This document describes the front panel, LED indications, interface and the installation procedure for the INT1G10CSA. This Aggregator TAP is ideal for 10/100/1000MB copper network monitoring. The innovative design allows these TAPs to be easily installed into any copper 10/100/1000MB network segment.

Front Panel

LED Indications

Port 1 LFP	Orange indicates LFP on Off indicates LFP off
Port 1 LNK	Link LED
Port 2 LFP	Orange indicates LFP on Off indicates LFP off
Port 2 LNK	Link LED
Port 3 LFP	Orange indicates LFP on Off indicates LFP off
Port 3 LNK	Link LED
Port 4 LFP	Orange indicates LFP on Off indicates LFP off
Port 4 LNK	Link LED
Port 5 LFP	Orange indicates LFP on Off indicates LFP off
Port 5 LNK	Link LED
Port 6 LFP	Orange indicates LFP on Off indicates LFP off
Port 6 LNK	Link LED
Port 7 LFP	Orange indicates LFP on Off indicates LFP off
Port 7 LNK	Link LED
Port 8 LFP	Orange indicates LFP on Off indicates LFP off
Port 8 LNK	Link LED
Port 9 LNK	Link/Activity LED
Port 9 Activity	Solid Green indicates no Activity Flashing Green indicates activity
Port 10 LNK	Link/Activity LED
Port 10 Activity	Solid Green indicates no Activity Flashing Green indicates activity
PS1	Power Supply 1 LED (Green indicates normal / Off indicates power not applied)
PS2	Power Supply 2 LED (Green indicates normal / Off indicates power not applied)

Interfaces

Serial	Serial Interface used to configure the INT1G10CSA
	(see **Settings for the Console Port**)

List of Components Supplied

The components supplied with each INT1G10CSA TAP are listed below. If any component is found to be missing, damaged, not working, or otherwise faulty, please report it immediately to Garland Technology Technical Support.

1 x INT1G10CSA Span Tap
1 x Rack mounting kit (bracket and screws)
2 x AC Power Cords
1 x Ethernet Cable (RJ45)
1 x Console Cable (RJ45 x DB9)

Rack-mounting the Chassis

This section describes how to mount the INT1G10CSA into a 19" rack. Follow the usual security precautions.

To rack mount the INT1G10CSA:

1. Unpack the INT1G10CSA and place it on a suitable work surface.
2. Attach the two mounting brackets supplied to the side of the INT1G10CSA chassis.
3. Slide the chassis into the rack and secure it with screws (not supplied).
4. Attached the AC Power cords to seperate power sources. The INT1G10CSA is able to work with a single power input but two power inputs from seperate power sources will help safeguard the device against power failure.

If the INT1G10CSA is DC powered, see connection instructions below.

To wire a DC power supply:

1. Verify the power is off to the DC input circuit.
2. Attach the appropriate ring fittings to the DC input wires.
3. From the bottom of the terminal block wire the DC input power supply to the terminal block as follows:
   Ground wire to Ground terminal (left)
   -48 Vdc return to "+" terminal (center)
   -48 Vdc wire to "-" terminal (right)

Caution: Before performing this procedure, ensure that all power is off to the DC circuit or the power supply being added or removed. Locate the circuit breaker that services the DC circuit and switch it to the off position. Tape the circuit breaker switch handle in the off position to prevent accidental closing of the circuit.

