

Status of the DHCAL m2 software

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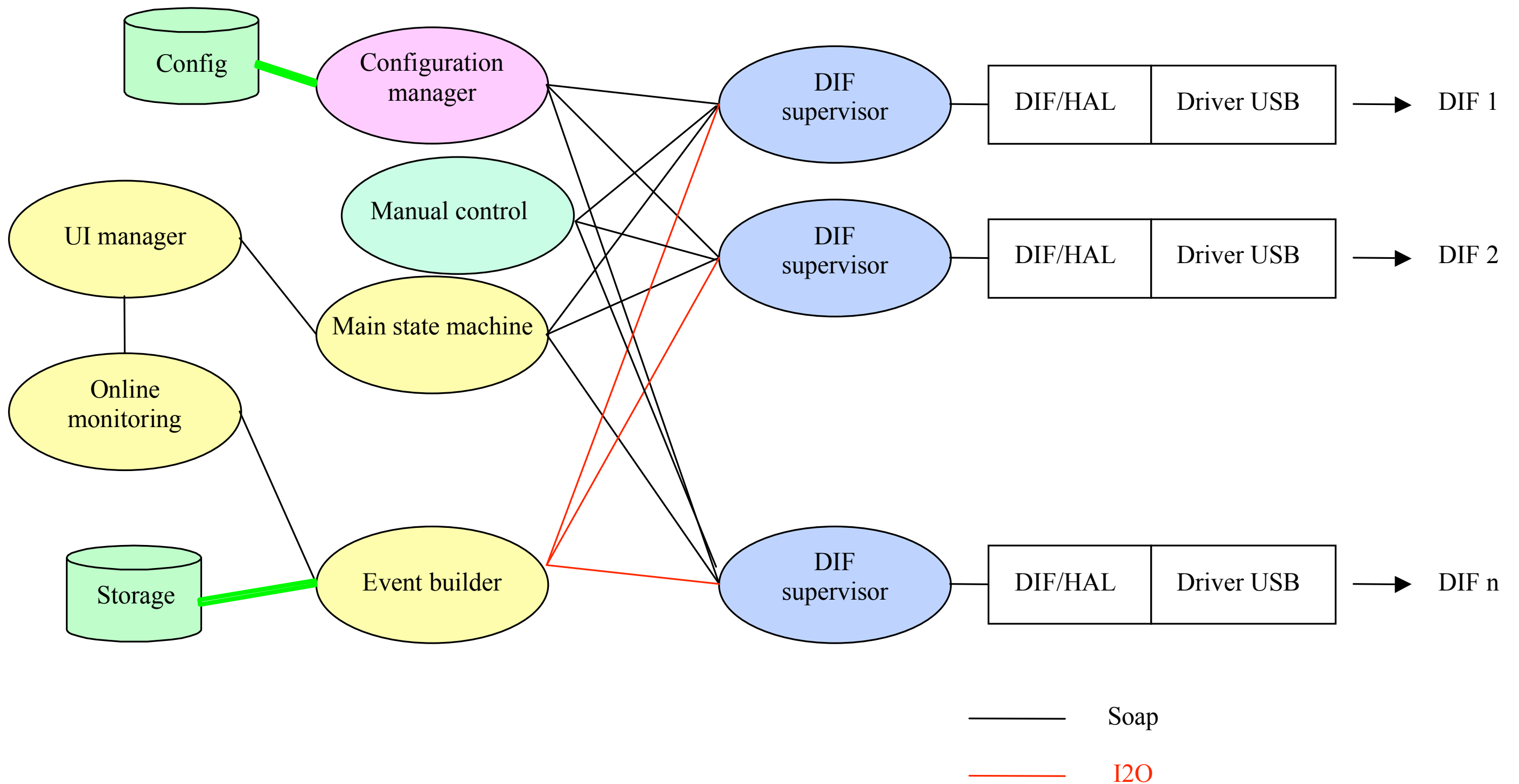
Xdaq over USB for the square meter : software

- Developed using Xdaq framework
- Running with Scientific Linux 4 (DAQ machines)
- User interface accessed through a web browser (OS independant)
- Highly scalable

- 2 possibilities to control the system :
 - By using the main state machine (real runs)
 - By using the manual control (tests and debug purpose)



