

vNS TechCon



Multisite scenarios met NSX-T

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Agenda

- Active, Passive en Disaster Recovery
- Active/Passive NSX-T
- Active/Active NSX-T
- NSX-T Federation

A vertical decorative bar on the left side of the slide. It features a dark blue background with a network diagram of yellow and gold lines and nodes. The nodes are represented by circles of various sizes and colors (yellow, gold, grey).

Active, Passive en DR

Voor- en nadelen

Voor- en nadelen

Type	Voordeel	Nadeel
Active/Active	<ul style="list-style-type: none">- Hoogste beschikbaarheid- Hoogste network throughput- Vaak volledig automatische recovery	<ul style="list-style-type: none">- Kosten- Resource efficiency- Complex- Hoge technische Eisen- Meer afhankelijkheden
Active/Passive	<ul style="list-style-type: none">- Lagere kosten- Lagere technische eisen	<ul style="list-style-type: none">- Lagere beschikbaarheid en/of bandbreedte
Disaster Recovery	<ul style="list-style-type: none">- Lagere complexiteit- Laagste kosten	<ul style="list-style-type: none">- Resource efficiency- Langzame oplostijd- Handmatige recovery

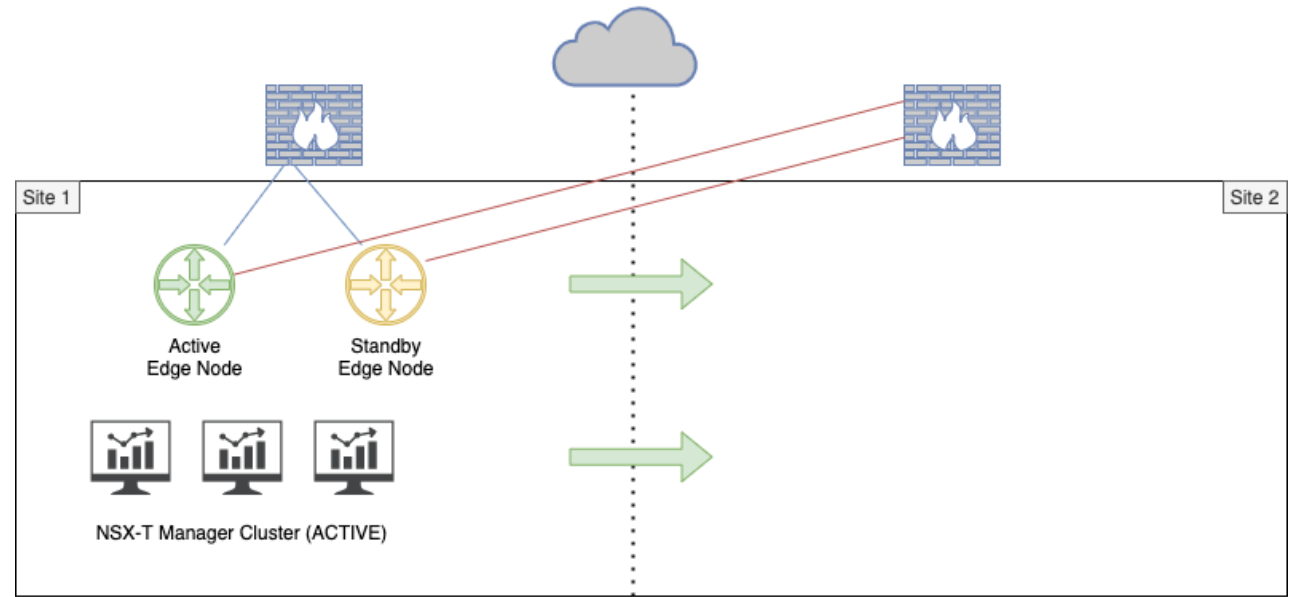


Active/Passive NSX-T

Active/Passive NSX-T op Stretched Dual DC Topologie

Active/Standby Routing

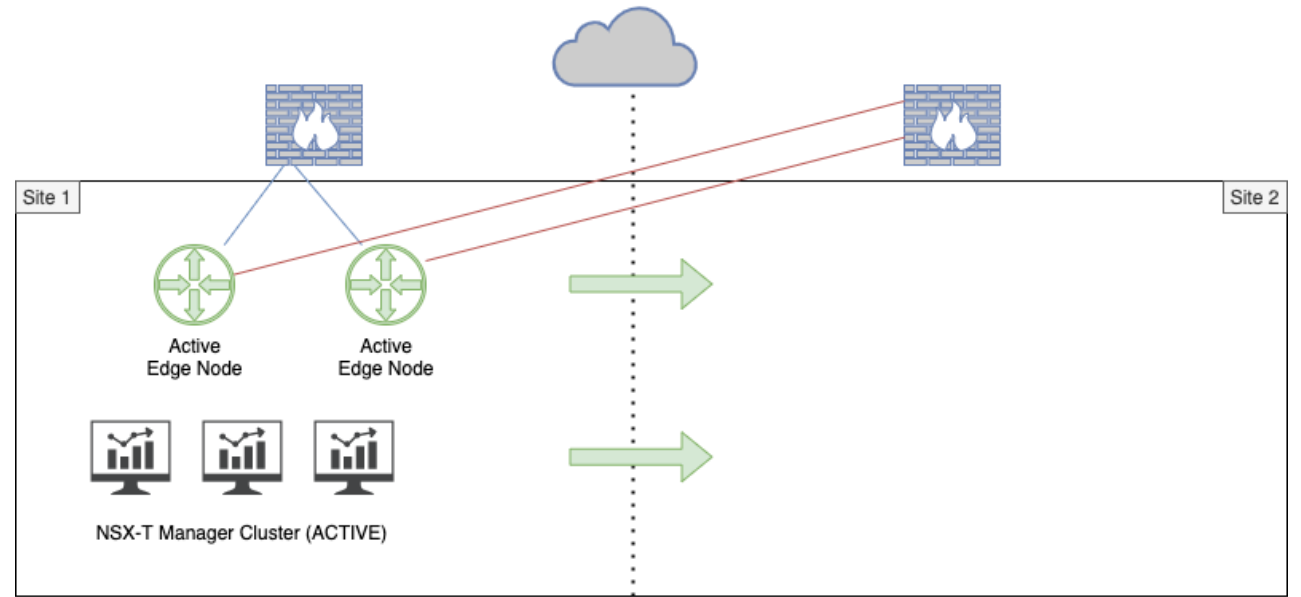
- VCF Deployment (Stretched)
- vSphere HA
- Automatic Recovery
- NSX-T TO ECMP
- NSX-T T1 as Service Router



