

Spirent Landslide™

Wi-Fi Offload Gateway Test Application

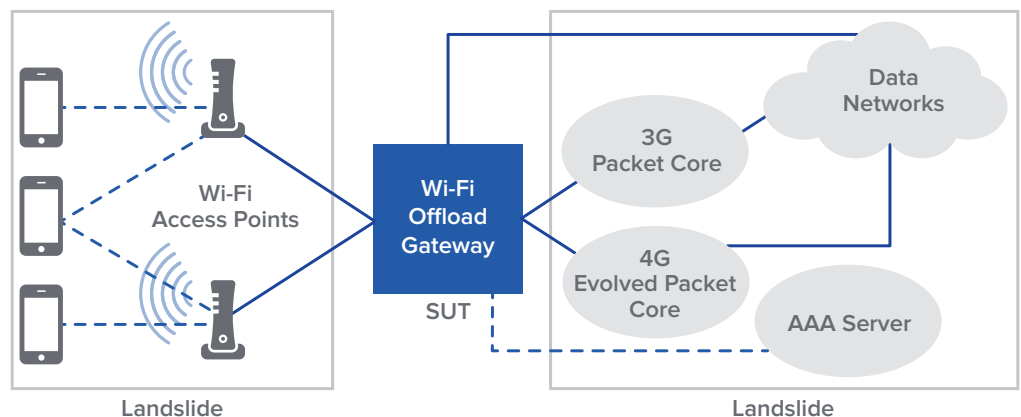
Using Wi-Fi networks to offload traffic from 3G and 4G networks is an important strategy for managing overall mobile network capacity. The Wi-Fi offload/WLAN Gateway serves as a critical element, providing a trusted access point into the mobile packet core, or into the internet for mobiles connected to Wi-Fi Access Points (APs). By emulating thousands of UEs and APs on the access side, as well as any required packet core elements on the network side, Landslide™ provides extensive support for testing all aspects of Wi-Fi Offload Gateways, WLAN Gateways, WLAN controllers or CAPWAP controllers.

Applications

- Validate Gateway scalability and identify capacity limits
- Measure data throughput performance
- Mobility testing
- Interoperability testing with 3G and 4G packet core devices
- Long term stability testing
- Regression testing
- Trusted & Untrusted Wi-Fi Scenarios
- Wi-Fi Calling and SLA Testing

Standard Landside features and benefits

- Multi-User Test Manager Environment with support for up to 32 test servers under a single test manager
- Up to 3 simultaneous users per test server/48 per test manager
- Support for running hundreds of test cases in parallel or series across multiple test servers for increased realism and/or long duration stability tests and extended regression runs
- Standard Web browser interface. No need to load software on user PCs
- Interactive Network Topology diagrams to troubleshoot and visualize complex test setups
- Full TCL automation interface for both test creation and test execution. NTAF interface provided



Specific features and benefits

- Authentication
- Full EAP authentication (EAP-TLS, EAP-TTLS, EAP-AKA, EAP-SIM)
- EAPOL 802.1X
- Radius
- AAA server emulation
- Web-Authentication with HTTPS

UE emulation

- Tens of thousands of UEs per server with Concurrent Session Loading
- Layer 2 tunneling between UE and Gateway using VLAN or MPLS tagging
- Extensive Data Generation—High Bandwidth Application Data generation including HTTP, HTTP redirect, FTP, RTP, SIP, etc., including “any protocol” capture and replay, Network Host/Internet server emulation
- IPv4 and IPv6 support with DHCP and SLAAC
- POLQA Voice Quality

UE Mobility

- Inter-SSID Mobility
- Inter-AP Mobility
- ePDG LTE Mobility

Access Node emulation

- Tens of thousands of Access Points (APs) per server
- AP DHCP support
- No Tunnel, GRE tunnel, or CAPWAP tunnel between AP and Controller/Gateway

Network Node emulation

- 3G GGSN Emulation (Gn, and Gi interfaces)
- 4G PGW Emulation (S2a, S2b, S5/S8, SGi, Gx interfaces)
- Additional EPC node emulation as required (HLR/HSS, MME, SGW, PCRF, etc.)
- PMIPv6 and GTPv1 and v2 support between Gateway and Packet Core and/or IP link to Internet

Technical specifications

- **Physical Interfaces:** 1G or 10G Ethernet
- **Platforms:** Landslide test servers, Virtual, C50 & M2