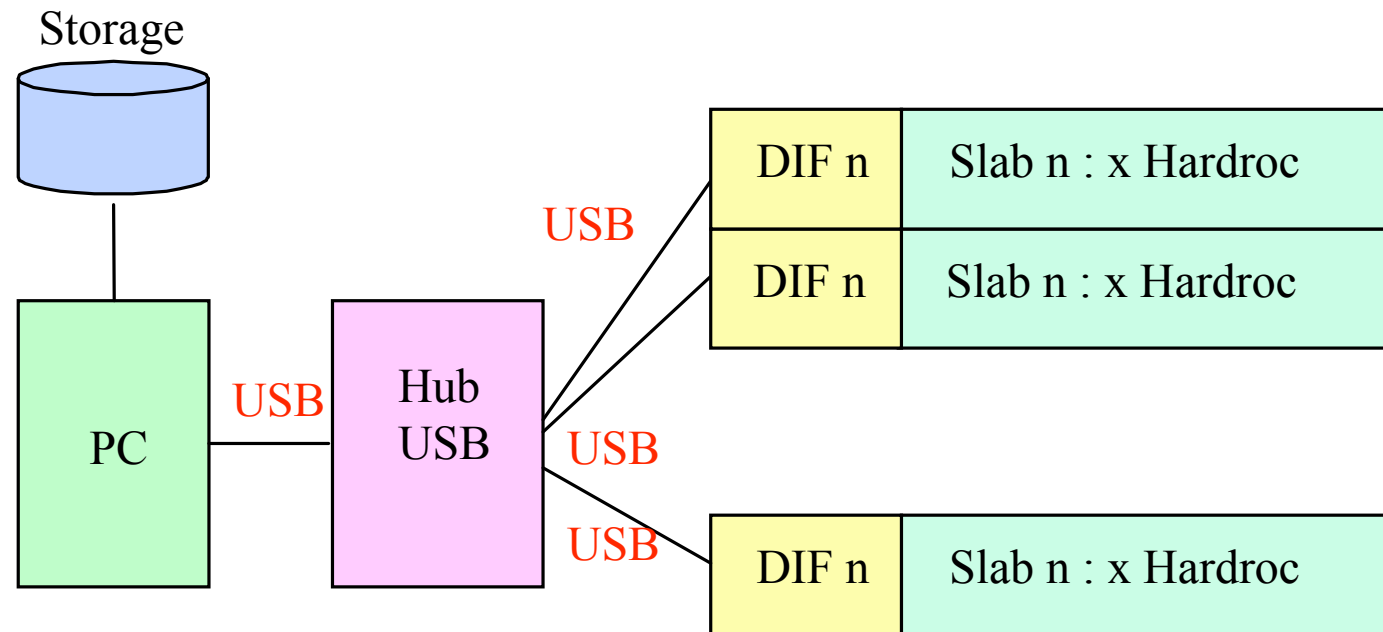
Xdaq over USB for the square meter : software



