

Open Source Private Cloud Computing -Eucalyptus

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BMC Software

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2010: Cloud Computing

Agenda



- Open Source Private Cloud
- Eucalyptus
- Eucalyptus Demo

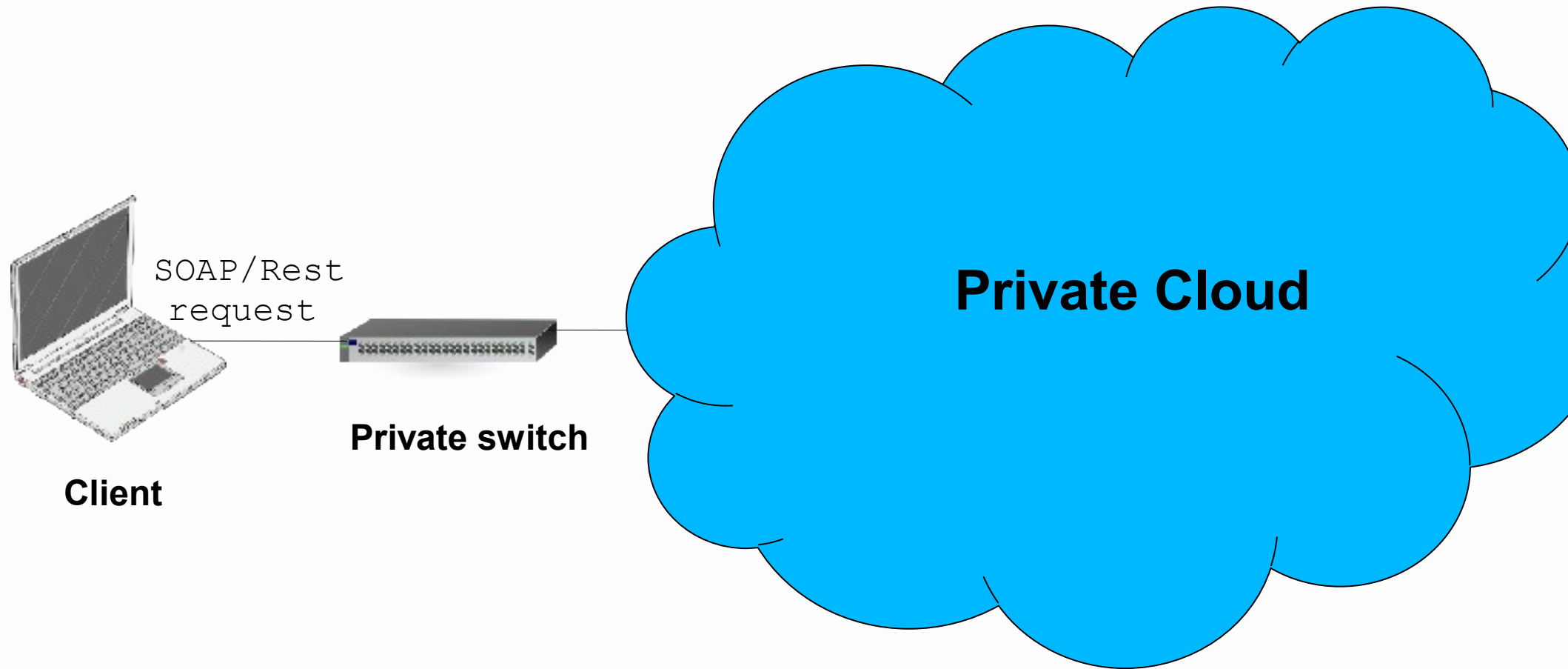


Private Cloud

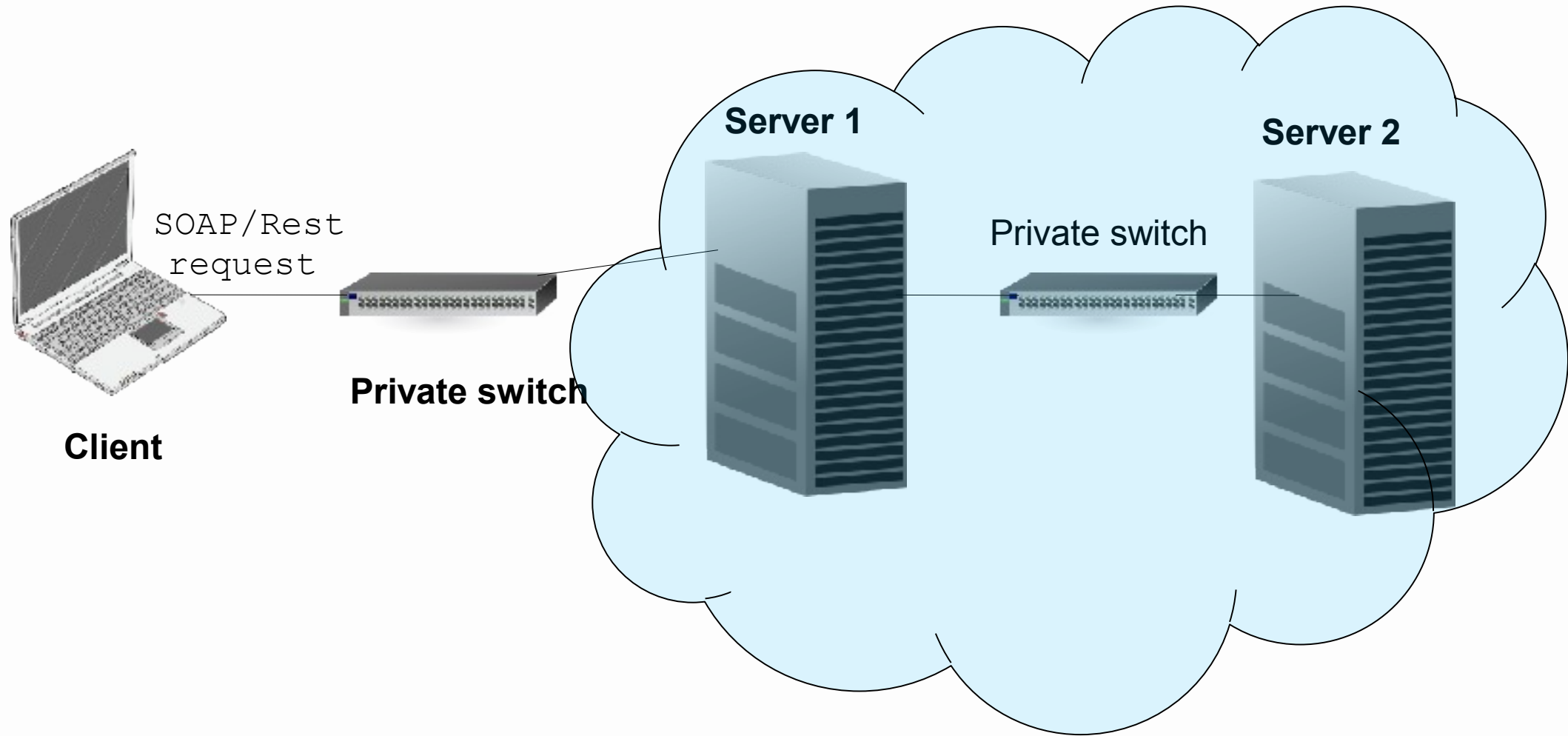
- What is Private Cloud ?



Private Cloud



Private Cloud



Options for Private Cloud in Open Source



Eucalyptus



ubuntu enterprise cloud

OpenNebula.org

The Open Source Toolkit for Cloud Computing

NIMBUS



redhat



Eucalyptus



Elastic Utility Computing Architecture Linking Your Programs To Useful Systems



About Eucalyptus

- Origins at Computer Science Department at University of California, Santa Barbara
- Provides framework for IT infrastructure and datacenter management by creating private clouds.
- Open source and packaged using Linux distributions
- Maintained by Eucalyptus Inc. which provides enterprise products and support.



