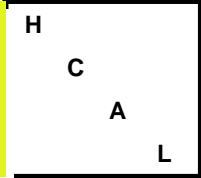
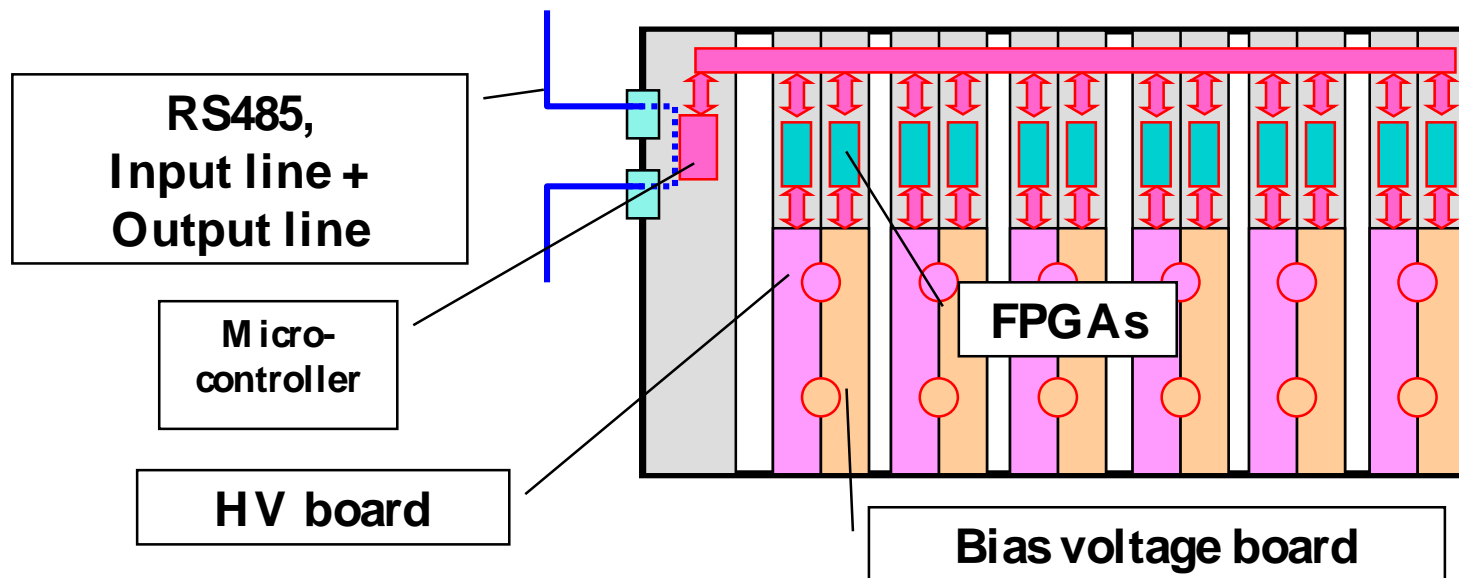




