GERDA Network Infrastructure and Slow Control Computing

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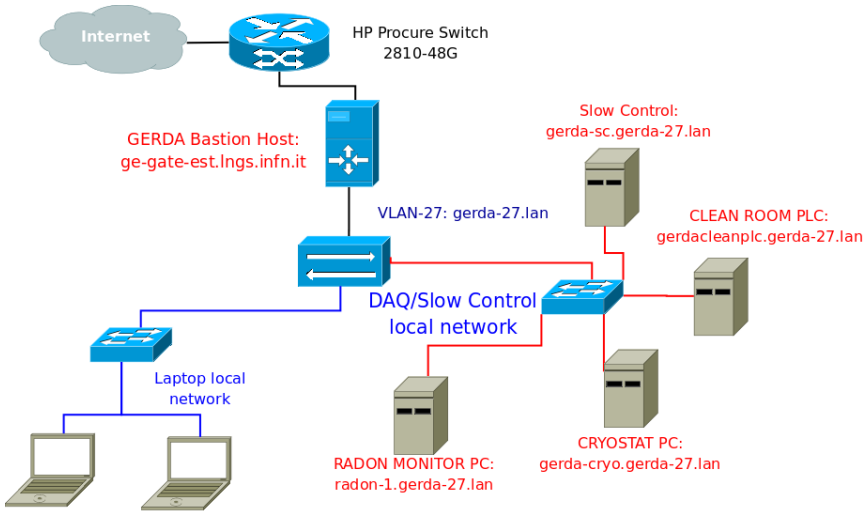
September 29, 2009

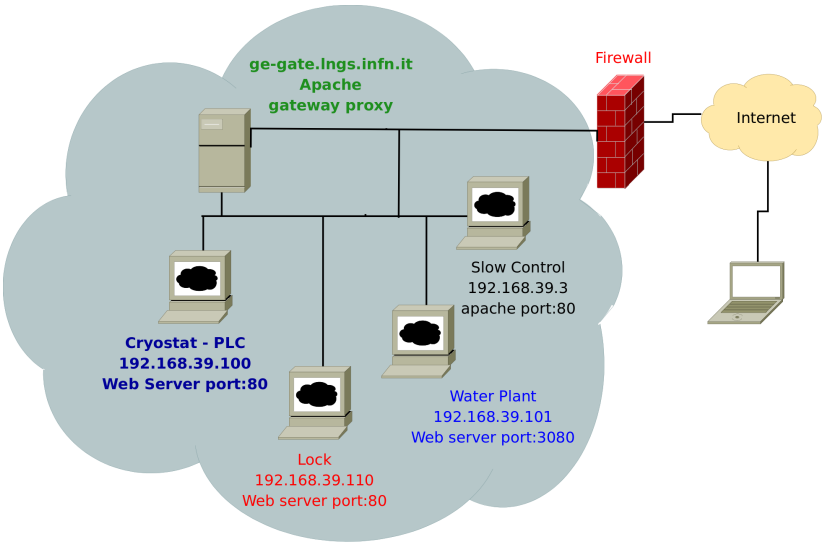
GERDA Network Structure



- GERDA Internal network is fully operational :
  1. 11 GERDA users have been requested for an account;
  2. 4 computers/PLC connected to the network;
- The GERDA Bastion Host: `ge-gate-est.lngs.infn.it` is the only way to get a direct access to the resources on the internal LAN `gerda-27.lan`;

