

Secure Voice over IP (SVoIP) vs. Voice over Secure IP (VoSIP) Installations

Frequently Asked Questions



**Sectera® vIPer™
Universal Secure Phone**

Q: What is the difference between Secure Voice over IP (SVoIP) and Voice over Secure IP (VoSIP) technologies?

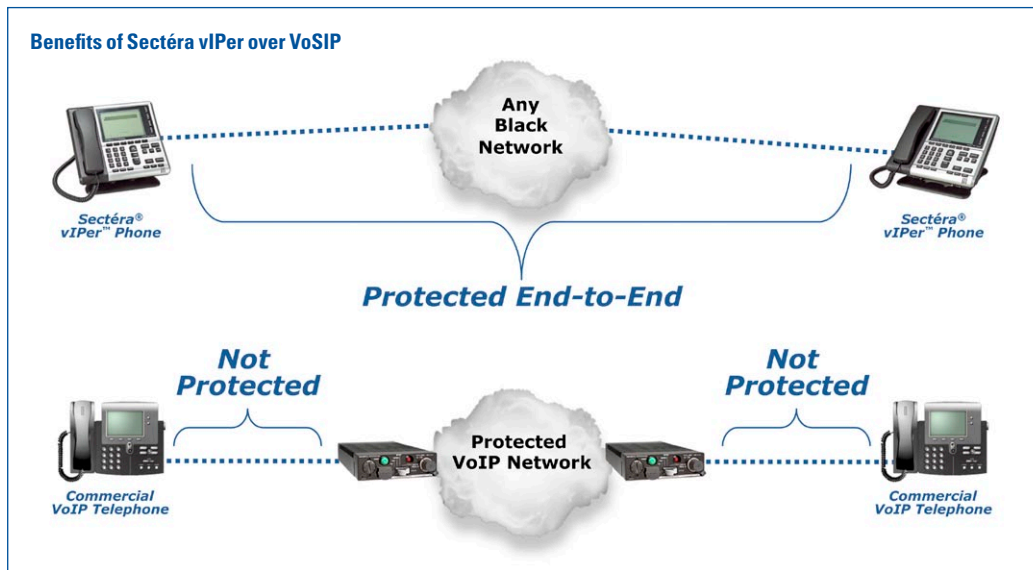
A: Voice over IP is the technology used to transmit voice communication over a data network using Internet Protocol. Examples of a data network could be the Internet, corporate intranet or a managed network. Many households as well as organizations are migrating to VoIP as opposed to the traditional telephone lines for several reasons, primarily - cost savings and simplified network and user management. Secure Voice over IP (SVoIP) is when secure phones are used to protect information sent

over the VoIP network. Voice over Secure IP (VoSIP) is the same as SVoIP in that they are technologies used to securely transmit voice communications, but with VoSIP, the security is provided by separate devices in the network (such as network encryptors) rather than the secure phones themselves. Note that the information is only secured once it passes through the encryption device — it is unsecured when being transmitted between each phone and its network encryptor.

Q: Is a VoSIP network more secure than SVoIP for voice communications?

A: VoSIP is not more secure than SVoIP when using regular commercial phones. The reason is that the information transmitted from the commercial phone to the encryptor is not protected. If you are using a Sectéra® vIPer™ Phone, it doesn't matter what network you are on (commercial or secured) because the security is built into the phone

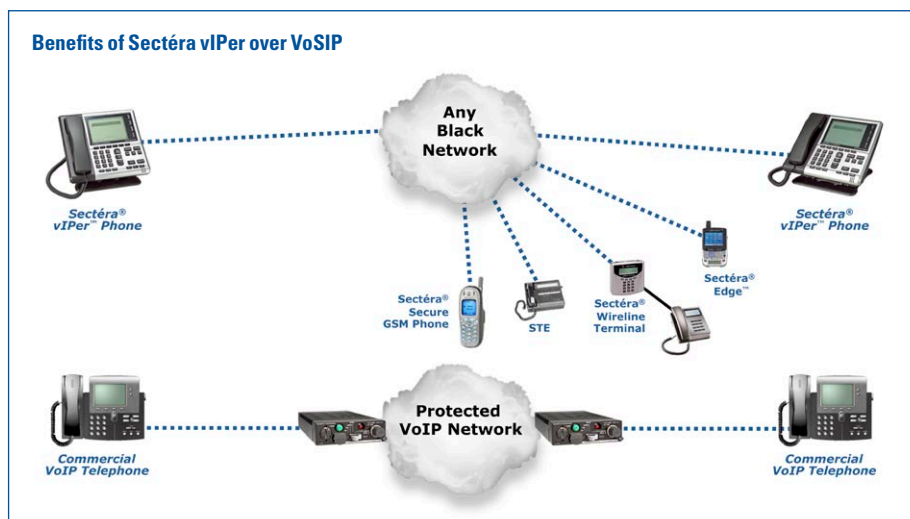
itself. This means that the information or conversation is encrypted as it's processed and is secure all the way to the receiving Sectéra vIPer Phone (or other government-approved secure phone) — this is called "end-to-end" security. You need end-to-end security to be the most secure. This is illustrated in the picture below:



