



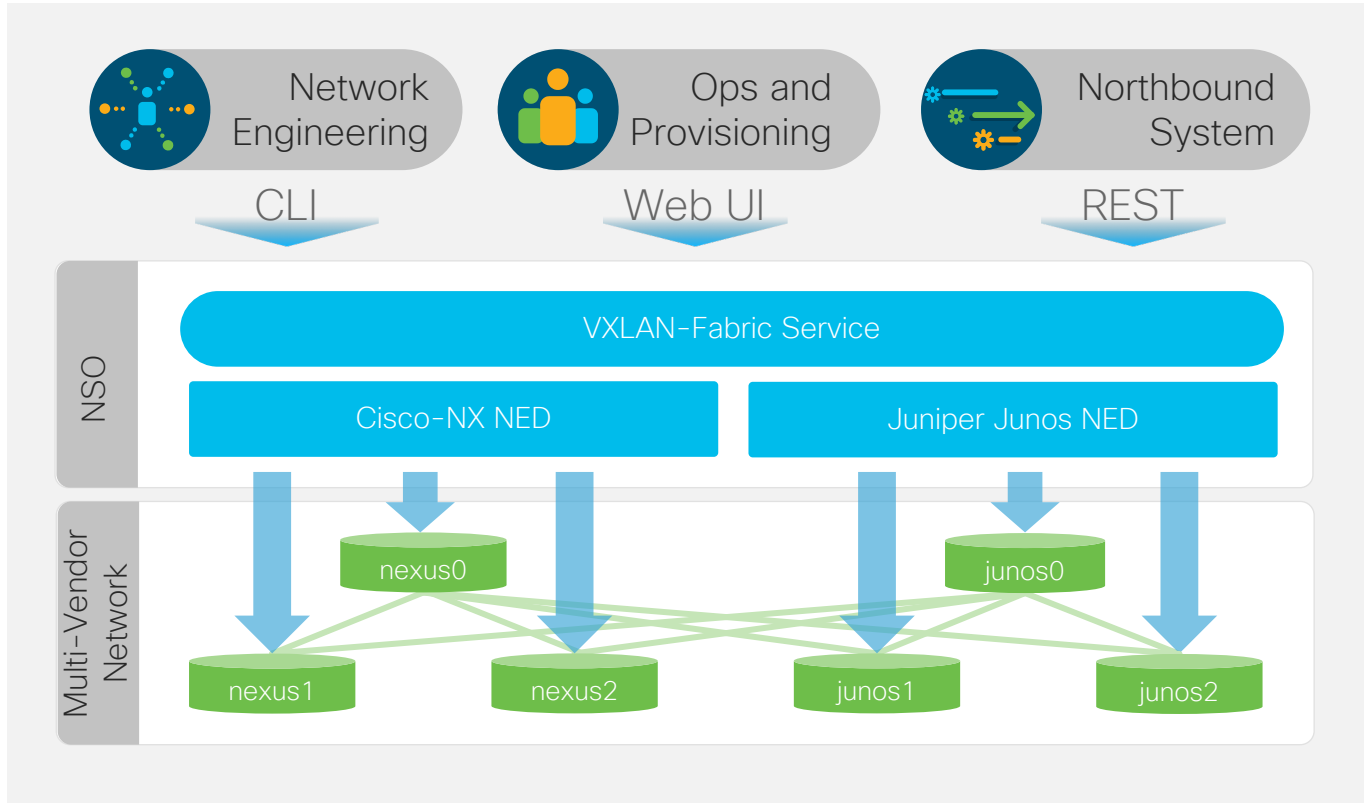
FastMap Templates

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Demo Use Case

- Multi-Vendor Data-Centre VXLAN Fabric Service
 - Cisco Nexus and Juniper Junos switches
 - Spine and leaf configuration
 - Interface IP address
 - BGP neighbours
 - Protocol Independent Multicast sparse mode
- NSO template-only service (no code)
- Create / update / migrate / repair and delete all supported
- Tenant EVPN VXLAN service can be added later