Settings for the Console Port

A terminal emulator is required to access and manage the INT1G10CSA. The settings to connect to the Serial Console are the following:

Bits per second: 19200
Data Bits: 8
Parity: None
Stop: 1
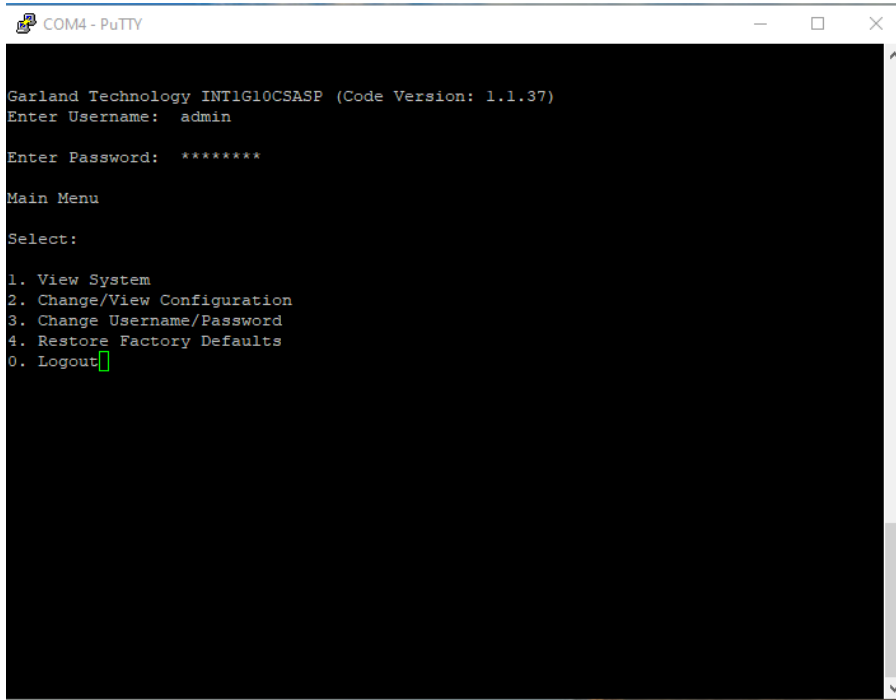Flow Control: None

Logging into the INT1G10CSA

Insert the RJ45 connect of the Console Cable into the Console Port. Configure the settings for the terminal emulator as previously instructed then press enter.

