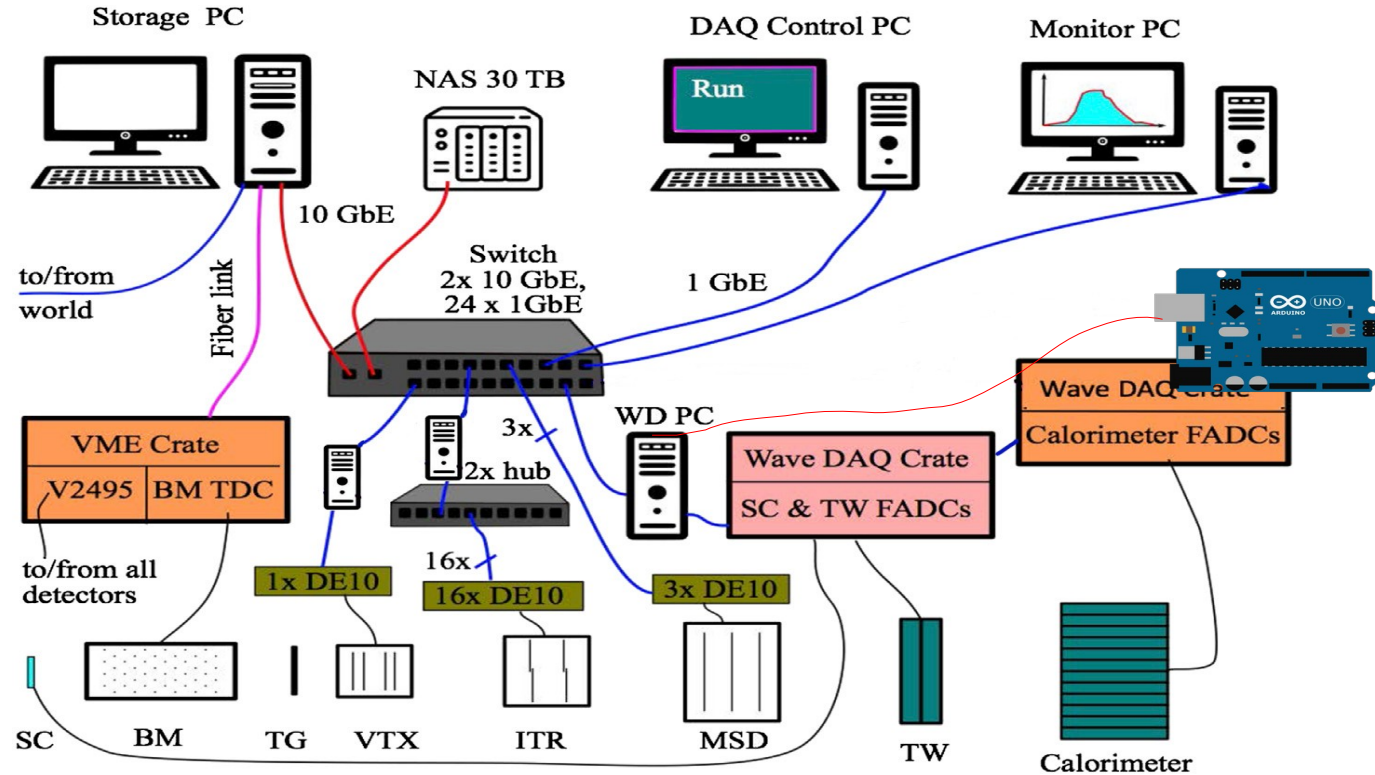


# Update on TDAQ status

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# TDAQ infrastructure



# TDAQ upgrade

- **update slowed down** by the CentOS EOL in June 2024 (CentOS used at CERN in LHC experiments and FOOT TDAQ is a spin-off of ATLAS TDAQ)
- **some uncertainties** in the high-energy physics scientific community about OS to adopt



FROM LAST  
GM

## AlmaLinux to be Used by CERN and Fermilab in Groundbreaking Physics Experiments

*CERN and Fermilab will use AlmaLinux for scientific computing, and many experiments will use AlmaLinux in their universities and other member institutions*

*CERN to become a member of AlmaLinux OS Foundation*

April 13, 2023 08:05 AM Eastern Daylight Time

PALO ALTO, Calif.--(BUSINESS WIRE)--The [AlmaLinux OS Foundation](#), the nonprofit that stewards the community-owned and governed open-source CentOS alternative AlmaLinux, has announced that [CERN](#), the European Laboratory for Particle Physics, located near Geneva, Switzerland, and [Fermilab](#), Fermi National Accelerator Laboratory, based in Illinois in the United States, will offer AlmaLinux as one of the standard Linux distributions for experiments at their facilities.

- AlmaLinux is now on new DAQ desktop, TDAQ infrastructure **upgrade to begin soon**

# TDAQ upgrade

- TDAQ update completed (drivers, settings, libraries...)
- stress test on new TDAQ with pulser → up to 70 kHz with simplest setup
- integration of remote detectors ongoing

# TDAQ speed-up

- TDAQ takes some time to stop and start
- detectors takes some time to read and apply the configuration
- however TDAQ deals with them one by one slowing the starting process
- several possible solutions were explored...
- splitting the detectors in groups (segments in TDAQ jargon) seems the best option

# Conclusions and perspectives

- TDAQ@CNAO2023 worked very well in its final setting
- for security reasons all the infrastructure was duplicated installing the last TDAQ version
- the TDAQ core works as expected
- integration of remote detectors ongoing
- a solution to speed-up the start-stop process was found
- implementation will start soon



**Thanks for listening!**