Automotive Services Catalog:
New Android IVI Applications

BUILD NEW, AUTOMOTIVE-GRADE ANDROID APPS FROM THE GROUND UP

OEMs frequently require custom-built Android applications to deliver tailored and brand-specific user experiences. These applications often must integrate deeply with vehicle systems, support unique infotainment features, and comply with stringent safety and usability standards. Building, validating, and maintaining these apps across diverse platforms and hardware configurations is accompanied by significant complexity and risk.

To address these challenges, Aptiv partners with OEMs to design, develop, and deploy custom Android IVI applications that are modular, scalable, and compliant — delivering production-ready user experiences:

Requirements and Design

- Comprehensive requirements analysis across infotainment, connectivity, safety, and human-machine interfaces (HMI)
- Translation of business goals into technical specifications for automotive-grade Android applications

Application Architecture and Development

- Modular, scalable architectures built for Android Automotive OS (AAOS) and custom OEM platforms
- Support for Google Automotive Services (GAS) integration, hardware abstraction layers (HALs), and adaptive designs for diverse vehicle models and screen sizes

Validation and Deployment

- Rigorous unit, integration, compliance, and stress testing against Google, OEM, and safety standards
- Securely provisioned, signed, and validated applications for smooth deployment across production vehicles

Business Outcomes

- Innovative, differentiated in-vehicle experiences
- Ensured compliance with Google, OEM, and automotive standards
- Guaranteed smooth platform integration and deployment readiness

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