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WIND RIVER PULSAR LINUX

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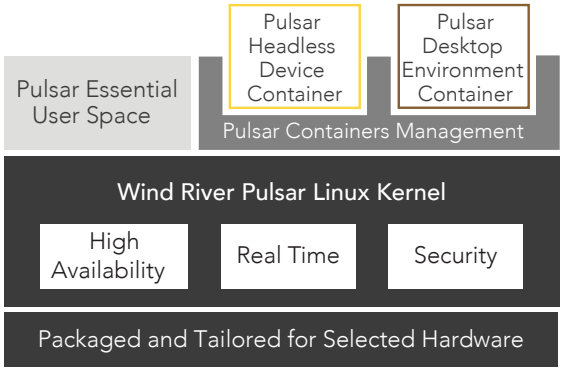
Wind River® Pulsar™ Linux is a small, high-performance, secure, and manageable Linux distribution that combines the best of Wind River open source technology and delivers it without the traditional cross-build complexity. Designed to be simple to download and develop on, Pulsar provides a certified and ready-to-use binary image for specific hardware, delivered as an application-ready platform. It includes selected packages and middleware from our traditional Wind River Linux and market-specific profiles.

Pulsar comes bundled with certified partner hardware, but users can also download the latest certified images, build system, cross toolchain, and all layers and packages needed to rebuild by following the simple instructions found on the Wind River Open Source Lab github repository, https://github.com/WindRiver-OpenSourceLabs/wr-core. Wind River Open Source Lab experts are easily reached via the Wind River Internet Relay Chat (IRC) Freenode public channel #wropenlabs.



- Small, reconfigurable kernel, user space, and file system
- High-performance virtualization
- Configured for size, performance, and reliability
- Packaged on select hardware
- Ideal for containers—you can start with atomic configuration

Figure 1: Wind River Pulsar Linux architecture

FEATURES

Based on 30 years of Wind River industry-leading experience and the latest Yocto Project Compatible releases, Pulsar ensures your team is working with the highest-quality commercial open source embedded operating system on the market. Features include:

- **Multiple architectures:** Certified images run on all major CPU architectures.
- **Easy application development and device lifecycle management:** Using the available SDK, users can focus directly on developing their own value-added features.
- **Quick prototyping:** Pulsar is shipped as a pre-installed binary image with hardware, or is available for download.

- **Integration with Wind River Helix™ Lab Cloud and Wind River Helix App Cloud:** Pulsar can run on simulated hardware within our cloud-based virtual lab that includes software and hardware simulations.
- **Top-to-bottom security:** From secure boot to middleware and applications, all transfers are made via a certified repository feed.
- **Secure updates:** Pulsar provides ongoing security patches and other critical Linux updates.
- **Software updates for deployed devices:** A smart update agent connects to certified repositories for updating devices deployed in the field.
- **Extensibility via packages:** You can add packages on the target from a certified repository or build packages on the target.
- **Containers for application middleware abstraction:** Pulsar can bring any application from any ecosystem to run on any device, even applications that need their own middleware.
- **Free open source software (FOSS) compliance:** Source code is provided for power users.

BENEFITS

Pulsar is available at no cost to the end user on certified hardware platforms. It offers the following benefits:

- Ability to deploy and run in minutes—and immediately get started building applications
- Faster time-to-market, with a smaller learning curve for developers
- World-class embedded platform development experience with the full ability to customize, from secure boot to middleware applications
- Easy updates by connecting to a trusted repository hosted by Wind River
- Risk mitigation by keeping customers' devices updated and protected from security threats
- Performance in bridging the ecosystem by allowing users to take applications running on any distribution or any device and move them to the binary platform

HARDWARE

The board certification program for Pulsar includes a variety of prototyping and development boards to fit your embedded development needs. The list of initial certified boards includes, among others, the following:

- Avnet PicoZed
- Avnet MicroZed
- Avnet Mini-ITX
- MinnowBoard MAX

NEED MORE HELP?

In addition to getting help from our IRC community, users can choose from among our award-winning, certified maintenance and support offerings to protect them from the risks associated with managing their embedded software across its entire lifecycle, from initial designs to retirement.

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Wind River is a world leader in embedded software for intelligent connected systems. The company has been pioneering computing inside embedded devices since 1981, and its technology is found in nearly 2 billion products. To learn more, visit Wind River at www.windriver.com.