*Traffic via Site 1

Active/Active Routing

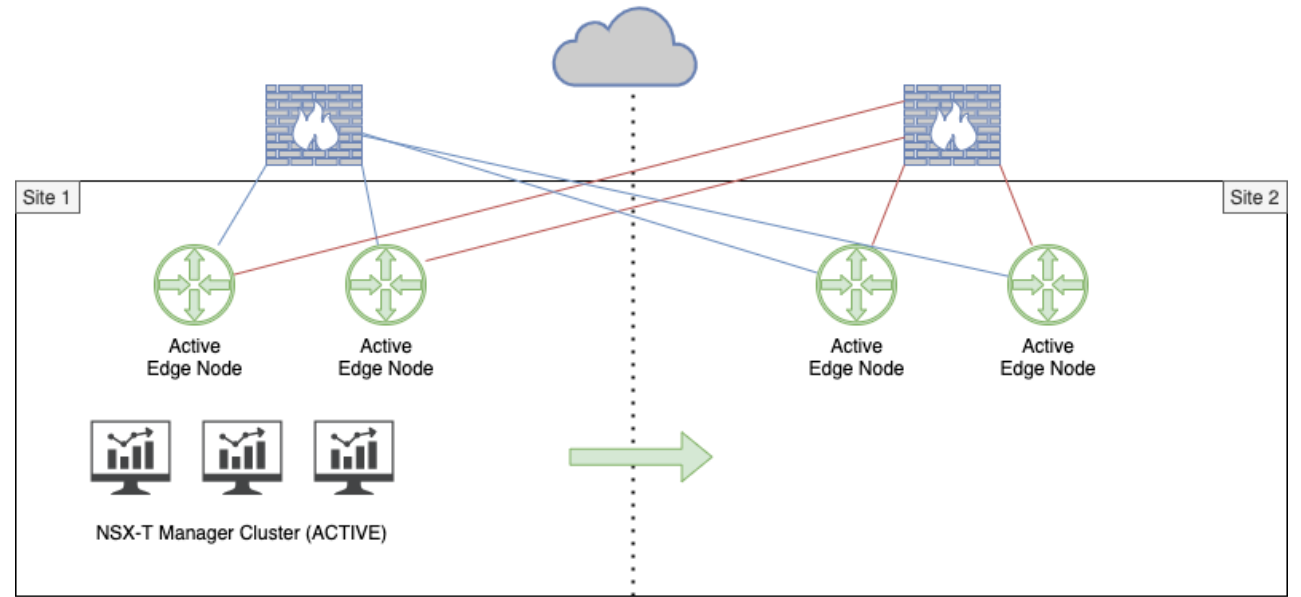
- vSphere HA
- Automatic Recovery
- NSX-T TO ECMP
- NSX-T T1 router fully distributed



*Traffic via Site 1

Active/Active Routing in Site 1 en Site 2

- DRS Affinity Rules
- Automatic Recovery
- NSX-T TO ECMP
- NSX-T T1 router fully distributed
- Geen verstoring voor 'lokale' VMs



*Traffic via Site 1 en Site 2 (tot de T0 router)

