



5. Customer Success **O ProcoliX**

Taking Linstor and OpenNebula to the Cloud







Speaker



LIN:BIT

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Taking Linstor and OpenNebula to the Cloud











About ProcoliX

- Based in The Netherlands
- Managed Hosting Provider since 12-12-2000
- Working with LINBIT since 2001
- 100% virtualisation since 2007
- Dedicated to open source software
- Serving cloud from the cloud











About Koen de Jonge

- CEO of ProcoliX
- Using Linux since 1994
- Strong open source evangelist
- Member of the board of the NLUUG
- Hacker, father of 3
- Neuro diversity enhancing employer











Our challenge an overview

- A scalable and sustainable cloud hosting solution
- Public Cloud Managed Hosting Privacy Security
- Our search over the years
- Why LINBIT Linstor?
- Why OpenNebula?
- How it all comes together
- Success guaranteed bringing Freedom to the cloud











IT Infrastructure: Hosting - Cloud - Solutions

- Cloud: not your own computer a service
- Hosting:
- Solution: a means to a problem

ProcoliX

a group of IT construction workers design, deliver and maintain

IT Infrastructure









Designing for sustainability

IT Infrastructure:

- Complex technology
- Very much in development
- Critical for day to day life



Even though you call it 'agile', 'fluent' or 'on demand' it has to work

Always on is default



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Why closed source is not an option

- ProcoliX experience with Citrix XenServer
- ProcoliX experience with VMWare (vCloud)
- ProcoliX experience with Compuverde storage

Result: very hard to build a 5+ year plan open source gives you options



Pure Storage Acquired Compuverde for \$47.9M









Public Cloud is part of the solution

Full service hosting

Privacy

Security

On-premise

Edge

Latency is important











The search for virtualisation - orchestration

- VMWare
- XenServer
- KVM in the early days (RedHat virtualisation)
- OpenStack
- Cloudstack
- Xen Orchestra
- Proxmox
- OpenNebula













Storage is the Key

High Availability

Shared systems and dependency

ZFS

Ceph

Linstor











Why LINBIT Linstor

- 100% open source
- Sustainable model
- High Availability
- Shared Nothing
- Thin Provisioning
- Integrated with OpenNebula
- Professional organisation
- European product















Why OpenNebula

- 100% open source
- Sustainable model
- Support for multiple technologies
- Multi-tenant
- API Support
- Integrated with Linstor
- Professional organisation
- European product











How it all comes together

- Hosting (colocation, dedicated, on-premise with hybrid, managed)
- Real customers need tailored solutions
- Scaling needs of IT Infrastructure
- Performance and scale
- Simplicity
- Growing from local to national to the continent (the world?)











A word on sizing

- Scale starts at a rack level
- The art of balancing net/cpu/power/storage/performance
- Distributed Edge Datacenters (the concept of a TV tower)

Hosts with a minimum of

- 256GB ram
- 48+ cores
- Redundant 25GbE ethernet
- 12TB of all flash storage

Sets of a minimum of (4+1=) 5 hosts







IPv6 unless

A radical approach towards IPv6:

- IPv4 is out of stock (no future!)
- IPv6 as a default everywhere
- IPv4 to IPv6 proxies and bridges
- The more IPv4 the higher the price per IP











Bringing Freedom to the Cloud

ProcoliX and Freedom Internet

- Privacy
- Sustainability
- Fairness
- Transparency
- Federation
- A better world with open source













Open

LINBIT







OpenNebula offerings

ProcoliX and Freedom Internet

- Infrastructure as a Service (laaS)
- Hybrid IT Infrastructure (On-prem + IaaS)
- Public Cloud Infrastructure (Self Service)

Managed on top of everything. Delivered from the edge.



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Questions in chat









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