

# BroadCloud PacketSmart for Assessment

## Superior Service Installations

A customer's first experience with a new VoIP service should not involve crackling audio or dropped calls. Nonetheless, VoIP services are often turned up with limited pre-installation wide area network (WAN) and local area network (LAN) assessment, leading to customer complaints and a loss of confidence in the service provider.

To address this problem, BroadSoft® has added BroadCloud™ PacketSmart™ Assessment, a solution that helps identify networking problems that can cause voice quality issues.

BroadCloud PacketSmart helps installers assess and validate wide WAN and local LAN to ensure successful installation of communications services like VoIP and video.

## BroadCloud PacketSmart Pro Series Overview

BroadCloud PacketSmart is a powerful toolkit for network assessments. This solution combines probes positioned in the WAN and LAN with a BroadCloud-based analytics platform that generates a rich set of reports.

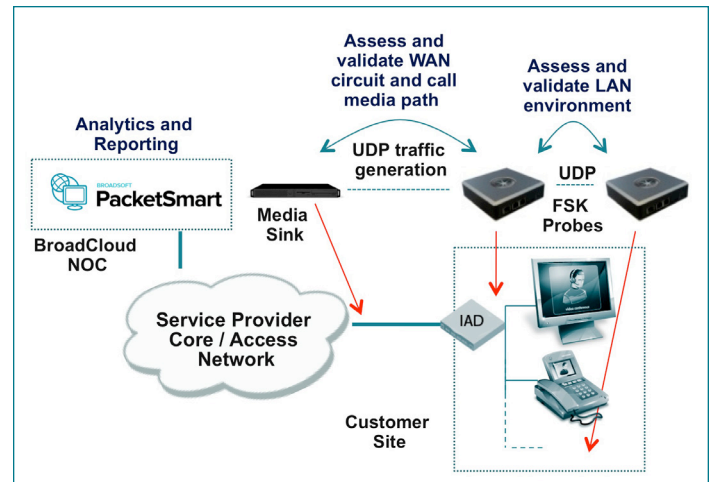
Unlike many solutions that require investment in an analytics system, BroadCloud PacketSmart analytics are delivered through a cloud-based subscription. This reduces the capital expenditures (CapEx) needed to deploy BroadCloud PacketSmart and the operating costs associated with maintaining systems while using BroadCloud PacketSmart for LAN and WAN assessments.

## BroadCloud PacketSmart Assessment Functional Overview

To assess the WAN, the LAN-based probes exchange data with a BroadCloud PacketSmart Media Sink which is a high capacity probe that sits in the service provider network. A single media sink can handle traffic from multiple Field Services Kits (FSKs) and enable installers to stress and test access link capacity, route paths and network media handling capacity.

Probes used on the customer network are packaged as the BroadCloud PacketSmart FSK. The FSK consists of two compact router-agnostic devices that an installer plugs into the customer network to —

1. Generate simulated media traffic
2. Inspect simulated media traffic and live voice, video, and IT traffic
3. Send performance data to BroadCloud-based analytics platform



*FSK probes exchange media traffic across the LAN and WAN to stress networks, to establish Quality of Service (QoS) for VoIP and video*

## Key Reports & Capabilities

### VoIPPro:

- Assessment Report – Standard/Premium
- VoIP Verification Report
- VoIP SLA Report
- Domain SLA Report
- Network Quality Report
- VoIP Call Generation
- VoIP Monitoring

### PacketPro:

- Network Behavior Analysis Report
- Network Discovery Report
- Packet Capture & Top N Flows

### VideoPro:

- Video Assessment Report
- Video Evaluation Capability

*BroadCloud PacketSmart Pro Series assessment subscriptions are broken into packages*

To assess the LAN, one probe is positioned off the LAN-facing Ethernet port on the access device. The second probe is placed across the LAN and exchanges data with the first probe to stress and test network capacity, configurations and performance.

To assess larger call handling capacities, BroadCloud PacketSmart offers greater call generation capabilities, starting with the PI-500.