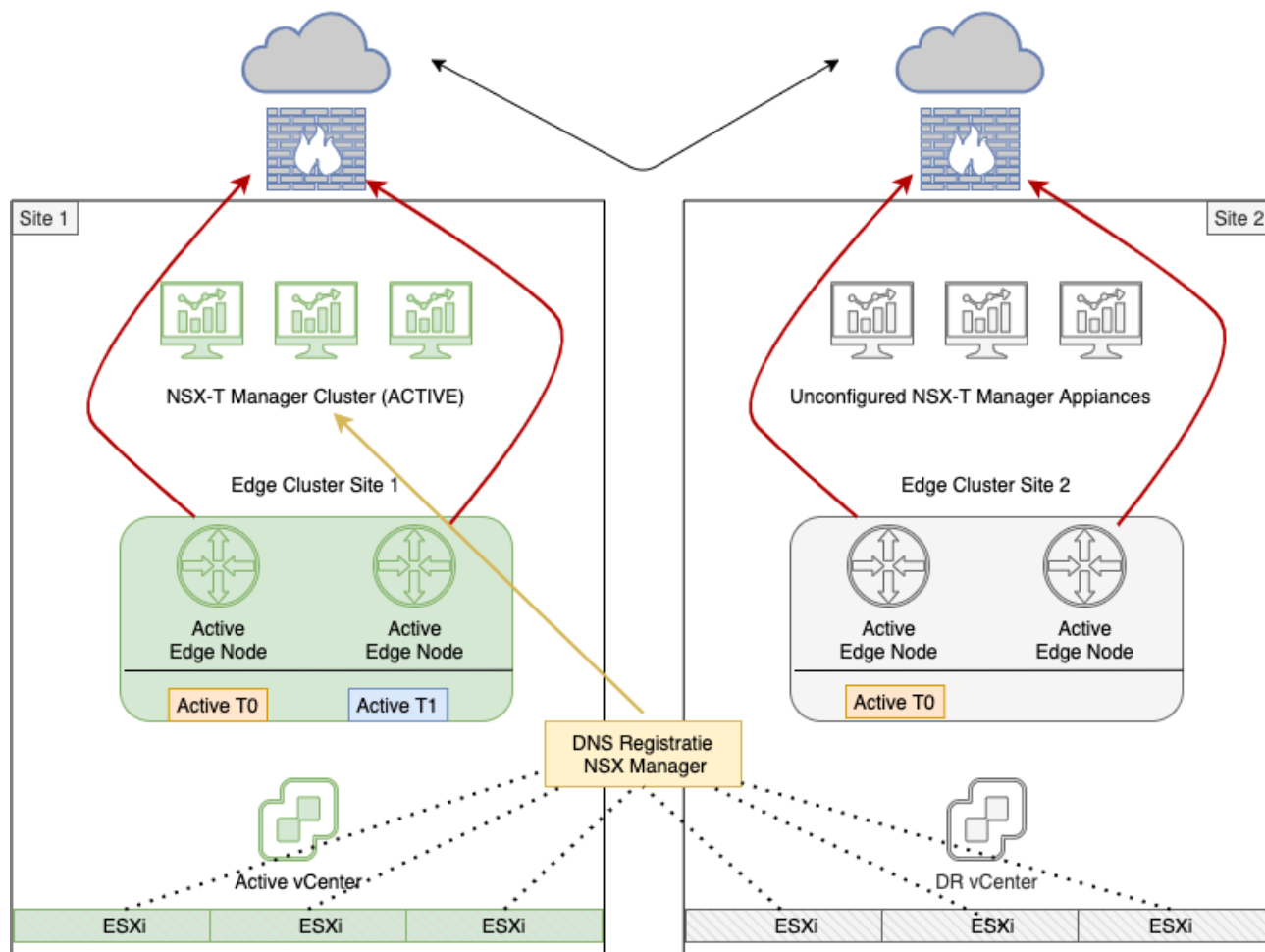


Active/Standby NSX-T

Active/Standby met Disaster Recovery

Active/Standby NSX-T met DR

- Geen L2 stretched tussen DCs
- Latency meer dan 10ms
- Continuous Backup
- DNS registratie
- VM recovery tooling



Recovery Steps

1. Verander NSX-T Manager nodes DNS Naam
2. Restore NSX-T vanuit backup in Site 2
3. Handmatig: Connect alle T1 routers naar de T0 router in Site 2 (op edge cluster 2)
4. Restore Virtual Machines

