

KontronOS for Avionics

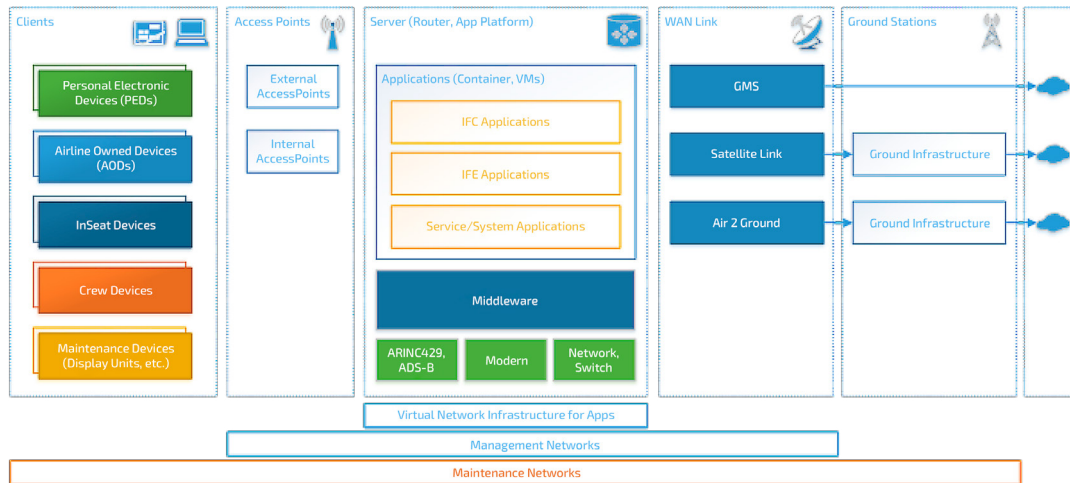


KontronOS Avionics



- KontronOS for Avionics (KOSA) is a middleware solution designed to make porting applications, seamless, quick, and easy
- Same applications & configurations are supported on all Kontron avionics hardware (hardware agnostic)
- Supports virtual machines (VMs) and containers
- Flexible and highly scalable for all application needs
- With Kontron Device Management for Avionics, KOSA supports a full fleet management solution. This includes OTA telemetry data, remote management, installation and updates of field-loadable software and content updates.

- KOSA has been engineered with scalability in mind, offering configurable modules that allow formation of complex networking and support for various hardware deployment.



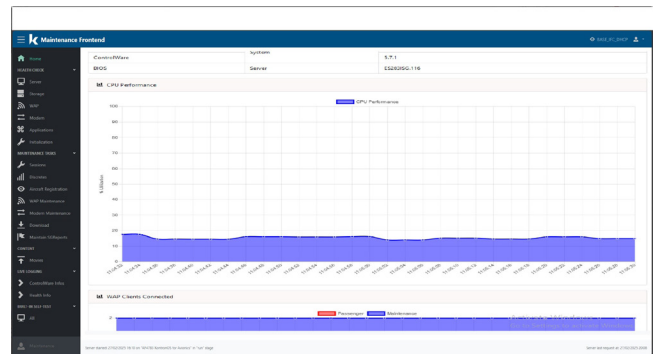
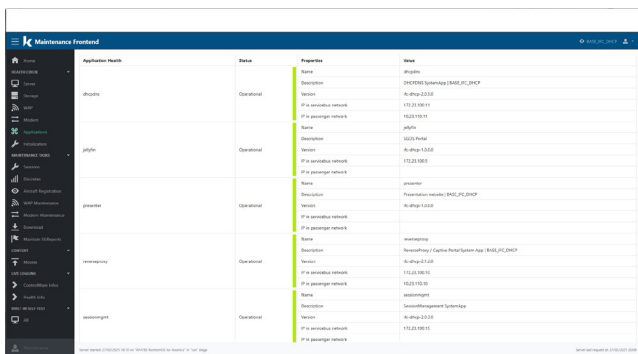
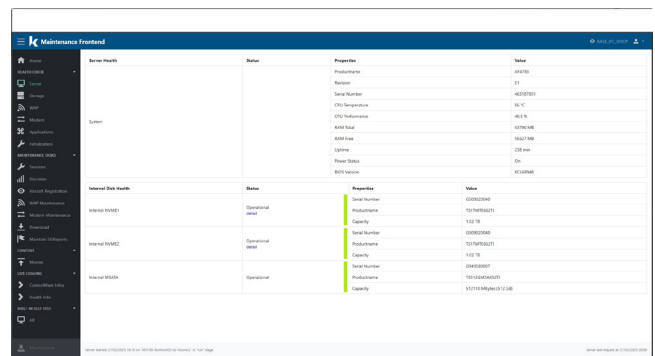
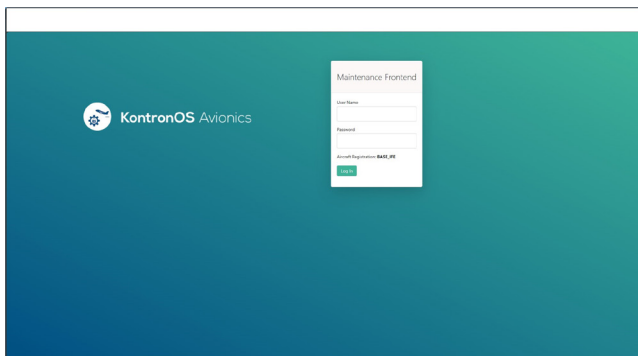
Product Overview