## Installer Benefits

- Fewer follow up truck rolls at installer's expense
- Clearly identifies network professional service engagement opportunities
- Faster and more effective installations — for both basic installs and multi-step engagements

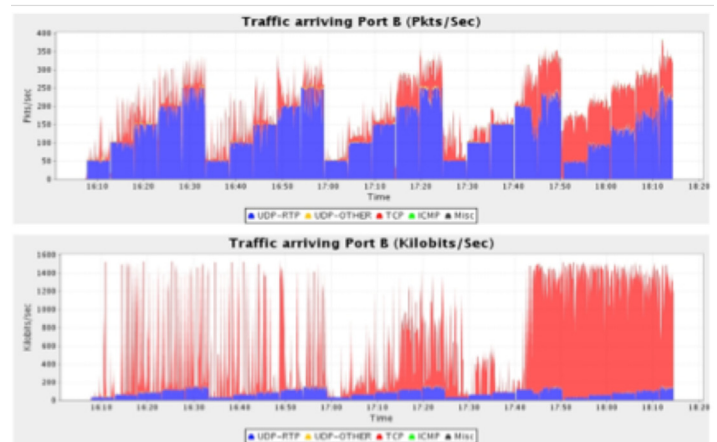
## Service Provider Benefits

- Network verification reduces customer service calls
- Establishes a network baseline for customer service reference
- Openly identifies the need for additional, potential revenue-generating WAN capacity

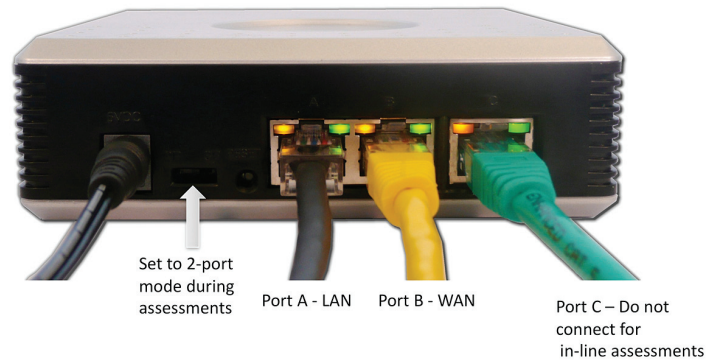
## Summary

BroadCloud PacketSmart is a proven solution that enables better VoIP service turn up. BroadCloud PacketSmart helps installers and service providers make sure that services are turned up right the first time.

Using BroadCloud-based analytics, BroadCloud PacketSmart helps reduce the cost to deploy and operate the solution. Equipping your installers with BroadCloud PacketSmart brings immediate operational savings by reducing the time to deploy services and the amount of non-chargeable rework or truck rolls.



5 call ramp to test WAN circuit capacity with packets (top) and data rates (bottom)



FSK probe is positioned in-line for assessments by plugging Port A into the LAN and Port B into the WAN

### Key Specifications for PI-100 Probe in FSK Configuration

|  |   |
|--|---|
| Power Supply                                 | 100 to 240V AC with output to MA 5Volts                 |
| Display                                      | LCD and LED   |
| Interface Type (A,B, & C)                    | Fast Ethernet   |
| Interface Speed (A,B, & C)                   | 10/100 base T   |
| Ethernet Cable Type                          | Straight-through or cross-over cables (CAT 5, 5e and 6) |
| VoIP Protocols Monitored                     | SIP, TCP, SCCP and MGCP                                 |
| VoIP Call Generation Protocols               | SIP, RTP  |
| Data Upload Protocol                         | HTTP  |
| SIP Ports Monitored                          | All UDP ports   |
| SIP Ports Used For VoIP Call Generation      | UDP ports 5060 & 5061                                   |
| RTP Ports Used For VoIP Call Generation      | UDP ports 15000 thru 16000                              |
| VoIP Concurrent Call Generation              | VoIP up to 4.25 Mbps using G.711 or G.722 (HD)          |
| UDP Traffic Load Generation                  | UDP Video up to 256 Kbps slabs                          |
| VoIP Monitoring Speeds                       | 100 base T  |
| Data Pass-Through Performance On Ports A & B | 100 base T switching speeds                             |
| NAT Support                                  | Yes   |
| Fail-Safe                                    | Yes   |
| CE Marked                                    | Yes   |
| ROHS Marked                                  | Yes   |