The CMS Electromagnetic Calorimeter is a homogeneous PbWO calorimeter, made of 76'000 crystals.

The detector operation is done through the ECAL online software system. Its main functions are:

- **Hardware configuration**: $10^7$ registers
- **Hardware monitoring**: $10^5$ registers and memories

It is a web based system controlling 216 VME boards made by ~250 applications running on a cluster of 20 PCs.
• The ECAL Online software have been used in all phases of detector construction and commissioning
  – Electronic integration: test of each of the 80k channels of the calorimeter.
  – Test beam: more than 1.6k hours of operation.
  – In situ commissioning: verification of each phase of the detector installation integration in the CMS Trigger and DAQ system.
  – CMS cosmic ray runs and first LHC beams: 350M cosmics events acquired, first system to see LHC beams in the CMS ECAL.
• Essential tool for detector commissioning and running, highly reliable and efficient.