Virtualization

Service Requests

- New virtualized service request
- Modify or delete a virtualized service (not available)
- Other queries or requests (not available)

The varied research done by the center makes it necessary to use a wide range of software tools, which have incompatibilities between them on multiple occasions. Our center has opted to provide access to its servers for its researchers through a private cloud, deploying a virtual machines service focused on providing infrastructure as a service.

Thanks to this service, the researchers can have virtual machines on demand in which to deploy any software necessary for their research. These machines allow to use a wide range of software tools quickly and easily, avoiding possible incompatibilities between programs.

Benefits

- **Isolation:** the virtual machines are independent, so failure in any of them has no effect on the rest.
- **Scalability:** the machines can increase their computing and storage capacity on demand.
- **Recovery:** the machines are automatically backed up weekly.

Software used

The service is based on **Proxmox VE**, a free commercial GNU / Linux-based distribution focused on virtualization.

Proxmox VE allows us to virtualize machines in two different ways:

- Complete virtualization through **KVM**.
- Virtualization based on **OpenVZ** containers.