Eucalyptus

Short Demo



Eucalyptus Components

Cloud controller (CLC)

Cluster controller (CC)

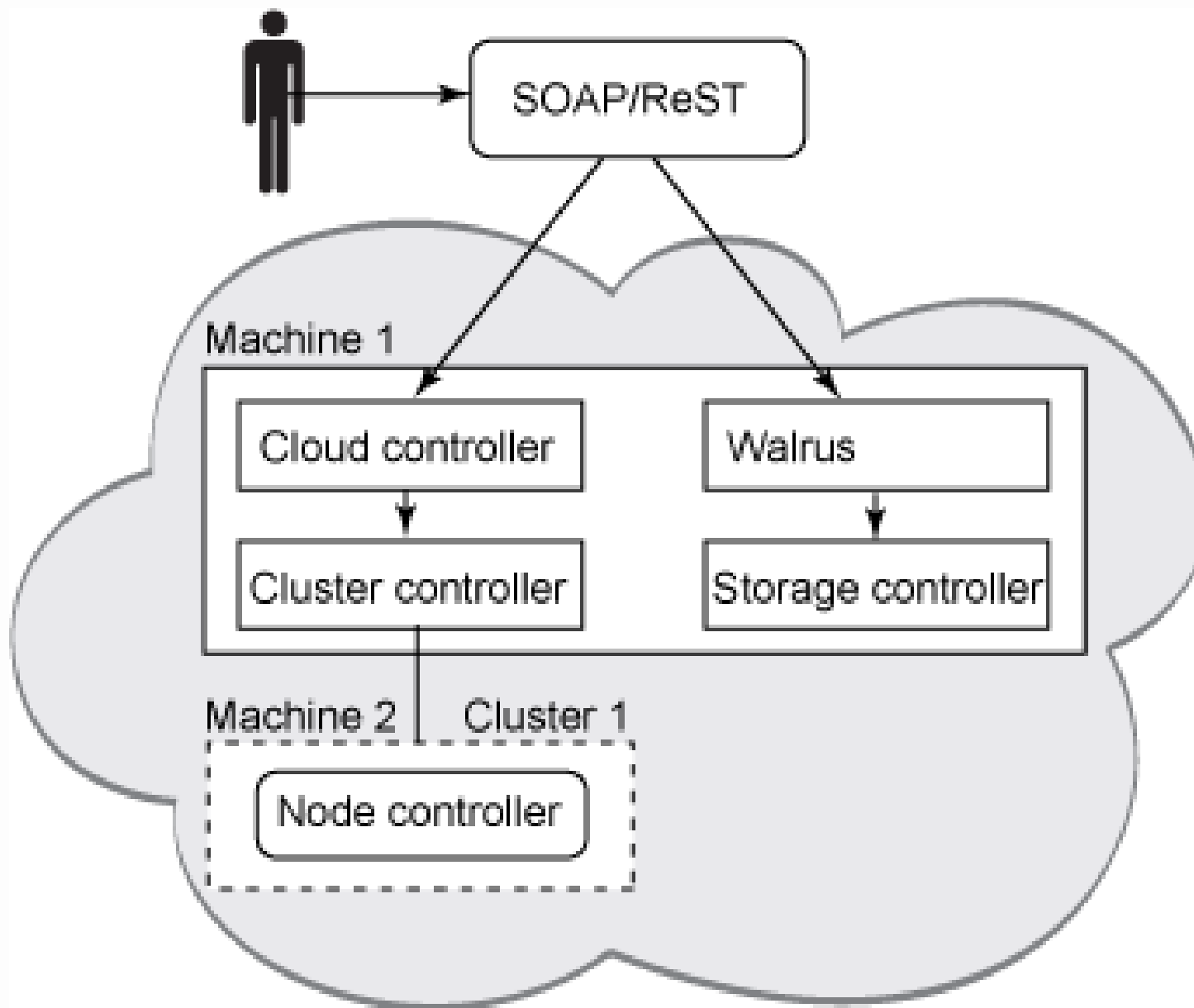
Node controller (NC)

