

Open Source High Availability

Vincent van Adrighem

Vergeet uw telefoons niet

Agenda

- 1) Intro: Vincent van Adrighem & Ictivity
- 2) HA: Virtualisatie
- 3) HA: Storage
- 4) iSCSI Enterprise Target
- 5) DRBD
- 6) Linux-HA (Heartbeat)
- 7) DRBD+IET+Linux-HA
- 8) DEMO (ye olde command line en Grafisch)
- 9) XEN
- 10) Vragen

Vincent van Adrighem, Ictivity

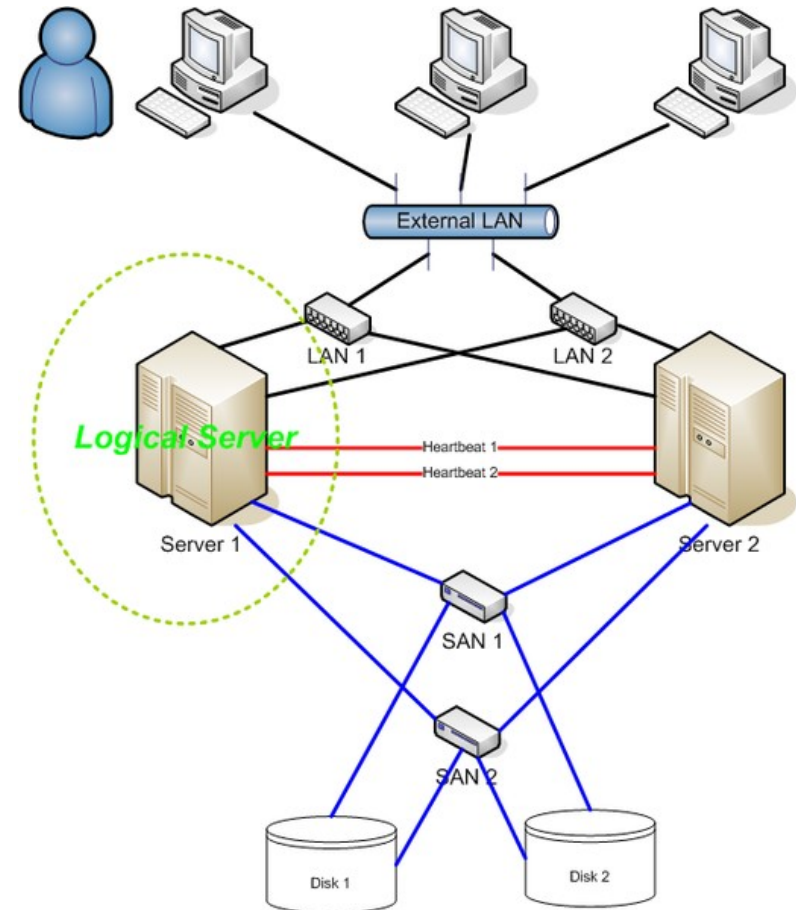


- Open Source Engineer
 - Voornamelijk korte projecten
 - Meest bekende is Open Amsterdam

- Ictivity
 - Netwerk infrastructuren, Netwerk besturingsystemen, Resource management systemen, Messaging systemen, IP telefonie en VoIP, Virtualisatie: Servers, werkplekken en applicaties, Identity & Access Management, Storage & archivering, Computerruimten, Disaster Recovery procedures

