

CernVM-FS - the tool for software distribution

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The CernVM-FS is firmly established as a method of software distribution for the LHC experiments at the WLCG sites. Use of CernVM-FS outside WLCG is growing steadily, its advantages being acknowledged by other HEP and non-HEP communities.

The presentation will give a status on the current work carried by the EGI CVMFS Task Force to establish a CernVM-FS infrastructure facilitating the efficient distribution of software across the EGI computing resources. It will also highlight the Task Force commitments to help sites to support CernVM-FS at batch farm level and achievements in assisting Virtual Organizations to migrate their software distribution to the CernVM-FS technology.

Wider impact and conclusions

Established and proven to work at scale, CernVM-FS is increasingly being used as a method for software distribution by the non-LHC VOs.

Driven along by the EGI CVMFS Task Force, the initiative to establish a CernVM-FS infrastructure designed to better facilitate non-LHC experiments access to the EGI grid computing infrastructure is already benefiting a number of EGI VOs.

This presentation synthesizes the main ideas about CernVM-FS and its impact within EGI computing and it is an attempt to disseminate the CernVM-FS work outside of the proposed dedicated workshop "CernVM-FS - Global Software Distribution".

URL(s) for further info

CernVM File System - <http://cernvm.cern.ch/portal/filesystem>

EGI CernVM-FS Task Force - https://wiki.egi.eu/wiki/CVMFS_Task_Force

CernVM-FS for non LHC VOs - https://www.gridpp.ac.uk/wiki/RAL_Tier1_CVMFS#CVMFS_for_non_LHC_VOs

Description of work

A possible outline of the presentation:

Status of CernVM-FS infrastructure for EGI Virtual Organizations with major achievements in last 12 months at site, VO and NGI levels.

Topology model evolution from the initial proposed design up to the present.

The fruitful collaboration between EGI, OSG, WLCG driven along by the EGI CVMFS Task Force materialized so far on the growing infrastructure of Stratum 0s and Stratum 1s and the benefits for a global infrastructure that will provide better use of the grid computer resources worldwide.

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