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E-Mail Finds Itself In Great Demand

Broad role for e-mail tied to unreliability of mail and phone systems

By Michael Faden

Moscow--In a vast land mass with 11 time zones, where mailed letters can take a week just to cross Moscow and the phone system is antiquated and inadequate, E-mail is spreading like wildfire. Thousands of users are subscribing to USENET-like mail, which seems to be used for just about every purpose, including ferrying business information between factories and commodity trading exchanges.

The reason? It works, and it's relatively cheap. It's usually easier for users in different cities to communicate by E-mail than by phone or fax.

Much of the support for that networking activity emanates from Demos, a cooperative with headquarters in Moscow, which supports the email network called Relcom.

Relcom has grown explosively since its inception a year and a half ago, and by last month was claimed to have about 1,000 subscriber organizations representing 15,000 to 20,000 end users.

IRON CURTAIN ORIGINS

The name Demos originally applied to a Soviet operating system based on Unix source code, acquired in the days of the Iron Curtain in ways usually considered illegal in the West (they were stolen, partly off of public networks). *(One can hardly call a theft downloading publicly opened software. V.D.)*. Some Demos members were involved in developing that software and porting it to a variety of Soviet machines little-known in the West. Nowadays, though, there's more future in networking.

Demos, which has some 50 full-time cooperative members and 100 employees in all, operates from extremely informal first-floor offices a few minutes' walk from the Kremlin that house the "kremvax" MicroVax II E-mail server. One evening this past November, several walls were lined with boxes of PCs for the hardware supply business that operates in parallel to the networking operation. Demos still has close links with one of the main centers of Soviet computer activity, at the Kurchatov Institute of Atomic Energy, which was involved in the development of the Relcom network.

Within months of the establishment of the regional network, it became linked to international mail networks, connecting via Finland to the Nordic, European and U.S. networks.

Meanwhile, Relcom has rapidly proliferated throughout Russia and the other republics, spawning approximately 10 local hubs from the Baltic republics of Latvia and Estonia in the West to Kamchatka in the Far East, said Demos' Dmitri Volodin.

To date, it's been based mainly on UUCP. "We're trying to switch to TCP/IP," though where feasible, Volodin said. Although the network backbone runs on Unix, most of the users in the PC-dominated country use DOS, he said.

Relcom uses phone lines and other kinds of communications links where they are available. Here, some of those methods of communicating can be a little unusual.

One of the unusual ones is ISKRA2, a second, "closed" phone network previously reserved for the privileged and inaccessible to most people. In contrast to the aged, low-quality public phone network, it turned out to be based on high-quality lines and digital exchanges.

The cost of subscription to Relcom is officially 20,000 rubles, about \$200 at the current, rapidly changing exchange rate, although it seems that a fair number of people don't pay that subscription cost. The price means that the service is mostly affordable by organizations rather than by individuals--a typical monthly salary is more like 500 rubles, or \$5.

It's claimed that the network itself doesn't currently generate a significant profit. The part of Demos that operates the network is likely to be spun off as a separate commercial Relcom company, Volodin said.

HEAVY BUSINESS USE

This kind of E-mail seems to be used here for business communications to a much greater extent than in the West. Its spread coincides with the breakdown of the state system, so that it sometimes becomes a natural communications mechanism for organizations and their employees that find themselves having to come up with new channels and ways of doing business. It's enough of a growing business that various computer suppliers are getting involved in selling Unix mail systems and services.

"Changes in society have destroyed the rigid structure, and the problem of information channels has become quite significant," said Sergei Turchin, who heads a department dealing with computers at the Central Institute of Aviation Engines. "A lot of organizations that used to deal with scientific and technical problems are getting more and more involved with commercial activity," Turchin said.

Turchin said his institute is negotiating with Techno, a computer company established by the aviation ministry, to buy an E-mail server that it will use to participate in Unix networks.

Yury Gerasimov, sales manager for Techno, said his company is also developing software that will use E-mail to transport requests to remote Oracle databases. The software would likely be sold and used as the basis of information services, he said.

Back at Demos, the staff were still waiting for a SPARC server donated by Sun Microsystems that became entangled for months in customs and export licensing paperwork.

In the meantime, developers haven't given up playing with Unix. "We have to squeeze maximum performance from the hardware," Volodin said, opening the door on a small room in which the kremvax E-mail server seemed to be communicating with an improbably large stack of blinking modems. The machine's operating system has, he said, been "a little bit redesigned."