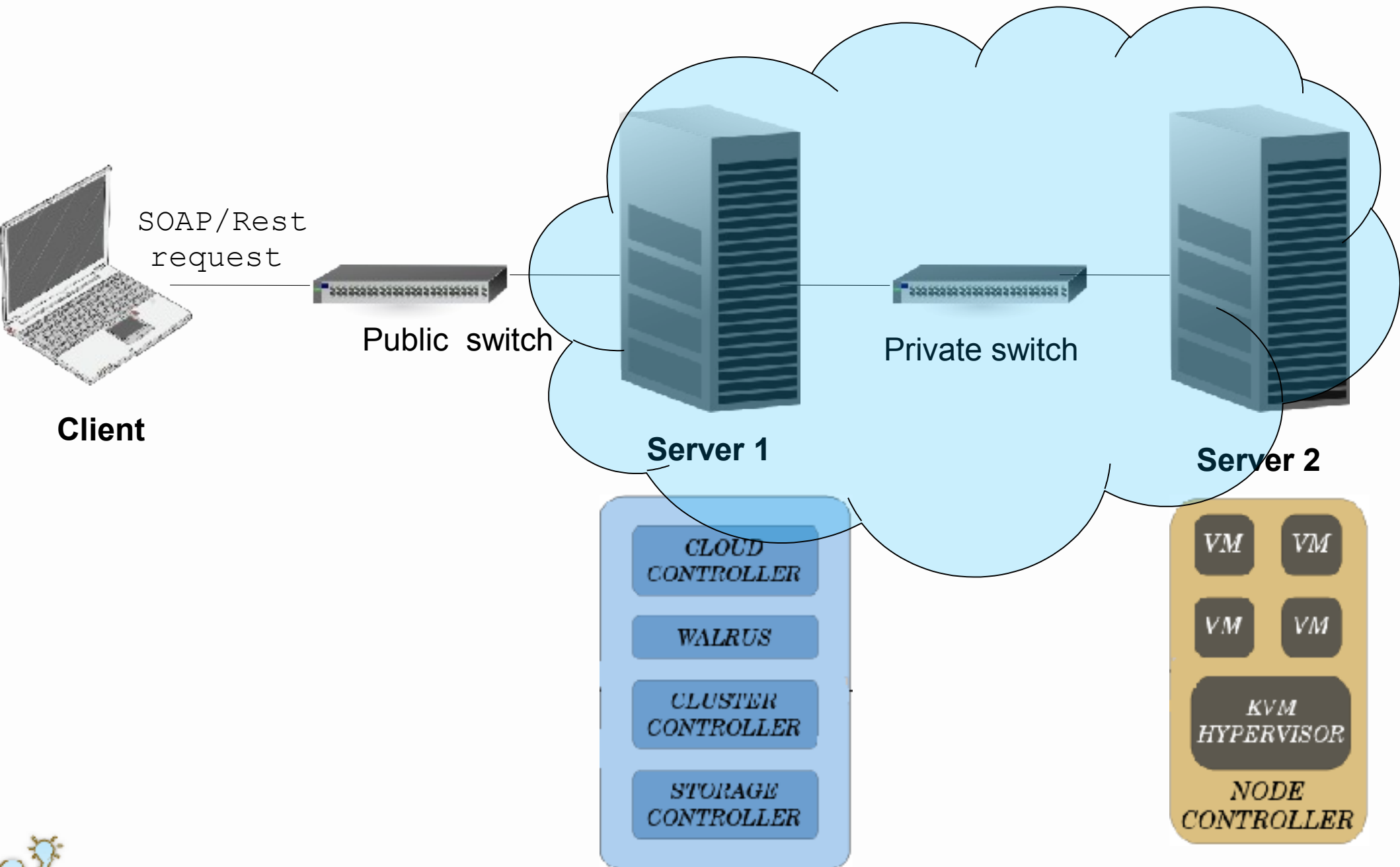
Storage controller(SC)