- KOSA is a highly flexible OS giving you the capability to integrate, maintain, operate & monitor any user defined application required to support your avionics business model.
 - Easy integration of your application either containerised or as virtual machine
 - Supports compute, networking (cellular, WiFi, wired, SATCOM, A2G) and storage resources via a highly sophisticated & configurable resource manager
 - Designed to guarantee system and data integrity for all hosted applications in case of sudden power loss for maximized uptime.
 - Monitoring and management of LRUs (e.g. SATCOM modems, Wi-Fi)
 - Broad range of system applications to support many different usage scenarios
 - Typical scenarios are session management for IFC, SNMP for monitoring of SATCOM modems, firewall for security, DHCP/DNS for connected client devices and many more.
- Highly configurable and scalable middleware solution
 - Hardware abstraction for easy and secure access to low level hardware
 - Decoding and translation of ARINC429, ARINC664 and ADS-B data
 - Centralized logging functionality via the middleware
 - Various management interfaces, including REST, ZeroMQ and SNMP
- Supports stand alone (IFE), partially connected (IFE) and connected (IFC) installations
- Provisioning process designed to support large fleet installations with multiple different aircraft configurations
- Highly configurable maintenance frontend interface for quick and easy system health checks and maintenance tasks
- Can be used together with Kontron Device Management for Avionics to enable remote management and updates

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pc-0000.00.1f	SystemDiskInfo	
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SecurityLocked	false	
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WriteCacheEnabled	true	

[illegible]

Example Maintenance Frontend Screenshots



With KOSA, integrators and content developers can seamlessly develop and deploy In-Flight Solutions such as:

- **Entertainment Content Delivery:**
 - **Movies, TV Shows, and Music:** Passengers can access a variety of films, TV series, music, and audio books, helping make long flights more enjoyable.
 - **Gaming:** Interactive games or mobile app-based gaming can be offered to passengers, catering to different age groups.
 - **Interactive Media:** Some advanced IFE systems offer interactive features like touchscreen controls, on-demand content, or even virtual reality (VR) for more immersive experiences.
- **Passenger Engagement and Comfort:**
 - **Personalised Content:** Passengers can create customized profiles to receive content suggestions tailored to their preferences, like preferred genres, languages, or media types.
 - **Seatback Screens & Personal Devices:** Passengers can enjoy entertainment via seatback screens or their own devices, with content streamed directly from the aircraft's IFE system.
 - **Kids and Family Content:** Tailored content for children, including educational videos, games, and cartoons to keep younger passengers entertained.
- **Safety and Informational Features:**
 - **Interactive Safety Briefings:** Modern IFE systems can display engaging and interactive safety videos that ensure passengers understand emergency procedures.
 - **Real-Time Flight Information:** Passengers can track the flight's progress, weather conditions, and arrival times through the IFE system, offering a more informed journey.
- **Advertising and Brand Promotion:**
 - **In-Flight Advertising:** IFE systems can serve as a platform for advertising, either through video ads or banners, allowing airlines and partners to promote products, services, and duty-free shopping.
 - **Sponsored Content:** Content such as movies, games, or documentaries can be sponsored, creating additional revenue opportunities for airlines.
- **E-commerce:** Airlines can provide passengers with the ability to shop for duty-free products, food, and services via in-flight apps.
- **Smart Cabin Solutions:** Airlines can introduce smart cabin solutions by integrating IoT technology, enabling real-time monitoring of passenger comfort, seat occupancy, and cabin conditions. This connectivity allows for personalized services, efficient maintenance, and enhanced safety.
- **Internet Access over A2G or Satellite Connectivity:**
 - **Wi-Fi Connectivity:** Passengers can access the internet to browse websites, check emails, and use social media apps, similar to regular internet use on the ground.
 - **Messaging Apps:** Allows passengers to use messaging services (like WhatsApp, iMessage, or Facebook Messenger) during flight.
 - **Streaming and Video Calls:** Enables video streaming from platforms like Netflix or YouTube, as well as video calling capabilities (such as Zoom, Skype, or FaceTime) depending on the bandwidth available.
 - **Fleet Management:** Allows for seamless communication between aircraft and ground operations for updates (with use of Kontron Device Management for Avionics).

- Aside to the base offering, the following additional features are offered as extended feature sets depending on the targeted use case
 - Forensic Logging (Keeping track of sessions, connected clients and storage of historical data for a duration of 100 Days)
 - DPI (Deep Packet Inspection)

Extended Feature Offering

- KOSA Software configuration support (6 months / 12 months)
- KOSA Software Assurance (Yearly Contract minimum term)
- KOSA Software Customization Support (NRE Based)

Your Contact

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