R&D Project Motivation

Computing models for the Run3 and HL-LHC era anticipate a growth of storage needs.

The reliable operation of large scale data facilities need a clear economy of scale.

A distributed heterogeneous system of independent storage systems is difficult to be used efficiently by user communities and couples the application level software stacks with the provisioning technology at sites.

- Federating the data centers provides a logical homogeneous and consistent reliable resource for the end users

Small institutions have no enough people to support fully-fledged software stack.

- In our project we try to analyze how to set up distributed storage in one region and how it can be used from Grid sites, from HPC, academic and commercial clouds, etc.

Tested (EOS) : T2 (ATLAS, PNPI, Gatchina), T2 (ALICE, SPbSU, Petergof), CERN
Planned : T0 (JINR, Dubna, NICA), T0/T1 (NRC KI, Moscow, FAIR), T0 (CERN, LHC), SINP; EOS, dCache