This document will describe how to troubleshoot a Clariion based RAID which is having booting problems.

1. ITEMS REQUIRED

You will need the following for following this document:

- Null Modem cable. This cable is a DB25 Female to DB9 Female where Pin2 in the DB25 connects to Pin2 on the DB9 (standard for null modem).
- An available Com port on your laptop or server.
- Access to Internet Explorer and the net.

2. ANALYZING BOOT PROBLEM

1. Shutdown any workflow in operation and any activity, if applicable on the RAID.
2. Connect the Null Modem cable between the SPA on the RAID and the Com port.
3. Open a connection to the **Clariion Partner's Page** at http://emc.clariion.com/login.asp. This site will contain a listing of many error code definitions. To enter into the site use:
   - User: braeder
   - Password: *joshua*
4. Create a HyperTerminal session between you and the RAID.
   a) Select a HyperTerminal session for your Com port by selecting **Start / Programs / Accessories / Communications / HyperTerminal** *folder*. If your port is not listed you must create it by doing the following.
      i) Select **Start / Programs / Accessories / Communications / HyperTerminal** *Application.*
      ii) In New Connection Name type **ComPortX** where X is the port you are connecting to.
      iii) Under Connect Using select you Com port number and hit OK.

iv) Select the following parameters:

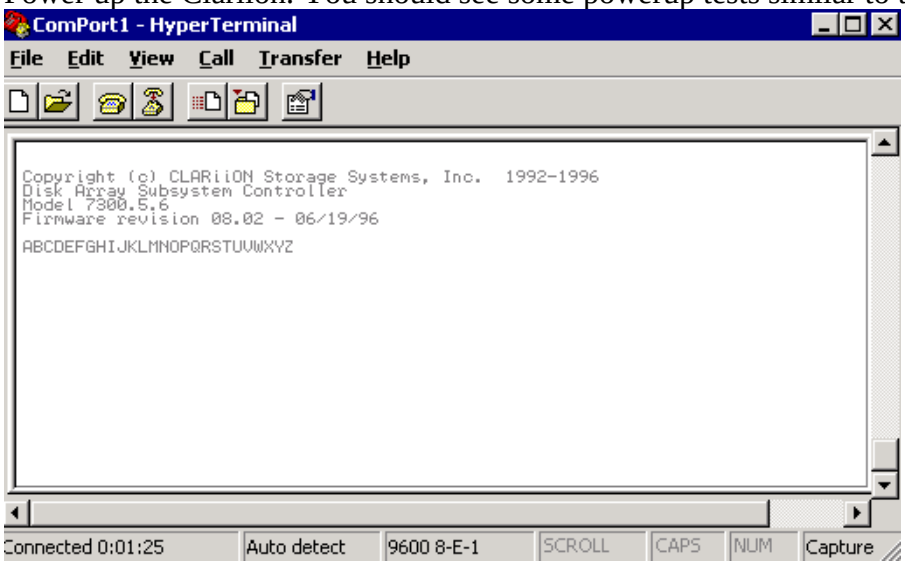
	SCSI	Fibre
Bits per second	9600	9600
Data bits	8	8
Parity	Even	None
Stop bits	1	1
Flow control	None	Hardware

v) Select **File / Save**.

b) Save the HyperTerminal session by selecting **Transfer / Capture Text** and type in a =file name (eg. **D:\ClarStart.Txt**).

5. Power the Clariion down and wait for the fans to stop.

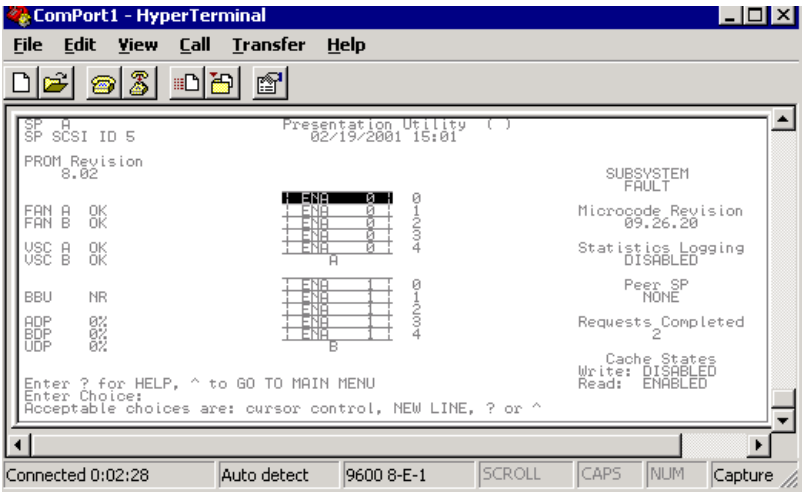
6. Power up the Clariion. You should see some powerup tests similar to the following:



c) If the test above stops at any of the above letters note the last letter tested and any error codes. A listing of error codes can be found on the partner's page under **Technical Support / PROM Powerup Indicators and Error codes** and select the appropriate RAID type.

2.1 SCSI Checks

7. If your RAID has so far passed all tests you should now see the main Presentation Utility main menu and should look something like:



d) Note the following:

- Note the **PROM Revision** and the **Microcode Revision**.
- All **Fan, VSC, BBU** status' should be **OK**.
- **Write** and **Read** cache should be **Enabled**.
- **Peer SP** should be **Present** only if a second SP is installed in the RAID otherwise should be none.
- In the disks at least one set of five disks should be showing **ENA**. Any disks showing RDY must be owned by the second SP if present otherwise there is a problem.

8. At this point you should be able to see the RAID from the SCSI bus in NT. If not try one of the following procedures:

Document	Description	Location
XX0183AA	Analyzing Clariion SCSI errors.	http://intranet.creo.com/support/html/workflow/raid/cl2900/install.htm#config
XX0223AC	Clariion dirty cache recovery document.	http://intranet.creo.com/support/html/workflow/raid/cl2900/knowledge.htm#cache
XX0264AB	Clariion Phoenix settings.	http://intranet.creo.com/support/html/workflow/raid/cl2900/install.htm#config

2.2 Fibre Checks

If your RAID has so far passed all tests you should now see the prompt Entering Serial Application Mode. You must now establish a connection with Navisphere to continue on, but your RAID has passed its bootup sequence.