

## Understanding the Command Line Interface in AOS

The AOS Command Line Interface is a keyword interactive interface that facilitates configuration via a common command set. This guide covers accessing the Command Line Interface via the Console Port (physical port on some AOS devices) and Telnet.

### Requirements

Your AOS device may not have a Console Port, in which case you must use the Telnet method to access the Web Interface.

#### For Console Port Access:

- Your AOS device must have a console port
  - 9 pin serial port labeled 'Console Port' on the back of the unit
- 9 pin male to 9 pin female straight through serial cable.
  - *Note:* that this must NOT be a Null Modem or Cisco Console Cable.
- A computer with a 9 pin serial port.
  - *Note:* If your computer does not have a serial port, you will need a USB to serial adapter available at any computer store.
- A VT100 Emulator such as HyperTerminal in Microsoft Windows

#### For Telnet Access:

- A computer with an Ethernet Interface, and access to configure the IP Address.
- An Ethernet cross-over cable.
- The IP Address configured on the AOS device. If you do not know the IP Address configured on the AOS device, you must use the "Console Port" method. If your device does not have a console port, please follow the section titled "Resetting AOS Devices without Console Ports"

### Accessing the CLI via Telnet

You must know the IP Address of your AOS Device, before being able to access the Command Line Interface via telnet. If you do not know the IP Address configured on your AOS Device, you must use the "Console Port" to access the Command Line Interface. If your device does not have a "Console Port", read the section titled "Resetting AOS Devices without a Console Port" at the bottom of this guide.

#### From the Web Interface:

The AOS Web Interface includes a link at the bottom of the left menu named “Telnet to Unit”. Clicking this link should open a telnet client to access the Command Line Interface. For more information about accessing the Web Interface, consult the guide titled “Accessing the Web Interface in AOS”.

*From a Telnet Client:*

- 1) Configure your computer with an IP Address in the same subnet as your AOS Device. If you do not know your AOS device’s IP Address, you will need to use the “Console Port” method. If your AOS device does not have a console port, read the section titled “Resetting AOS Devices without a Console Port”.
- 2) Connect the AOS device’s Eth 0/1 port to your computer’s Ethernet interface using an Ethernet Cross-over cable.
- 3) Open a Telnet Client on your computer.
  - a. Windows Example: Start -> Run. Type: “telnet 10.10.10.1”
  - b. Mac OS X Example: Applications -> Utilities -> Terminal. Type “telnet 10.10.10.1”

*Note:* 10.10.10.1 is the IP Address configured in AOS from the factory. You should specify the IP Address configured on your AOS device, instead of 10.10.10.1

## **Accessing the CLI via the Console Port**

If your AOS Device does not have a 9 pin serial port labeled “Console Port”, you will need to read the section titled “Accessing the CLI via Telnet”.

- 1) Connect the AOS Devices’ Console Port to your computers serial port with a 9 pin male to 9-pin female straight through cable.

*Note:* that this must NOT be a Null Modem or Cisco Console Cable.

- 2) Open a VT100 Emulator.
  - a. Windows Example : Start -> Programs -> Accessories -> Communications -> HyperTerminal -> Hyper Terminal.
- 3) Configure the VT100 Emulator to use 9600 Baud, 8 data bits, No Parity Bits, 1 Stop Bit and No Flow Control.
- 4) Press ‘Enter’ once to start a session.

*Note:* If you do not receive any output via the console port, reset the AOS device with the console cable connected. If you see text upon power up, you are not using a 9-pin male to 9-pin female straight through cable.

## Using the Command Line Interface

The AOS Command Line Reference Guide, available in the ‘Support’ section of AdTran.com lists all available commands and their use.

### Navigating the Command Line Interface

The Command Line Interface has two features that are important for navigation.

Typing a question mark (?) shows contextual help and options. Here are two examples.

- Typing a question mark (?) at a blank prompt will show all available commands.
  - Example: *hostname# ?*
- Typing a command, then pressing the space bar, and then typing a question mark (?) will show all available sub-commands for that command.
  - Example: *hostname#: configure ?*
- Typing part of a command, then typing a question mark (?) will show all commands that start with those letters.
  - Example: *hostname# co?*

The Tab key can be used for command auto-completion, to help ensure proper spelling.

- Type enough letters of a command to distinguish that command from all other available commands, and press tab.
  - Example: *hostname> en<press tab>*

### Accessing Privileged and Configuration Modes in the CLI:

The Command Line Interface is used to view statistics, troubleshoot and configure AOS Devices. Privileged mode allows users to view privileged statistics and debug output. Global Configuration Mode allows users to configure the AOS device.

#### *Accessing Privileged (Enable) Mode*

Type **enable** and press enter.

#### *Accessing Global Configuration Mode*

Type **configure terminal**. You must already be in privileged mode.

### Common Commands in the CLI:

The following is a list of common commands used in Privileged Mode to view statistics about the operation of the AOS device, and to save the configuration.

*View Interface Statistics:*

**show interface <interface-type> <interface number>**

*View Current Configuration*

**show running-config**

*View Saved Configuration*

**show startup-config**

*View all IP Address Currently Configured*

**show ip interface brief**

*Save the Current Configuration*

**write**

For more commands please consult the AOS Command Line Reference Guide.

## **Resetting AOS Devices without a Console Port**

If you do not know the IP Address to your AOS Device, and your AOS Device does not have a console port, you must reset the device.

- 1) Power on the AOS Device, and let sit for two minutes (120 Seconds)
- 2) Using a ball-point pen, hold the reset button for 45 seconds. Watch a clock to be sure that you have held the button for at least 45 seconds.

*Note:* The reset button is in a small hole in the back of the unit.

- 3) After 45 seconds, the status lights on the front of the unit will begin to flash, indicating the unit has been reset. Let go of the reset button at this time.
- 4) Allow the unit to boot for two minutes (120 seconds).
- 5) The AOS device's IP Address is now 10.10.10.1