



Baltic Grid-II,

www.balticgrid.eu

BGi,

bgin.wordpress.com

Baltic Cloud

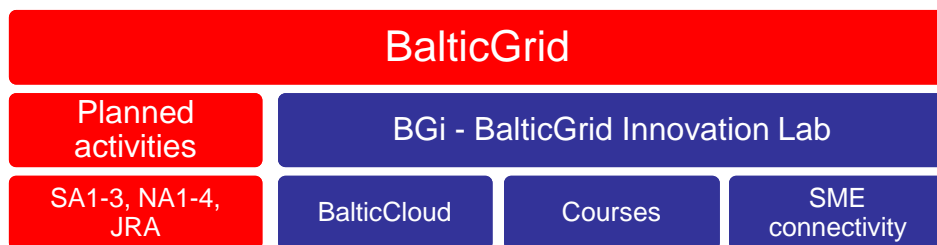
cloud.balticgrid.eu

BalticGrid Innovation Lab - BGi

BalticGrid Innovation Lab (BGi) was launched during the first year of the BalticGrid-II project (on January 20, 2009). BGi is an initiative to attract early stage startups to learn about the latest technologies for scalable services; to meet; to network; to find ways to build successful companies. In the framework of BGi a program has been started for early stage companies in Baltic States region, by inviting them to a hands-on course in grid and cloud computing. One of the main activity within BGi is developing BalticCloud in Baltic States and Belarus.

Countries covered in this collaboration are: Sweden, Estonia, Latvia, Lithuania, Belarus, Poland and CERN. Resources are given from the BalticCloud as well as the BalticGrid-II.

BGi - How it all fits together



BalticGrid-II – the foundations

- Started 1st of May, 2008, duration - 2 years
- Continues the BalticGrid project (2005-2008)
- 13 partners from Baltic States, Belarus, Poland, Sweden, Switzerland
- Financing – 3 M EUR
- Collaborating project for EGEE
- Supporting NGIs and their collaboration

BGi - offering

- Prototyping resources - The whole BalticCloud to “play with”
- Networking – Learn from other startups, alumni, investors, excellence centers, industry
- Mentors – Get hands-on advice from people who know what it takes to succeed
- Scalability – Learn how to build scalable services – technology and business
- New technologies - Learn how to leverage on novel technologies, e.g. cloud computing, virtualisation, multicore, ...
- Startups – Get hands-on knowledge in our “Startup school”

BalticCloud

is a subproject of the BalticGrid-II project aimed at developing cloud infrastructure in Baltic States and Belarus. The infrastructure is based on open-source solutions and is available for research and teaching activities within the partner states.

Motivation for BalticCloud

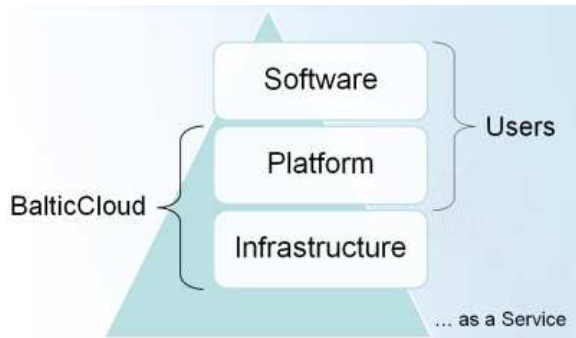
- Low number of applications and application areas in BG-II
- Too steep learning curve for grid users
- Low acceptance within industry – almost non-existent collaboration with SMEs
- Problems with adapting new applications - typically, need a “project” to do that
- Following the trend

Goals of BalticCloud

- One more, hopefully, easier access point to our BalticGrid-II resources
- Building cloud-competence in the region in academia and industry environments

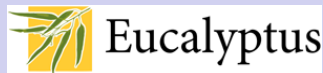


Cloud model and Baltic Cloud



BalticCloud - technology

Our (main) choice:



- Lead by Rich Wolski, UCSB
- Integrated with
- Integrated with



More info: <http://open.eucalyptus.com/wiki/ToolsEcosystem>

BalticCloud – summary

- BalticCloud have learned quite much about the current open source cloud technologies – what there is to use, what is missing, the quality level
- The user side is evolving, now that we have some basic courses and clouds to play with
- Next level, beyond this pilot project, is to be part of the Northern Europe Cloud Initiative - Sweden, Norway, Denmark, Finland, Iceland, Estonia, Latvia, Lithuania, Belarus, Poland
- Cloud computing improves on many aspects
 - Security, resource usage, interactive applications
 - Cloud computing is economically motivated
 - Startups and prototyping, one-off tasks, research at scale
 - Scaling solutions
 - BalticCloud will strive to provide cloud services to academia and industry

A new way to attract startups

Courses

- A course prepared and run by BG-II members, on BG-II resources as well as on donated from e.g. Amazon
- The aim with the course is to help early stage high-tech Internet based companies to try their services on new platforms, resulting in early proof of concepts and later exploitation of grid and cloud in the region
- On top of the course a network of innovative companies in the region will be built

Examples of the educational activities

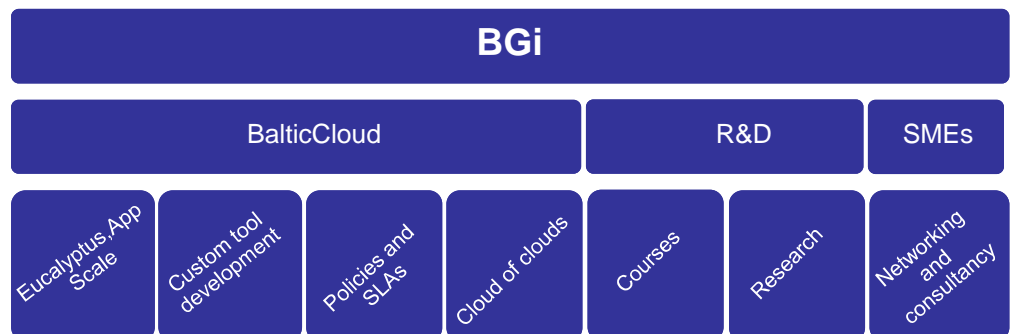
- VGTU: Bachelor thesis on cloud computing (2009): “Deployment of Service Oriented IT Infrastructure”
- VGTU: Cloud computing is part of the MSc course “High performance systems” at VGTU
- BG: general presentations, e.g. at ISSGC09
- NICPB: A course in IT college (in Tallinn) about the distributed systems. Cloud computing is part of the course, labs will be run on the BC resources
- NICPB: Tartu cloud and startup school – May, 2009

SME connectivity

Collaboration with SMEs

- We hope to make it better with cloud approach
 - Industry driven, not HEP driven
 - Reasonable economical models
 - Existing success stories
- Courses for SMEs on best practices using clouds
 - In all countries involved
 - Building a network of adopters
- Hybrid clouds - selling unused cycles to SMEs

BGi Future work



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