



# NEWS RELEASE

**UNITED STATES AIR FORCE**

## **HEADQUARTERS STANDARD SYSTEMS GROUP**

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### **Dynamic VLANs Save the Day**

**MAXWELL AFB, GUNTER ANNEX, Ala** -- What would you do if your boss said, "Beginning tomorrow we are going to relocate 2,000 of our people and all of them will require network connectivity within 48 hours."

While this scenario may sound somewhat overwhelming, it is one that the Headquarters Standard Systems Group has addressed and solved by implementing a virtual local area network (VLAN). A VLAN allows users to better manage base network operations by dividing customers into separate VLANs or groups. VLANs are set up to include customers needing communication within a specific function or area, such as finance or the command section. VLANs also provide administrators with a far more manageable network when troubleshooting.

One major drawback with traditional VLANs was that it required administrators to locate every user one-by-one in order to activate the port, which could prove very time consuming for the administrator, as well as the user. Further, if equipment had to be moved for some reason, the administrator would have to repeat the entire process. This prompted SSG technicians to seek out other solutions, resulting in the conversion to dynamic VLANs.

## ***DYNAMIC VLANs***

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Basically, dynamic VLANs consist of a database on a VLAN Management Policy Server. Because this server holds the Media Access Control (MAC) address or hardware address for each piece of customer equipment that connects to the network, it provides increased security.

Additionally, dynamic VLANs give administrators the ability to turn off any piece of equipment on the network with the MAC address or hardware address information. This comes in very useful when completing security assessments of the network and customers who are non-compliant with network standards implemented by the base Network Control Center (NCC). This also provides security for the NCC allowing better control of equipment on the network.

“The payoff has been tremendous for the Gunter Network,” said Capt. Ryan Vetter, Network Operations Crew Commander. “Not only have administrators gained a better understanding of the equipment that is on the network, but the additional security provided by dynamic VLANs has been invaluable.”

Another feature about dynamic VLANs is customers can now pickup their equipment and relocate anywhere on base if they so choose. With a LAN drop available, users can have network access by simply plugging in their equipment. This is excellent when it comes to a base where a relocation process is going to take place.

Using dynamic VLANs save time and money for SSG. “The average time to complete a trouble call in the Network Control Center in February 2002 was around 77 hours. This time has been reduced to approximately 29 hours, an improvement of 48 hours; this is including all trouble calls for the NCC, not just dealing with VLAN issues,” Vetter said. “We have saved the United States Air Force and American taxpayers an incredible amount of money on manpower, time and equipment. During this timeframe, we have been expanding the network and relocating over 2,000 users on base to different buildings and offices. We have also been able to reutilize thousands of dollars worth of materials and equipment.”

## ***DYNAMIC VLANs***

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Keep in mind there still may be a few drawbacks yet to be encountered at this time, however, the professionals at SSG are continuing to increase their use of dynamic VLANs.

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