The default username is **admin**. The default password is **gtadmin1**.
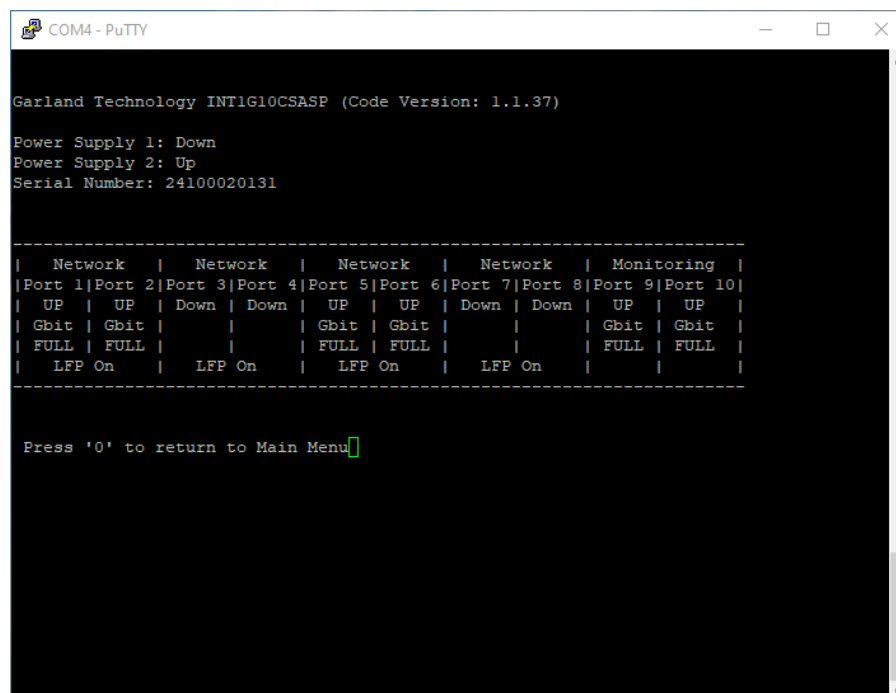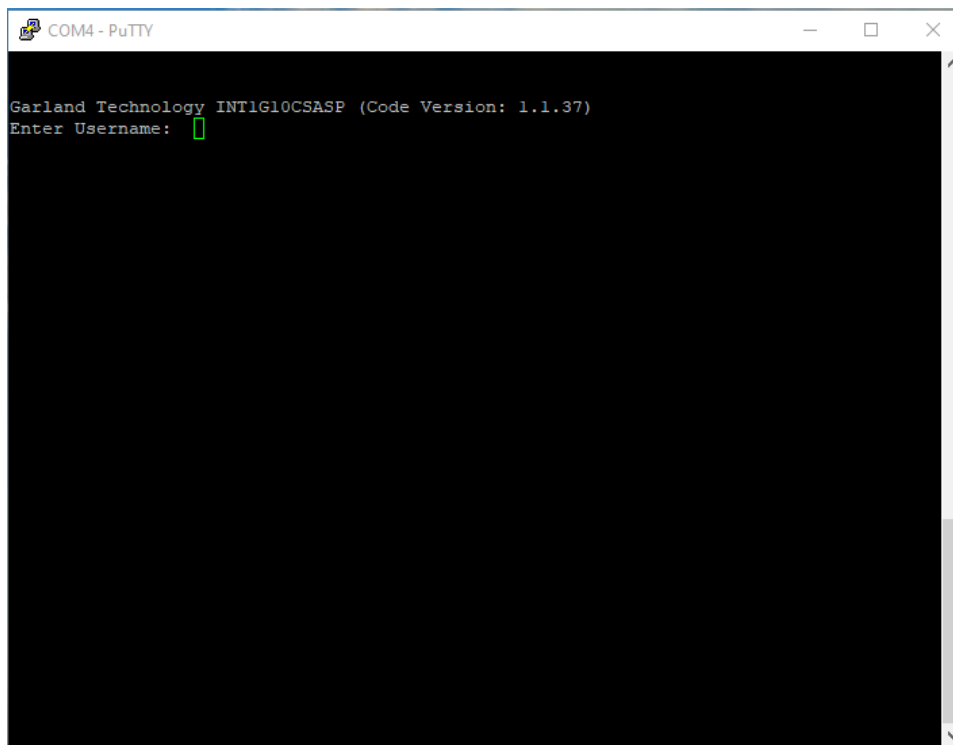
Configuring the INT1G10CSA

The main menu is displayed upon successful login.

