Virtual Private Network Now Available to all UF Faculty, Staff, and Students

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Virtual Private Network Now Available to all UF Faculty, Staff, and Students

The Virtual Private Network (VPN) service that UF Network Services and the Open Systems Group have developed and have been testing over the past few months is now available! This means all UF faculty, staff, and students with an active GatorLink account are welcome to begin using the service. Support is provided by the UF Computing Help Desk (http://helpdesk.circa.ufl.edu).

Everyone who is interested in using the VPN service is encouraged to subscribe to the vpn-l e-mail list. Maintenance announcements as well as problem reports and feature enhancement notifications will be posted to the list. Anyone with a problem or question is also welcome to post. You can subscribe to the list by sending e-mail to listserv@lists.ufl.edu with the body: subscribe vpn-l. Please note that the last character in this list name is a lower-case "L," and not the number 1.

What is a VPN?

VPN stands for Virtual Private Network. It is a set of technologies that allow us to build secure "virtual" networks between hosts on insecure networks. The particular type of VPN Network Services is deploying is commonly known as a remote access or tunnel mode VPN. This acts very much like a classical dial-up service, except you are using a data network rather than a voice network to make your "calls." Rather than dialing into a modem on the far end, you are making a connection to a VPN concentrator and creating a secure tunnel from your machine to the tunnel concentrator, which is located on the UF network. Additionally, your machine will appear as if it were on the UF network (i.e., you get an IP address on the UF network).

Why should I use a VPN?

By connecting to the VPN service, your data is secured by encryption between your host and the UF core network. VPN also allows you access to resources that are restricted based on source address. While you are connected to the VPN concentrator, you appear to other hosts at UF as if you were on the UF network. This allows you to get access to resources from off campus (such as library databases and NETg courses) that are otherwise blocked because of your source address. For example, if you dial up using a commercial Internet service provider such as AOL, you are blocked from the NETg service. If you connect with the VPN service, however, you "look" as though you are on the UF network, and you can access the NETg courses.

How strong is the encryption used in the UF VPN service?

The UF VPN service uses Triple DES (Data Encryption Standard) with a key length of 168 bits. Triple DES is considered to be a very strong encryption algorithm and is currently immune to key space search attacks (the most common kind of attack against strong encryption) because of its key length. It also uses a technique called Cypher Block Chaining (CBC) in which each plain text block is XORed with the previous cypher text block before
encryption. This makes dictionary style attacks very difficult and increases the overall effectiveness of encryption.

For more information, complete installation instructions, client software, and FAQs, please see http://net-services.ufl.edu/vpn. You will need an active GatorLink account to download the software.

Your Comments are Welcome

We welcome your comments and suggestions on this and all UFIT documentation. Please send your comments to:

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