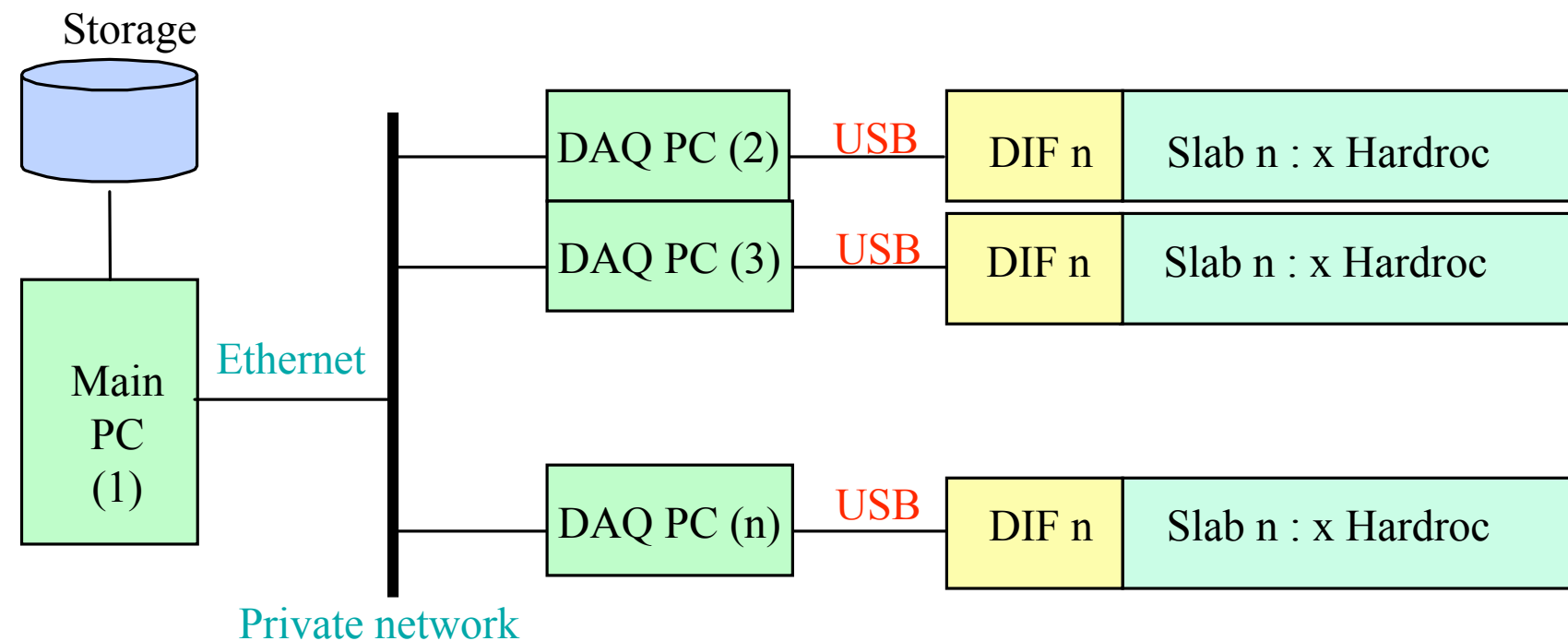


Xdaq over USB for the square meter : hardware

One PC with few DIFs (cosmics) or standalone tests (can be 1 PC, 1 DIF)