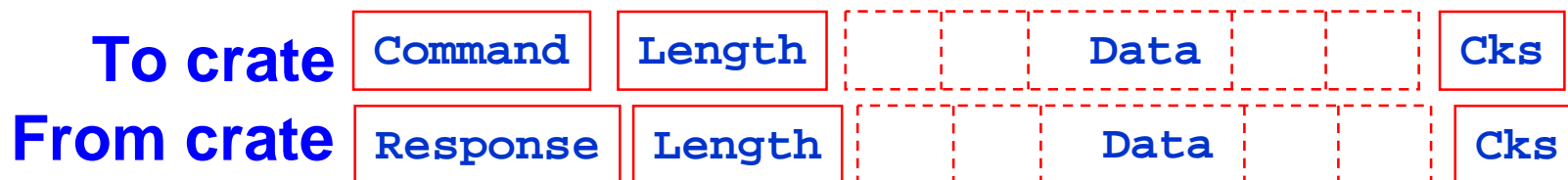
HV Control system



HV power supply hardware

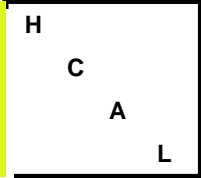


Data exchange format

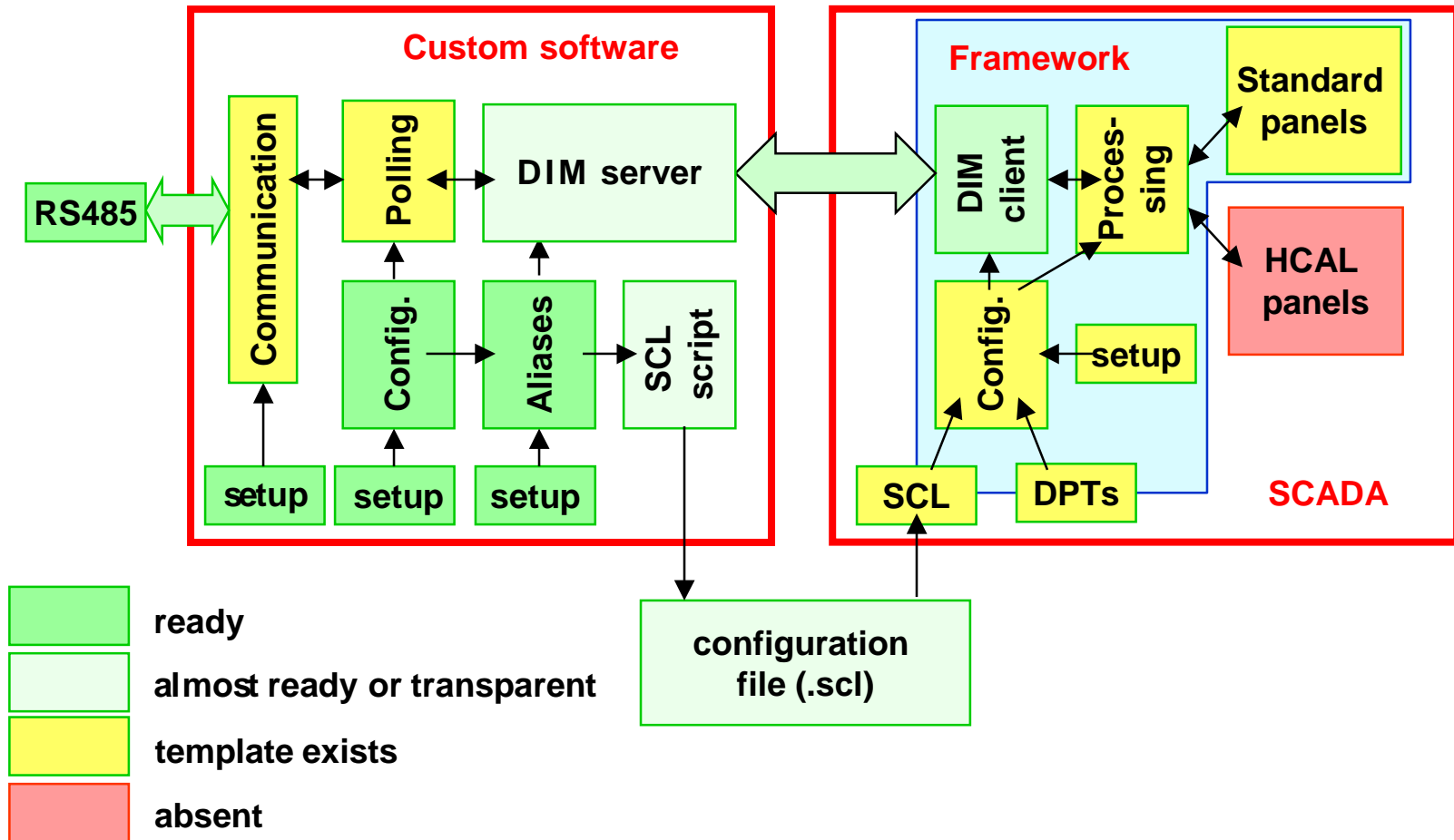




HV Control system

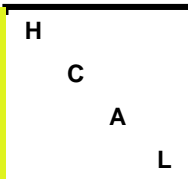


HV power supply software

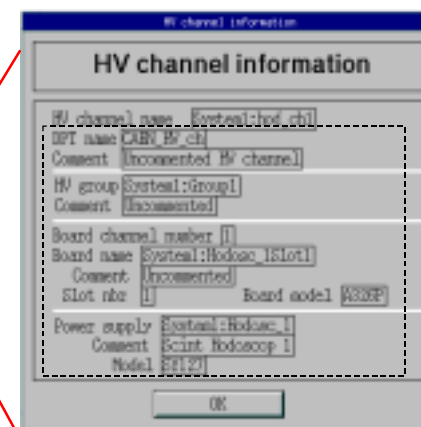
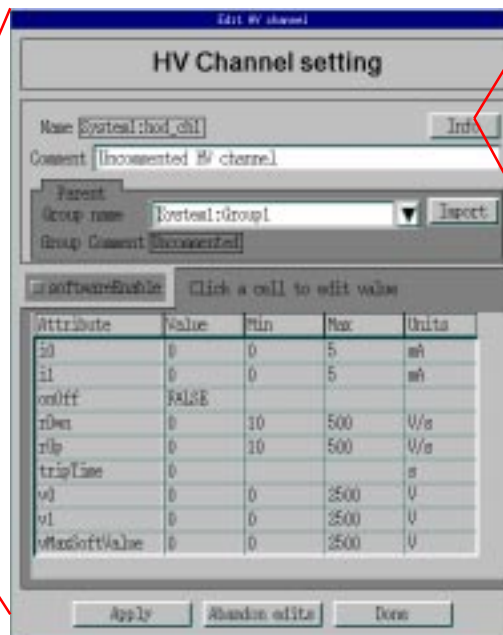
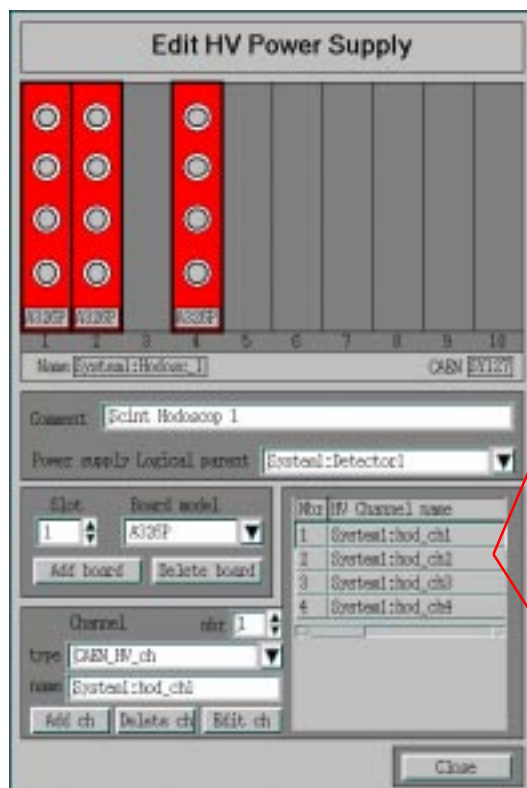




HV Control system

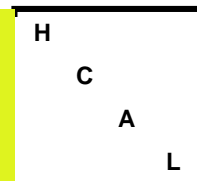


