SPIRENT LANDSLIDE

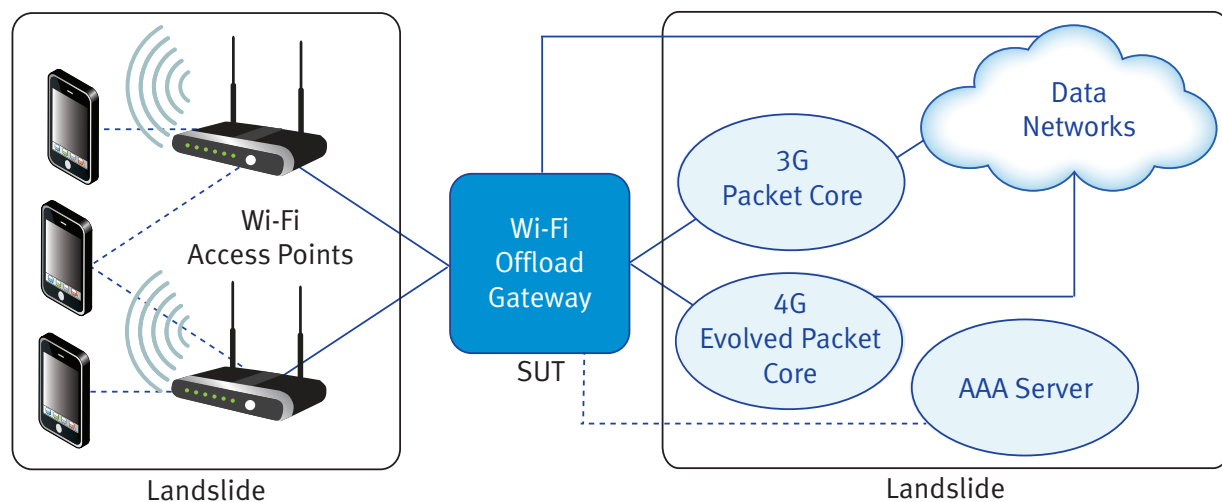## WI-FI OFFLOAD GATEWAY TEST APPLICATION

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 throughout performance
- Mobility testing
- Interoperability testing with 3G and 4G packet core devices
- Long term stability testing
- Regression 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

SPIRENT PRODUCT NAME
WI-FI OFFLOAD GATEWAY TEST APPLICATION

SPECIFIC FEATURES AND BENEFITS

Authentication

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

UE emulation

- Tens of thousands of UEs per server
- 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 emulat
- IPv4 and IPv6 support with DHCP and SLAAC

UE Mobility

- Inter-SSID Mobility
- Inter-AP 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, Spirent TestCenter mX and mXP modules
- **Performance**: Minimum of 150,000 APs and 150,000 UEs per test server

SPIRENT SERVICES

Spirent Global Services provides a variety of professional services, support services and education services—all focused on helping customers meet their complex testing and service assurance requirements. For more information, visit the Global Services website at www.spirent.com or contact your Spirent sales representative.

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