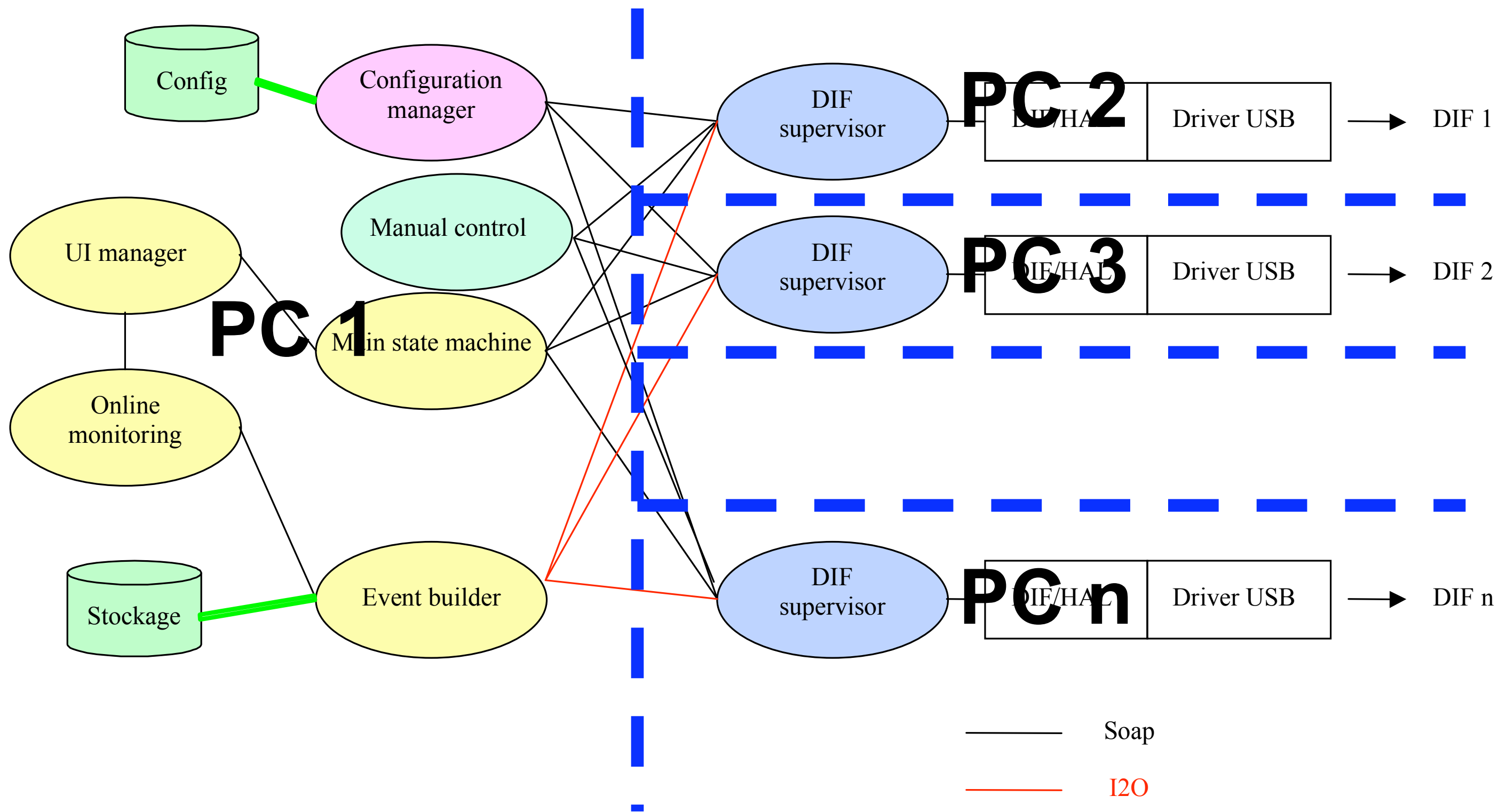


Several PCs : more DIFs or faster transferts needed (ie testbeam setup)