Framework HV panels





HCAL Tree



Why tree?

- Propagating commands from top to bottom.
- Collecting status and alarms.
- Partitioning.
- Part numbers with part history (?).

To collect information from people, to browse/edit tree etc. some tool was needed.

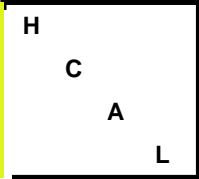
Available trees – HCAL (preliminary) and HV power supply (OK)

More details at

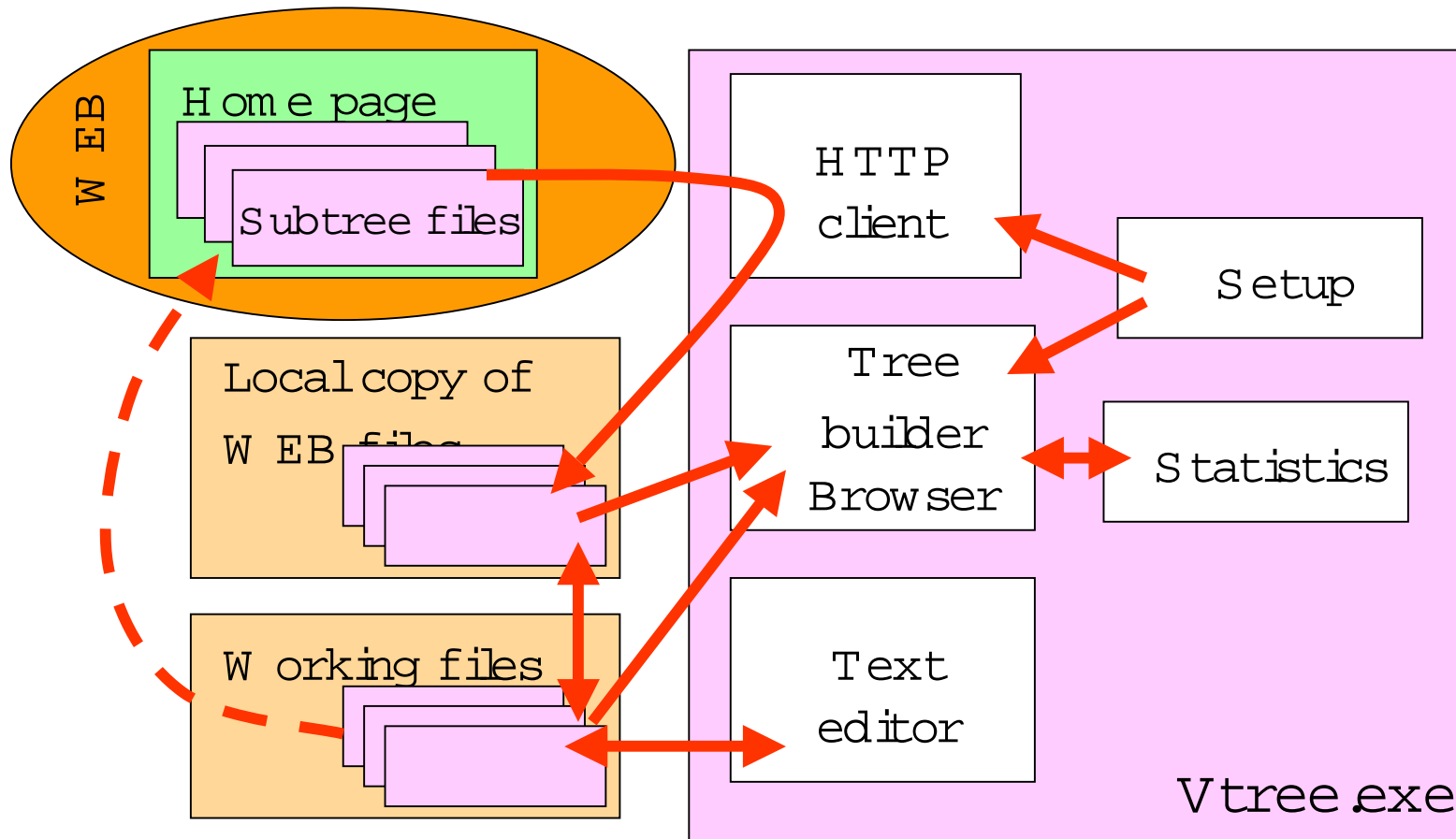
<http://sergueev.home.cern.ch/sergueev/hcal/tree/index.htm>



