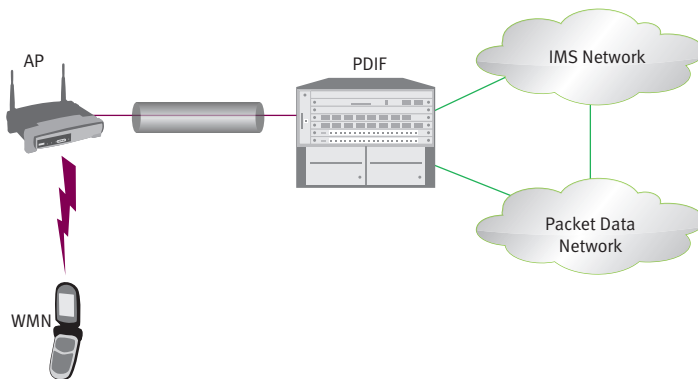


SPIRENT LANDSLIDE

PDIF TEST APPLICATION

The advent of all IP networks—specifically Voice over IP (VoIP) and IMS—have led to the ability to move freely between cellular and WiFi networks while still maintaining application layer services. Now a mobile subscriber can start a cellular call on the way home from work and seamlessly switch to a WiFi network when entering the home, while still carrying on the same call.

The convergence of the wireless network and the fixed-line network is known as Fixed Mobile Convergence, or FMC. To enable FMC networks, an element has been defined by the 3GPP2 called a Packet Data Interworking Function (PDIF). The PDIF allows access to the CDMA2000 packet core and IMS networks via WiFi access points. The PDIF is responsible for security, access, authentication, policy enforcement, user information collection and IP address allocation.



PDIF Access

Spirent Communications' Landslide™ PDIF test option, with the Dynamic IPSec option and IP Data application, performs lab tests for performance and accuracy of secure access to the 3GPP2 packet data core and IMS network via the PDIF. By adding the Landslide CDMA application to the above, testing of mobility between 3GPP2 and WiFi is also available. The Landslide also tests a mixture of network elements. When used with the CDMA application, Landslide can test a network's ability to handle Fixed Mobile Convergence by emulating mobile nodes accessing the network through a WiFi access point and through a PCF.

APPLICATIONS

- Validate system scalability and identify capacity limits
- Measure call/data performance
- Characterize system before trial/delivery
- Identify performance ceilings
- Enable accurate capacity planning

FEATURES & BENEFITS

- TCL Interface allows the user to control/monitor the Landslide from a higher level management system, thus making it possible to compile specific test reports for both the emulation (Landslide) and the device under test
- Realistic, real-world simulations allow equipment vendors to accurately specify the performance characteristics of their equipment under real-world conditions
- Simultaneous control and user plane makes it easy for service providers to measure the performance of their network and to validate new features and services in the lab
- Unmatched scalability for the user to simulate subscriber loads ranging from a small rural town to the largest metropolitan city
- Standard Web browser interface means no need to load software onto user equipment
- Emulation of multiple network elements permits the user to test in a variety of network topologies providing more effective utilization of lab equipment and reducing capital expenditure and ongoing support costs associated with a test lab

SPIRENT LANDSLIDE PDIF TEST APPLICATION

(Features & Benefits continued)

- Automation control allows the user to run many test cases simultaneously or serially on multiple Landslide test servers, creating real-world scenarios for heavy load and long duration stability tests
- PDIF Nodal Testing – Landslide tests a standalone PDIF by emulating the mobile nodes, the WiFi access point and the Network hosts
- Inter-technology Mobility Testing – Landslide is capable of testing inter-technology mobility between the 3GPP2 access network and the WiFi access network; Landslide also emulates mobile nodes changing from one access technology to the other

TECHNICAL SPECIFICATIONS

- Test Activities
 - Capacity Test
 - Session Loading
 - Session Loading with Mobility
 - MIP Revocation
 - Mobile Node Mobility
 - Inter-technology Mobility
- Landslide Manager
 - Up to 125 user accounts
 - Up to 48 simultaneous users
 - Up to 32 Landslide test appliances
- Landslide Test Server (without performance accelerator)
 - 200,000 simultaneous sessions
 - Up to 1.7 Gbs of encrypted bearer traffic
 - Activate/deactivate up to 200 sessions per second
 - Up to 3 simultaneous users per test appliance
 - Emulate up to 1,000 PCFs and up to 1,000 Home Agents
- Landslide Test Server Ethernet ports
 - 4-port 10/100/1000Base-T NIC (P/N L-NIC-12)
 - 4-port 10/100/1000Base-SX NIC (P/N L-NIC-11)
 - Single-port 10 Gigabit XF SR NIC (P/N L-NIC-10)
- Physical Specifications
 - 3U, 19-inch rack-mount
 - 5.25" H x 16.53" W x 19.75" D
 - 31 lb. (14kg)
 - Operating environment: 5° C to 30° C
 - 100-240 V, 50/60 Hz, 6 A
- Referenced Standards
 - 3GPP2 S.R0087-A CDMA – WLAN Interworking
 - 3GPP2 X.P0028-200 Access to Operator Service and Mobility for WLAN Interworking

ORDERING INFORMATION	
DESCRIPTION	PART NUMBER
<p>WIFI CONVERGENCE TEST FEATURE</p> <p>Adds the Packet Data Gateway (PDG) and the PDIF test capabilities to the Landslide IP Data Test System.</p> <p>Note: PDIF testing requires the MIP Performance Test application. S/N or MAC ID of existing Landslide Manager required.</p>	L-FT-028
<p>LANDSLIDE IP DATA APPLICATION</p> <p>Adds IP Data Application to an existing Landslide Test system. Serial number or MAC ID of existing Landslide Manager required.</p>	L-APP-007
<p>DYNAMIC IPSEC EMULATION</p> <p>Adds IPSec emulation to an existing Landslide Test System. IPSec accelerator must be ordered separately. Serial number or MAC ID of existing Landslide Manager required.</p>	L-FT-004
<p>LANDSLIDE IPSEC ACCELERATOR CARDS</p> <p>Provide hardware accelerated IPSec processing for Landslide Test Server. Requires L-FT-004 Dynamic IPSec Emulation feature. See sales rep for more information.</p>	L-ACC-003 L-ACC-004
<p>LANDSLIDE MIPV6 TEST APPLICATION</p> <p>Adds MIPv6 test application to an existing ASN-GW, CDMA, CSN, GPRS or UMTS Landslide Test System. IPSec accelerator must be ordered separately. Serial number or MAC ID of existing Landslide Manager required.</p>	L-APP-003
<p>AAA RADIUS SERVER EMULATION</p> <p>Adds the AAA Radius server emulation to applications such as CDMA2000, GPRS, or MIPv6 Landslide Test Systems. Serial number or MAC ID of existing Landslide Manager required.</p>	L-FT-003

SPIRENT LANDSLIDE
PDF TEST APPLICATION

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/gs or contact your Spirent sales representative.

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