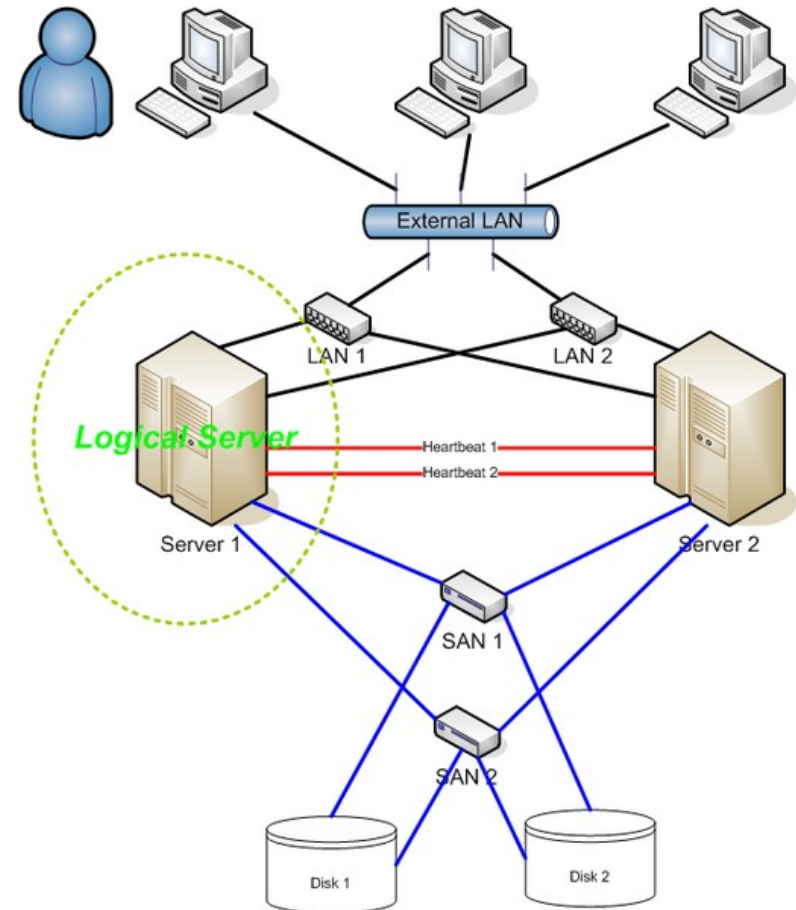
High Availability: Virtualisatie

- High Availability is geen uptime
- Redundantie
- Virtualisatie of clustering
- Failover
- Onderhoud



High Availability: Storage

- SAN
- Clustering
- Prestatie



Voorbeeld: High Availability Storage

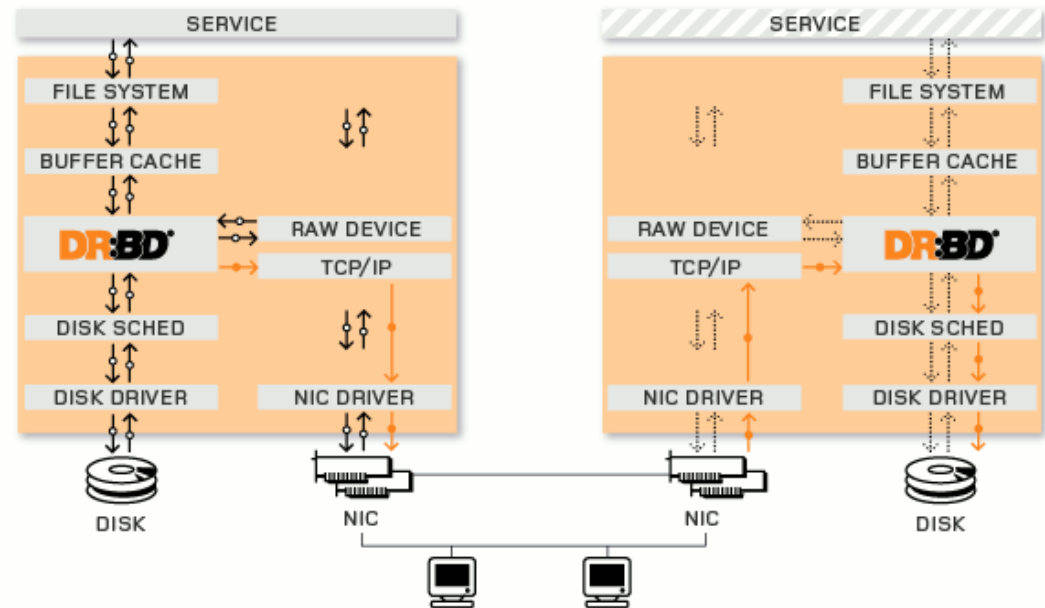
- iSCSI Enterprise Target
- Distributed Replicating Block Device
- Linux-HA Clustering

iSCSI Enterprise Target (IET)

