Galaxy in MetaCentrum
integration

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CESNET

- ▶ open source scientific work-flow system
- ▶ web server based front-end for bioinformaticians (you can run computations through web browser)
- ▶ lightweight, modularly written in python
- ▶ tools are managed by wrappers and allow pipe-lining
- ▶ running analyses in background
- ▶ primarily designed for single user and run in VM

Be default

- ▶ primarily for Amazon Elastic Compute Cloud (EC2) and Simple Storage Service (S3)
- ▶ CloudMan deployment tool

In MetaCentrum

- ▶ MetaCloud testbed with OpenNebula
- ▶ we can provide dedicated cloud resources
- ▶ we can prepare VMs with pre-set services (application wrappers, /storages, ...) or users can have own images
- ▶ user is completely managing VM

- one Galaxy front-end *per* computation and/or user
  - user is completely managing Galaxy (settings, users and data)
  - not-persistent
  - we can prepare service's settings (application wrappers, …), but administration of Galaxy is on user
  - (not supported but still possible to use)
- one Galaxy front-end for all users (or *per* VO/project)
  - MetaCentrum accounts (accounting, security)
  - computations through PBS (efficient resources use)
  - we will prepare everything (frontend, …), integration is ongoing
  - **(currently preferred approach)**

Combinations of previous approaches and solutions are possible too.

Questions/comments?

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