Edinburgh Network Technologies Ltd. and University of Stirling

Prog. No. 4132 – Local Management Committee Meeting (LMC *04*)

Associate's Report for LMC 04

Mr Colin Cameron

The report will be presented to the LMC 04 meeting to take place at *3pm* on *Monday 19th April 2003* at *EdNet*, *12 Dock Place, Leith.*

Circulation:

Dr. A. Kurt-Elli (Chair)
Mr. M. Kurt-Elli (Industrial Supervisor)
Prof. E. H. Magill (Lead Academic, Secretary)
Mr. A. J. Mitchell (TCS Consultant)
Prof. K. J. Turner (Second Academic)

Executive Summary of Voice over IP softswitch project.

Project Aim

The aim of this project is to design and implement a functioning voice over IP 'softswitch' implementing IP Centrex capability. Since the beginning of the project this has been expanded to the support and enhancement of the softswitch platform which mainly revolves around creating 'value-added' features for end users.

This project forms part of edNet's main business in the future, further to this if provides opportunity for working with the knowledge base partner in several areas of leading edge research.

Activity since Previous Meeting

The second phase of the softswitch project has been completed and is live and being used by customers. In addition we now have a Media Server in place to provide IVR type services (menu systems, voicemail, etc). Systems are in place to automatically deploy VoIP services to new and existing ADSL customers and will form the base of our IP Telephony customers that will complement our IP Centrex customers.

Achievements to Date

We now have a powerful platform for providing new telephony features, already available are Call Forwarding, Hunt Groups, Voicemail (including VoiceMail to e-mail facility), Call Pickup, and active Call Status monitoring.
A fully reworked interface to the VoIP provisioning website (for customers and resellers) is now also live which is more user-friendly than the previous version.

We now have a dual server system with active standby and monitoring of the services provided – this should mean that the possibilities for service outages are minimised.

We have also successfully tested video telephony over our system and in the future may investigate possibilities for video messaging and conferencing.

Proposals for future action

We need to start the third phase of the project to provide new and more complex features for the system. In addition we will have to provide interfaces to allow third party resellers to provision users automatically. In addition we must make efforts to make the system more stable and fix some of the scalability issues, this will involve a re-design of how the system communicates data within itself and with external services (such as provisioning systems or diagnostic tools).

To achieve the future requirements of the project it would be useful to understand customer requirements better, in particular what forms the possible VoIP products might take and what impact that will have on the technical aspects of the system.

In addition I've been improving my understanding of networking technology by being involved in the deployment of the dual server system and the monitoring applications. I'll like to further improve my knowledge in this area in order to deploy and completely separate monitoring system for all of the telecommunications platforms.

My research in SIP Services continues and I hope to be able to deploy a generic service interface that could in time be used to design and deploy complex services interacting over many different platforms.

I am also actively looking for opportunities to further practice my management skills, and expand my knowledge in areas not directly relating to the project.

As always these require little in the way of resources, apart from sufficient time to achieve all of these goals.

Author: Colin Cameron, April/2004