Q: Is interoperability the same with either SVoIP or VoSIP?

A: There is a difference between SVoIP and VoSIP in terms of interoperability. Many people think that because their network is secure, they can use regular commercial IP phones. If you choose to use regular commercial IP phones instead of the Sectéra vIPer Phones, you will not be able to securely interoperate/communicate with other government approved devices. Government secure phones adhere to the Secure Communications Interoperability Protocol (SCIP), which

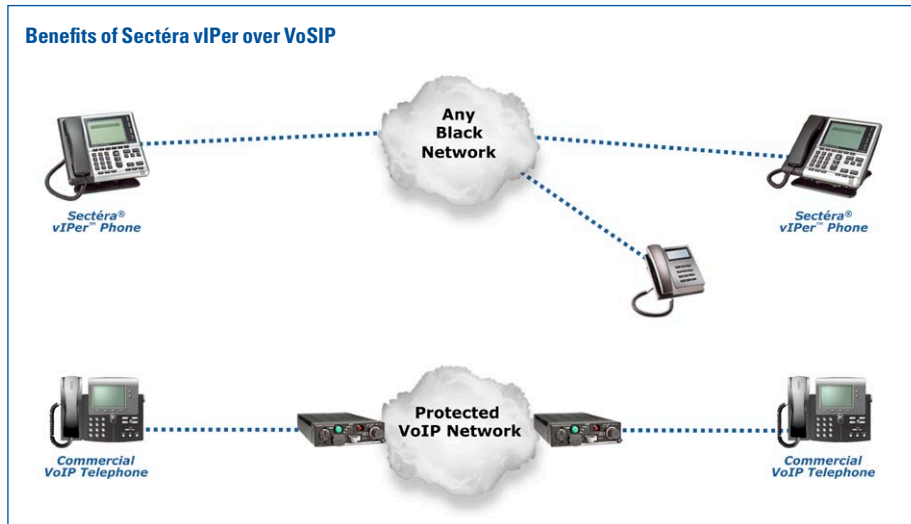
ensures the devices can securely "talk" to each other. Commercial IP phones do not comply with SCIP and therefore cannot securely "talk" with SCIP-compliant devices - even though they may be on a secure network. With Sectéra vIPer, you can securely communicate with other SCIP devices such as the Sectéra Wireline Terminal, Sectéra GSM Wireless Phone, Sectéra Edge™ Smartphone, the STE and Omni. This is illustrated in the diagram below:



Q: Can I still communicate with phones on different networks?

A: The Sectéra vPer Phone can be used for both secure and non-secure communications. This means that when on a regular VoIP network, the Sectéra vPer can place clear calls to other VoIP phones as well as analog/PSTN

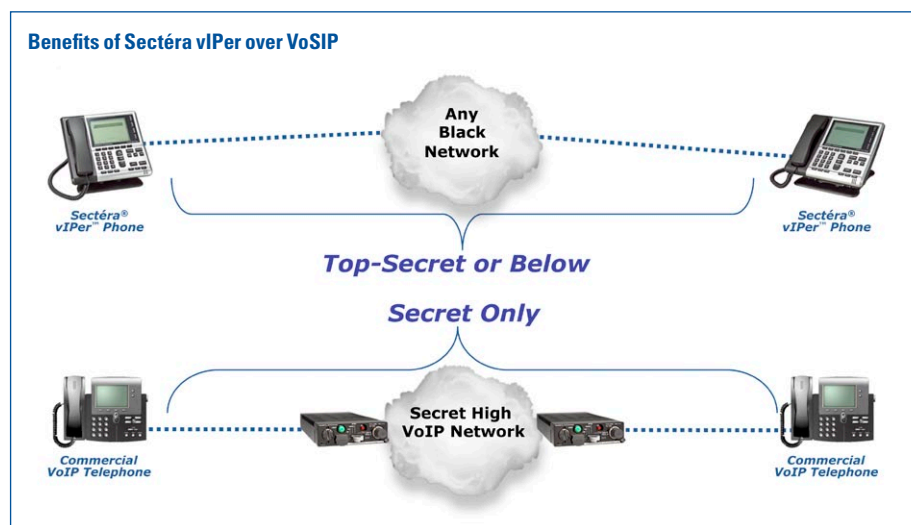
phones. A VoSIP network utilizing commercial IP phones does not allow this flexibility since the phones can only communicate at the security level of the network. This is illustrated in the diagram below:



Q: With SVoIP or VoSIP, can I communicate at multiple security levels?

A: A VoSIP network utilizing commercial IP phones restricts communication to the security level of the network. If your network is Secret, you can only communicate at the Secret level. The Sectéra vPer Phone is the only VoIP phone with integrated security certified to protect information classified Top Secret /SCI and below over commercial or unprotected IP networks. The Sectéra vPer

Phone provides end-to-end security for Top Secret, Secret or even unclassified communications. The security level is determined by the user, not the network. Having one phone that can be used for both classified and unclassified communication provides more flexibility and eliminates the need for multiple desktop phones. This is illustrated in the diagram below:



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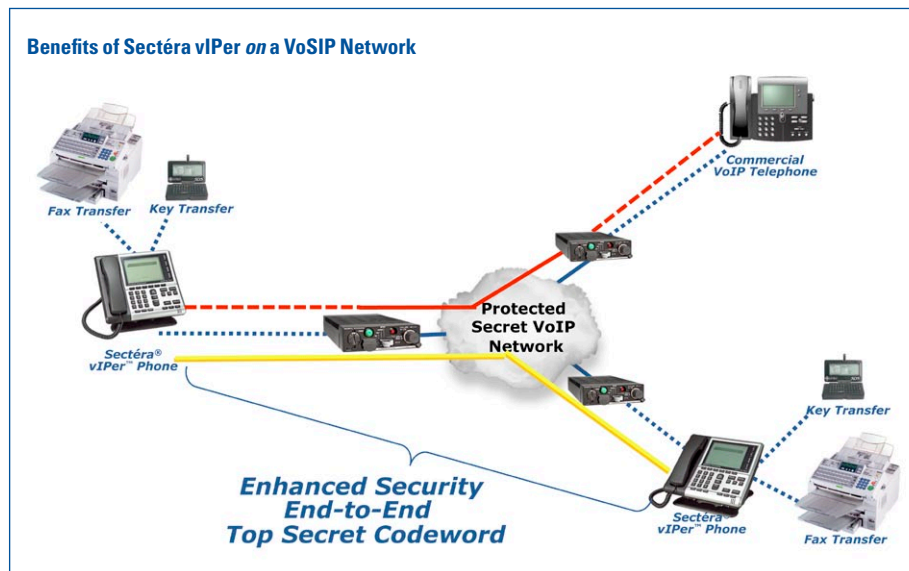
Q: Even though the Sectéra vIPer Phone provides end-to-end security, is there any benefit to using it on my VoSIP network?

A: Yes! There are several benefits of using a Sectéra vIPer Phone on a VoSIP network:

1. With the Sectéra vIPer Phone, you are not restricted to communication at the level designated by the network. For example, if you are on a Secret network, using the Sectéra vIPer Phone enables you to enhance the security and transmit voice and data classified Top Secret/SCI and below.
2. The secure data feature of the Sectéra vIPer Phone

enables users to securely transfer data such as key material or secure faxes over the network (Top Secret/SCI and below).

3. Data restricted to U.S.-only can be transmitted over a coalition network using the Sectéra vIPer Phone.
4. Sectéra vIPer enables communication with other VoIP phones at the network classification level, as well as with other Sectéra vIPer Phones up to the Top Secret/SCI level.



Summary

A major advantage of using the Sectéra vIPer Phone is flexibility. The Sectéra vIPer Phone can be used:

- On multiple networks (commercial VoIP networks, VoSIP networks and even analog/PSTN networks)
- For classified and unclassified communications
- To secure both voice and data transmissions
- To communicate/interoperate with other secure (SCIP) devices

GENERAL DYNAMICS C4 Systems

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