Walrus

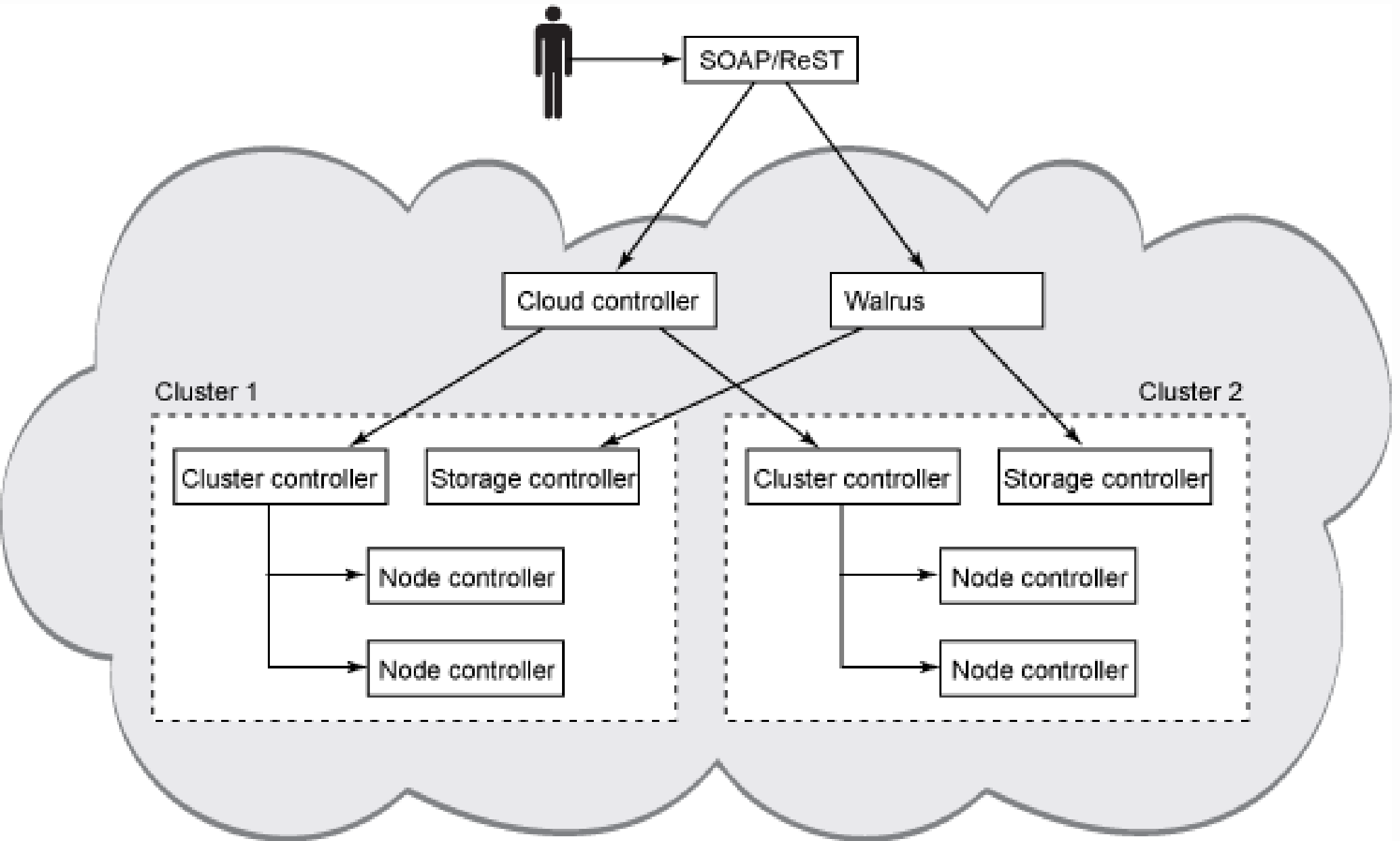


Private Cloud- Single Cluster





Private Cloud-Multi Cluster



Setup

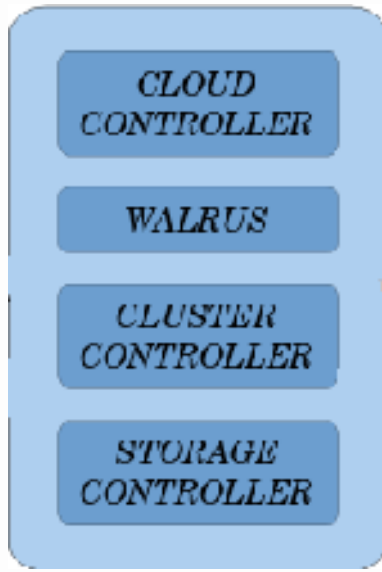
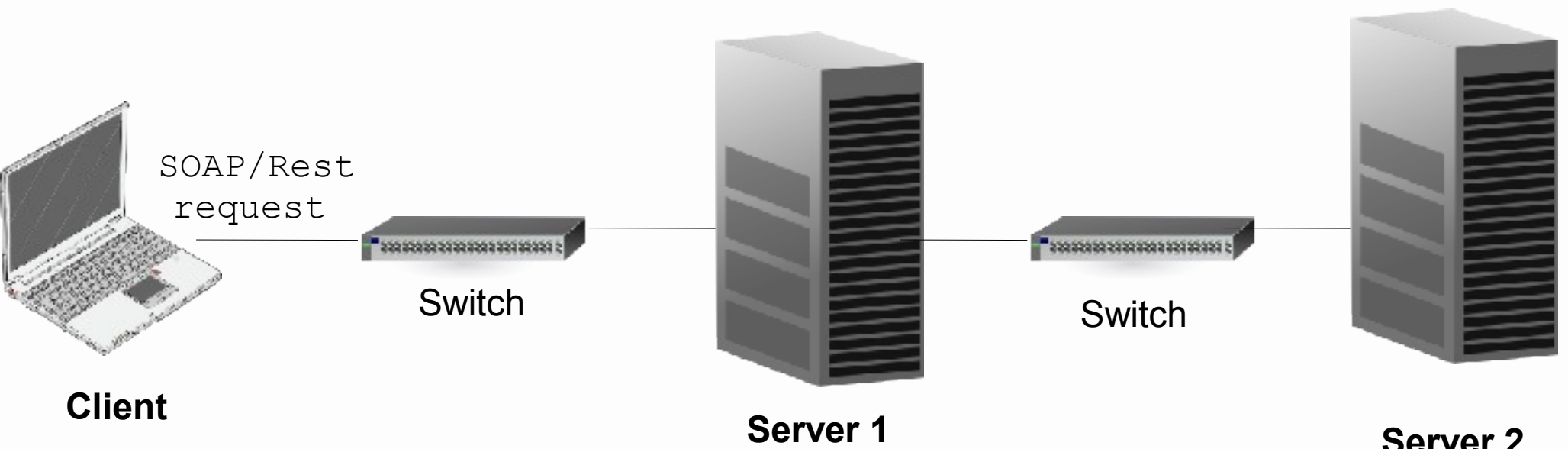
Installation -

- From source

OR

- From pre packaged binaries
 - For 1.6 support for - Ubuntu 9.04 and 9.10, OpenSUSE 11, CentOS 5.4 and Debian squeeze





Eucalyptus

Demo using Hybrid Fox



User access

Users can access to the eucalyptus cloud by

- HybridFox (Firefox plugin)
- ElastDream (stand alone client)
- Euca2ools (Eucalyptus command line tools)

These clients have to be configured with user certificates, secret keys.



Eucalyptus Benefits

Data center optimization

Automated self service provisioning

Web services based

Elastic resource provisioning



Summary

- **Provides private cloud Framework for IT data center**
- **Compatible with EC2 and S3**
- **Open source, transparent**



Questions



References

<http://open.eucalyptus.com>

**Eucalyptus Cloud Computing Platform –
Administrator Guide.**

