



# LANDSLIDE

## AAA PERFORMANCE TEST SYSTEM FOR BROADBAND NETWORKS

Spirent's Landslide™ AAA Performance Test Application is the only high performance test tool that tests and validates key aspects of your RADIUS server's performance and functionality by simulating a Broadband Remote Access Server (B-RAS). Landslide AAA RADIUS is part of the Landslide family of test applications available on Spirent's proven Landslide platform.

### SOLUTION OVERVIEW

Landslide AAA RADIUS provides a comprehensive test system that emulates a B-RAS and sends millions of authentication, authorization and accounting messages to the AAA server. By emulating the key B-RAS functions, Landslide AAA provides real-world emulation of authorization and accounting transactions. Landslide AAA also supports Extensible Authentication Protocol (EAP) to provide support for additional authentication methods. EAP allows for the easy addition of authentication methods as required.

Additionally, Landslide AAA RADIUS can be combined with the IP Data Application to run any of the supported advanced data types directly over IP for cases where IP address allocation from a AAA or DHCP server is desirable. In the case of DHCP, the IP Data Application can also emulate a DHCP relay agent (Option 82) as defined in RFC 3046. This combination of applications can also be used for testing of a AAA proxy device. In this case, all the Advanced Data test capability is available from within the same test case. Refer to the Advanced Data Option data sheet for complete details.

### 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

- 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 for the user to simulate subscriber loads ranging from a small rural town to the largest metropolitan city
- Standard Web browser interface so there is no 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 for 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 for the user to control/monitor the Landslide from a higher level management system, making it possible to compile specific test reports for both the emulation (Landslide) and the device under test

Features & Benefits continued on next page.

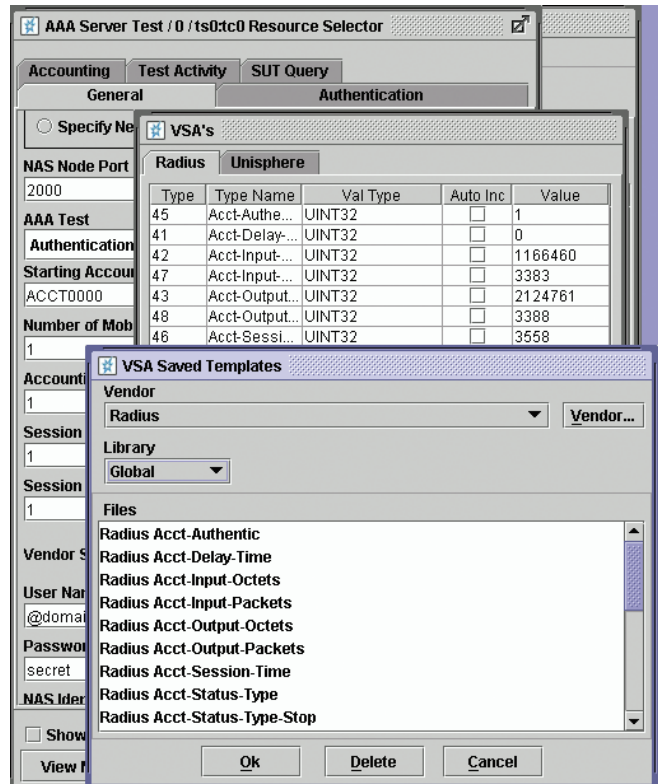
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- VSA Editor—Landslide AAA RADIUS features a powerful, easy-to-use graphical user interface that allows a test operator to quickly set up test sessions. The user may select optional Vendor Specific Attributes (VSAs) from any of the libraries. The user also has the ability to create custom libraries, defining the vendor, vendor type, format and value of any additional attributes desired using the VSA editor. The user can select which optional attributes will be included in each message type and define the field values for each attribute.

### TECHNICAL SPECIFICATIONS

- Test Activities
  - Capacity Test
  - Session Loading
- Landslide Manager
  - Up to 125 user accounts
  - Up to 48 simultaneous users
  - Up to 32 Landslide test appliances
- Landslide Test Server (without performance accelerator)
  - 400,000 simultaneous sessions
  - Generate up to 1,500 transactions per second
  - Up to 3 simultaneous users per test appliance
  - Emulate up to 1,000 NAS devices
- Landslide Test Server Ethernet ports
  - 4-port 10/100/1000Base-T NIC
  - 4-port 10/100/1000Base-SX NIC
  - Single-port 10 Gigabit XF SR NIC



VSA Editor

- Protocols Supported
  - RADIUS Accounting
  - RADIUS Authentication
  - EAP Methods
    - EAP-MD5
    - EAP-GTC
    - EAP-AKA
    - EAP-SIM
    - EAP-MSCHAPV2
    - EAP-TLS

ORDERING INFORMATION	
DESCRIPTION	PART NUMBER
<b>LANDSLIDE AAA RADIUS TEST SYSTEM</b> Includes Landslide Manager, Test Server and AAA RADIUS Test Application. Allows testing of AAA server authentication and accounting capability.	<b>L-KIT-1004</b>
<b>LANDSLIDE TEST SERVER WITH AAA RADIUS</b> Landslide Test Server with AAA RADIUS Test Application. Must be purchased as an expansion to a AAA RADIUS Test System.	<b>L-TS-1004</b>
<b>LANDSLIDE AAA RADIUS TEST APPLICATION</b> Adds Landslide AAA RADIUS Test Application to an existing Test System.	<b>L-APP-004</b>
<b>AAA RADIUS SERVER EMULATION</b> Adds AAA RADIUS server emulation capability to a CDMA2000, GPRS, or other Landslide Test System.	<b>L-FT-003</b>
<b>LANDSLIDE IP DATA APPLICATION</b> Adds IP Data Test Application to an existing Test System.	<b>L-APP-007</b>
<b>IPSEC ACCELERATOR CARD</b> Provides four channels of hardware accelerated IPSec processing to a Test Server. Requires L-FT-004 and L-FT-032-A or L-FT-032-B.	<b>L-ACC-004</b>
<b>DYNAMIC IPSEC EMULATION</b> Adds IPSec emulation to an existing Test System. Requires L-ACC-004 per Test Server.	<b>L-FT-004</b>
<b>DATA THROUGHPUT ACCELERATOR LICENSE</b> Improves Test Server data throughput for Landslide Test Applications.	<b>L-FT-032-A</b>
<b>PERFORMANCE ACCELERATOR LICENSE</b> Improves Test Server data throughput and control plane performance for mobility Test Applications.	<b>L-FT-032-B</b>

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#### 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](http://www.spirent.com/gs) or contact your Spirent sales representative.

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