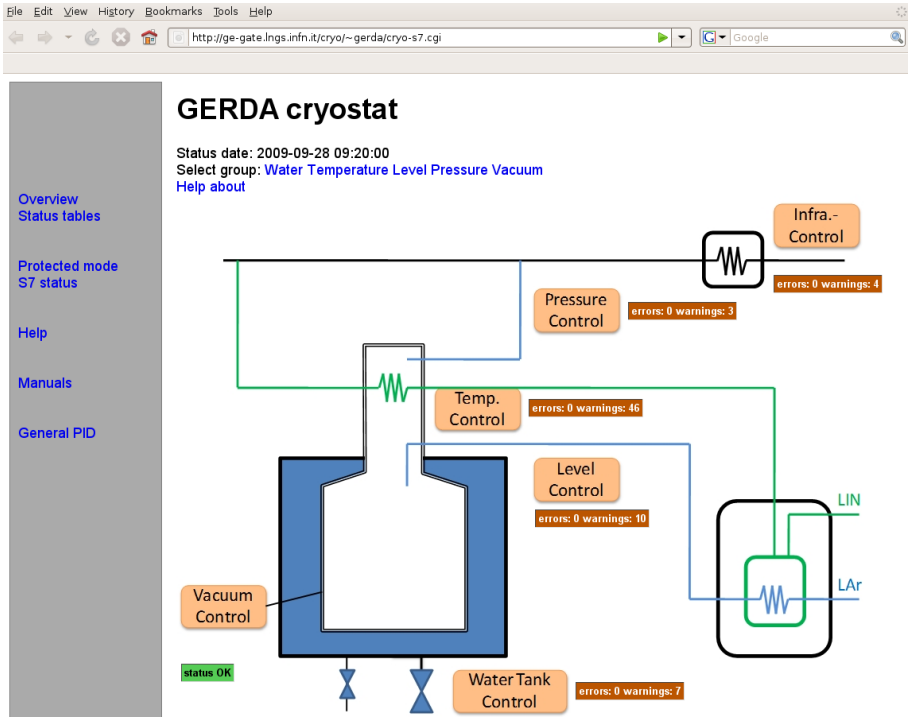
Access to Internal Web Resources

- Direct access to GERDA Web servers located on the internal LAN is provided through the Apache gateway proxy running on our `ge-gate` host.



- At the moment the Web proxy has been configured and is being tested for the cryostat.
- The same procedure will be used for the GERDA general slow control Web server.

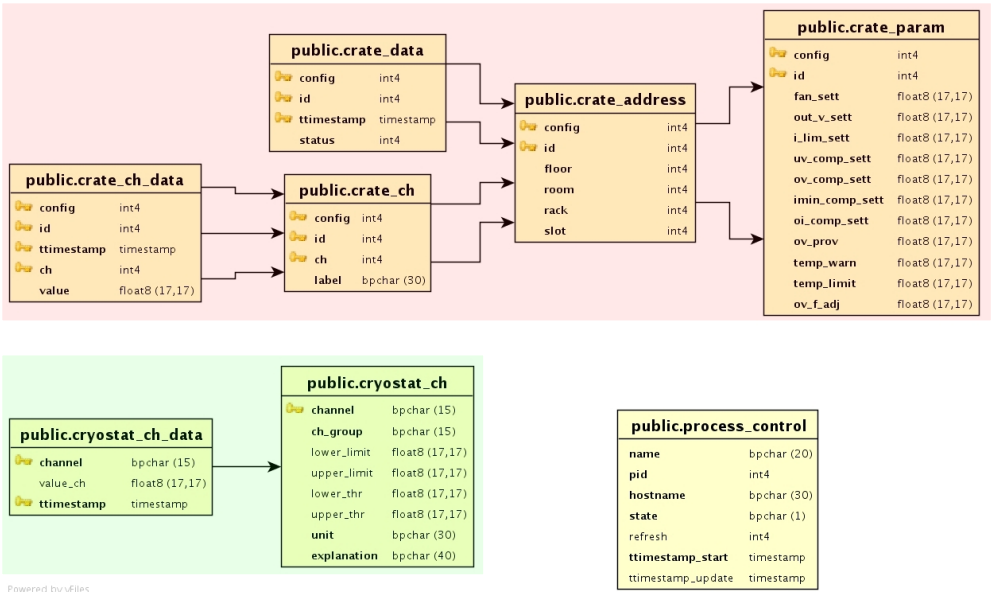
Access to the Cryostat Web Server



- `http://ge-gate-est.lngs.infn.it/cryo/%7Egerda/cryo-s7.cgi`

Slow Control Data Base

- The global structure of the Data Base has been designed;
- detector subcomponents are being integrated once available (shortly after their installation)



Slow Control clients

Crates

- a prototype client has been developed and tested in Padova on Bernd's VME crates;
- as soon as VME crates will be installed the software will be deployed and commissioned in Hall A;

Cryostat

- It's the current item under development;
- The cryostat data will be periodically read (every 3 s) by the cryo-client and all variations will be stored in the Data Base;
- Historical plots will be available on the slow control pages;
- The cryostat Web server provides also:
  - lower and upper limit for allowed values;
  - lower and upper thresholds for alarm generation.
- A note will be soon prepared on HOWTO retrieve data from the Data Base for offline analysis.

Rn monitor

- it's the next item on the list and development will start soon.

Conclusions

- The network in Hall A has been designed, installed, tested and is running smoothly since few months;
- A mechanism to access internal Web pages has been setup and will be used for all subcomponents willing to use it.
- The client design is proceeding and new components are being integrated into the system:
  - → data read by dedicated clients and stored in the Data Base
  - → data will be accessible from the Web server or directly from the Data Base for offline analysis.
- We are currently working on the Cryostat, but the integration of the Radon monitor will follow soon.