PhoneProxy: Secure Mobile and Remote IP Telephony

Metreos™ PhoneProxy solves key problems related to mobility, security and access management for companies that have adopted the Cisco IP communications platform. PhoneProxy secures IP phones deployed to employees' homes and other remote locations without requiring a VPN router. It also secures traffic from IP Communicator as it crosses from the data VLAN into the voice VLAN to proxy and protect CallManager from security threats.

PhoneProxy has been proven reliable and highly scalable by some of the world's largest IP telephony customers. It is one of a number of industry-leading applications available from Metreos.

Remote Phone Deployment without VPN Routers

The need for mobility and the trend toward telecommuting have increased demand for deployment of IP phones to employees' homes and other remote locations. Organizations interested in placing Cisco IP phones in these remote locations have traditionally found it necessary to purchase, configure, deploy and support VPN routers with the IP phones in each remote location in order to meet security requirements.

This has proven to be an expensive proposition, with the cost of a VPN router ranging from $650 to $800 just for the initial hardware purchase price. PhoneProxy can save organizations deploying IP phones to remote locations $500 or more on hardware per IP phone deployed.

As with other information technology products, ongoing management and support costs are far greater than the initial cost of these products. Organizations also benefit from far greater savings by eliminating the cost and complexity associated with the ongoing management and support of these VPN routers each year.

Example of PhoneProxy Savings

Current Cost Per Remote Phone Deployed

Handset	$500
VPN Router Cost	$700
Initial Cost Per User	$1,200

Cost Per Remote Phone with PhoneProxy

Handset Cost	$500
VPN Router Cost	$0
Metreos PhoneProxy Cost	$200
Initial Cost Per User	$700

Initial Cost Savings Per User	$500

x100 users	$50,000
x500 users	$250,000
x1000 users	$500,000

Plus ongoing support cost and complexity which can dwarf hardware cost savings

Figure 1. *PhoneProxy Example Savings.*

Secure IP Communicator Access to CallManager

In addition to securing IP phones deployed to remote locations, PhoneProxy is also used by organizations to meet security requirements related to the use of IP Communicator. When company employees use IP Communicator from the office, home, or on the road, voice traffic is placed onto the corporate data VLAN and must traverse to the voice VLAN to reach CallManager. This creates a significant security risk to CallManager.

PhoneProxy can be placed in a location of the customer's choice (for example, a DMZ VLAN) to aggregate voice traffic from all IP Communicator sessions and proxy this traffic through to CallManager. This enables security personnel to open just a single hole in the firewall to the voice VLAN and closely monitor and secure this point of entry.

Figure 2. *The Metreos™ PhoneProxy appliance.*

It also obscures CallManager information from IP Communicator and from any associated security threats.

Product Features

Application Layer Gateway – Acts as application layer gateway, seamlessly proxying all SCCP, RTP, HTTP and TFTP communications between IP phones and CallManager while carefully obscuring CallManager information from all IP phones.

SCCP Protocol Support – Offers full support for Cisco's Skinny Call Control Protocol (SCCP).

IP Phone Activation – Allows connections to be made to the appliance only by phones that have been activated by an authenticated and approved user. Administrators can set expiration period for activations to make security as tight as desired.

User Authentication – Provides built-in Web application for authentication of users who are activating IP phones for secure use. Also offers LDAP integration and Web services interfaces for organizations that prefer to integrate with existing user authentication services.

Secure Platform – Uses a security-hardened operating system and firewall to further enhance network security.

Built-In Reporting – Offers built-in reports on usage and exceptions.

Archival and Custom Reporting – Enables easy access to historical reporting data for archival into the organization's preferred database, as well as custom reporting.

Backup and Restore – Provides built-in backup and restore function for all configuration data.

Simple Deployment and Configuration – Enables the administrator to easily get the appliance installed, configured, and up and running in a short time.

Centralized, Automated Administration – Provides for automated administration of remote IP phone access for all users via a single centralized administration console, without the need to configure and support any remote hardware.

Application Architecture

Appliance Platform – Metreos PhoneProxy is delivered on a 1U rack-mounted appliance.

Multi Cluster – A single installation of PhoneProxy can support multiple Cisco CallManager clusters.

High Availability –PhoneProxy supports a distributed, redundant architecture to meet enterprise-class high availability requirements.

Scalability – A single PhoneProxy appliance can support one thousand users. A multiple appliance configuration is available to easily scale to large enterprise deployments.

System Requirements

PhoneProxy requires Cisco CallManager version 4.0 or later.

Other Mobility & Security Solutions

If your company is looking for more mobility and security solutions to gain further advantage from your IP telephony platform, check into:

Metreos VoiceTunnel
Allows a remote user to use a mobile or home phone to be authenticated and securely connect to any corporate IP PBX, making calls as if the phone is a local enterprise IP PBX extension.

Metreos ActiveRelay
Provides transparent single number reach to mobile employees' office, cell and home phones. ActiveRelay gives users easy, flexible and complete control over where they receive calls, where voicemail is delivered, and what phone they want to use at any time during the call.

Metreos ClusterMobility
Enables mobile users to move freely and transparently among CallManager clusters. Users can log into an IP phone on any cluster in the network, use their normal office phone features, and be reached at a single office number.

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