Selecting 1 brings up the View System page. This page informs the user as to the status of the power supplies and ports in addition to displaying the serial number of the unit.
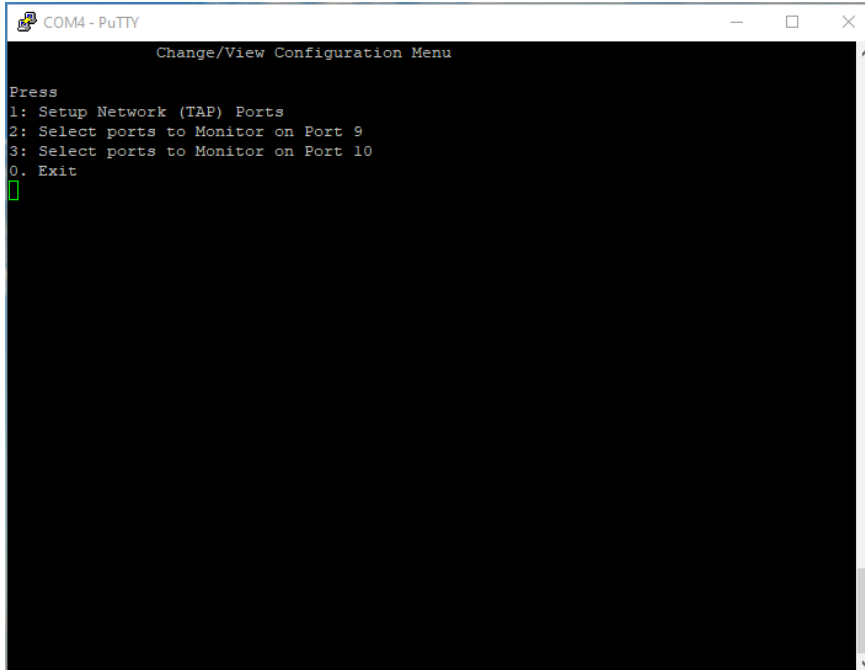
Selecting 2 brings up the Change/View Configuration page. Pressing 1 will bring up the configuration screen that enables you to change the port to match your network. Pressing 2 and 3 enables you to select which ports forwards a copy of the received packets to port 9 or port 10.
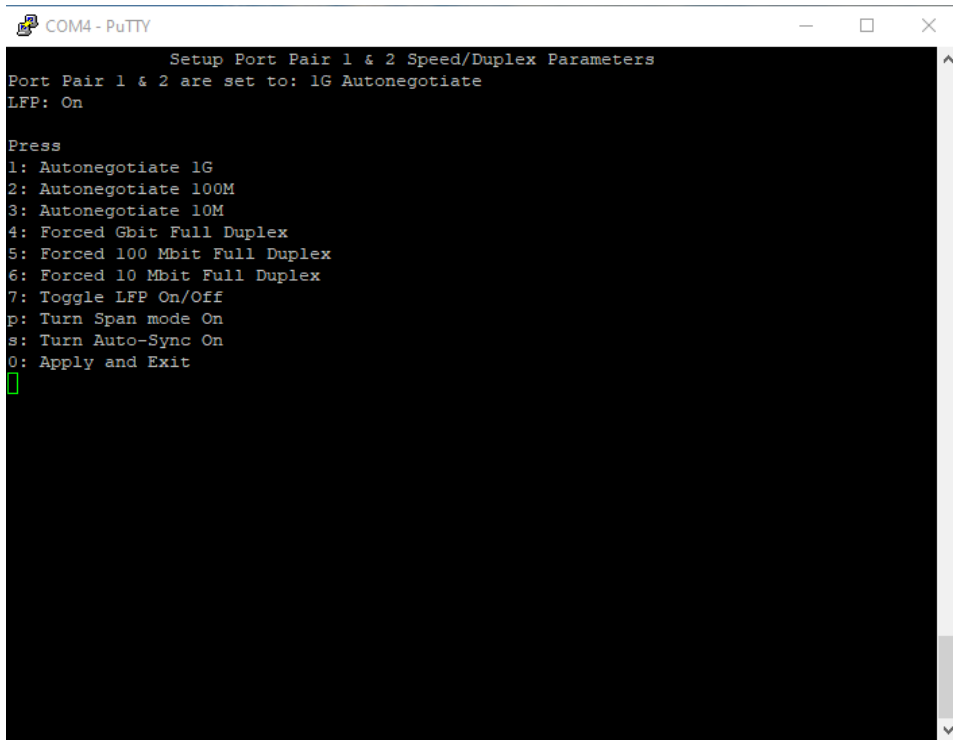

Note: The INT1G10CSA ships configured in Tap mode. The user may change this by enabling Span on each Network Pair.