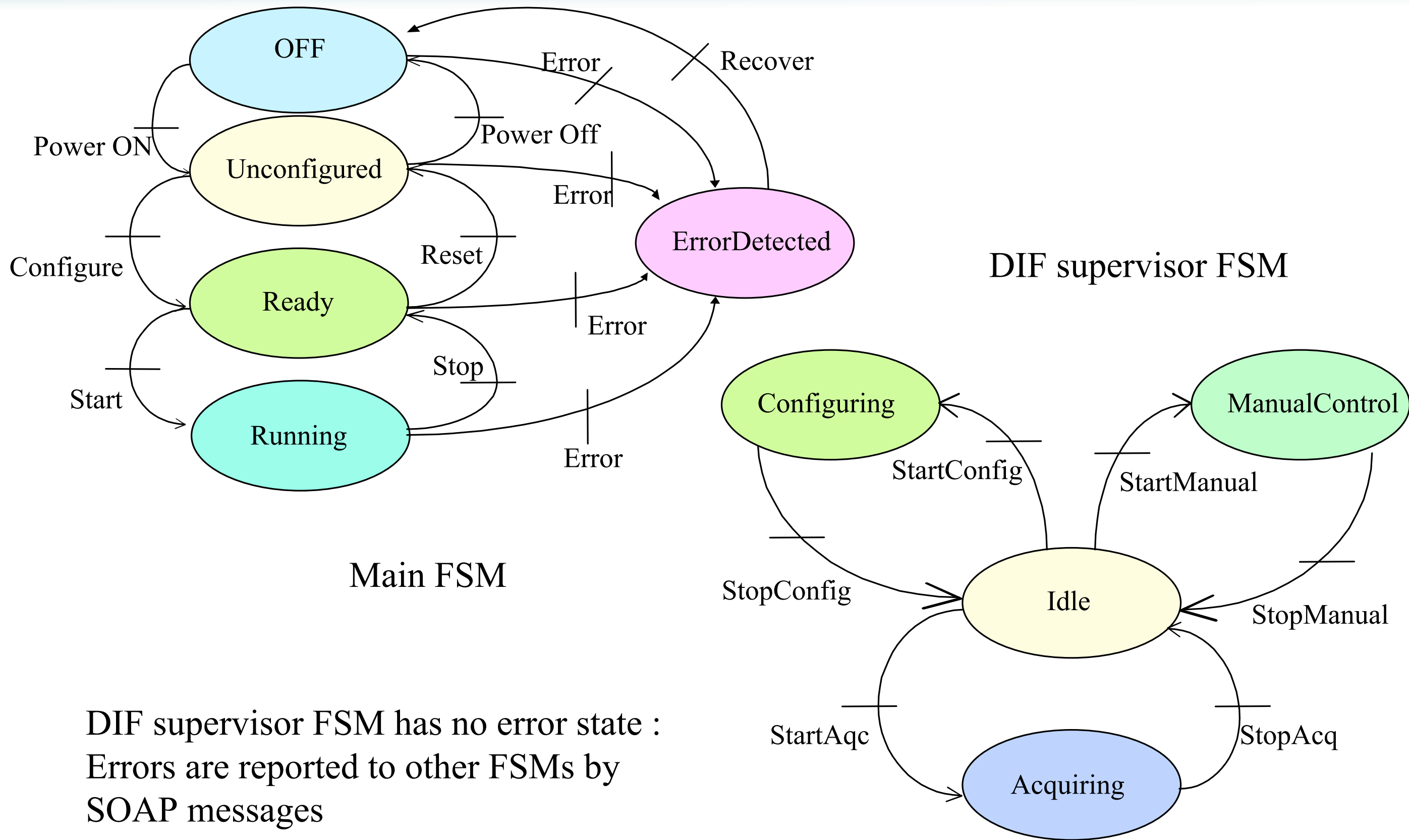


Xdaq over USB for the square meter : software





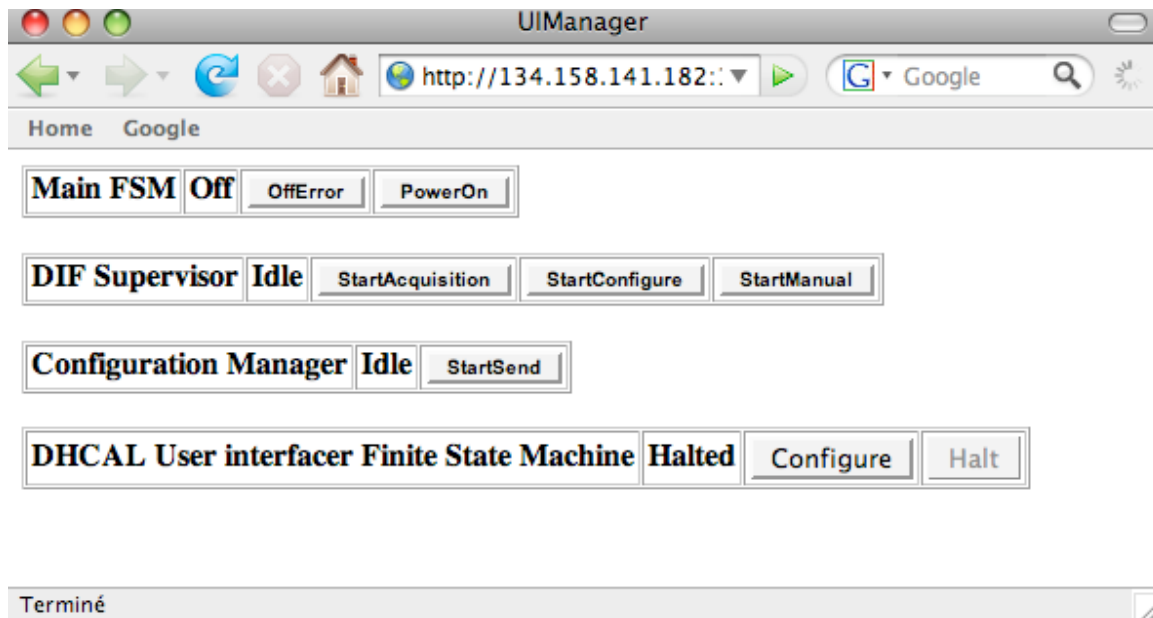
Xdaq over USB for the square meter : State machines



