Procedure

This section provides know-how procedures the CALICE team share.

- **Ideal topology**:
  PC (or ODR made by UK)
  - LDA: Link Data Agregator (made by UK)
  - (x2)
    - DCC (made by LLR)
    - (x10)
      - DIFF (made by LLR or LAPP)
      - (x9)
- **Power supply:**
  - ASU: ?
  - CCC: home made Alim (UK)
  - DCC: 5v, from 3mA 18W max Alim
  - LDA: 12V-0.5A and 5.5V-1A (ok from PC Alim)
  - DIF ECAL (Xilinx): 3.3v-0.5A (ok from PC Alim)
  - DIF DHCAL (Altera): 5v-0.5A (ok from PC Alim)

  Note: PC Alim is switched on by linking the green and black input of main motherboad cable.

- 4 kinds of links are used (identified by the Ethernet Type 809, 810, 811):
  - PC to CCC: RS232 (working but not used) reach throught an ACKSYS COM/ETH convertor.
  - PC (or ODR) to LDA: Ethernet Gigabit on rj45 (Ethernet but not IP)
  - CCC to LDA: HDMI plugged from dedicated LDA Mezzanine
  - LDA to DCC: Home made Ethernet over HDMI (no MAC address, see the documentation section)
  - DCC to DIF: Home made Ethernet over HDMI (no MAC address, see the documentation section)
  - DIF to ASU: 100+ pins connector

  Notes:
  - HDMI runs at 50 MHz that implies 40 Mb/s due to 8b/10b Encoding.
  - Question is: may LDA be replaced by standards Eternet Switch ?
  - With the actual firmware, LDA needs the CCC to work (6 red leds).
  - `uint16_t ODR_Data_and_PAD[0];` is a meta attribute for the following data in memory.
  - ODR (not used) state of the art (odr_server) is describe in *svn/calice/online-sw/trunk/doc/odr-calice.txt*.
- **Hosts**
  - `poltestcalice`: old DHCAL test bed (svn, xilinx 11, pyserdiag)

- `polcaldaq`: DHCAL+ECAL test bed (svn, xilinx 11+12, pyserdiag, optical eth)
- `poldhcp45`: SC55 for soft devel (svn, libLDA)
- `poldhcp54`: new DHCAL test bed (svn, xilink 11+12, pyserdiag) ?
- `pollinmc2`: SC55 for soft devel (svn, libLDA, XDaq)
- `polcalslc`: SC55 pizza box for XDAQ devel (svn, libLDA, Xdaq)
- `pollinbtc`: ECAL cosmic test bed (svn, libLDA, pyserdiag via virtual machine)
- `polntnr`: Nicoas Roche's laptop
- `polsmtp`: smtp
- `polynet`: intranet
- `polzope`: intranet
- `llrforge`: */pwhash/*
- `llroffice`: *ELog*
- `polui0[1-7]`: gateways
- `lyoac[19,20,26]`: IPNL gateways reachable only via `polui0x`
- `lxplus.cern.ch`: Cern gateway