

Caution urged for switch to internet phones

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Federal agencies and other organizations that are considering switching their telephone systems to Voice Over Internet Protocol (VOIP) should proceed with caution and carefully consider the security risks, says a recent report* by the National Institute of Standards and Technology (NIST).

VOIP is an important emerging technology that makes it possible to place telephone calls using a broadband Internet connection rather than traditional, circuit-based telephone lines. While it shows promise for lower cost and greater flexibility, VOIP has a very different architecture than circuit-switched telephony, and these differences result in significant security issues.

"Administrators may mistakenly assume that since digitized voice travels in packets, they can simply plug VOIP components into their already-secured networks and remain secure. However, the process is not that simple," says the NIST report. Implementing common security measures into VOIP, such as firewalls and encryption, can cause poor voice quality and blocked calls if not done carefully and with the proper equipment. Designing, deploying and securely operating a VOIP network is a complex effort that requires careful preparation, says the report.

NIST recommendations to help in the transition to secure VOIP include: develop appropriate network architecture, including separate voice and data networks where feasible and practical; ensure that the organization can manage and mitigate risks to their information, system operations, and continuity of essential operations when deploying VOIP systems; use

and routinely test the security features included in VOIP systems; update VOIP software regularly and frequently; and, since worms, viruses and other malicious software are common on PCs connected to the Internet, do not use "softphone" systems that implement VOIP using a PC with a headset and special software.

*D.Kuhn, T. Walsh, S. Fries, Security Considerations for Voice Over IP Systems, NIST Special Publication 800-58, is available at csrc.nist.gov/publications/nistpubs/index.html

Source: NIST

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