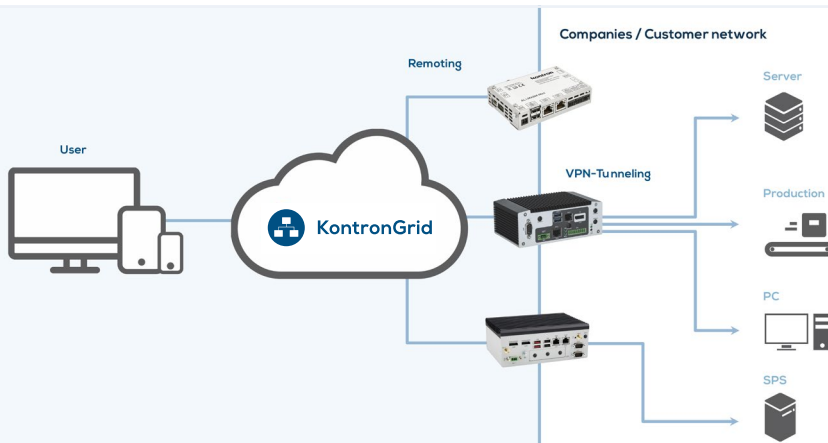
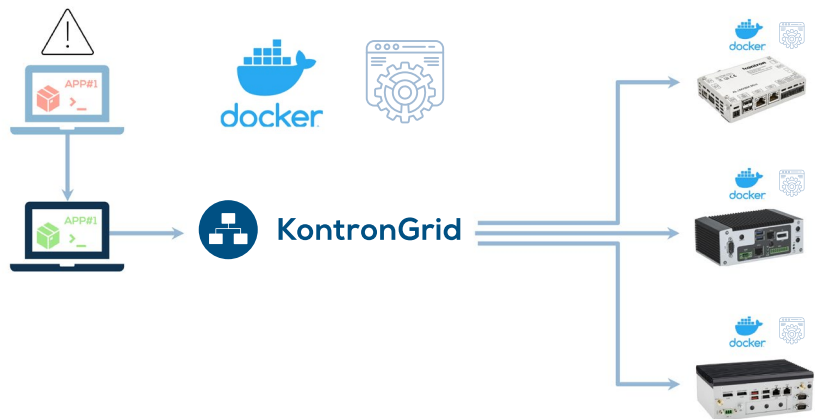


Secure operating system (optional)

Secure your Intel® x86 and Arm® based devices against critical vulnerabilities with a Yocto Linux®-based operating system. Two redundant operating system partitions provide the highest availability and a secure management interface for updates and deployment.

Rolling out updates

Container-based or native applications can be updated without manual effort using configurable image templates in KontronGrid. Test and roll out update scenarios on edge devices distributed worldwide.



Remote support

For service cases, use KontronGrid to remotely access your machines quickly and efficiently. Set up a temporary VPN connection at control level to significantly increase your support depth.

Add-ons: Extend your fleet management solution for the best possible results

The secure Linux® OS operating system for edge devices – KontronOS

A core component of the KontronGrid fleet management solution is the hardened Yocto Linux®-based KontronOS operating system, which comes pre-installed for enhanced security and optimal operation of Docker containers in embedded and networked Intel® x86 or Arm® based devices.

- › **Comprehensive security architecture:** KontronOS effectively protects against compromise, unwanted external access and uncontrolled updates
- › **Intuitive user interface:** Simple configuration of network zones and settings
- › **Advanced physical security:** Additional security layer for device and user login data as well as an integrated security mechanism at BIOS level, supported by TPM 2.0 on x86 and HAB for Intel® x86 or Arm®
- › **Network protection:** Integrated firewall enables precise definition and protection of network zones against unwanted access
- › **Versatile signal support:** GPIO support allows the use of digital signals for extended use cases
- › **Proactive security check:** Continuous CVE/CWE analysis of software components against known vulnerabilities
- › **Extended functionality:** Handling of Boot-Loader updates

Matching hardware portfolio for the KontronGrid fleet management solution

Every company is unique and has its own specific requirements, which we can cover with a complete hardware and software solution if you wish. Our product portfolio is designed to be flexible and adaptable to your individual needs. We offer a variety of options, including standard IoT stacks, modified stacks, and fully customized solutions. Our product range with Kontron's proven embedded hardware ensures that you get the perfect solution for your fleet management needs.

