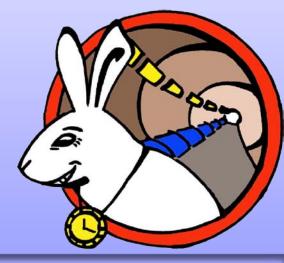
Reliability in a White Rabbit Network

Maciej Lipinski, Javier Serrano, Tomasz Wlostowski BE-CO-HT@CERN, Geneva, Switzerland

Cesar Prados GSI, Darmstadt, Germany

WEMMU007



What is White Rabbit?

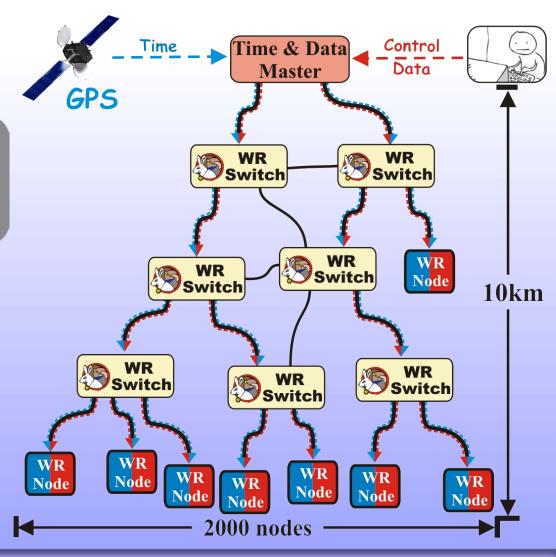
- Accelerator's control and timing (GSI, CERN)
- Based on well-known technologies/standards (Ethernet, PTP, SyncE)
- Open Hardware and Open Software
- International collaboration
- Ethernet with extra features:
 - transparent, high-accuracy time distribution (sub-ns)
 - low-latency, **deterministic** data delivery
- High reliability

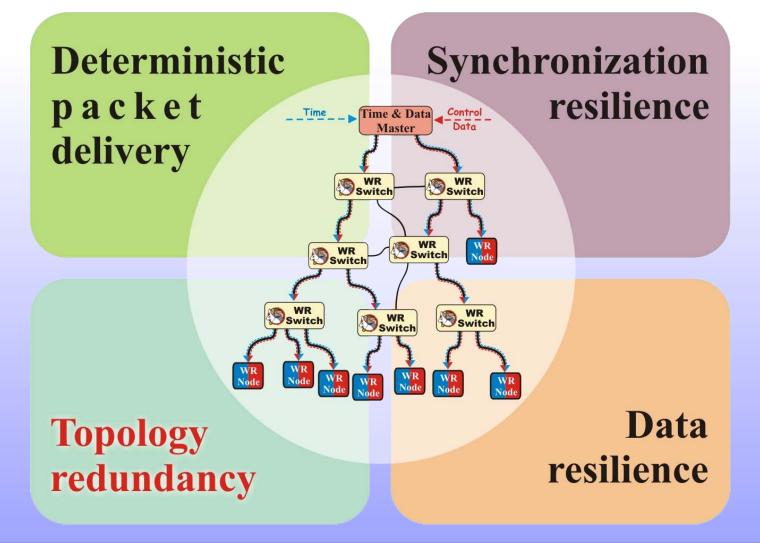
White Rabbit Network (WRN)

WRN is functional if ...

... it provides **all** its services to **all** its clients at **any** time.

- Sub-nanosecond time synchronization
- Deterministic Control Data delivery





icalepcs 2011