To change a Network Ports select 1 under the Setup Network (Tap) Ports. Select the Network Pair to be changed.
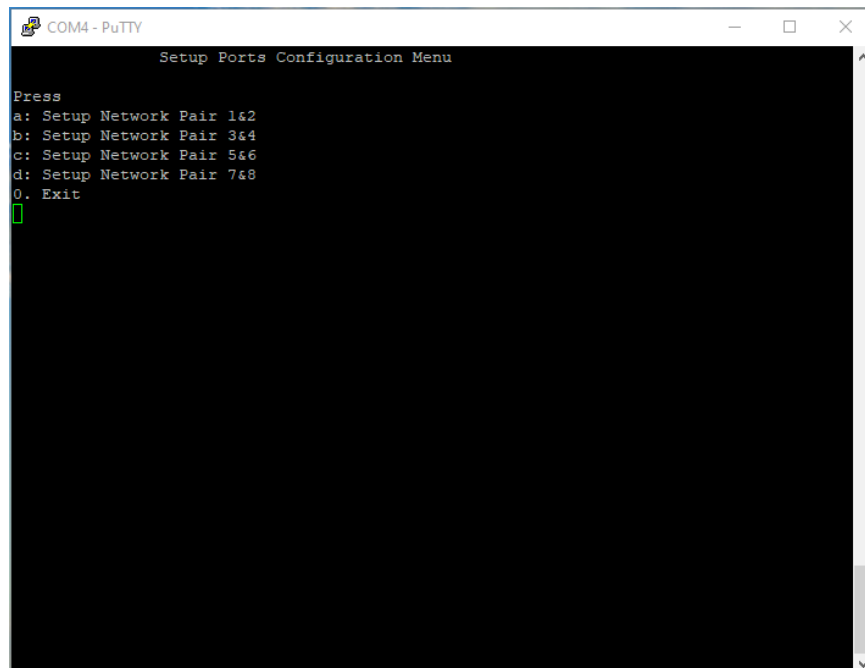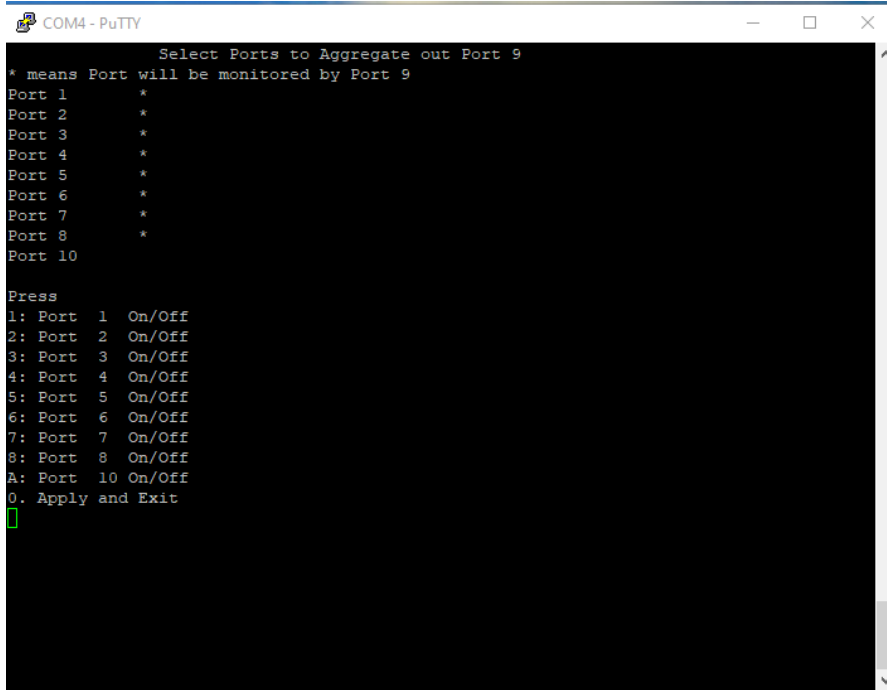
Under Setup Port Configuration Menu you can set the port speed, set LFP, disable Span mode for a Network pair (Tap), and enable Sync Mode. Configuring the port to Forced Full Duplex prohibits the port from responding to autonegotiate messages which requires the user to manually configure the port on the device linked to the INT1G10CSA.

```