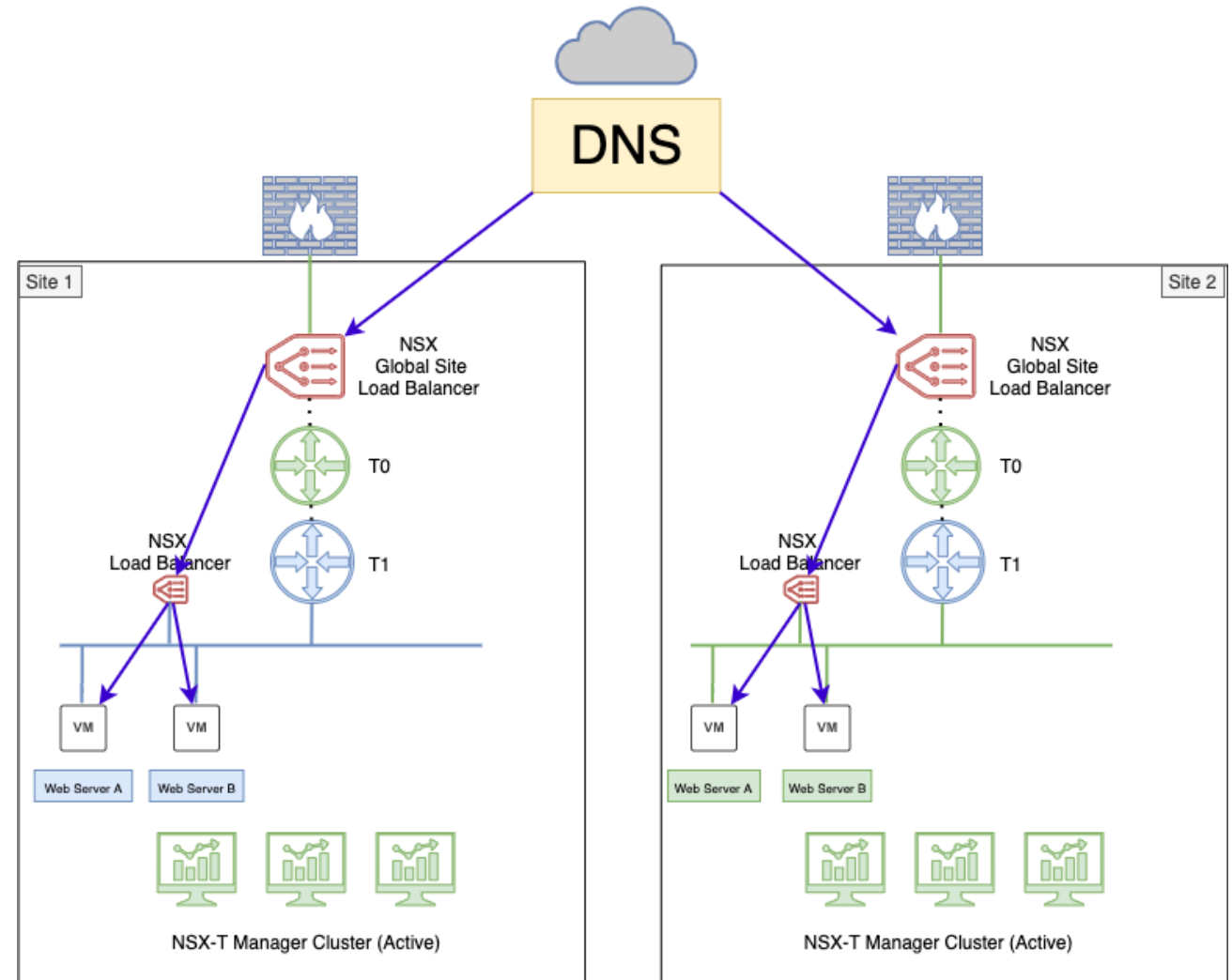


Active/Active NSX-T

Active/Active with the NSX Advanced Load Balancer

Active/Active Topologie met de NSX Advanced Load Balancer (AVI Networks)

- Hogere beschikbaarheid
- Geo-based Load Balancing
- Disaster Avoidance
- Netwerkonafhankelijk
- Cloud integratie



