

SUMMARY: DE500 on AS2100 5/300, tru64 4.0F

Source: <http://unix.derkeiler.com/Mailing-Lists/Tru64-UNIX-Managers/2003-11/0121.html>

From: Chris Los (*clos_at_trentu.ca*)

Date: 11/17/03

Date: Mon, 17 Nov 2003 14:57:16 -0500

To: tru64-unix-managers@ornl.gov

Thanks to everyone who replied so quickly. Here are the responses which basically sum it all up.

From: "Dr Thomas.Blinn@HP.com" <tpb@doctor.zk3.dec.com>

There is only one driver in V4.0F for that class of Ethernet chip, and you can tell it's being selected by the fact the device is reported as "tu1" (the driver is named "tu" and that's the second instance of the chip type that was found in the system).

Further, you can tell that although the driver knows the chip can do "auto negotiation", it also knows that you used console commands to turn that off and explicitly select 100BaseTX full duplex through the twisted-pair port.

If you have poor performance, it's probably due to a noisy network and lots of retransmissions. Review the "netstat" reference page as well as the network tuning information in the networking manuals that come with your release. I suspect that if you look at the counters associated with that port using "netstat" you'll see lots of errors, but that's just my wild a** guess.

Tom

From: "Cohen, Andy" <Andy.Cohen@cognex.com>

Chris,

When we've had this type of problem it's been a port/switch negotiation issue; i.e., the way the port and the nic are 'talking' is causing the problem. Have the network people check the port and make sure it's running at 100 FDX. We've even had them lock in the port speed instead of auto-negotiating.

hth,
Andy

From: Martin Rønde Andersen <martin.roende@mail.dk>

This is a very old saga.

It has to do with the 21140 chip and certain switches, that are not understanding each other. I had the troubles when using these de500 with 21140 chip in a ASE cluster. The fix back then was to switch the de500 to a de500 with 21141 tulip chip. (this is the card without components mounted on the back of the print.)

You might be lucky to get it to work on 100 implex. But I will not recommend it. Because the trouble you could have cost more than ordering som de600 cards ,

Yes they work, I have de600 running at a customer site at 200 (fastFD)on 4.0f PK7

From: "Thomas, Douglas L." <dthomas@glgt.com>
Chris,

Your best bet is to NOT use auto, set 100/Full on the switch, SRM, and OS. I have notes for setting the SRM and the OS, my Network guy did the switch.

On SRM Console:

```
>>>set ewa0_mode <mode>
<mode> = twisted-pair (10M, ½)
         full (10M, full)
         fast (100M, ½)
         Fastfd (100M, full)
```

>From OS:

```
hwmgr -get attr -cat network
```

```
lan_config -i tu0 -s [10|100] -x [1|0]
```

To persist, add to /etc/inet.local

OR

```
ifconfig tu0 down
```

```
ifconfig tu0 speed <n>
```

```
ifconfig tu0 up
```

To persist, add to /etc/rc.config:

```
IFCONFIG_0=speed <n>
```

```
<n> = 10 (10M, ½)
```

```
      20 (10M, full)
```

```
      100 (100M, ½)
```

```
      200 (100M, full)
```

Douglas L. Thomas

Orginal question:

Tru64-UNIX-Managers: SUMMARY: DE500 on AS2100 5/300, tru64 4.0F

Would like to know if its possible to expect "100/full duplex" performance from a DE500 on a AS2100 5/300 under tru64 4.0F PK7? I have the card curenntly installed, running and set to "FastFD" but performance is very poor. When the system boots I get the following message in /var/adm/messages:

Nov 13 08:52:43 ted vmunix: tu1: DECchip 21140: Revision: 2.0

Nov 13 08:52:43 ted vmunix: tu1: auto negotiation capable device

Nov 13 08:52:43 ted vmunix: tu1 at pci0 slot 8

Nov 13 08:52:43 ted vmunix: tu1: DEC TULIP (10/100) Ethernet Interface, hardware address:
00-00-F8-03-77-E5

Nov 13 08:52:43 ted vmunix: tu1: auto negotiation off: selecting 100BaseTX (UTP) port: full duplex

How do i ensure the right driver is being selected for this device when the system boots?