                Setup Port Pair 1 & 2 Speed/Duplex Parameters
Port Pair 1 & 2 are set to: 1G Autonegotiate
LFP: On

Press
1: Autonegotiate 1G
2: Autonegotiate 100M
3: Autonegotiate 10M
4: Forced Gbit Full Duplex
5: Forced 100 Mbit Full Duplex
6: Forced 10 Mbit Full Duplex
7: Toggle LFP On/Off
p: Turn Span mode On
s: Turn Auto-Sync On
0: Apply and Exit
```
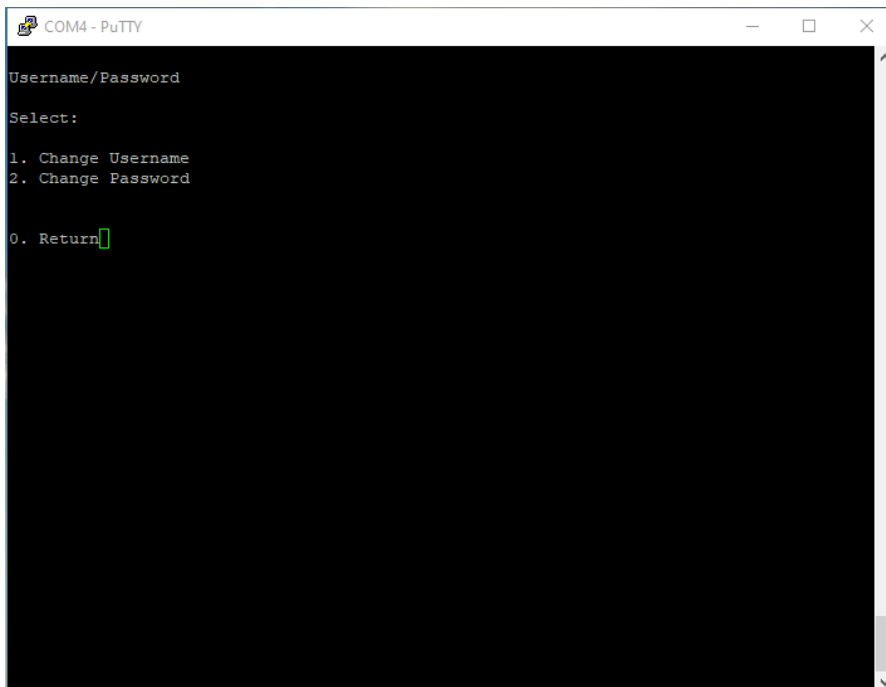
Note: Failure Propagation (LFP) allows the link state to be mirrored to adjacent live network interfaces. When the tap is in SYNC mode then LFP is set to be enabled.

