

Cloudferro cloud infrastructure is adapted to the processing of big amounts of EO data, including an EO data storage cluster and a dedicated IaaS cloud infrastructure for the platform's users. The platform is based on collocating a big data repository and customer accessible big processing power. The processing resources are open source and compliant with world standards.

The CREODIAS platform consists of main categories of commercial and non-commercial services:

- Computing services cloud based Virtual Machines (VMs), dedicated servers, GPU, containers, operating system, software images
- Storage: volume (Tier 1-HDD, Tier 2-SSD), object storage, backup solutions, image services
- Earth Observation big data storage with satellite and other data, locally available for users
- Virtual networking services: virtual networks, virtual routers, Internet connectivity, public IPv4, Load Balancer as a Service virtual (LBaaS)
- Security services: authentication and authorization service (OpenStack Keystone), access groups, Firewall as a Service (FWaaS), VPN as a Service (VPNaaS), software upgrades
- Additional services: cloud orchestration solution, general reporting, monitoring services, direct data connections to the platform, data marketplace applications, engineering support, consulting and project implementation
- Specialized tools for Earth Observation: EO Finder – searching, discovering, indexing EO products over GUI/API Rest, EO Browser – browser for EO data with precompute information like NDVI, SWIR, NDWI etc., OGC/WMS server based on SentinelHub software