## **General Switch Setup**

In the interest of standardization all Star2Star Master Switches come pre-configured with a set port configuration; the last 4 ports are reserved for specific applications. If you will be configuring your own switches it is strongly recommended you apply these same assignments to aid in the support of your installation. *The numbers in parentheses are for a 48 port switch.* 

Port - Application

- Ports 1-20 (1-44) SIP Phones, ATAs, Computers (single drop phone & computer) etc.
- Port 21 (45) Telephony Diagnostic Port
- Port 22 (46) StarBox Telephony Port (LAN3)
- Port 23 (47) Secondary WAN connection
- Port 24 (48) Customer DHCP Server (no VLAN41)

The guide below is written specifically for Netgear switches however the same principles apply to any managed switch. Voice traffic runs over VLAN41 therefore priority QOS should be applied to VLAN41.

- 1. Find the switch's IP address. If you already have this, continue on to step 2.
  - Is the switch on the customer's internal data network, or the default Star2Star switch network of 10.55.26.xx?
  - On the starbox in question, do an ifconfig. We need to define an interface on eth2 on the same network as the switch. Do that with ifconfig eth2 xxx.xxx.xxx.99 netmask 255.255.255.0
  - o find the IP of the switch by doing **nmap -sP xxx.xxx.xxx.0/24**. It will have the label "Netgear" in parenthesis next to its MAC. Exit the box.
- 2. From admin, create a tunnel to that switch with cid tun <starbox id> <switch ip>
- 3. Enter in the password for the starbox, and open the link given in an Internet browser. Password is *password*.
- 4. Depending on the firmware version of the switch, you may need to do some hunting around. To configure a switch for Dual Failover, we need to create a VLAN42.
- 5. In the VLAN Membership screen, we need to configure the ports for the following VLANs (U means untagged, T means tagged):
  - o Ports 1-20 are U1 and T41
  - o Port 21 is U41
  - Port 22 is U1, T41 and T42
  - o Port 23 is U42
  - Port 24 is U1
    - Those steps for a 48-port switch:
    - 1-44 are U1/T41
    - 45, 46, 47 and 48 are setup like 21,22,23 and 24 respectively.
    - The extra (gigabit/uplink) ports as U1/T41 as well.
- 6. You will also need to go into the PVID Configuration and list port 21 as 41 and port 23 as
- 7. Apply and save the configuration, and you should be good to go (changes should not require a reboot, but it may be necessary).