Pressing 2 or 3 enables you to change which ports are assigned to send packets to port 9 or port 10. By default ports 1 through 8 send copies of the packets they receive to port 9 and 10.

```
COM4 - PuTTY                                              —   □   ×
            Select Ports to Aggregate out Port 9
* means Port will be monitored by Port 9
Port 1        *
Port 2        *
Port 3        *
Port 4        *
Port 5        *
Port 6        *
Port 7        *
Port 8        *
Port 10

Press
1: Port  1  On/Off
2: Port  2  On/Off
3: Port  3  On/Off
4: Port  4  On/Off
5: Port  5  On/Off
6: Port  6  On/Off
7: Port  7  On/Off
8: Port  8  On/Off
A: Port  10 On/Off
0. Apply and Exit
```

You may change the username or password by selecting 3 from the Main Menu.

```
COM4 - PuTTY                                              —   □   ×
Username/Password

Select:

1. Change Username
2. Change Password


0. Return
```
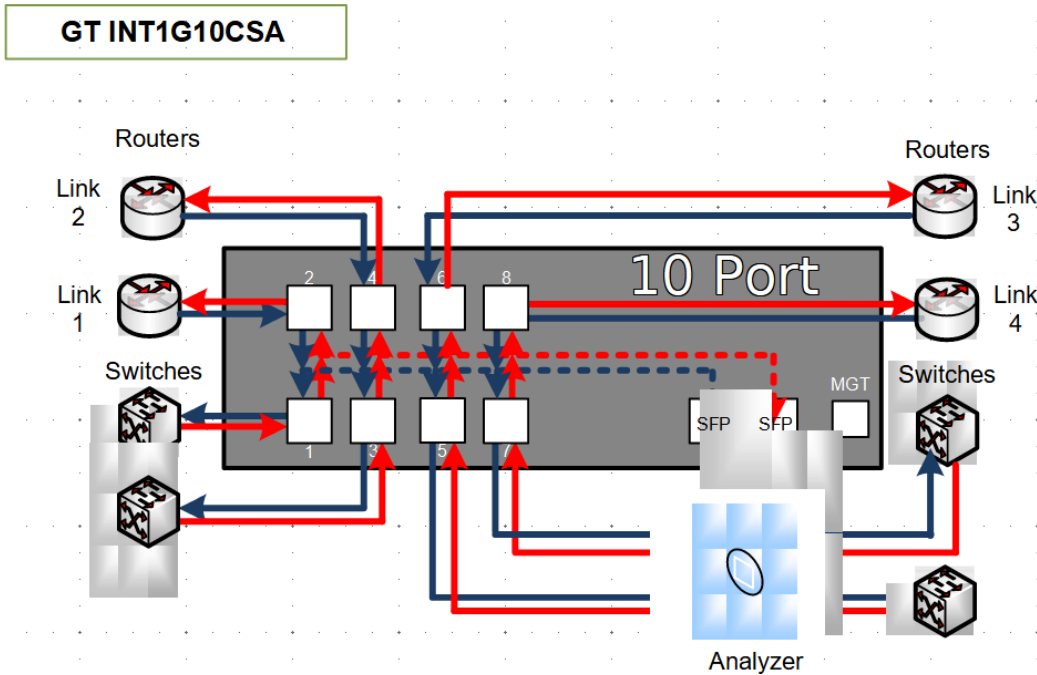
Restore Factory Defaults