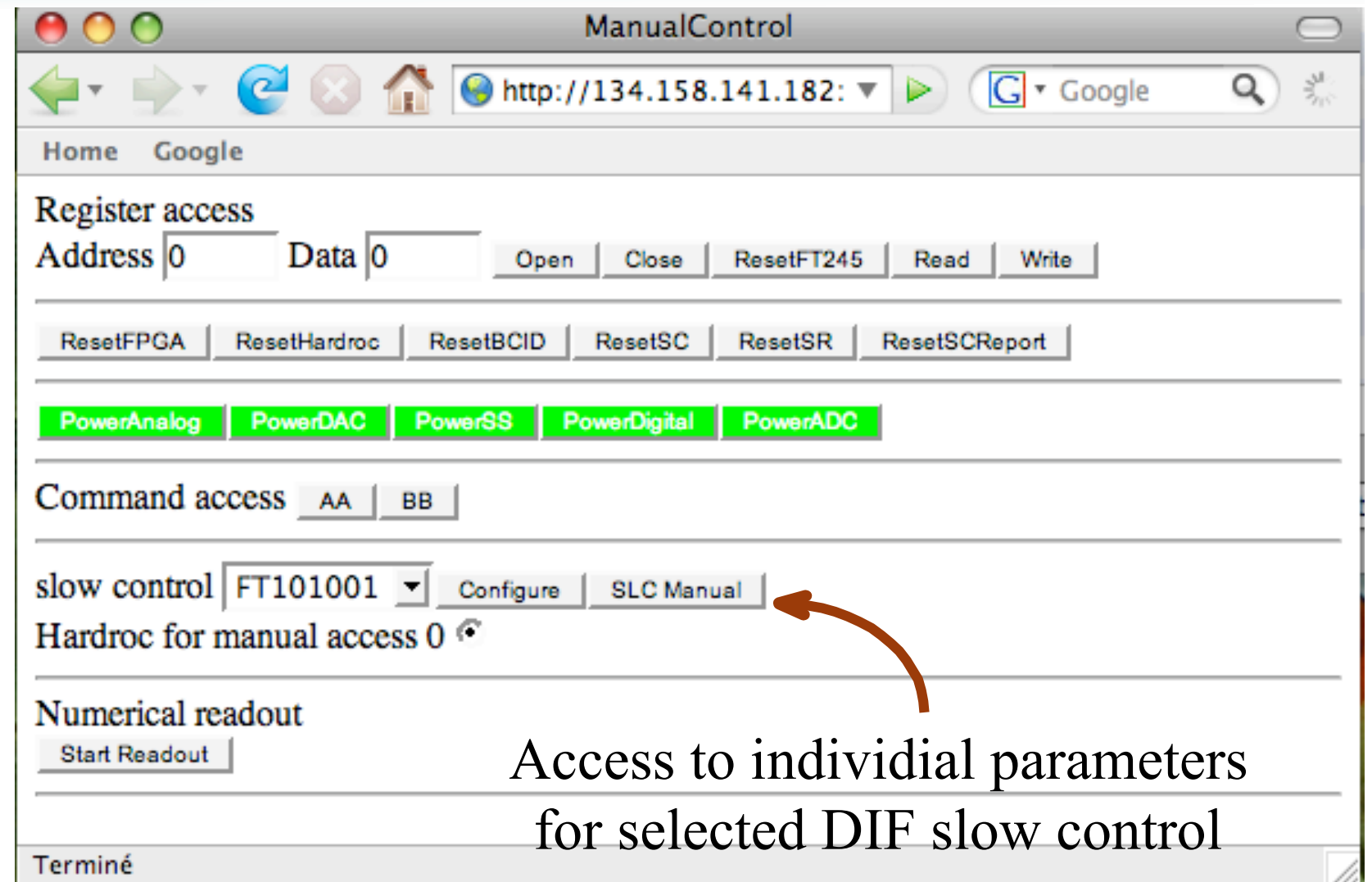
DIF supervisor FSM has no error state :
Errors are reported to other FSMs by
SOAP messages



Some screenshots...



UI Manager : control and status of different FSMs



Access to individual parameters for selected DIF slow control

Manual control : Individual actions on selected DIF



Status

Software developments are in phase with DIF firmware (See Guillaume's talk) :

- DIF low level access OK
- Slow control OK and tested
- Digital acquisition :in progress (very soon)
- Event builder : in progress (very soon too)
- Analog Acquisition : to be done
- Monitoring : mostly developed but not tested yet (need the real DIF to do it)