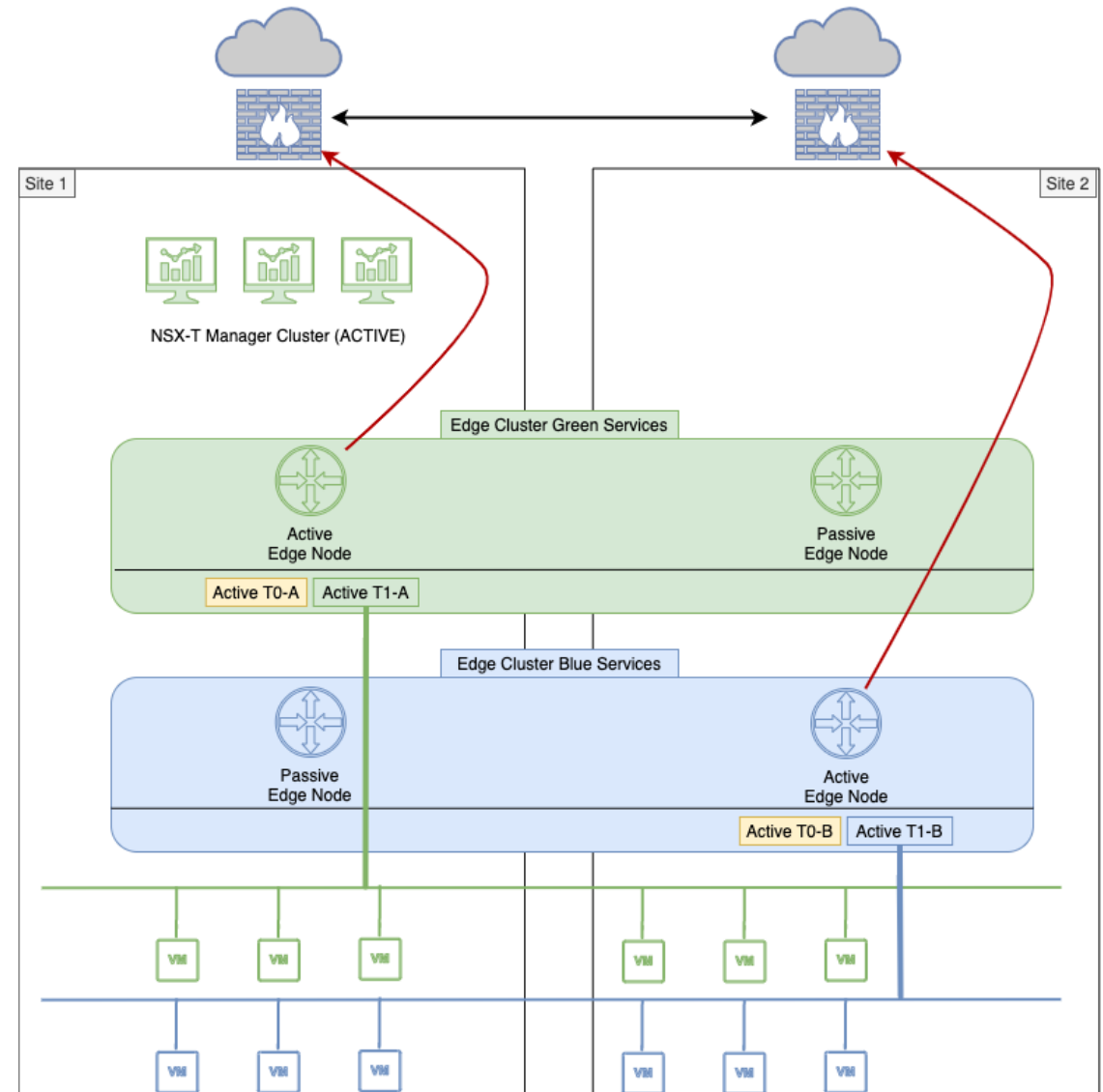


Active/Active NSX-T

Active/Active Routing met Active/Standby Tier-0 en Tier-1 Routers

Active/Active Routing met A/S Edges

- NSX (L2) netwerken beschikbaar in beide datacenters
- Actieve traffic flow voor groen via Site 1
- Actieve traffic flow voor blauw via Site 2
- Management/Control Plane restore via vSphere HA of NSX-T Restore





NSX-T Federation

Concept

Active/Standby

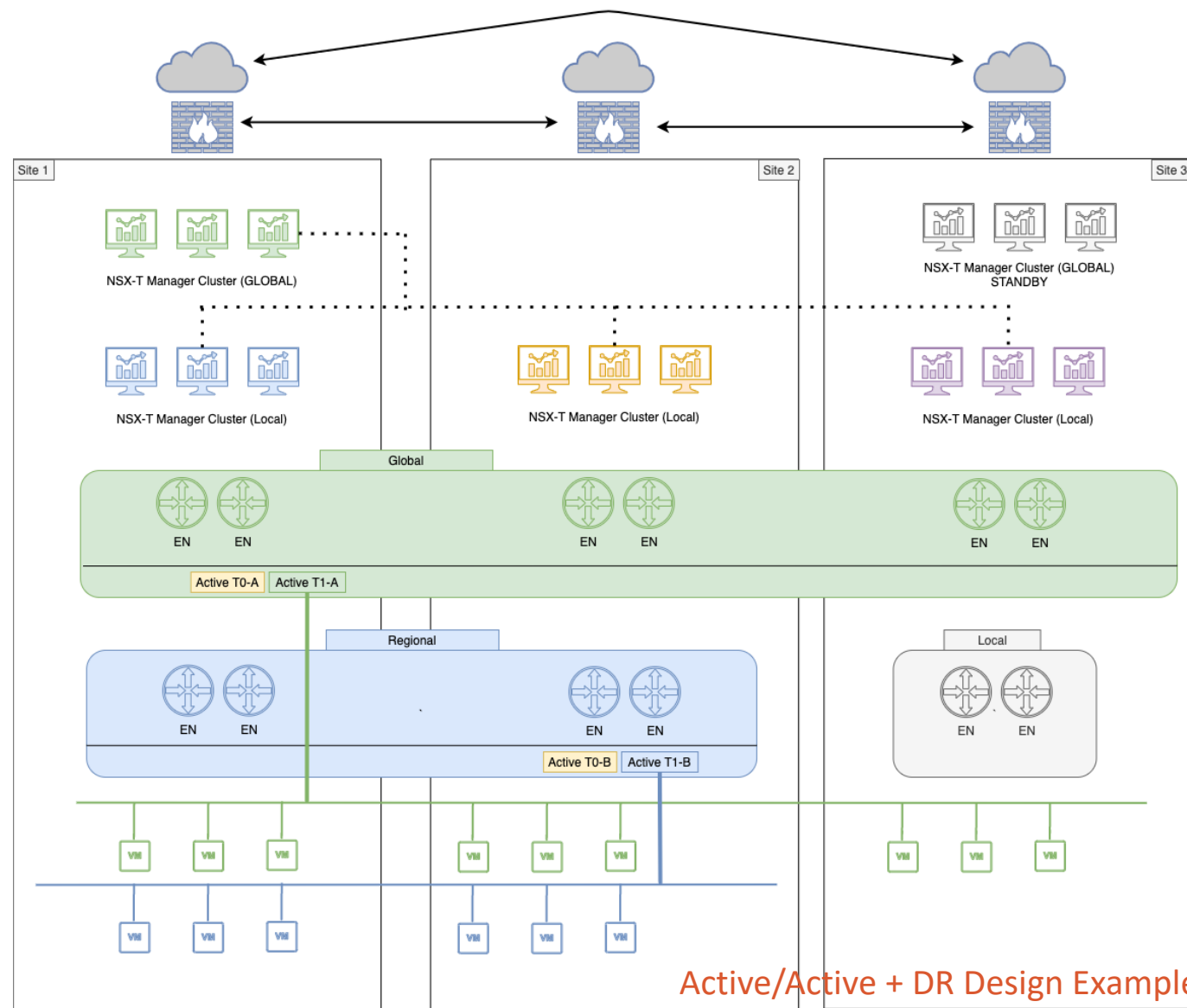
Active/Active (local egress)

NSX-T Federation

- NSX-T 3.0.0
- Greenfield deployment
- Geen productie
- Consistente security configuratie in al je datacenters
- Globaal netwerk beheer

