The Vision

BG Innovation Lab
Startup starting point

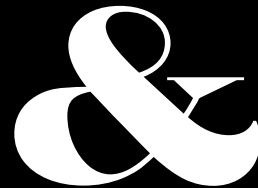HOME   OFFERING   STARTUPS   PARTNERS   PRESENTATIONS AND WRITINGS   BLOG   CONTACT

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Northern Europe Cloud

The Vision

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Startup starting point

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Aake Edlund, PhD

KTH and SNIC, Sweden

Northern Europe Cloud (Project Manager)**NEW**

BalticGrid (Project Director)

BalticGrid Innovation Lab and **BalticCloud** (Initiator, Manager)

Motivation for BalticCloud

Startup and prototyping focus

When we started, cloud was considered immature, and only for startups and possibly prototyping.

This suited us well, knowing that we had not been very successful in attracting bigger companies.

Clouds and startups - the vision

The startup world is changing

"**Startups can be run so cheaply** now (with open-source software, **cloud computing**, and virtual teams spread across the Web) **that many more can achieve profitability without any VC cash.**"

Paul Graham, Ycombinator

Clouds and startups - the vision

The startup world is changing

"Imagine what it would do to the VC business if the next hot company didn't take VC at all. The less venture capital there is for new startups, the faster the decoupling will begin."

Paul Graham, Ycombinator

Clouds and startups - the vision

Enter microstartups!

"The zero cost startup has led to the age of the "microstartup." It's no longer two folks in a garage hoping to build a prototype in order to land a huge VC round, then getting millions of dollars to build out an office. Microstartups are sustainable from prototype to launch and on to a core user base, all for around $5-10,000 in costs. "

Jason (Calacanis.com)

Clouds and startups - the vision

Fortune 1M

" Our vision is to enable one person to invent and run the next revolutionary IT service, operationally expressing a new business idea as a multi-million-user service over the course of a long weekend. "

By doing so we hope to enable an Internet "Fortune 1 million".

RAD Lab, Berkeley

Clouds and startups – the reality

Cloud computing + Microstartups = True love!

Bootstrapping – more than ever

Quick start – really quick!

New directions, prototyping, customer projects

Lower your own internal IT costs

Quick to start, agile

"VC = VISA Card"

STARTUP
@ BGi

BalticGrid Innovation Lab (BGi)
– the starting point for early stage startups in the Baltics

Scalability – How to build – technology and business aspects

Course - Learning how to leverage on cloud computing

Course – "Startup school"

Networking – alumni, investors, excellence centers, industry

Mentors – finding and follow up

Prototyping resources - the whole BalticCloud to "play with"

STARTUP
@ BGi

Try it! You don't have to be in the Baltics

BGi is an unique starting point for microstartups

bgin.wordpress.com

Northern Europe Cloud

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Northern Europe Cloud

To build competence

"To build competence and better understand the value of cloud computing on eInfrastructure for science"

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Open source, as well as proprietary

"… study and use of open source software and commercial products

…. build competence on the end-user interfaces provided by cloud technologies and identify their added value to today's grid and standard HPC interfaces

….. understand the economic implications cost-efficiency of eInfrastructure, by possibly adopting interfaces to external (commercial) providers

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Defintion of 'Northern Europe'

Initial setting
Sweden, Norway, Denmark, Estonia, Latvia, Lithuania, Belarus, Poland

Extending to (hopefully)
The Netherlands, Iceland, Finland , (more)…

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Resources

1 FTE per NGI

Duration o f 1 Year (first phase)

Building on BalticCloud experiences as well as national experiments (e.g. in Norway, the Netherlands, Denmark).

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Expected outcome of year one

A classification/categorization of scientific applications suitable for cloud computing

A set of popular scientific applications ported to a cloud environment, with active participation from the user communities themselves

Identification of the potential and challenges of using cloud environments for science; This includes aspects of (data) security, intellectual property and quality of service

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Expected outcome of year one

An evaluation of the impact of cloud computing technologies for the member's eInfrastructure as operated by the NGIs today;

This includes overall
- ❖ efficiency, running costs,
- ❖ user interfaces,
- ❖ service levels,
- ❖ federated resource pooling, and
- ❖ cloud as catalyst for adopting new (non-grid, non-Linux) scientific communities

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Expected outcome of year one

Identification of interoperability issues between private clouds, commercial clouds, grids and traditional HPC environments;

This includes identifying and establishing mechanisms for (dynamically) migrating applications loads (incl. data) between all these environments, while keeping control of service levels and cost. Identify interoperability issues in authentication, accounting, billing, monitoring and resource brokering/rating

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Expected outcome of year one

Identify problems concerning software licensing on the cloud

An operational cloud service in the participating NGIs, using both private and commercial technologies; This should also include a study of federating national/private clouds and, ultimately, a Nordic/international virtualised data centre

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Expected outcome of year one

Investigate the value of cloud computing to SMEs, early stage companies and possible high-tech spin-offs in the region. A survey on possible industry partnerships and their cost effectiveness for the following components:

Private clouds within a NGI
Public cloud (incl. direct peering) within a NGI
Federation middleware for usage between private, public, commercial and non-commercial clouds between NGIs

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Summary

NEcloud starts in less than 10 days – but we're already running…

- ❖ Learning-by-doing,
  - ✓ Many members, looking at many angles – dynamic project
  - ✓ With a look at the future
- ❖ Science focus, applications are key – still with close contact with industry
- ❖ Opensource, as well as commercial solutions – and their combination

Overall a very exciting 1 year ahead!

Northern Europe Cloud

The Team

Sweden	Aake Edlund (lead)
Norway	Maarten Koopmans
Denmark	Frederik Orellana
Estonia	Ilja Livenson
Latvia	Janis Kulins
Latvia	Rūdolfs Ošiņš
Lithuania	Dalius Mazeika
Lithuania	Eduardas Kutka
Belarus	Yury Ziamtsou
Poland	Marcin Pospieszny

Northern Europe Cloud

Web presence

Public information site

www.necloud.org

Project wiki

https://portal.nordu.net/display/NECloud

Thank you!

Aake Edlund

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www.pdc.kth.se/Members/edlund

www.necloud.org (Northern Europe Cloud)

www.balticgrid.eu (Baltic Grid)

cloud.balticgrid.eu (Baltic Cloud)

bgin.wordpress.com (BG Innovation Lab)