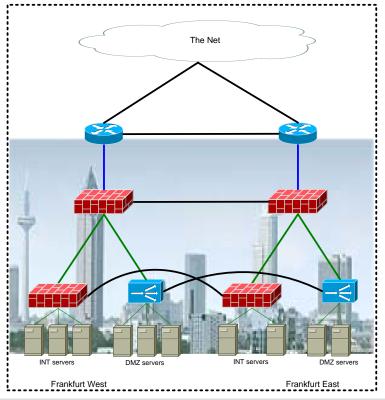




Redundancy for Registry Services

24 June 2009 Sabine Dolderer





Redundancy

- 2 locations (in Frankfurt)
- · tightly coupled
- one network
- dependencies

Locations

- Inhouse datacenter (Frankfurt West)
- Externally hosted datacenter (Frankfurt East)



- Both locations in Frankfurt
- One production space co-located with office space
- Only redundancy amongst datacenters
- Few redundandcy within single datacenter

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Current structure - Objectives

Redundancy and Failsafeness

- Two locations somewhat more apart (Frankfurt <-> Amsterdam)
- Loose coupling of data centers (-> less dependency)
- Full functionality and redundancy at each location (-> autonomy)

Professionality

- cages with professional hosters
- Security, power, cooling given by service provider
- ⇒ DENIC can concentrate on functionality
- Complete rebuild as a chance
 - to improve documentation of the setup
 - better availability and full redundancy
 - Enforcement of better security guidelines

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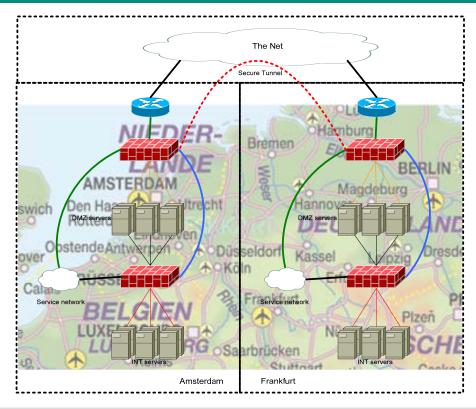


DENIC Current structure: Locations



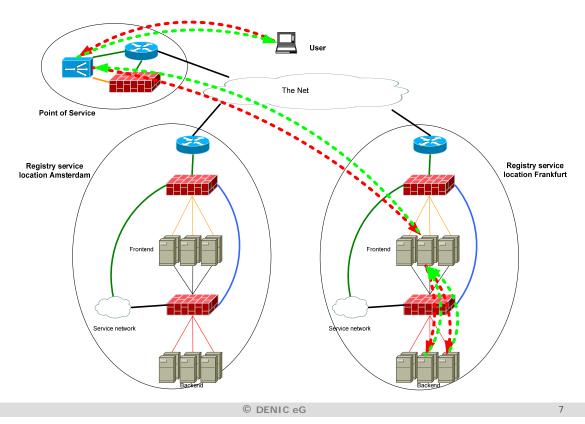
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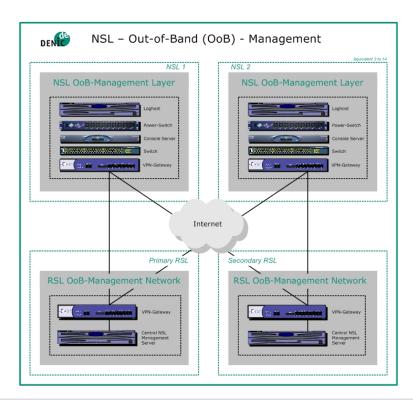


DENIC Query flow example





DNS: NSL OoB Management





DENIC Location Frankfurt (~150 m²)



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DENIC Proof of Concept

Proof of Concept

• On 18 February 2009 all DENIC services switched sucessfully to Amsterdam

Next Steps

Project on Redundancy and Failover to switch more automatically





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