

High Availability



Richard Hicks

Richard M. Hicks Consulting, Inc.

@richardhicks www.richardhicks.com



Overview



High Availability

Overview

- Redundancy
- Capacity
- NPS
- VPN



NPS High Availability



NPS High Availability

Add NPS Server(s)

Install role and
certificate

Export NPS Policy

UI or PowerShell

Import NPS Policy

UI or PowerShell

Configure VPN Server

Update server
configuration

Configure VPN Clients

Update client
configuration



Demo



Configure NPS high availability



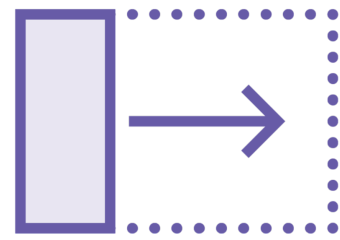
VPN High Availability



VPN High Availability



Deploy additional server(s)



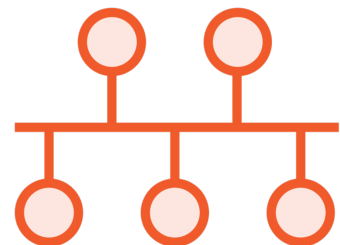
Export existing VPN configuration



Import VPN configuration



Perform additional configuration



Enable load balancing



NLB vs. ELB

NLB

Included in Windows

No additional cost

No additional software/hardware

Limited functionality

Broadcast-based

External Load Balancer

Third-party

Additional cost

Physical or virtual appliance

Advanced functionality

Layer 3-7



External load balancer is highly recommended.



Demo



Configure VPN high availability



Server Configuration

Windows Version
Match across servers

Domain Join
Same domain

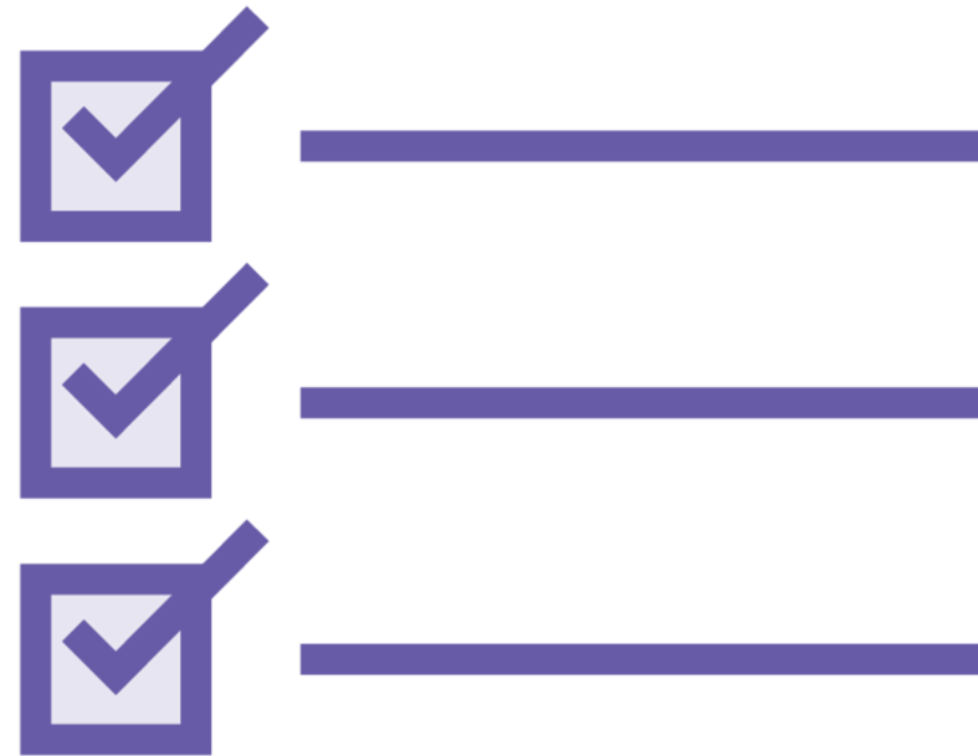
Network Interfaces
Identical names



Windows Network Load Balancing

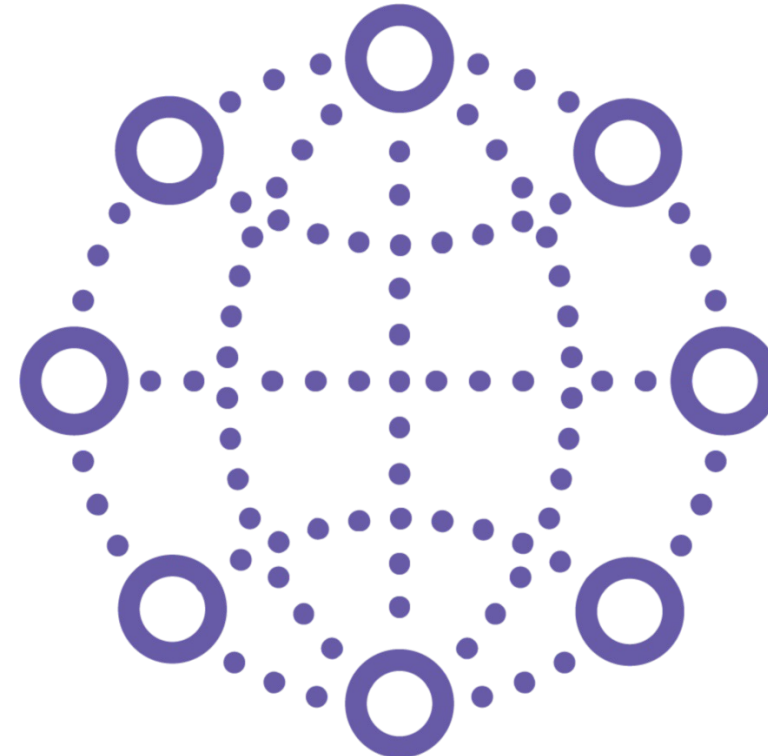


NLB Requirements



NLB role

**Installed on all VPN
servers prior to
configuration**



Virtual IP address

**Same subnet as
dedicated IP**



Operating mode

Unicast or multicast

Demo



Enable Windows Network Load Balancing



Summary



High Availability

Summary

- Expand VPN and NPS infrastructure
- Eliminate single points of failure
- Increase capacity
- Recommend ELB



Up Next:
Monitoring and Reporting

