

## SPIRENT LANDSLIDE

EVOLVED HIGH RATE PACKET DATA (eHRPD) TEST APPLICATION

### **eHRPD**

The CDMA Evolved High Rate Packet Data (eHRPD) network provides an IP environment that supports a variety of differentiated IP services via the 3GPP evolved packet core (aka LTE). The eHRPD Serving Gateway (HSGW) and evolved Packet Control Function (ePCF) interface directly with elements in the ePC to provide the necessary interworking that takes advantage of the 3GPP evolved packet core.

These IP services create an enormous demand for a carrier grade, real-time service delivery architecture that can decouple the service logic from the transport network and successfully orchestrate the complex operations required to successfully fulfill application and subscriber requests.

The Landslide® eHRPD Test Application provides the necessary reference points and interfaces (i.e. A10/11', S2a) to thoroughly measure performance and provide load to an HSGW. When used in conjunction with other Landslide® applications such as PCRF Node emulation, AAA server emulation, a comprehensive test bed can be built.

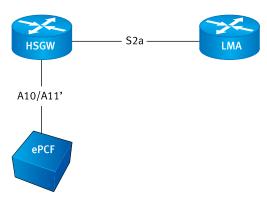
#### **FEATURES & BENEFITS**

- 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 allows service providers to measure the performance of their network and to validate new features and services in the lab
- Unmatched scalability allows the user to simulate subscriber loads ranging from a small rural town to the largest metropolitan city
- Standard web-browser interface prevents the need to load software onto user equipment
- Emulation of multiple network elements allows 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

- 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
- 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
- HSGW Nodal Testing will emulate the ePCF (providing the A10/A11' interface) on the access side and emulate the AAA, PCRF, and PDN GW on the core side, creating and environment in which the HSGW can be tested in isolation
- In the eHRPD end-to-end testing scenario, Landslide® emulates the access-side ePCF and the core-side AAA, PCRF and network host providing an environment in which gateways can be tested in their entirety

#### **APPLICATIONS**

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



# SPIRENT LANDSLIDE eHRPD

#### **TECHNICAL SPECIFICATIOONS**

- Test Activities:
  - Capacity Test
  - Session Loading
  - Intrigues 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)
  - 100,000 simultaneous sessions
  - activate/de-activate up to 1,000 sessions per second
  - up to 3 simultaneous users per test appliance
  - emulate up to 1,000 ePCFs

- Landslide Test Server Ethernet ports:
  - 4-port 10/100/1000 Base-T NIC (P/N ANG-NIC-12)
  - 4-port 1000 Base-SX NIC (P/N ANGNIC-11)
  - Single-port 10 Gigabit XF SR NIC (P/N ANG-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°
  - 100-240 V, 50/60 Hz, 6 A
- Reference Point Support:
  - A10/A11'
  - S2a

Description	Part Number
LANDSLIDE eHRPD TEST SYSTEM - Includes one LANDSLIDE Manager and one LANDSLIDE Test Server with eHRPD application and two quad copper NICs.	L-KIT-1025
TEST SERVER W/ eHRPD - Purchased as expansion to an eHRPD Test System. Requires two NICs, sold separately. Serial number or MAC ID of existing LANDSLIDE Manager required.	L-TS-1025
LANDSLIDE eHRPD TEST SYSTEM SOFT-WARE - Includes eHRPD test application SW for one Manager & one Test Server. SVC-6064 purchase required for installation of software on Manager and TS. NICs sold separately.	L-KIT-1025-SW
LANDSLIDE eHRPD TS SOFTWARE - Purchased as expansion to an eHRPD Test System.Existing Manager SN or MAC ID reqd.  SVC-6064 reqd. NICs sold separately.	L-TS-1025-SW
LANDSLIDE eHRPD TEST APPLICATION - Adds eHRPD Test Application to an existing high-end Landslide test system. Serial number or MAC ID of existing Landslide Manager required.	L-APP-025
DYNAMIC IPSEC EMULATION - 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.	L-FT-004
LANDSLIDE IPSEC ACCELERATOR CARDS - Provide hardware accelerated IPSec processing for Landslide Test Server. Requires L-FT-004 Dynamic IPSec Emulation feature. See sales rep for more information.	L-ACC-004
DATA THROUGHPUT ACCELERATOR LICENSE - Improves test server data throughput for Landslide Test Applications. Price per test server. S/N or MAC ID required.	L-FT-032A
PERFORMANCE ACCELERATOR LICENSE - Improves test server data throughput and control plane performance for mobility test applications. Price per test server. S/N or MAC ID required.	L-FT-032B

#### **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' Web site at www. spirentcom.com/gs or contact your Spirent sales representative.

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