A Cloud Computing infrastructure for the Competence Centre for the Conservation of Cultural Heritage (4CH)

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On behalf of the 4CH collaboration

Istituto Nazionale di Fisica Nucleare & ICSC
Competence Centre for the Conservation of Cultural Heritage (4CH)

The 4CH is to design and prepare for an European Competence Centre for the Conservation of Cultural Heritage

The Competence Centre will address several topics such as how cultural heritage is managed, the risks it may be exposed to, the technologies that can be used for its conservation and how it shall be exploited.

https://www.4ch-project.eu/
Towards the development of a 4CH Cloud Platform - part I

Effort has been spent to design and implement a proper architecture, able to combine different software stack, and aimed at providing users with the capability of using different software services.

To host the 4CH services for cultural heritage, a cloud-native approach has been adopted to implement a 4CH Pilot infrastructure hosted on Cloud@CNAF resources as part of INFN Cloud collaboration.
Towards the development of a 4CH Cloud Platform - part II

Reverse proxy

Application access flow

Authentication / Authorization

Indigo-IAM

OPA

Open Policy Agent

Image registry

Monitoring

Ancillary services

Infrastructure-as-Code (IaC)
At the time being, some services provided by and for the Cultural Heritage community within the activities of the 4CH project have been ported and hosted in the 4CH Cloud Platform.

Those services and processes are part of a lively ecosystem of activities expected to evolve within the 4CH project to accommodate further needs and requirements.
Thanks for your attention!

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