

Configuring the Cisco 700 Series Router for LAN-ISDN

Setup:

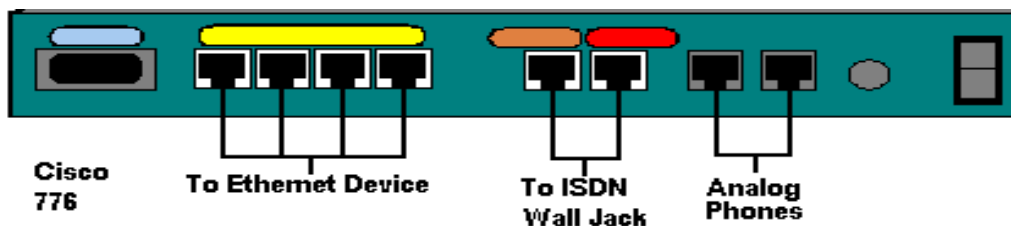
To setup your Cisco 700 Series router the following cable connections should be made:

1. Connect the Ethernet Cable from the machine's Ethernet card to one of the Cisco 700's yellow Ethernet (10BaseT) ports.
2. Connect the ISDN cable from the ISDN port on the back of the Cisco 700 to the ISDN wall jack.
3. Connect the power cord to the power supply. Wait a few minutes for the Cisco 700 to finish its diagnostics test, then check the front panel for link lights.

Note: If your Ethernet cable is connected to an external Hub, be sure to depress the Uplink button.

Hooking up a Console to the Netopia:

To start a console session, you must connect the blue DB-9-to-DB-9 serial cable from your terminal to the rear-panel port labeled CONFIG. Be sure your emulation software is set to VT100, 9600 Baud, 8 Bits, 1 Stop Bit, No Parity and Flow Control to Hardware.



Configuration:

To configure a LAN-ISDN account, you need only change the parameters that are always set in the router to match individual needs. Stated another way, the router has a huge configuration and it is always present. We need only modify it slightly to get it to work. It is also set up in levels and uses the CD command to go from level to level.

Ethernet info is under USER LAN, while WAN is setup under an arbitrary USER, which will be called USERNAME.

There are some "profiles" associated with the Cisco 700 series that are always intact. These profiles must be disabled; to do that use the following procedure:

```
CD INTERNAL
RESET USER INTERNAL
```

The router will ask if you are sure and may object; just answer "Yes" and hit Return.

```
CD STANDARD
RESET USER STANDARD
```

Again, the router will ask if you are sure and may object; just answer "Yes" and hit Return.

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The following are all system parameters that are set from the root or base level:

```
CD SET SCREENLENGTH 20
SET COUNTRYGROUP 1
SET MULTIDESTINATION ON
SET SWITCH [SWITCH TYPE]
SET 1 SPID [SPID 1]
SET 1 DIRECTORYNUMBER [DIR 1]
SET 2 SPID [SPID 2]
SET 2 DIRECTORYNUMBER [DIR 2]
SET AUTODETECTION ON
SET BRIDGING OFF
SET SPEED AUTO
SET SYSTEMNAME [ROUTERNAME]
```

The following are modifications to the default configuration that will keep the connection up for 10 min / 600 seconds before dropping due to inactivity:

```
TIMEOUT 1 DURATION 600
TIMEOUT 2 DURATION 600
```

The following is the Ethernet setup. We only need to turn on routing and set IP and mask:

```
SET USER LAN
SET IP ROUTING ON
SET IP ADDRESS [LAN IP ADDRESS]
SET IP NETMASK [SUBNET NETMASK]
```

Setup the dialup profile, including number to dial, username and password:

```
SET USER PSINET
SET PROFILE ID 000000000000
SET PROFILE POWERUP ACTIVATE
SET PROFILE DISCONNECT KEEP
SET BRIDGING OFF
SET 1 NUMBER [1st POP NUMBER]
SET 2 NUMBER [1st POP NUMBER]
set 1 BACKUPNUMBER [2nd POP NUMBER]
set 2 BACKUPNUMBER [2nd POP NUMBER]
SET IP ROUTING ON
SET IP ADDRESS 0.0.0.0
SET IP NETMASK 0.0.0.0
SET IP FRAMING NONE
SET IP ROUTE DEST 0.0.0.0/0 GATEWAY 38.1.1.1 PROPAGATE ON COST 1
```

NOTE: Do not cut and paste the following two lines: **TYPE THEM IN MANUALLY!**

```
SET PPP CLIENTNAME [DIALUP/RADIUS USERNAME]
SET PPP PASS CLIENT [DIALUP/RADIUS PASSWORD]
```

To setup the telnet password, enter the following:

```
SET SYSTEM PASSWORD [TELNET PASSWORD]
```