European Union’s REKonstruced content in 3D

Website: www.eureka3d.eu
@eureka_3d   @eureka3d_

Cover image: *The First Cold* by Miquel Blay, 1892, Museu Nacional d’Art de Catalunya. 3D digitisation by Giravolt, Generalitat de Catalunya.
e-infrastructure services development:

- Access to computing and storage resources managed in Europe
- Methods on authorization and authentication with different levels of interaction with users and with Europeana services
- Publication of services on EOSC European Open Science Cloud

The infrastructure of EUreka3D is deployed in CYFRONET-CLOUD, one of the resource providers of the EGI Federation, which uses OpenStack as its cloud technology. Amongst other things, there are three main resources that are managed through the OpenStack platform:

- Computing layer. The different servers needed by EUreka3D are implemented as Virtual Machines, each of which is managed independently like a physical server.
- Storage layer. Disks are managed as virtual devices to provide the required storage capacity, and can be attached to the different Virtual Machines as if they were physical drives connected to physical servers. In EUreka3D, the main storage allocation is managed by a service called EGI DataHub.
- Networking layer. Network connectivity is managed and configured to allow Virtual Machines to communicate. This includes traffic routing (to move data packets from a source to a destination) and firewall rules (to block undesired network traffic).