PLC & Front-Ends

General Information

The EN/ICE group is mandated to give general PLC support to the CERN community. The CERN PLC users benefit from a comprehensive list of services.

CERN-wide PLC Services Offered

- Complete PLC support and information to CERN PLC users about the two official and supported PLC brands at CERN
  - PLC Siemens
  - PLC Schneider
- PLC application repository: A central repository of PLC applications. Users may use this tool to have a direct link to their current operational software version running in their PLCs. The service does not substitute SVN/GIT for the code versioning, but only provides a central place to have all operational versions at hand. The service is provided by a commercial tool: VersionDog.
- PLC critical spare stock. The stock is not a general purpose stock but a critical one. It's intended to provide a replacement for a faulty PLC hardware component installed in a running machine and which may compromise the normal working of one our accelerators and/or experiments. The service is available 24/7 by contacting us (Siemens or Schneider) or just calling the stand-by service in non-working hours. EN/ICE will deliver the asked piece and make the replenishment in the shortest supplier offered time.
- Central PLC Database (Layout). The group provide tools to automatically populate the database from existing project hardware configurations (Schneider and Siemens). This is a first attempt to have an asset database for components tracking. The database items are created in base of a CERN equipment catalogue.
- Diagnostics & monitoring: PLC agent. EN/ICE provides a central monitoring service based on both, MOON and DIAMON tools, to make the surveillance of the PLCs networked at CERN. No intrusive code is needed in the PLC. The additional load caused by this service has been stated to be meaningless.
- Testing & Verification of PLC applications: The group provides expertise in testing and verification and provide tools to verify formally PLC applications.
- Test-benches. EN/ICE holds a set of demonstrators and test benches for training and or tests.

News

Please check out the latest news concerning both Siemens and Schneider.

Support

Any support issue must be communicated by e-mail to: plc.support@cern.ch or IceControls.Support@cern.ch

In case of a serious issue (e.g. PLC crash) related to a Siemens or Schneider PLCs you can follow the corresponding recovery procedures:

- Siemens PLC recovery procedure
- Schneider PLC recovery procedure