- Server als SAN
- Standaardhardware
- Standaardsoftware
- TCP/IP
- Open Source, dus geen onverwachte EOL

Distributed Replicated Block Device (DRBD)

- RAID-1 over het netwerk
- Realtime replication
- Linux kernel module
- 2 nodes
- Primary/Secondary
- Dual Primary
- Open Source



Linux-HA (Heartbeat, Pacemaker, OpenAIS)

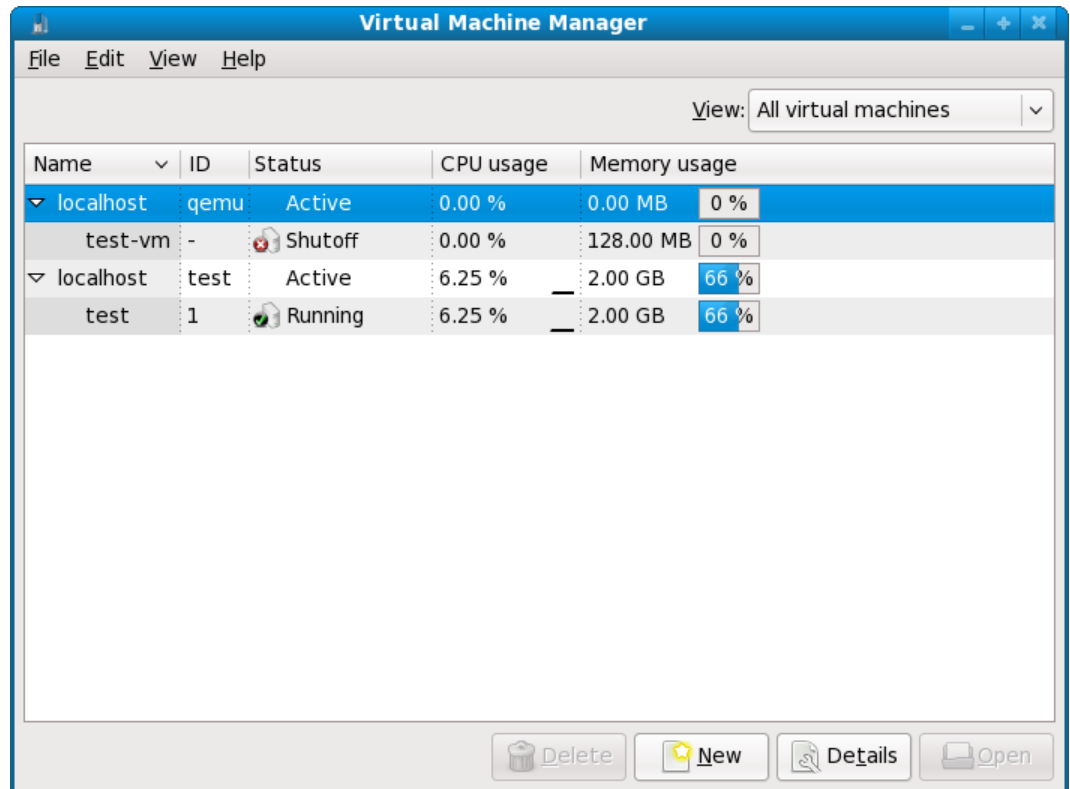
- Algemene clustering
 - LSB-services
 - OCF-services
 - Clone-services
 - Master/Slave services
- Fencing (STONITH)
- Command line en GUI
- Open Source

