



cherenkov
telescope
array

NectarCAM: New switches

Thoughts, Explanations and Proposal for quick validation

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History up to present

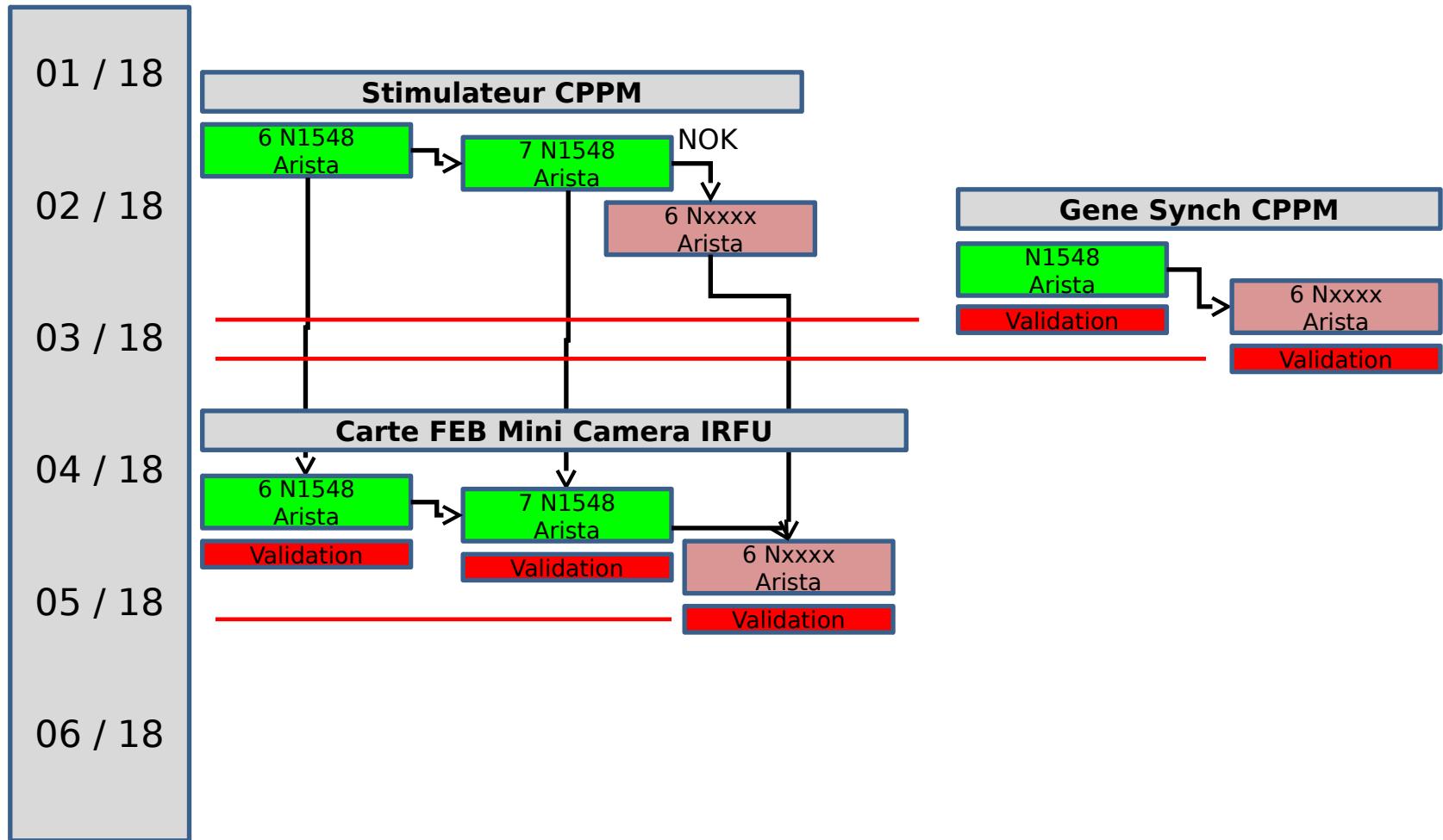
- DELL S60 switches production stopped in 2015
- New schema identified. Cheaper. More sustainable. **This our “Plan A”.**
 - Not yet validated (“purchase is not priority”) Purchased later by local funding at CPPM.
 - Needs significant modification of mechanics
- Two properties to validate
 - Overall performance $6 + 1 \rightarrow 40\text{Gbps}$
 - Synchronous 45-port input on 1st-level switch

Proposal for synchronous validation



- Hardware equivalent to “CLAS12 setup” almost complete:
 - N1548 switch(es) available (CPPM)
 - 2×24 adapters LD fibres - SFP(+) - RJ45 available (IRFU)
 - Splitter(s) MTP – 24×LD fibre connectors to be purchased
 - PCIe40 data generator available (CPPM)
- Funding needed
 - 2 months engineer 6000 € (CNRS sal. Table)
 - Splitters MTP – LD 2000 € (approx.)

