



LEIDEN UNIVERSITY MEDICAL CENTER

Dynamic and transparent cluster scaleout

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Proposal

Dynamic and transparent *scale out* of a local cluster:

- Based on system load.
- Access to remote nodes with *local credentials*.
- Access to local resources.

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A light path to access remote datasets directly.

Current situation

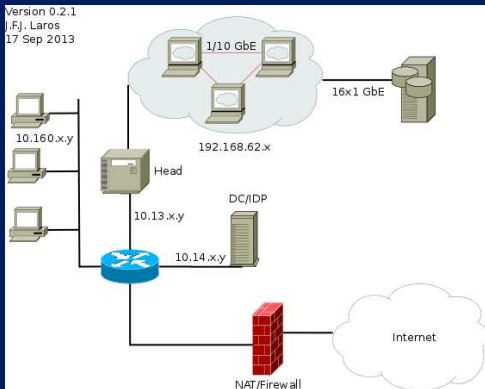


Figure 1: Schematic overview of our current situation.

Use cases

We focus on three main areas:

- Full genome sequencing data analysis (high volume).
- Bacterial strain typing (low latency).
- *De novo* assembly (long run time).

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We expect to make use of the following services:

- HPC cluster in the cloud.
- Permanent light path.
- SURFconext.

Goal

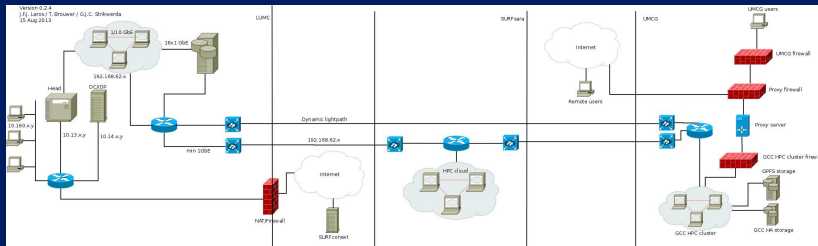


Figure 2: Schematic overview of the desired outcome.



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