

Aptiv Automotive Services: Android Platform Maintenance

OFFLOAD COMPLEX BSP AND SECURITY UPDATES TO THE INTEGRATION EXPERTS

Maintaining Android platforms in automotive environments requires continuous integration of security and board support package (BSP) updates — among the most resource-intensive aspects of platform maintenance. These updates provide critical performance improvements, vulnerability fixes and hardware enablement, but aligning them with OEM/Tier 1 customizations adds complexity. Without disciplined impact analysis, rigorous testing and compliance validation, BSP and security updates can introduce instability, regress performance or compromise certification readiness.

Aptiv helps customers overcome these challenges through specialized Android lifecycle services.

BSP Integration and Impact Analysis



- Integrate BSP releases (kernel, hardware abstraction layer, firmware, bootloader) to ensure compatibility with evolving system-on-a-chip and hardware updates
- Perform impact analysis and resolve conflicts with OEM/Tier 1 customizations
- Conduct regression and compliance testing using Android (CTS/VTS) to ensure platform stability and certification readiness

Security Updates and Risk Analysis



- Analyze monthly Android security bulletins and relevant changes from the Android Open Source Project for security and stability impact
- Provide risk-based recommendations aligned with automotive cybersecurity standards (ISO/SAE 21434, UN R155)
- Integrate selected patches and fixes into customers' build trees on a scheduled cadence

Business Outcomes



- Faster adoption of BSP performance, feature and security updates
- Reduced integration risks and downtime
- Verified compliance and Google certification readiness