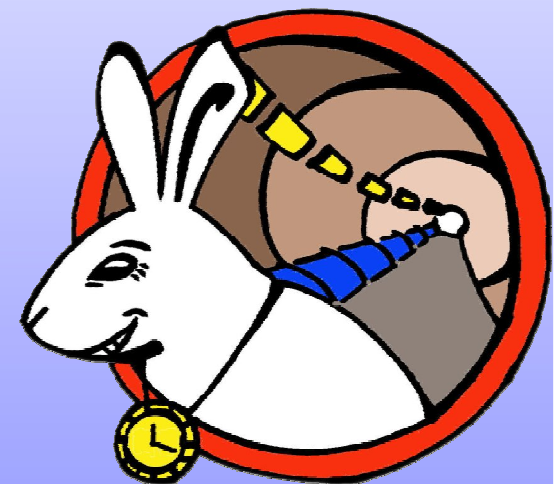


Reliability in a White Rabbit Network

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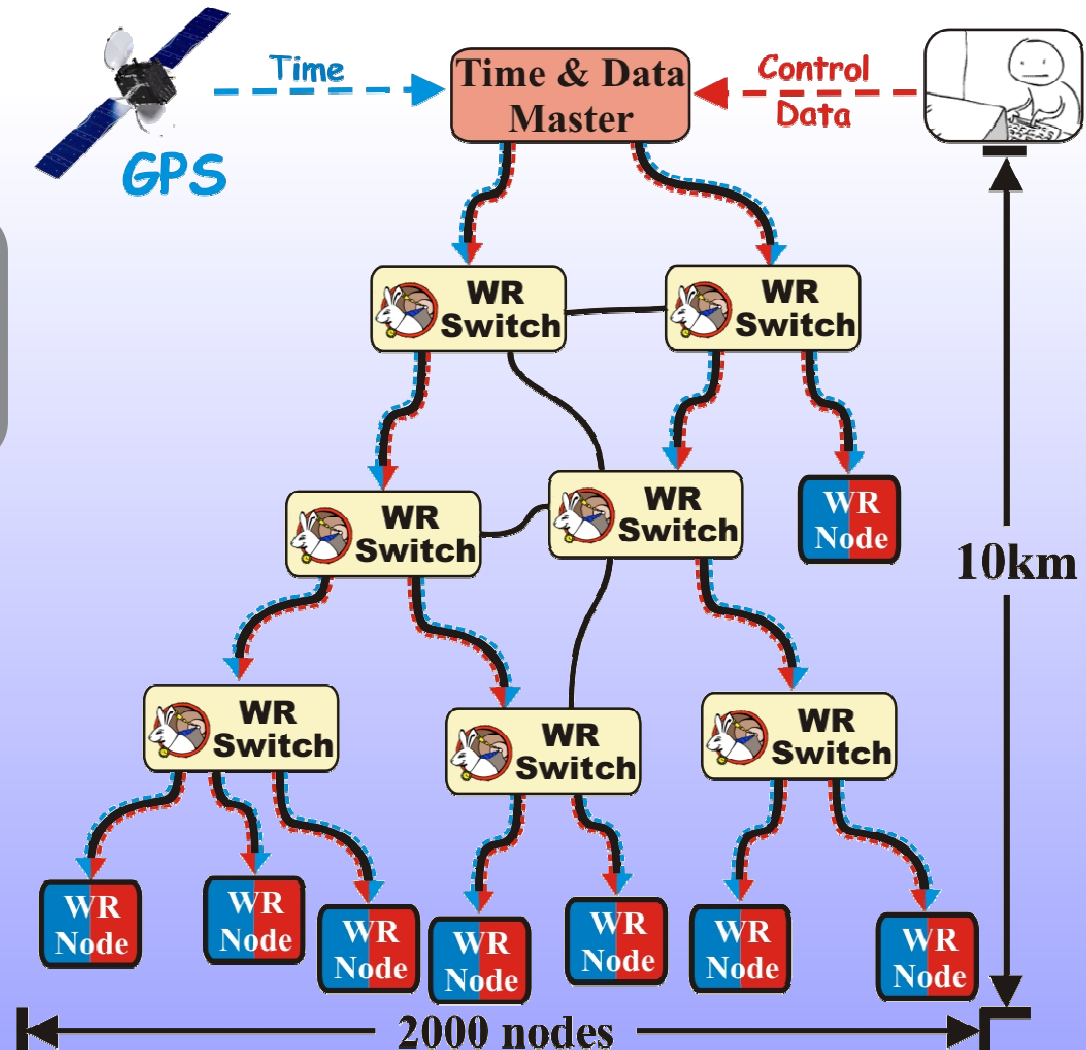
What is White Rabbit?

- 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.

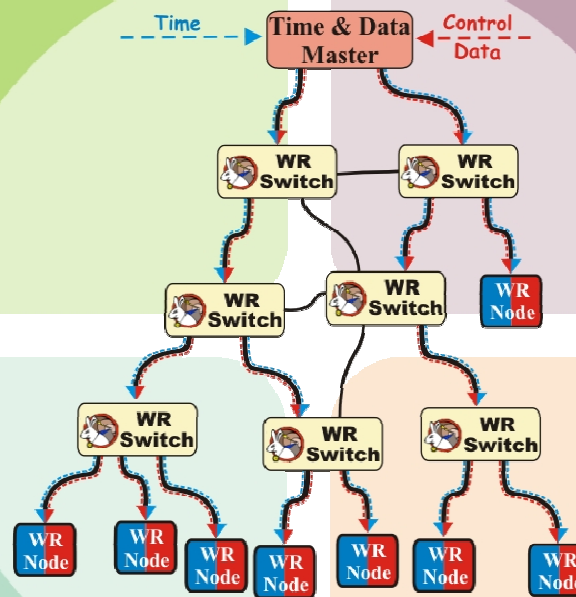
- **Sub-nanosecond time synchronization**
- **Deterministic Control Data delivery**



Reliability in a White Rabbit Network

**Deterministic
packet
delivery**

**Synchronization
resilience**



**Topology
redundancy**

**Data
resilience**