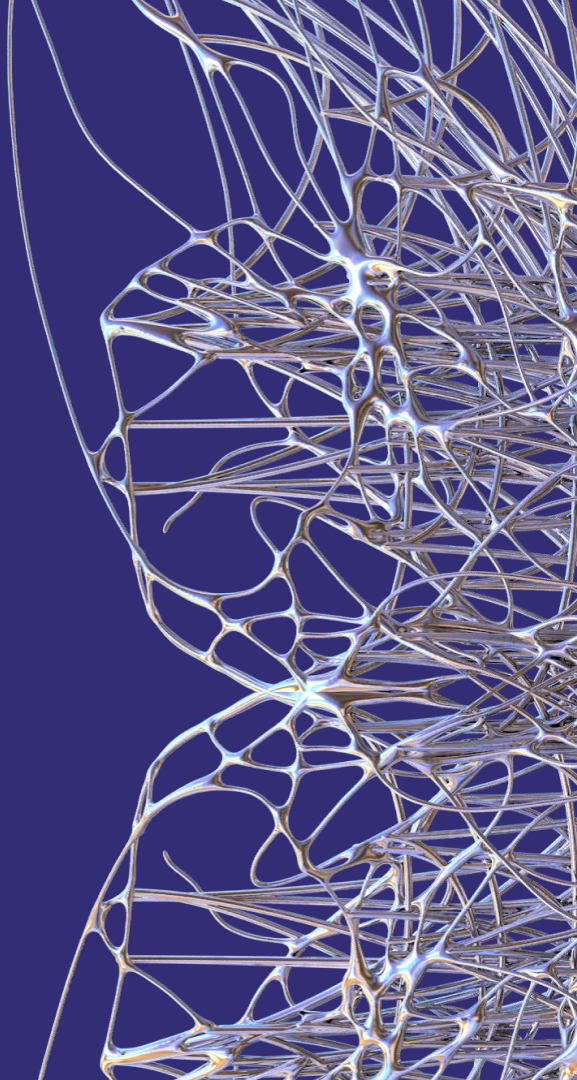# SPHINX

Project description

CyberTown
Engineering solutions

Description of the project

SPHINX is a virtual machine management system as part of a single software package based on the universal OpenStack platform, which solves the problem of controlling a large number of computing nodes and virtualization tools at the customer's data centers (data centers).

The uniqueness of the system lies in the adaptive, responsive interface for managing OpenStack components on various devices, including smartphones and tablets.

Areas of application

The system will be useful and relevant for many companies working with large amounts of data and virtual computing resources. This applies not only to data center operators, but also to financial, medical and educational organizations that need modern technological solutions.

Regardless of the field of activity, the use of SPHINX will provide common advantages: increased availability of services, performance management, resource optimization, cost reduction and reliability.

Functional features

Authentication and Authorization via the Keystone Service in OpenStack provides access to system resources.

The VM Management (Nova) service allows users to easily create, delete, and modify virtual machine (VM) settings.

Disk Management (Cinder) enables users to create new disks, delete existing ones, and attach them to VMs, similar to adding an external hard drive to a computer to store additional data.

Image Management (Glance) allows users to upload, delete, and take snapshots of images, which is like creating backups of their computer. Network

Management (Neutron) allows users to create, configure, and connect virtual networks and routers.

Current status of the project

The current iteration of SPHINX encompasses:

- A fully functional backend that serves as a robust foundation for the future development of the project.
- An intuitive and user-friendly front-end that is currently in the implementation phase, and which will be available on mobile devices. This interface will provide a majority of the necessary functionality for managing the system.

The project has been in active development for the past 19 months, and the current investment phase has successfully concluded.