

Wind River Platform for Android

Device manufacturers and operators are challenged to consistently achieve time, quality, specification, and cost delivery performance metrics in complex, rapidly evolving, open platforms such as Google’s Android. Wind River created a commercial Android platform to address these real-world device delivery issues and to help device manufacturers and operators compete for their share of an ever growing revenue stream from consumers who expect compelling, mobile, always-on, network-centric services.

Wind River Platform for Android enables Android success by providing a validated, multi-BSP, fully compliant Platform for Android augmented with cutting-edge Wind River technology and select, preintegrated partner solutions. With Wind River’s position as the pioneering Android commercialization partner and our experience from numerous Android enablement engagements with operators, independent software vendors (ISVs), and device and semiconductor manufacturers, Wind River Platform for Android represents a rapid and predictable way to innovate and differentiate.

Operators and device manufacturers expect market-ready, multi-SKU Android solutions that can be rapidly brought to market. Consumers expect intuitive innovation and predictable device performance. Application and content providers expect a reliable platform to realize new revenue streams.

Backed by Wind River’s certified global customer support organization, Wind River Platform for Android is the basis to rapidly deliver a customized solution to fit specific market needs without having to reinvest in bringing up core platform components and ensuring their stability.

Advance the Android Experience

Beginning with the latest version of the Android software development kit (SDK), Wind River enhances the entire Android experience, encompassing all layers of the software stack and embedding the Wind River Platform for Android into a comprehensive, automated test framework, to ensure predictable device quality.

Wind River offers a thematic approach to enhancing Android functionality.

Enhanced User Interface and Personalization

Consumers often base their decision to buy a device on its user interface. And their decision to return a device is often driven by their frustration with nonintuitive, multistep user interface designs. Wind River Platform for Android includes enhancements to the standard Android user interface and music player as well as rapid implementation options to customize common branding elements such as boot-up and termination screens and additional gesture-based choices for core phone functions such as making a call and sending text messages.