The INT1G10CSA can be restored to Factory defaults by selecting 4 on the Main Menu.
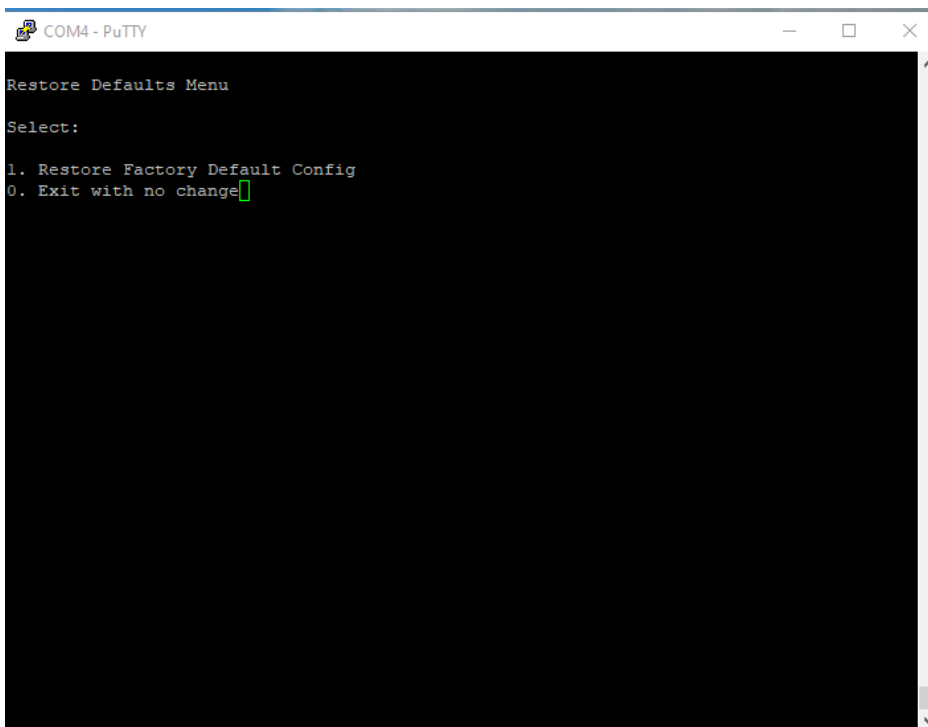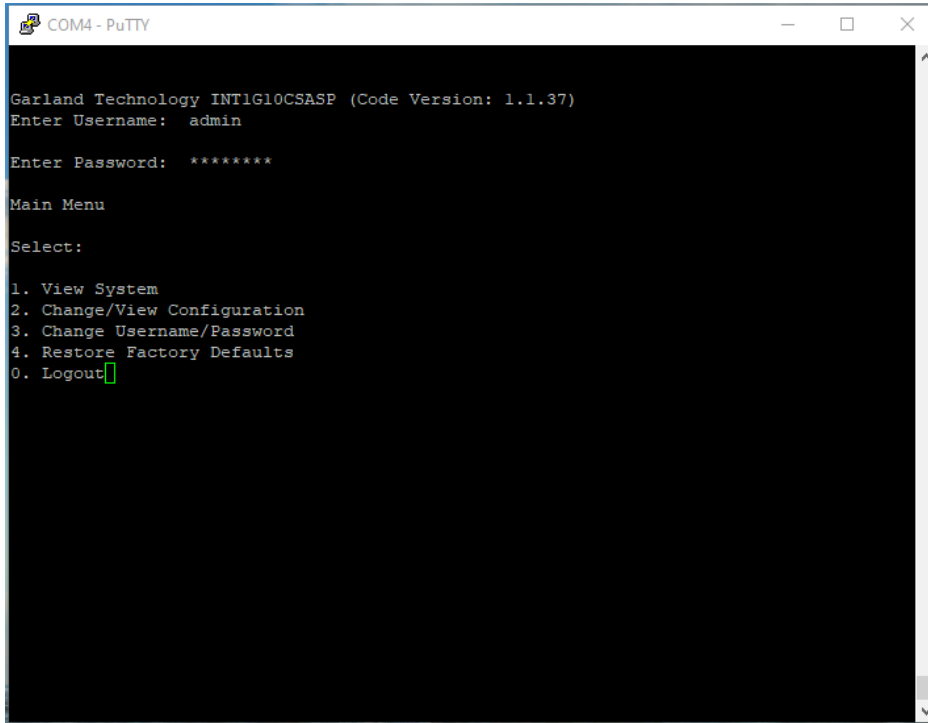
Note: A power cycle is required after pressing 1.

INT1G10CSA Flow Diagram

Understanding the Operational Possibilities for the INT1G10CSA TAP

Ports 9 and 10 are Monitor Ports.

2 INT1G10CSAs can be inserted in a 19" rack mount.

Application – TAP up to 4 network segments and aggregate traffic to 1 or 2 monitoring ports.
Send East-West traffic out port 9 and West-East traffic out port 10.

Span Mode Enable:

Ports 1 through 8 do not transmit packets to the network elements linked to them.

Ports 1 through 8 are sending packets to both 9 and 10.

Application – Aggregate Span ports to send to a tool.

Caution: The INT1G10CSA supports Fail-Safe. If the INT1G10CSA loses power than the relays would close which send the packets received on port 1 out the transmit of port 2 and visa versa. This is true of ports 3 and 4, 5 and 6, and 7 and 8 as well. It is recommended that you purchase the INT1G10CSASP if Span mode is the primary mode used.

Garland Technology Technical Support at:
8AM-9PM (CST) Monday - Friday (Except for observed US Holidays)
Tel: 716.242.8500 Online: garlandtechnology.com/support