Connecting Remote Sites Using Cisco DMVPN with EIGRP

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Agenda

Why DMVPN?

WAN preparation

DMVPN phases 1, 2, and 3

DMVPN at a High Level
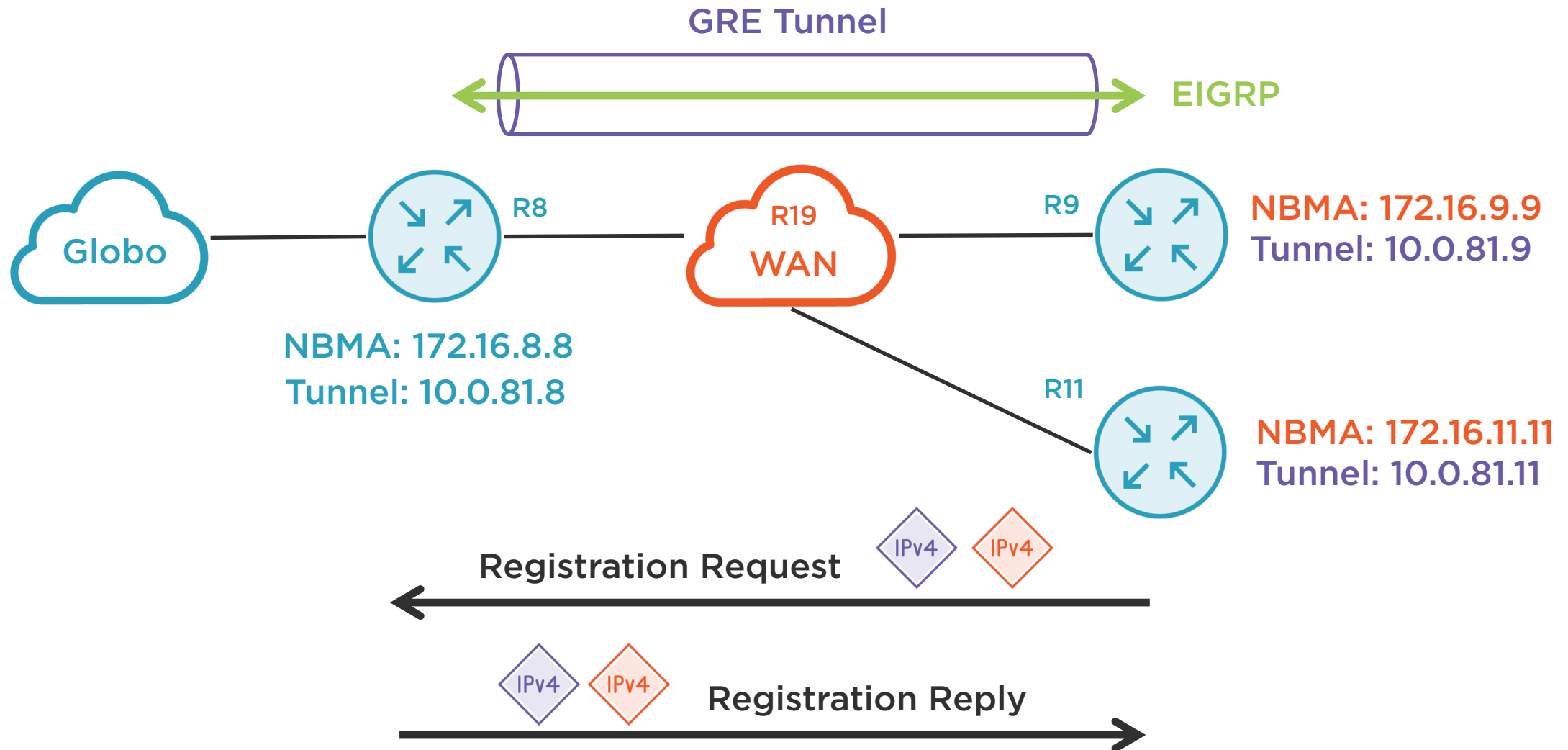
Next-hop Resolution Protocol (NHRP)

Generic Routing Encapsulation (GRE)

