WIND RIVER SOLUTION ACCELERATOR FOR ANDROID, CONNECTIVITY

Android has become one of the leading mobile operating systems through its openness, highly customizable features, robust ecosystem, and growing application availability. For device manufacturers, original equipment manufacturers (OEMs), original design manufacturers (ODMs), and operators, harnessing the power of Android for mobile devices of all kinds can be both rewarding and very challenging. The rapid technology release cycles and the growing competitive pressure make it difficult to meet time-to-market windows, add differentiating functionality, ensure user experience and quality, and control development costs. Wind River understands these challenges and is dedicated to helping our customers build leading-edge Android-based products in this dynamic and competitive environment.

Wind River Solution Accelerators for Android are commercial add-on software modules optimized for the Android operating system. Solution Accelerators are tested and validated applications and middleware components that are combined with specialized innovation design, consulting, industrial standard compliance, and comprehensive life cycle services. OEMs, ODMs, and service providers can utilize Solution Accelerators to quickly build their own Android products, solutions, or services and add branding, personalization, and innovation to fill the gap between the Android Open Source Project and real-market requirements.

**BENEFITS**

As ready and well-tested software components, Wind River Solution Accelerators for Android also bring financial benefits to our customers by reducing engineering costs during each project phase:

1. **Project startup phase:** Fewer technical evaluation and skills acquisition are required.
2. **Development phase:** Effort is reduced for testing frameworks, license management, and refactoring.
3. **Maintenance phase:** Effort is reduced for refactoring and regression testing.

Wind River Solution Accelerators are categorized and packaged by functions. Currently, three Solution Accelerator packs are defined. Each is a standalone product; however, multiple packs can be combined:

- Wind River Solution Accelerator for Android, Connectivity
- Wind River Solution Accelerator for Android, Medical
- Wind River Solution Accelerator for Android, User Experience
In addition, Wind River also offers Wind River Platform for Android, a fully compliant commercial software platform, and Wind River Framework for Automated Software Testing, a meta-test framework that automates software and system tests and their results for mobile Linux devices, as part of our solutions for mobile devices.

**CONNECTIVITY SOLUTION**

Connectivity is one of the most important functions in today’s portable devices. It allows users to connect to services, networks, other devices, and interfaces. With the many different standards and devices or services to connect with, it’s a challenge to deploy additional connectivity stacks to Android quickly and ensure stability and compatibility with peer devices or services. Wind River Solution Accelerator for Android, Connectivity helps address this challenge with implementations for a media sharing standard, an information synchronization standard, and radio broadcasting support.

**KEY FEATURES**

**Wind River Media Center**

Digital media has become an important part of our lives, and the capability of media sharing is key in consumer electronic devices today. Wind River Solution Accelerator for Android, Connectivity includes Wind River Media Center. Media Center provides multimedia interoperability for Android devices, enabling an Android device to connect to another device and view that device’s digital media, or connect to another device and allow it to access the media on the Android device following the Digital Living Network Alliance (DLNA) standard. Wind River’s implementation is comprised of three components:

- Digital Media Server stores content and makes it available to networked digital media players.
- Digital Media Player finds content on digital media servers and provides playback and rendering capabilities.
- Digital Media Controller finds content on digital media servers and plays it on designated players.

The full-feature media sharing capability makes Wind River Media Center suitable for Android-based smartphones, tablets, automotive infotainment systems, media phones, and other devices where the media sharing benefits.

**SyncML Support**

Mobile users want to access their information and applications wherever they are, whenever they want it, and on whatever devices they are using. It is critical for the mobile platform to provide the ability to back up, synchronize, and access such information at all times. Operators and device makers always want to have a synchronization mechanism that is independent from Google Sync. Wind River has incorporated the SyncML protocol into Android, providing users the sort of information synchronization they want.
SyncML is an open standard protocol that has been widely adopted today. It does not rely on proprietary hardware or software, meaning device manufacturers, service providers, and application developers can focus on communicating with one universal standard rather than maintaining multiple interfaces to different protocols.

Wind River’s SyncML is suitable for operators or device manufacturers that want to enable the synchronization services on their Android-based connected devices.

**FM Radio**

Listening to FM radio is still a common way for people to get news, music, and entertainment today. FM Radio is a popular function embedded in most consumer electronic devices, but Android currently provides no FM radio support. Wind River has implemented an FM radio application with a fancy user interface and a framework to bridge the application and the FM radio chipset on Android.

Wind River’s implementation of FM radio has both the FM receiver and the FM transmitter functions. It is suitable for Android-based smartphones, tablets, portable players, and automotive infotainment systems.

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.