CNS /Update Newsletter Feature

Telecom and Network Services
Deployment of Voice over IP (VoIP)

CNS Document ID: u030308a
Last Updated: 3/12/03

UF Information Technology

UFIT

2046 NE Waldo Rd, Suite 2100
Gainesville Florida 32609-8942
(352) 392.2061
<editor@cns.ufl.edu>
Table of Contents

Telecom and Network Services Deployment of Voice over IP (VoIP) ..................3
Telecom and Network Services
Deployment of Voice over IP (VoIP)

If it looks like a telephone, and acts like a telephone, and sounds like a telephone, but doesn't operate over telephone wires, what is it? It's Voice over IP (VoIP). OIT-Network Services and UF Telecom have successfully deployed the first group of VoIP telephones on campus. Instead of the usual analog telephone wire system, these phones communicate over our IP network infrastructure.

A "Call Manager" application runs on a cluster of MS Windows 2000 Servers located around campus to direct calls just like the huge Centrex switch currently does with the regular telephones. The Call Manager holds all configuration settings for every phone and keeps track of each phone by its ethernet (Media Access Control, or MAC) address. "The major difference between a Cisco Call Manager and a legacy PBX is that the Call Manager is not required to maintain the call. Once the Call Manager sets up the call, the communication is directly between the phones themselves. If a Call Manager were to fail during a call, the call remains connected," said Senior Engineer Pete Mauro of OIT-Network Services.

Telecom and Network Services beta-tested the phones for more than a year before the first production phones were deployed in Rinker Hall. Constans Theater is the next scheduled deployment, in June 2003.

But how do they sound? Mauro said, "There's no discernable difference in sound quality from legacy telephony gear, and, given adequate bandwidth, these phones can communicate over WAN links, the Internet, and an Internet2 connection located at the Gemini Observatory in Hawaii!"

The Cisco IP Phones support most of the features you'll find on a standard phone including conferencing, speed dials, and directories. Since they are true IP devices, they also have the ability to run XML-based applications using the LCD display and four user-definable keys.

Eventually, these phones will represent an overhead savings. With VoIP, there's no need for multimillion-dollar phone-switching equipment, and no programming changes needed when a phone is moved from one spot to another. These phones are "plug and play."

For more information on VoIP, see
https://net-services.ufl.edu/provided_services/voip.

Your Comments are Welcome

We welcome your comments and suggestions on this and all UFIT documentation. Please send your comments to:

UF Information Technology

UFIT
Deployment of Voice over IP (VoIP)

2046 NE Waldo Rd, Suite 2100
Gainesville Florida  32609-8942
(352) 392.2061
<editor@cns.ufl.edu>