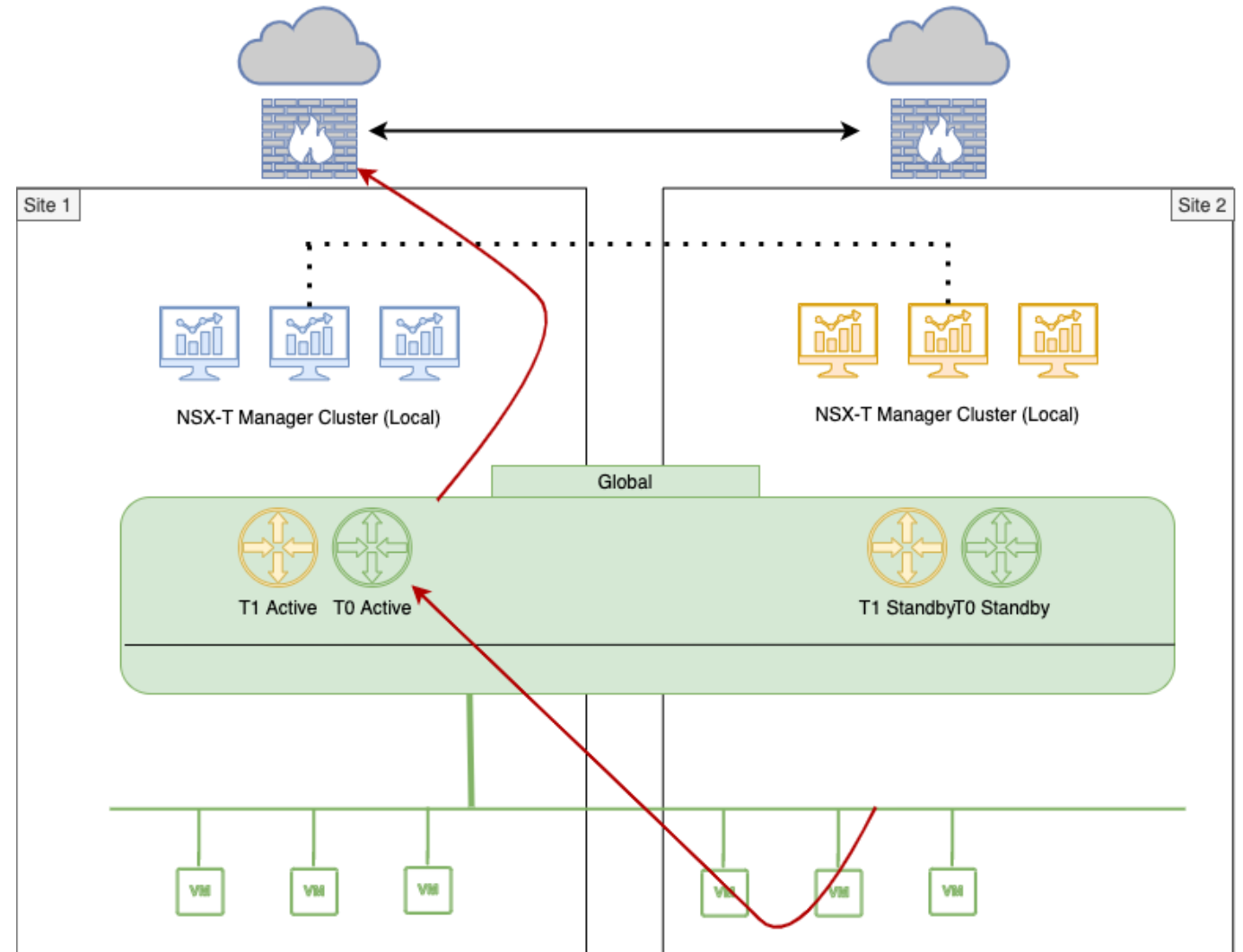
Concept – NSX-T Federation

- Meerdere datacenters/sites (huidig 4)
- Global Manager (clustered)
- Standby Global Manager (clustered)
- Local Managers
- Regions
- Global vs. Custom Regions
- Groups, Policies + Locations