Calendar

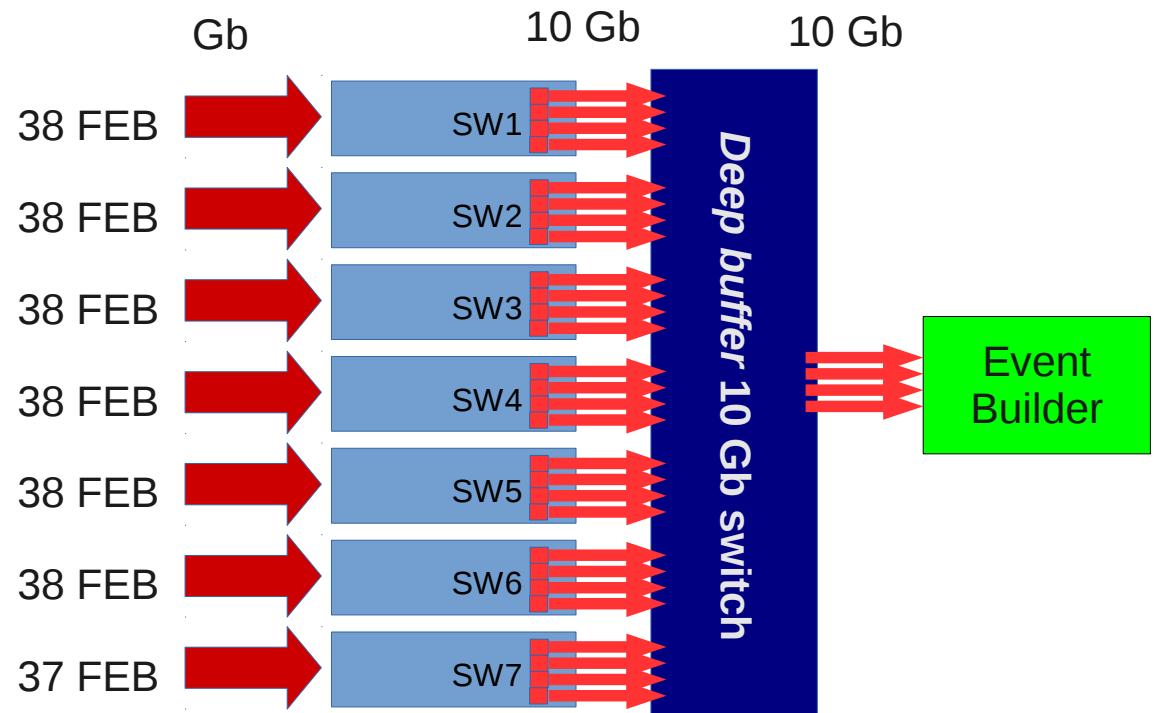


Obsolescence des commutateurs



Novelle architecture, supposée plus pérenne

- Deux niveaux de commutateurs
 - Concentration $38 \times 1\text{Gbps}$: $4 \times 10\text{Gbps}$
 - Temporisation $28 \times 10\text{Gbps}$: $4 \dots 6 \times 10\text{Gbps}$
- Bridage éventuel au niveau des modules FEB
- Utilisation de la *class of service* pour optimiser l'utilisation du tampon
- 10Gbps plus durable (jusqu'a ...)

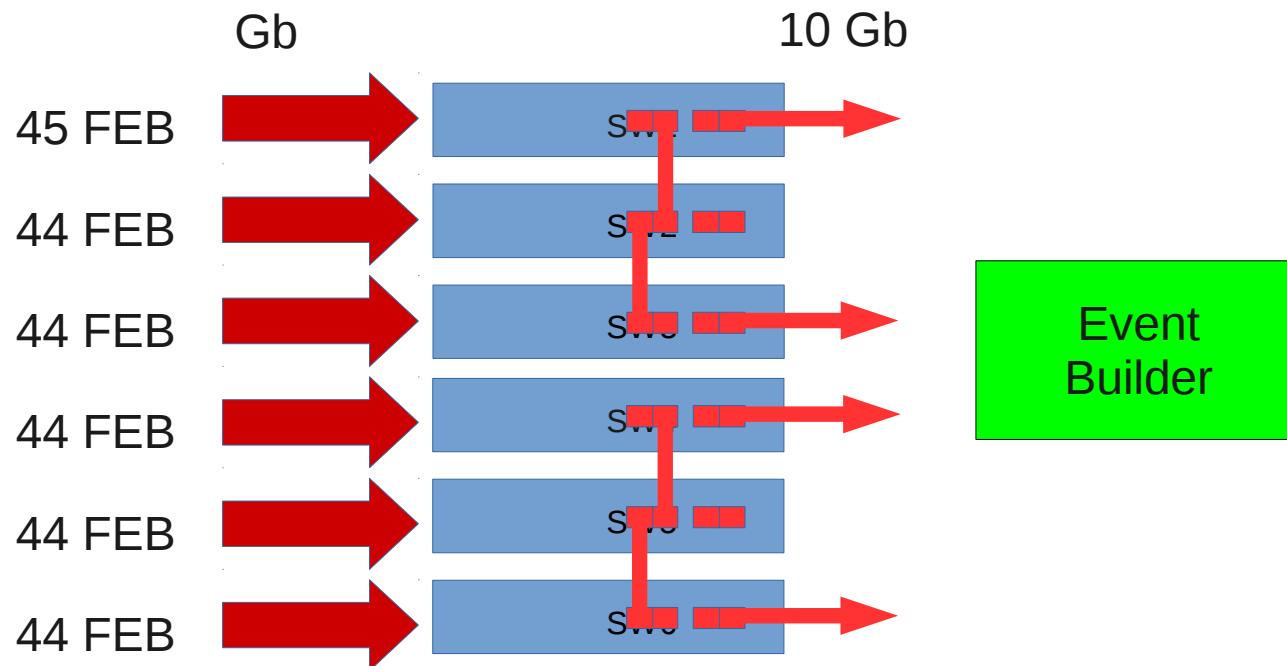


Obsolescence des commutateurs



Problème (un peu inattendu) de la pérennité des solutions

- Obsolescence des S60 depuis cette année



- Obsolescence des commutateurs *deep-buffer* dans la gamme « 1Gbps » tout court !