Connecting to an IOC Console Port

Connecting to a CPU Serial Port

Cables

Directly from a Linux PC
SLAC Linux has restrictions for accessing the serial port and so special access must be requested in order to use the serial port of a linux-host without sudo privledge. On the SLAC Linux systems, a number of devices are associated with the "console". The user logged in at the console automatically gains access to these devices as long as he or she is logged into that machine. Unix-admin can add the serial port to this set of devices for your machines. Please note that the serial port is not added to the list of "console" devices as standard practice and so you will need to send email to Unix-admin to request such access.

If persmissions are set appropriately, then you should be able to connect to ttyS0 on your linux-host by typing the following from the shell:

```
minicom
```

Troubleshooting
If you are unable to connect to the serial port ttyS0 on your linux-host (remember you can't do this via ssh), please do the following:

1) Check the file /etc/security/console.perms on linux-host you are requesting console access to and verify that the following two lines are included. The permissions listed are key.

```
<serial>=/dev/ttyS<01>
<console> 0660 <serial> 0660 root.uucp
```

2) Check to see that you own the serial ports ttyS0 and ttyS1. You can do this from the Unix shell by typing the following command:

```
ls -l /dev/ttyS?
```

The following should be displayed:
luchini@lcls-highbay $ ls -l /dev/ttyS?
crw------- 1 luchini uucp 4, 64 Aug 29 19:06 /dev/ttyS0
crw------- 1 luchini uucp 4, 65 Jun 24 2004 /dev/ttyS1
crw-rw---- 1 root uucp 4, 66 Jun 24 2004 /dev/ttyS2
crw-rw---- 1 root uucp 4, 67 Jun 24 2004 /dev/ttyS3
crw-rw---- 1 root uucp 4, 68 Jun 24 2004 /dev/ttyS4
crw-rw---- 1 root uucp 4, 69 Jun 24 2004 /dev/ttyS5
crw-rw---- 1 root uucp 4, 70 Jun 24 2004 /dev/ttyS6
crw-rw---- 1 root uucp 4, 71 Jun 24 2004 /dev/ttyS7
crw-rw---- 1 root uucp 4, 72 Jun 24 2004 /dev/ttyS8
crw-rw---- 1 root uucp 4, 73 Jun 24 2004 /dev/ttyS9

You should see you're account as the owner of ttyS0 and ttyS1. In the example "luchini" has logged in and so "luchini" is the owner of /dev/ttyS0 and /dev/ttyS0". The privledge for these devices need to also be set to 0660, which is specified in the file /etc/security/console.perms.

3) Verify that the global files /etc/minirc._dev_ttyS0 and /etc/minirc._dev_ttyS1 exist and are accessible from your linux-host.