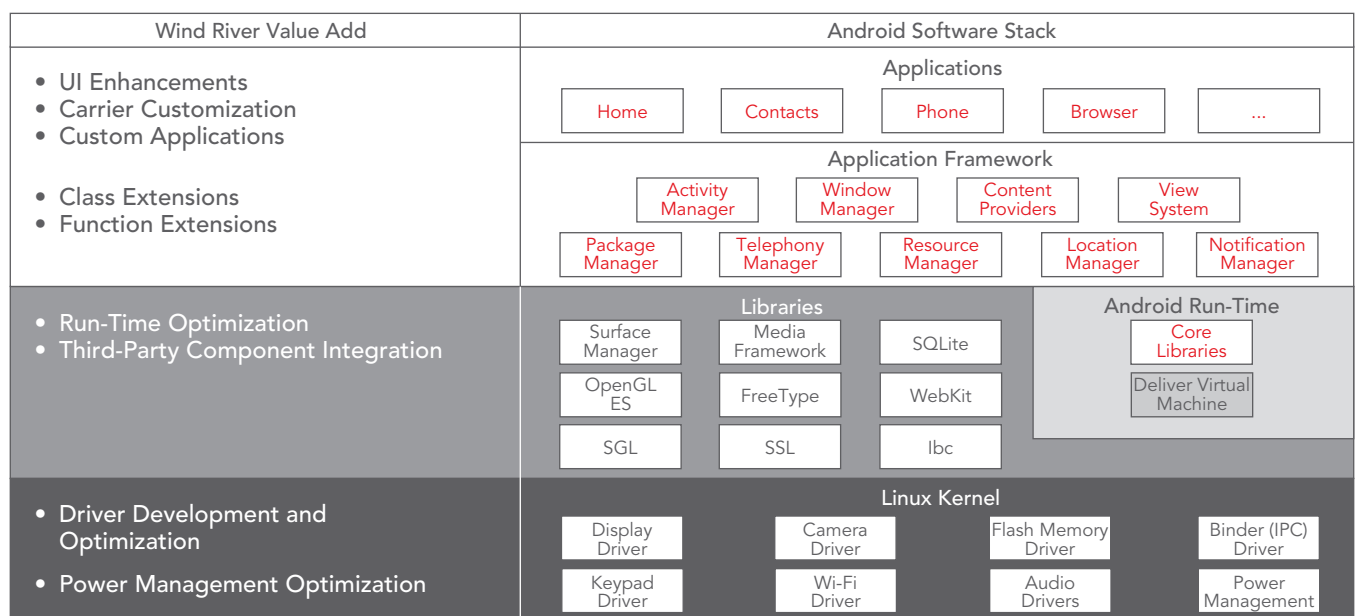


Figure 1: Wind River enhances the Android experience

New options for personalization include the ability to allow still-picture slide shows on a locked idle screen. Wind River also delivers a series of new widgets and different skins in addition to the existing Android widgets (e.g., analog clock) for users who want a differentiated look and feel from the standard Android interface.

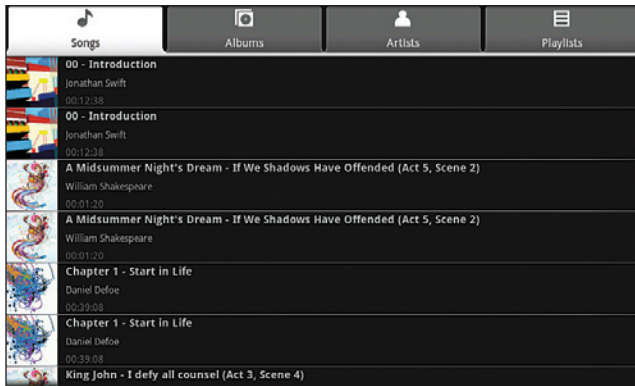


Figure 2: Android user interface enhancements



Figure 3: Flexible user interface personalization

Extended Application Framework

Wind River makes targeted changes, optimizations, and extensions to the existing Android application framework for creating new application capabilities and enabling new use cases. For example, the short/long press behavior of hard and soft key options can be changed.

Reset Capability

Wind River Platform for Android adds the ability to reset the mobile device to factory state, that is, erase all user data and reload the original kernel and file system image. This new functionality is important because it makes device refurbishment and service much easier.

Lower-Layer Optimizations

Patching the Advanced Linux Sound Architecture (ALSA) module to optimally perform within Android is another concrete example of Wind River's expertise. Lower-layer optimizations delivered by Wind River Platform for Android are specific to the supported board and chipset. They often include performance- and stability-enhanced drivers for such external communication interfaces as 802.11, USB, and Bluetooth; optimized hardware acceleration options to ensure a high-quality multimedia experience; and boot-time acceleration. Kernel level optimization for power management can also be offered depending on the capabilities of the hardware platform.

Validated and Tested

Wind River Platform for Android is a roadmap-driven, fully validated and tested, Android Compatibility Test Suite (CTS)-compliant, globally supported and maintained Wind River platform. Releases are scheduled to be available quarterly or to coincide with public Android SDK drops.

Each release is validated through a rigorous process that combines hundreds of manual test cases and our market-leading Wind River Framework for Automated Software Testing, with tens of thousands of automated test scenarios (including the latest Android Compatibility Test Suite).

Wind River Platform for Android provides predictability uncommon to roll-your-own Android projects because of Wind River's ongoing investment in the platform. Leveraging the benefits of a commercial software solution offered by Wind River allows the cost-effective expansion from an initial, expensive, single SKU delivery to a whole portfolio of devices without creating significant additional Android-related engineering and quality assurance costs.

To learn more, visit <http://windriver.com/solutions/mobile-handsets/>. To have a representative contact you, call 800-545-9463 or write to inquiries@windriver.com.