Active/Standby – NSX-T Federation

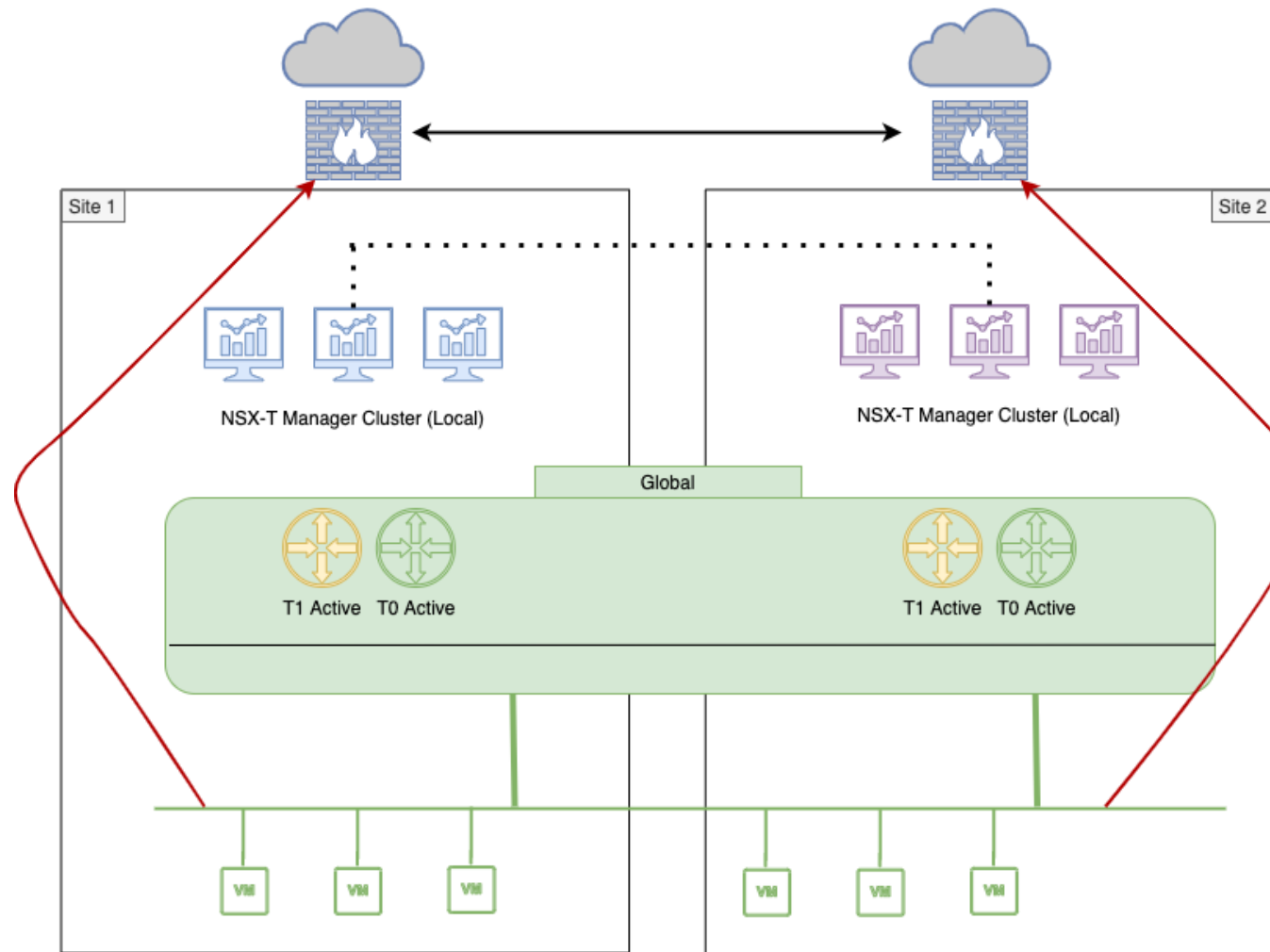
- Primair DC – Site 1
- Gedeelde compute resources
- 2 Edge Node Clusters
- One click / API call recovery



Active/Standby DR Design Example

Active/Active – NSX-T Federation

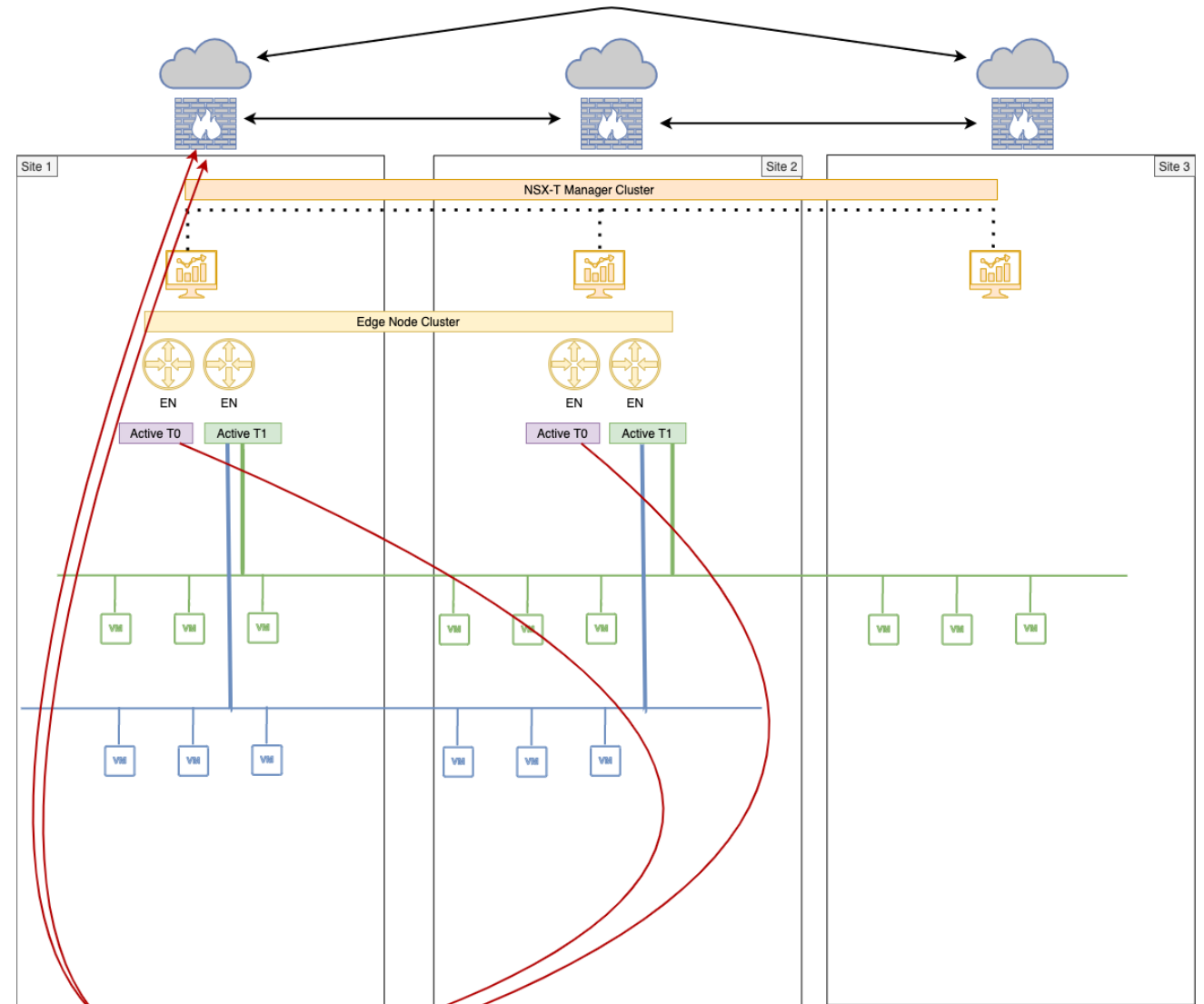
- T0/T1 Active in beide datacenters
- Netwerk verkeer naar buiten via lokaal DC (local egress)
- Uitdaging: Asymmetrische routering



