

# ESX Server im Netzwerk analysieren und optimieren



# THEMEN

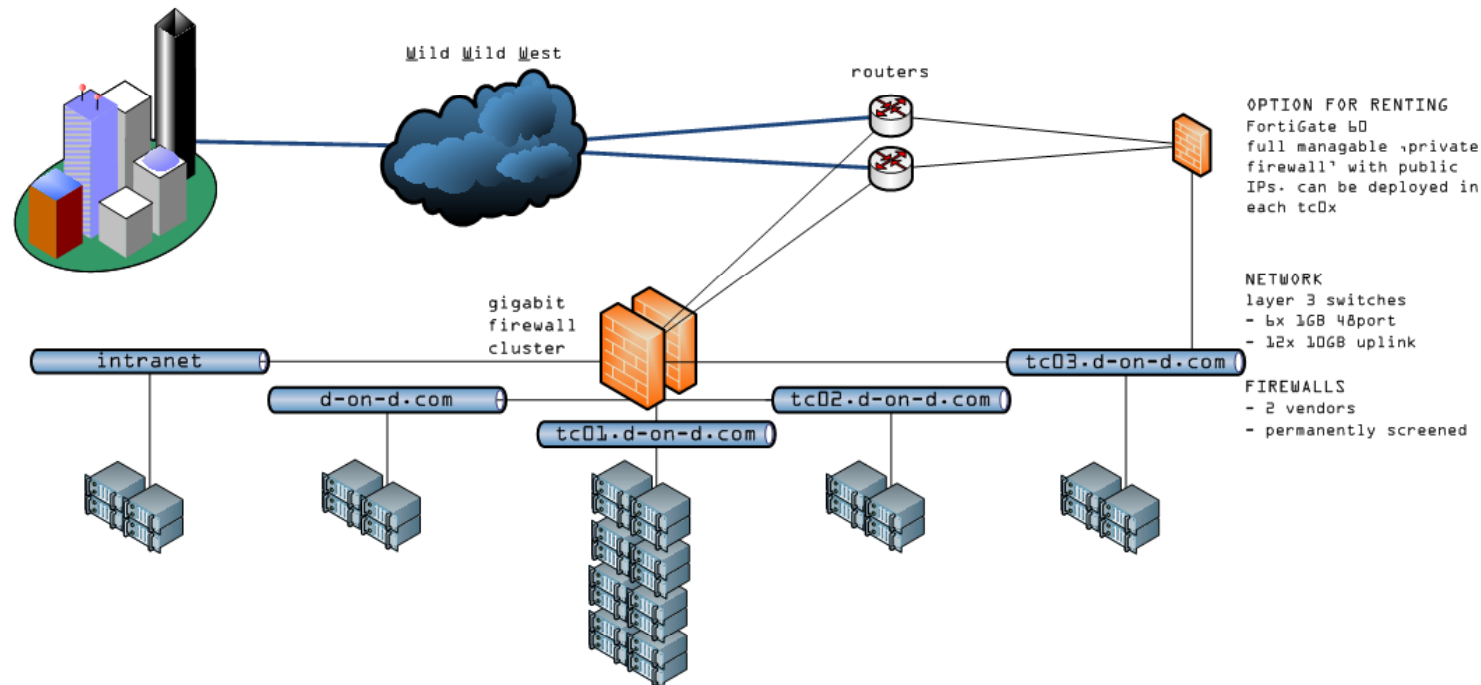
- SETUP
- NETZWERK-ELEMENTE
- vNIC & LEISTUNG (DEMO)
- TEAMING-POLICIES (DEMO)



# SETUP

## d-on-d.com - DATACENTER ON DEMAND

design & implementation by usa@kybernetika.ch



OPTION FOR RENTING  
FortiGate b0  
full managable ,private  
firewall' with public  
IPs. can be deployed in  
each tc0x

NETWORK  
layer 3 switches  
- 6x 1GB 48port  
- 12x 10GB uplink

FIREWALLS  
- 2 vendors  
- permanently screened

### INTRANET

- support servers
- office
- administration

and here is the  
master-chief



### MANAGEMENT NETWORK

central servers for all  
zones: DNS / DHCP / file-  
repository

iL0s for all servers -  
access protected by  
firewalls

### TESTCENTER 0-ONE

- 14 DL380G5
  - 2x 1.86 GHz QuadCore
  - 6x 1GB NICs
  - 4GB RAM
  - 4GB Dual HBA

- 1 DL380G4 (mgmt)
  - 2x 3GHz XEON
  - 2x 1GB NICs
  - 4GB RAM
  - 2GB HBA

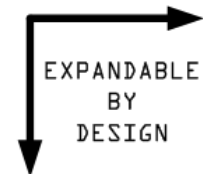
### TESTCENTER 0-TWO

- 6 DL380G5
  - 2x 2.0 GHz QuadCore
  - 6x 1GB NICs
  - 4GB RAM
  - 4GB Dual HBA

- 1 DL380G4 (mgmt)
  - 2x 3GHz XEON
  - 2x 1GB NICs
  - 4GB RAM
  - 2GB HBA

### TESTCENTER 0-THREE

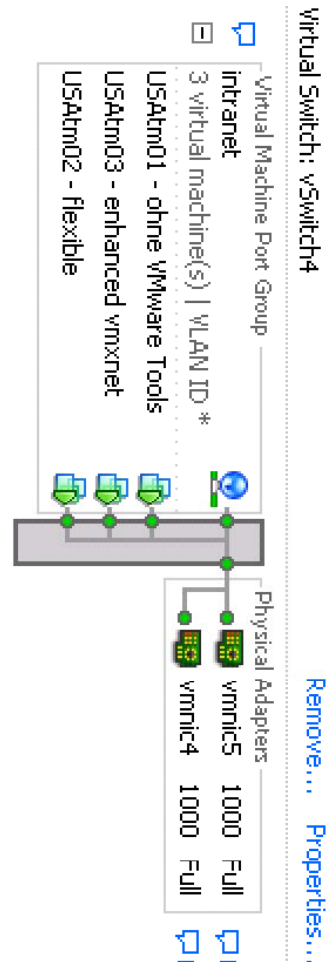
for long time rental  
hardware deployed on  
request





# NETZWERK ELEMENTE (1/2)

- vNIC
- Portgroup
- vSwitch
- pNIC





# vNIC UND LEISTUNG

- AMD PCNET Family PCI Ethernet Adapter
  - ‚flexible‘ – ohne VMware Tools
- VMware Accelerated AMD PCNet Adapter
  - ‚flexible‘ mit VMware Tools
- VMware PCI Ethernet Adapter
  - ‚enhanced vmxnet‘
- e1000
  - ‚e1000‘ – Intel Emulation



# TEAMING-POLICIES

- Teaming-Policies steuern:
  - Traffic-Distribution
  - Failover detection / response
  
- Typen:
  - Route based on the originating virtual Port ID
  - Route based on ip hash (802.3ad)
  - Route based on source MAC hash
  - Use explicit failover order