DRBD+IET+Linux-HA

- Recept (config files, Linux-HA GUI)
- DEMO van een failover

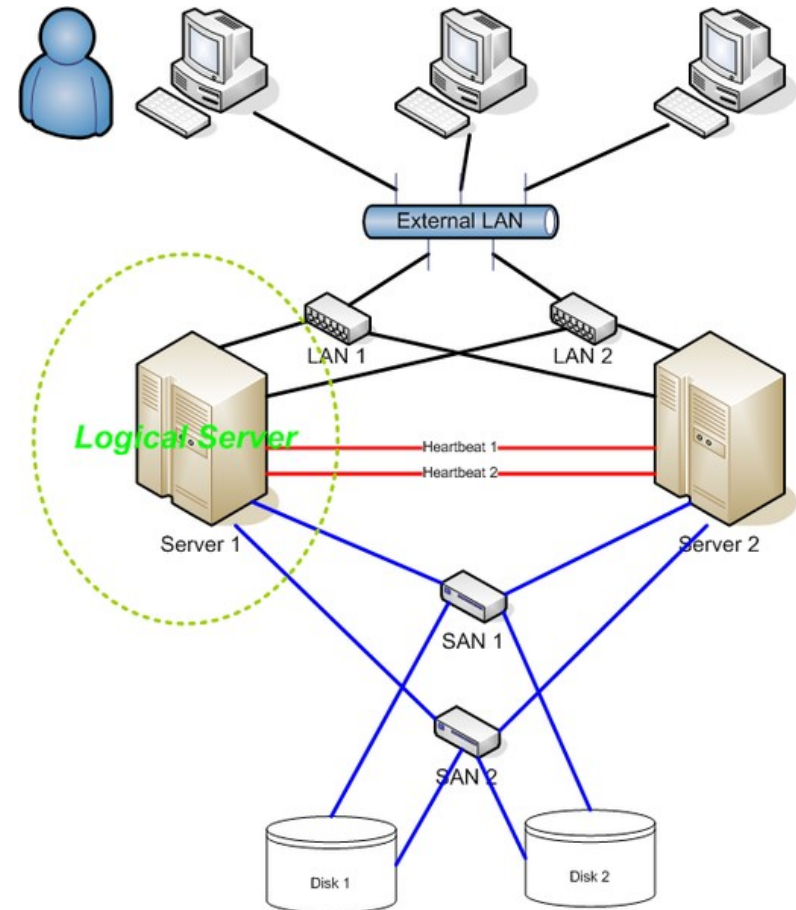
XEN

- Abstractielaag van de fysieke machine
- Consolideren services
- Scheiden services
- VMs bewust
- Efficient
- Flexibel
- Live migreren
- Flexibel
- Onderhoud



Het hele cluster

- Applicatiecluster
- XEN
- Linux-HA
- Storagecluster
- DRBD
- iSCSI Enterprise Target
- Linux-HA



Vragen en antwoorden



Dual Primary

Volgende dia trainingen

Zelf ook kunnen? Ictivity Training

- **Novell / SUSE CLP-10 opleiding traject:**
 - - SUSE Linux Enterprise Server 10 Fundamentals (N3071)
 - - SUSE Linux Enterprise Server 10 Administration (N3072)
 - - SUSE Linux Enterprise Server 10 Advanced Administration (N3073)
- **Novell / SUSE CLE-10 opleiding traject:**
 - - SUSE Linux Enterprise Server 10 Networking service (N3074)
 - - SUSE Linux Enterprise Server 10 Security (N3075)
- **Novell / SUSE 11 opleidingen:**
 - - SUSE Linux Enterprise 11 Fundamentals (N3101)
 - - SUSE Linux Enterprise 11 Administration (N3102)
 - - SUSE Linux Enterprise Server 11 Administration (N3103)