WIND RIVER ELXR PRO 24.12

Release 24.12 highlights: cloud-native advancements, virtualization support, and hardware enablement

The eLxr project is an open source, Debian-derivative Linux distribution that broadens access to cloud-native environments and connects heterogenous, computationally limited edge computing devices that run remotely. The enterprise distro, eLxr Pro™, is fully compatible with existing Wind River® deployments, offering reliable, secure, and cost-saving Linux solutions that address the unique challenges of near-edge and far-edge computing for mission-critical and data-intensive workloads..

Wind River is now unveiling eLxr Pro 24.12. This release addresses three pivotal areas:

- Scalability and resource constraints
- Performance optimization
- Strengthened trust, compliance, and data protection

ADDRESSING SCALABILITY AND RESOURCE CONSTRAINTS

Wind River empowers organizations to accomplish more by streamlining processes, improving efficiency, and optimizing uptime at the edge. We regularly address scalability and resource constraints that arise as workloads become more intricate and demanding.

eLxr Pro 24.12 adds support for more virtualized guest environments, including VMware ESXi and Microsoft® Hyper-V. You'll also find cloud-native enhancements, such as container base images for popular languages such as Python.

Its cloud-native components, such as Kubernetes and lightweight solutions such as k3s, are tailored for edge server use cases. The eLxr platform is optimized for low-latency AI workloads. Deployments are streamlined with distroless containers for security, optimized execution for low latency, and Kubernetes for a seamless experience from edge to cloud.

eLxr Pro 24.12 offers cloud-native flexibility at the edge, streamlines and scales AI deployments, and enhances support for the virtualization environments you use. It supports more of the hardware that your applications need — and it's fast. Whether you're deploying new applications or scaling AI workloads, the transition is effortless.

OPTIMIZING PERFORMANCE

Ensuring workload adaptability while also enabling a broad range of hardware is important for all Wind River customers. It is a particularly critical requirement in industries where demanding, data-intensive workloads such as AI and edge computing stress hardware performance. In this release, we expand hardware compatibility and interoperability.

eLxr Pro 24.12 supports more platforms, including AMD EPYC, NXP's i.MX series, and NVIDIA Jetson Orin. These offer special attention to intelligent systems, such as those used in automotive and industrial AI.

STRENGTHENING TRUST, COMPLIANCE, AND DATA PROTECTION

Wind River is dedicated to enhancing trust and compliance, which are paramount in regulated industries. eLxr Pro 24.12 ensures secure, compliant systems that can handle today's edge and cloud environments.

In this release, we implemented a secure boot design with X86-64, ensuring that only trusted code executes during startup. Secure boot ensures trusted code execution and protects against unauthorized modifications.

Our encryption libraries are undergoing FIPS 140-3 certification right now. Wind River OpenSSL achieved FIPS 140-2 validation in autumn 2024. FIPS validation guarantees cryptographic module compliance with stringent security standards, so this is an important process.

For cloud-native security, we're expanding testing, automation, and use cases with tools such as Kube-bench. This broadens protection across diverse cloud workloads.

The updates introduced in eLxr Pro 24.12 empower trusted system startups, bolster data protection, and deliver enhanced security for cloud-native environments. Our goal is to ensure that your critical systems are protected and prepared for the future.

LEARN MORE

For more detailed information about eLxr Pro, visit the Wind River website.

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