

## JDSU PVA-1000 Capture Agent

# Advanced VoIP analysis and troubleshooting



#### **Applications**

- IMS Service Providers
- Enterprise IT VoIP
- System Integrators
- VoIP Service Providers
- Call Centers

#### **Key Features**

- Distributed capture agents
- Automatic MOS-based capture
- User controlled VoIP call capture
- Manual one-click data traffic capture
- IMS, Softphone, and SPAN support

Troubleshooting IP problems often requires a packet capture. This applies to voice over IP (VoIP) as well as traditional data traffic. Attempting to capture a poor performing VoIP call can be a time consuming and frustration exercise. The challenge is even greater if the problem is being experienced intermittently at remote locations. The PVA-1000 Capture Agent was developed to automate the capture process using low cost, distributed, intelligent software capture agents.

#### **PVA-1000 VolP Capture Agent**

#### **Distributed Capture**

Each agent can be uniquely configured with customized capture features. Their small file size makes them easy to distribute to remote locations and their preconfigured capture parameters allow them to be used by untrained personnel.

## **Automatic Capture**

Designed for flexibility a capture agent can monitor multiple simultaneous calls on an Ethernet SPAN port or single calls on a PC soft-phone. Only calls that fall below a user defined MOS value are captured. These capture files can be automatically forwarded to a centralized server for detailed analysis.

### **User Selected Capture**

Capture agents may be configured to prompt the user to save and forward the capture file at the completion of a VoIP call. The user is in control of which calls to capture through a simple prompt. A single click saves and forwards the call capture file.

## **Manual Capture**

A manual capture agent allows users to start and stop a capture by a simple mouse click. This allows personnel with no experience of protocol analyzers to take a packet capture from their desktop that will be automatically forwarded to a server. This can be useful when trying to resolve a variety of VoIP and data related problems.

# **Applications**

## **Network Acceptance**

Quality problems can be expected during VoIP/IP multimedia subsystem (IMS) network turn-up and acceptance. The PVA-1000 Capture Agent can be used to automatically capture poor quality calls. These capture files can then be quickly analyzed by PVA-1000 VoIP Analysis software to identify the root cause of the problem. During the critical first months of network operation PVA-1000 can provide a cost effective tool for optimizing and troubleshooting the network.

## **Remote office troubleshooting**

When troubleshooting VoIP problems often the key is to get detailed information on poor performing calls. With traditional analyzers this can be problematic. PVA-1000 Capture Agents solve this problem by automatically capturing all packets associated with poor performing calls. Capture Agents can be easily provided to remote locations and can operate on Windows® PCs connected to an Ethernet SPAN port. The resulting capture files can be stored locally or automatically sent to a designated server.

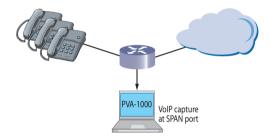
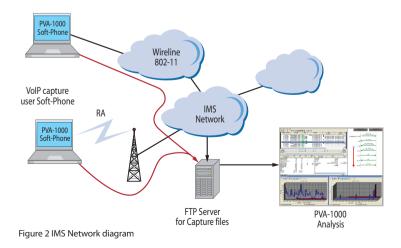


Figure 1 Network diagram of Enterprise

#### **IMS troubleshooting**

Supporting SIP and RTP the PVA-1000 Capture Agent is compatible with IMS networks. Allowing capture and analysis of VoIP calls in an IMS environment insures that providers can address problems effectively and reduce the time and cost to provide support to mobile end users.



## **Soft-phone troubleshooting**

Soft-phones are becoming more popular in mobile environments but present problems with respect to troubleshooting. With the PVA-1000 capture agent, on a soft-phone equipped PC, a support group can instantly get capture files of problem calls. Operation is supported on devices connected to IMS/VoIP or virtual private networks (VPNs) using Ethernet, Wi-Fi or 3G/3.5G networks.

#### **Data application troubleshooting**

With a Capture Agent configured for manual operation any end user can quickly create a capture file in order to resolve data application connectivity and performance issues. The simple one click operation eliminates the need for training so that an untrained user can easily create a capture file.

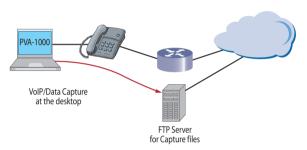


Figure 3 Desktop data capture

#### **JDSU VoIP Solution Portfolio**

PVA-1000 VoIP Analyzer is a component of JDSU's family of VoIP products. By supporting the full lifecycle of a VoIP network, JDSU VoIP products work together to provide a complete solution to VoIP turn-up, monitoring, maintenance, and troubleshooting.

## **PVA-1000 VoIP Analysis**

PVA-1000 VoIP Analysis software provides complete analysis of VoIP capture files. Detailed performance statistics and signaling trace diagrams pinpoint problems quickly. Audio playback is provided to emulate the user experience.

## DA-3400 and DA-3600A Data Network Analyzer

The DA-3400 is a full-feature LAN/WAN/ATM network analyzer capable of detailed network analysis, troubleshooting and real-time VoIP monitoring, and analysis. Capture files of up to 1 Gigabyte may be created and VoIP capture files are compatible with PVA-1000 VoIP Analysis Software.

#### **NetComplete Service Assurance for VolP**

NetComplete Service Assurance for VoIP provides true end-to-end visibility into the customer's quality of service. Continuous monitoring and correlation of service and network performance is coupled with robust sectionalization and segmentation features.

#### HST-3000 VoIP

The HST-3000 Handheld Service Tester allows field technicians to turn up and troubleshoot VoIP networks. VoIP calls can be sent and received in real-time with full quality measurements and packet capture.



## **Technical Specifications**

#### **Minimum System requirements**

#### **Capture Agent Builder**

Windows Vista, Windows XP Professional, Windows 2000

500 MHz Pentium class minimum

256 MB minimum

100 MB disk space for software

### PC running distributed Capture Agent

Capture Agent Builder

Windows Vista, Windows XP Professional, Windows 2000

1 GHz Pentium class recommended

256 MB minimum - 500 MB preferred

10 Gigabytes for on-board capture file storage recommended – usage dependent

Order information		
Description	Part number	
PVA-1000 Capture Agent Floating License	PVA-1000-AgentF	
PVA-1000 Capture Agent Node Locked License	PVA-1000-AgentN	
SIP signaling option Floating License	PVA-1000T-SIPF	
SIP signaling option Node Locked License	PVA-1000T-SIPN	
SCCP signaling option Floating License	PVA-1000T-SCCPF	
SCCP signaling option Node Locked License	PVA-1000T-SCCPN	

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