Active/Active Design Example

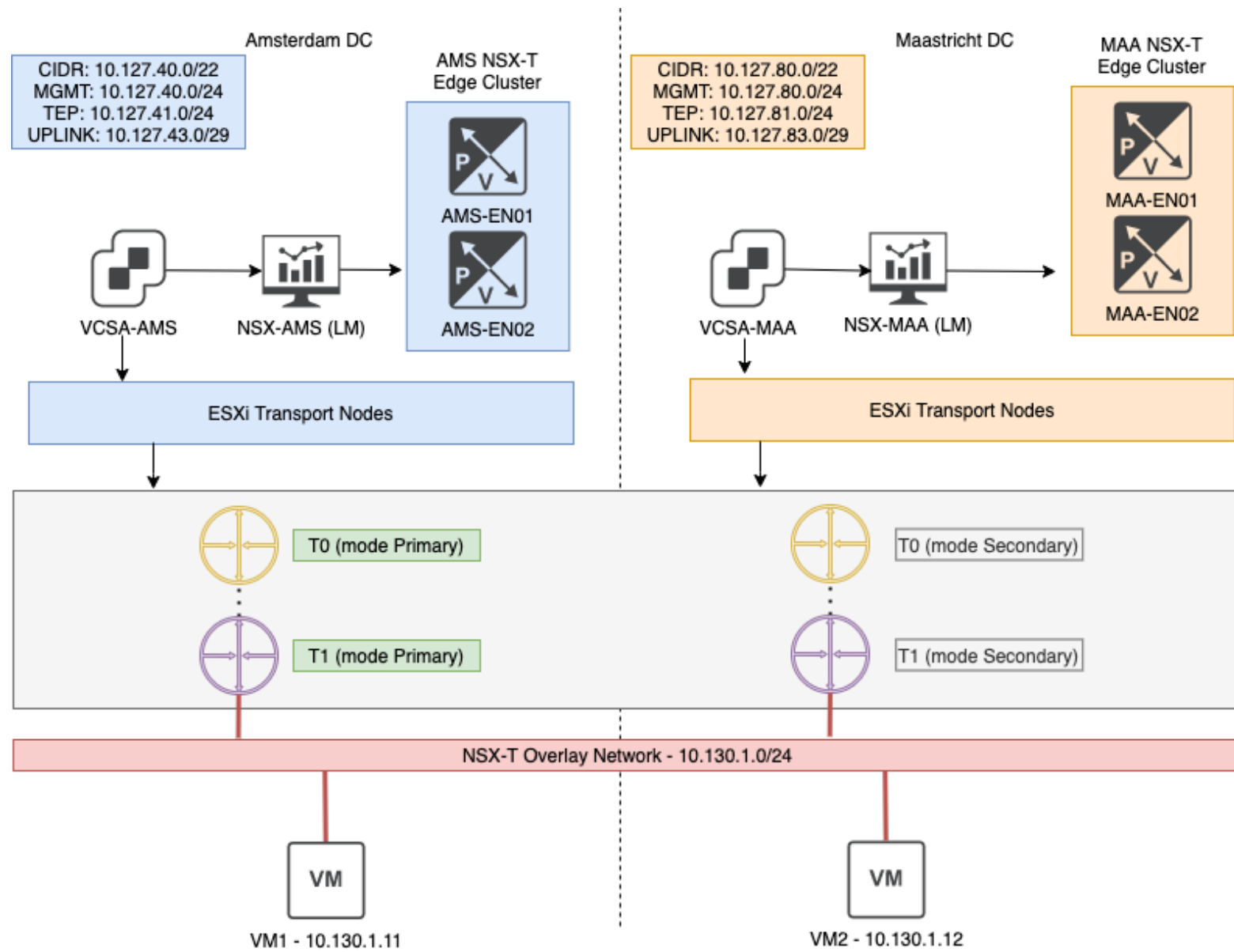
3 sites? Maar geen NSX-T Federation

- 3 sites (GEEN NSX-T Federation)
- 1 NSX-T Manager per site
- Routing actief via Site1 of Site2
- Active/Active + DR



Vragen?

Demo NSX-T Federation



Demovideo

GO!!!