HCAL Tree

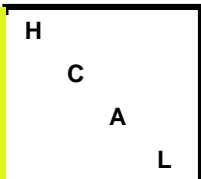


Vtree.exe block diagram





HCAL Tree



The screenshot shows the 'View tree' application interface. The main window displays a tree structure for the HCAL detector. The left pane shows the tree hierarchy, and the right pane shows a list of files used in the tree. A 'Tree summary' dialog box is open, displaying statistics and a table of item counts.

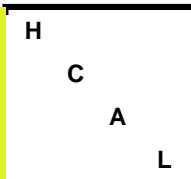
Tree summary

35842 item(s) in tree
7846 node(s)
27936 parameter(s)

Item name(s)	Count
ACDC	7
bChannelsOnGet	1170
bOverCurrentGet	1170
bOverVoltageGet	1170
bRampingDnGet	1170
bRampingUpGet	1170
bReadyGet	1170
CalibrationData	14
CAN	144
CAN_register1???	144
CAN_register2???	144
CAN_register3???	144
CAN_register4???	144
Ch1	36
Ch10	36



HCAL Tree



Sub-tree syntax

Root item 1

Root item2

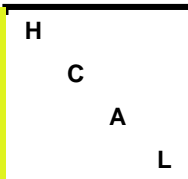
.....<tab>Child item 1

.....
<tab><tab>Child 2 item1

.....
<tab><tab>\$L <sub-tree filename>



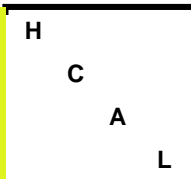
“HOT” items



- Naming convention
- Creation of the CMS global Data Point Types (data point classes) repository
- Partitioning
- Parts database. Why not PVSS?
 - Object-oriented
 - Works under Win and Linux
 - Works as distributed and as local one (at portable PC)
 - A lot of experience (should be...)
- Managing of the label items codes

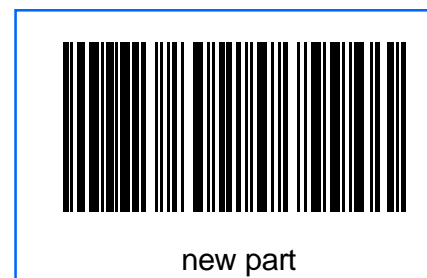


Parts DataBase



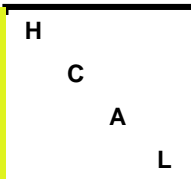
Some ideas how to use it...

- Barcode could contain a number
- Barcode could contain a text
- Text could be interpreted as a command to the DB
- Bar code reader could be connected to the laptop PC as serial device (sw for PVSS exists)
- Exists an ActiveX component to create barcode of different types





Parts DataBase



Possible schemes of bar code using

