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Computer Failure Disrupts A.T.&T. Long Distance

A new worry: is the phone system vulnerable to rogue programs?

By CALVIN SIMS

Millions of people were unable to make long-distance calls yesterday after the American Telephone and Telegraph Company suffered a major failure in the computer program that operates its new long-distance switching equipment.

A.T.&T. said about half the long-distance, international and toll-free 800 calls dialed on its network were not completed. Callers who tried got a busy signal or a recorded message that the call could not be completed because all circuits were busy.

Shortly after midnight the company announced that the computer problem appeared to have been solved and that the switching system had been working normally since 11:30 P.M. A spokesman, Walter Murphy, said the company expected the network to operate normally today, when it will face a heavy volume of workday calls.

"We have put in place some software fixes that stabilized the network and contained the problem," he said. "The root cause of the problem is still to be investigated and determined, but the network should process calls normally today."

Yesterday's telephone problems were spread across the country. Businesses needing instant access to places thousands of miles away had trouble getting through. Rental car companies and hotels reported fewer reservations than normal.

Officials noted that the breakdown caused fewer problems than it might have, because banks, government offices and many businesses were closed for the holiday honoring the Rev. Dr. Martin Luther King Jr.

The company said it noticed the problem shortly after 2:30 P.M. Eastern time. At its network operations center in Bedminster, N.J., a technician who spoke on the condition of anonymity described the scene as "chaotic and almost out of control" as engineers scrambled to identify the problem.

By late afternoon they found it: a failure in the new computer softerware that expedites the switching of calls from one part of the network to another. The new system finds the most efficient path for long-distance calls to travel over the network by allowing the switches to communicate with each other before they process the calls.

Engineers from Bell Laboratories, the telephone company's research arm, then began work on software that would override the problem.

A.T.&T.'s major rivals, the MCI Communications Corporation and the US Sprint Communications Company, also use the new switching technology, but they reported no problems with their long-distance networks yesterday.

MCI and US Sprint did say they received a flood of calls from customers who normally use A.T.&T., which controls about 70 percent of the long-distance market. A.T.&T. operators refused, even when asked, to tell subscribers that they could place their calls with other long-distance carriers by dialing access codes. The operators said they did not know the access numbers, and that it was against company policy to provide information on a competitor.

The failure of the system, which is considered the most sophisticated telephone network in the world, raises questions about the vulnerability of the nation's telephone system to malfunctions in computer software and rogue computer programs like viruses and worms. But Daisy Ottmann, an A.T.&T. spokeswoman, said the failure was "not a virus or worm or anything insidious like that."

"We know what the problem is, and our engineers are in the process of fixing it," she said.

Because of the King holiday, the effects of the breakdown were not as severe as they might have been. But there was no shortage of problems. "I cannot call out," said Art Morriston, regional duty officer for the Federal Aviation Administration in Los Angeles, which covers air traffic in California, Arizona, Nevada and Hawaii. "I've been trying to call a lot of people." But he added that air traffic and safety were not affected because those communications are by microwave transmission.

Other businesses fared better. Sharon Gamsin, a spokeswoman for the New York Stock Exchange, said the financial market was not hurt by the network problems even though it uses A.T.&T., and Roy Berces, communications manager for the Pacific Stock Exchange, said: "Basically, there was minimal interruption. The network trading system has been designed to take this into consideration and switch to an alternative carrier." In Japan, the telephone company KDD reported problems with connections to the United States in the morning but said they eased as the day went on.

'All Circuits Are Busy'

Oriette Mani, manager of the Azer Travel Agency in Los Angeles, said her office had been having trouble making hotel and air reservations for clients. "I've been experiencing problems with 800 numbers," she said. "They say all the circuits are busy."

Kendra Silverman, a spokeswomen for the Hilton Hotels Corporation, said the corporate offices in Los Angeles were having trouble placing calls but added: "It's not disrupting business to any serious degree. I'm able to get through if I'm persistent enough. It may take 10 calls."

On a normal business day, the long-distance network handles about 80 million calls. In the first three hours after the problem developed, the company said, well over half the calls dialed were not connected. "In my 20 years I have not seen a situation that affected as many cities as this," Burke Stinson, a company spokesman, told The Associated Press.

A.T.&T. subscribers who find that its service is unavailable can use MCI's network by dialing an access code, 10222, and then 1, the area code and the telephone number. US Sprint's network can be reached by dialing 10333. Users are charged the same rate as the network's regular customers, and are billed through their local telephone companies.

The new switching system, which is the apparent cause of the problem, is designed to process twice as many calls as the previous system, which is now handling most of the calls on the network.

A.T.&T. had a similar disruption in 1988 when a construction crew in New Jersey accidentally severed a fibre optic communications line. The company had to reroute hundreds of thousands of calls from its network operations center in Bedminster, N.J., and there were major delays in service.

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