Dynamic spoke-to-hub registration
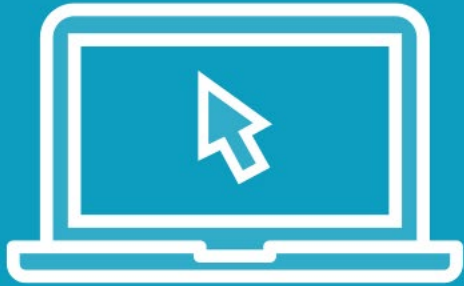
DMVPN Phase 1 – A Good Start

Demo

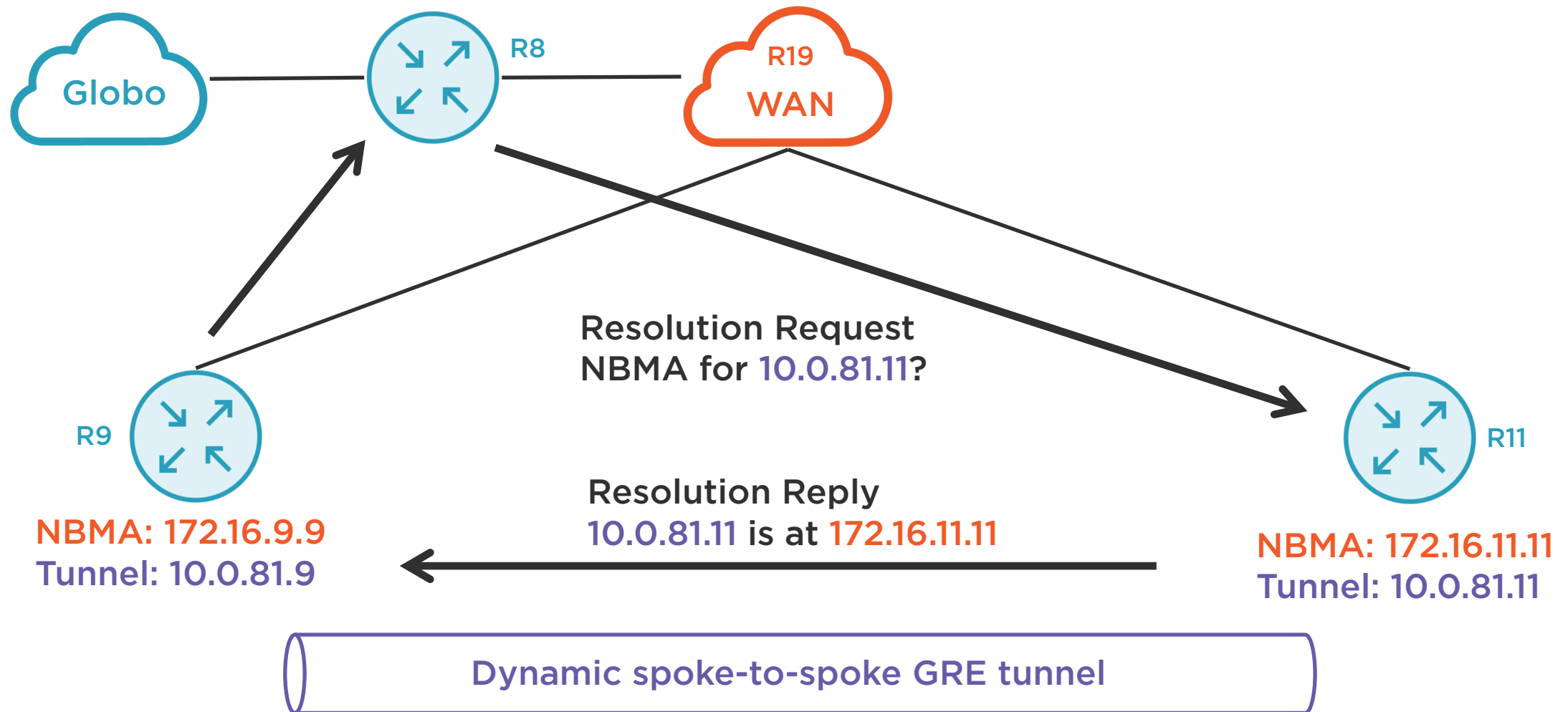**WAN preparation with VRF-lite and ACLs**

Demo

DMVPN phase 1

Demo

EIGRP route filtering use case

DMVPN Phase 2 – Better Traffic Flow

Globo — R8

R19
WAN

R9

R11

Resolution Request
NBMA for 10.0.81.11?

