



Re-engineering of tape operations toolset

Code	IT7548
Programme	FCT
Department	IT
Responsible	27871 - Mr. Alberto Pace

Title

Re-engineering of tape operations toolset

Description

CERN manages the largest scientific data archive in the HEP domain. The archive currently holds over 200 Petabytes, with forecasts of up to 100PB of new data added per year. The successful candidates will join the Tapes, Archives and Backup (TAB) section of ST group. The TAB section is responsible for running the tape based archive and is also developing the upcoming CERN Tape Archive (CTA) software that will provide a direct tape back-end to EOS, CERN's disk storage system.

The goal of this project is to contribute to the re-design and porting of CERN's tape management operational tools from the current production system (CASTOR) to EOS/CTA. This includes tools for daily tape administration tasks, configuring and monitoring tape servers and drives, generation of problem reports, drive and media health check and testing tools, media repair scripts, management of tape pools, etc. The successful candidate will work in close contact with the tape service managers as well as the developers of CTA and EOS.

Profile: MSc/BSc in CS

Required skills/expertise:

- Programming languages: Scripting languages (Python/Perl/shell), C/C++
- Acquainted with Linux and systems administration tools such as Puppet
- Relational databases and SQL
- Experience with Data Management tools and techniques would be an advantage.

Skills

Databases: Oracle. Information Technologies: Developing distributed computing systems (e.g. clusters, batch systems), System administration (e.g. with GNU/Linux, Microsoft Windows, Networks). Programming Languages: C, C++, Perl, Python, Shell Script

Disciplines

Information Technologies