Digital transformation solution EquipmentCloud®

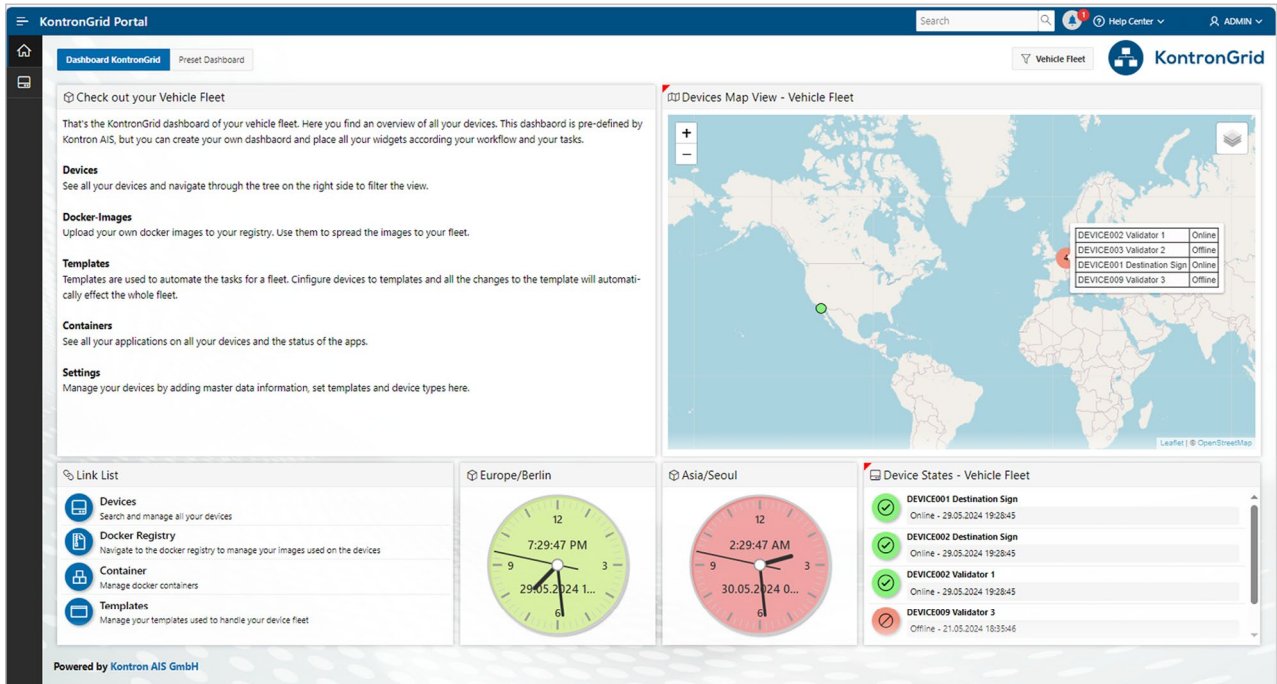
EquipmentCloud® is our agile digital transformation solution for service and after-sales in mid-sized mechanical engineering companies. It enables you to streamline your processes, consolidate information in one place, and open up new data-based business models. Keep your customers happy with a personalized customer portal with custom branding, customizable user rights, and multi-language support.



EquipmentCloud®

Proven added value for service and support in mechanical engineering

- › **Cost efficiency:** Reduce hardware, installation and maintenance costs
- › **Minimize travel costs:** Significantly reduce the need for on-site visits
- › **Efficient troubleshooting:** Save time with direct and targeted problem resolution
- › **In-depth support:** Immediate assistance down to the device level
- › **Act proactively:** Perform preventive actions through predictive analysis



Features



Device management made simple

- › **Condition monitoring:** Continuously monitor the state of all IoT devices
- › **Cloud-based management:** Centralized control of globally distributed edge devices in a cloud environment
- › **Easy onboarding:** Quickly and easily integrate new IoT devices



Efficient application management

- › **Automated deployment:** Efficiently manage and deploy Docker images or native applications to device fleets via command line interface (CLI)
- › **Customer applications:** Encapsulate images into containers for optimized distribution or enable native application installations
- › **Mass updates:** Efficiently schedule and roll out complex updates to device fleets using templates or distribution sets
- › **Docker Compose integration:** Extensive configuration and easy orchestration of image sets



Flexible remoting

- › **Centralized access management:** Manage desktop and remote access, including RDP and SSH
- › **Secure remote connection:** Set up secure remote connections for efficient support



Temporary VPN tunneling

- › **Flexible access:** Direct, secure, and controlled access to machine and system networks
- › **Direct connection & tunneling:** Simple setup of direct network connections with comprehensive monitoring and logging
- › **Unlimited Teamwork:** Multiple experts can access a system in parallel for efficient problem solving

Kontron AIS GmbH

Kontron AIS GmbH sets the benchmark in industrial software – for more than 30 years and with an experienced team of over 250 employees. The proven software products and customized digitalization solutions enable machine and equipment builders as well as factory operators to break new ground in automation and secure long-term competitive advantages. Together with its customers, Kontron AIS implements worldwide cross-industry, intelligent digitalization strategies and solutions for the smart manufacturing of tomorrow.

As a subsidiary of the Kontron AG, Kontron AIS offers integrated, end-to-end IoT concepts consisting of hardware and software as well as worldwide project management, service, and support thanks to a global network.



Software Development



Consulting and Requirement Engineering



Project Management and Training



Supply of Hardware for Control and IT Systems



On-Site Installation and Commissioning



Flexible, Global Service and Support

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