Resolution Reply
10.0.81.11 is at 172.16.11.11

NBMA: 172.16.9.9
Tunnel: 10.0.81.9

NBMA: 172.16.11.11
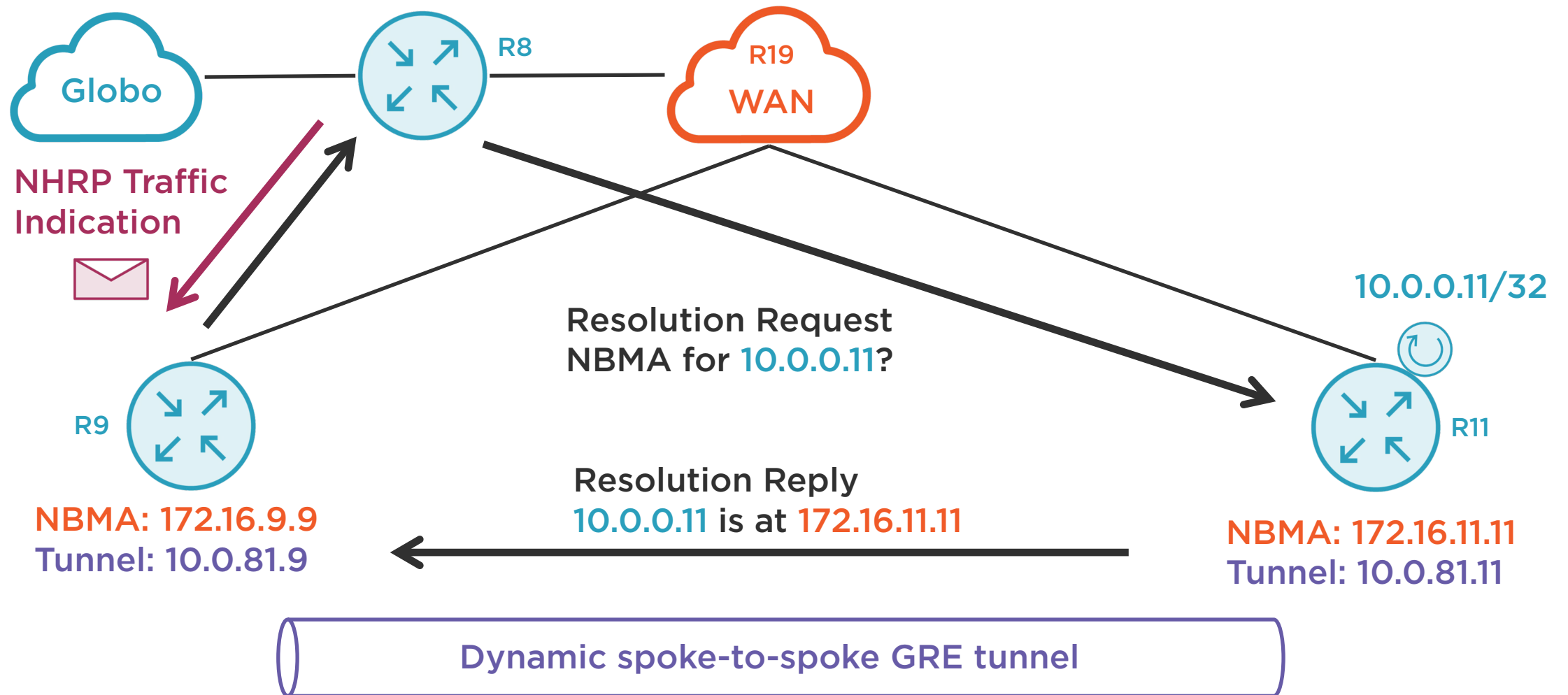**Tunnel: 10.0.81.11**

Dynamic spoke-to-spoke GRE tunnel

Demo

DMVPN phase 2

DMVPN Phase 3 – Hub Redirection

Demo

DMVPN phase 3

Summary

VRF-lite + ACL = smart for most WANs

DMVPN phases:
- Phase 1: Dynamic reg. + hub/spoke
- Phase 2: Spoke/spoke, full view
- Phase 3: Spoke/spoke, summarizable