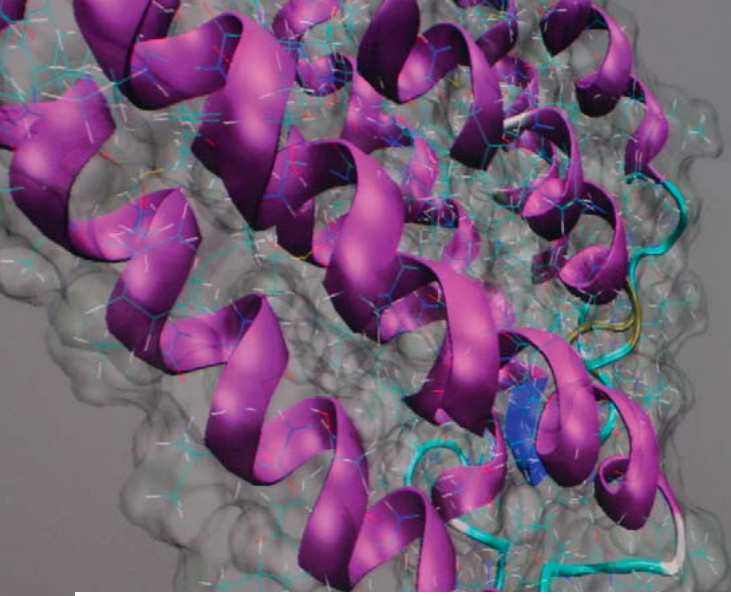**Leibniz Supercomputing Centre**
of the Bavarian Academy of Sciences and Humanities

The LRZ Compute Cloud

Modern computer assisted science helps to quickly gain new insights.

The LRZ Compute Cloud Ideal for Research

Is computational science the basis of your research?

Do you work in burst mode?

Do your needs for compute resources sometimes explode?

If so, the LRZ Compute Cloud is just what you need for your research. It allows you to adjust your resources dynamically and very flexibly to match your needs.

Infrastructure-as-a-Service — Using Your Own Virtual Machine Images

The LRZ Compute Cloud is set up as an Infrastructure-as-a-Service (IaaS) solution based on the open source software OpenNebula. You supply whatever virtual machine image you want to create your very own personalized Cloud environment.

Compared to Cloud services offered by commercial vendors, the LRZ Compute Cloud provides multiple benefits that are especially important for scientific users.

Your Benefits

Self-Service Interface

An easy to use self-service interface lets you easily set up your own Cloud-based infrastructure. You can dynamically and flexibly adjust the resources according to your needs.
Bring your own images – no problem!

In- and Outbound Traffic

The in- and outbound traffic is free of charge independent of the data volume.

Integration with LRZ Services

The LRZ Compute Cloud is closely integrated with other LRZ services, especially consulting for domain scientists, in, e.g. astrophysics, life sciences, geo sciences, or energy and environmental research.

Flexible Security Layers

Four different security classes let you choose the granularity of security measures that best match your requirements.

Root Access

You can do quick tests that require a clean slate and root access. Turnaround is in minutes, not days.

The LRZ Compute Cloud for Students

Great for diploma thesis, classes, teaching, etc. The LRZ Compute Cloud is the ideal platform to give students their own system without the need for physical hardware.

Tutorials & Trainings

An extensive manual and tutorials are waiting for you. We offer technical support and special training sessions on the LRZ Compute Cloud.

The LRZ Compute Cloud offers you extra resources whenever you need them.

Your Technical Requirements

LRZ-SIM account
Image suitable for KVM, in raw or qcow2 format

Technical Specifications

Overall LRZ Cloud Infrastructure

CPU: Intel Xeon E5540, 2.53GHz
640 cores
7 TB RAM
300 TB disk space

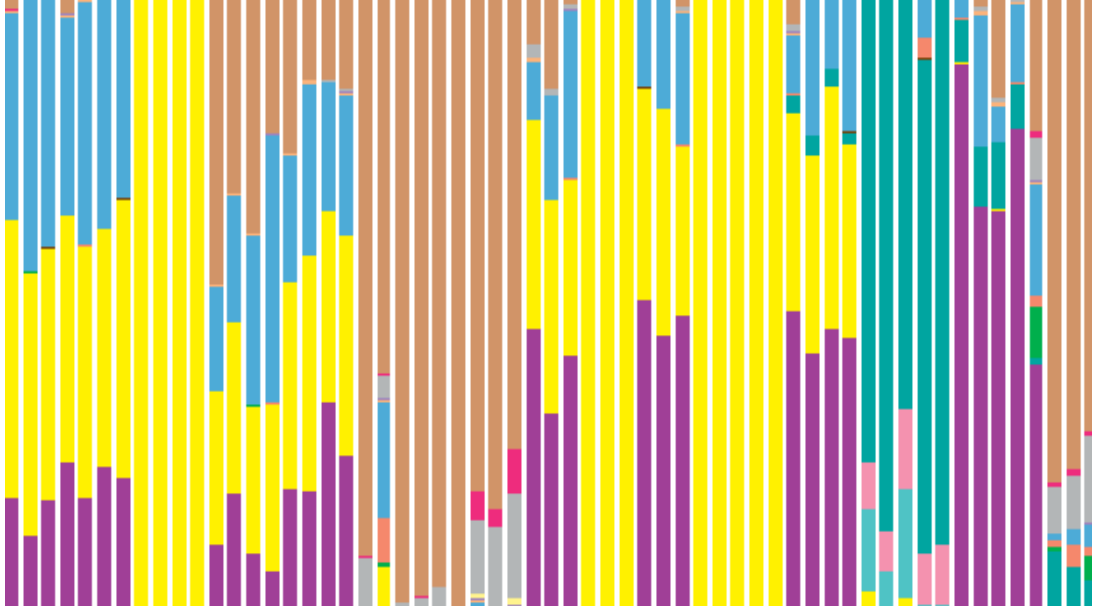### *Per Virtual Machine (VM)*

Up to 8 cores
Up to 64 GB RAM

"The LRZ Compute Cloud offers a lot of flexibility: you can install whatever software you want – which makes it really convenient when you need your results urgently. Sharing data with colleagues is an essential feature for any research institute. All in all, this new service makes my daily work easier."

Dr. Debora Garzetti;
Max-von-Pettenkofer Institute, LMU

lrz Compute Cloud

The QIIME software installed as Virtual Machine on the LRZ Cloud allows a fast microbiome analysis from high-throughput sequencing data.

Fast Facts

Eligible Users

The LRZ Compute Cloud is open to TUM, LMU and BAdW users during the ramp-up phase.

Getting Access

Please contact your Master User first. They can enable your LRZ account for the Cloud. If you are a Master User and have questions, simply contact the LRZ service desk.

Costs

The Cloud service will be free of charge during the ramp-up phase.

Resource Limits

Individual resource limits have to be negotiated with LRZ. During the ramp-up phase you will receive an initial budget free of charge that you can use to try out the new service.

Login LRZ Compute Cloud

Direct login   *https://www.cloud.mwn.de*

Further information   *www.lrz.de/cloud*

You can count on us!