

Device Recovery on Ethernet

Unable to Connect to an ODU on a LAN

The problem: Supervisor (Svr10) is failing to connect to a powered unit that has been connected to a Local Area Network, using an Ethernet cable.

These scenarios and solutions will require use of the Supervisor Terminal window, which can be brought up by clicking on the button Show/Hide Terminal that is located in the Summary window menu bar. Commands internal to Supervisor are used here, which always begin with a > character.

Scenario #1:

The ODU has an IP address and is conflicting with another device already present on the LAN with that same address. It appears to be impossible for Supervisor to connect to the unit using the normal methods.

Solution, using the Terminal window:

```
>SNRESET "ODU serial number"
```

The ODU should now have a new static IP address, assigned by Supervisor.

Assuming there is a DHCP server present, and the user is running the latest version of Supervisor, (10.1.07 or later, see AnaCom, Inc. to download,) then make sure the device is selected in the Summary window. Return to the Terminal window and enter:

```
>DHCP
```

That should do it. Supervisor will instruct the ODU to query the DHCP server for a dynamic address, and Svr10 will check to see if this has taken place.

If running an older version of Supervisor, issue the ODU command "IP DHCP" directly to the ODU, and then re-acquire the device manually.

Scenario #2:

The unit has been configured for DHCP, but is connected to a LAN that has no DHCP server. Assuming BootP/DHCP packets are not being blocked, then follow the solution for Scenario #1 to assign the device a static IP address.

Another solution is to uncheck "Disable IP Address Checking" in the Summary window Options menu. Then, the normal method of just clicking the "Find Devices" button in the Summary Window or "Scan for S/N" should work, giving the unit a new static address automatically.

By default, this option is checked to avoid giving devices static addresses on LANs managed by a DHCP server – the expectation.

Scenario #3:

The unit has a functioning and non-conflicted IP address, (DHCP assigned or a valid static address,) but for whatever the reason the standard method (BootP packets) that Supervisor uses under the hood for acquiring devices is failing. For instance, this could happen if the unit is on another LAN behind a gateway or if the unit is on a LAN without a DHCP server connected to a second Ethernet interface. It could get more complicated than that too. Supervisor needs to open TCP/UDP port 67 for listening, which could be blocked for some reason such as a firewall the user does not have permission to modify in any way.

Knowledge of the device's IP address will be required. Using the Terminal window, enter the command:

```
>IPCONN "ODU IP address"
```

Scenario #4:

This is the unlikely nightmare scenario. The unit is configured for DHCP but there is no DHCP server, BootP/DHCP packets are somehow being blocked by something on the network that sits between the PC running Supervisor and the ODU, such as a firewall.

At the present time, with Supervisor 10.1.09 and ODU firmware Revision 88, there is no solution other than one that requires physical access to the device. It will be necessary to move the ODU to another network, use a PC that is on the same side as the blocking gateway, a direct connection, or even using a serial port connection.

Using the Terminal window, after connecting successfully using any means, assign a static address valid for the LAN that the unit is destined for by entering the following ODU command:

```
IP "IP address" ; SUSPEND CANCEL ; SAVE
```

It is likely that after issuing this command via Ethernet, that Supervisor will lose connection with the device.

Do not disconnect power until the ODU has been running for at least 30 seconds.

Move the unit back to where it belongs, and now Scenario #3 should apply.