NSO Multi-Vendor VXLAN Fabric Service



Templates Overview



NSO Overview



Network
Engineering



Ops and
Provisioning



Service
Developers

Network Services
Orchestrator (NSO)

Service Manager

Device Manager

CDB

Package
Manager

Device Abstraction

NED

NED

NED

ESC (VNFM)

VNF Lifecycle
Manager

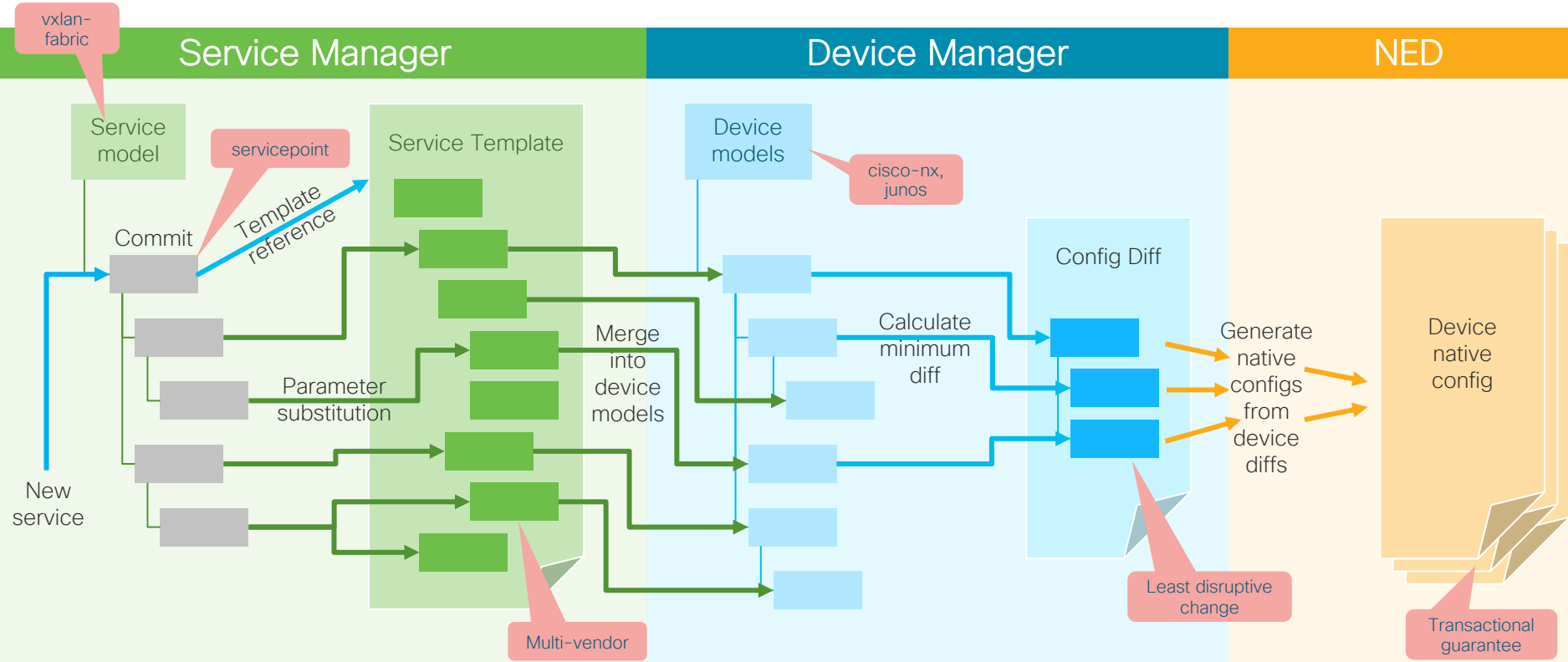
VNF Service
Monitoring



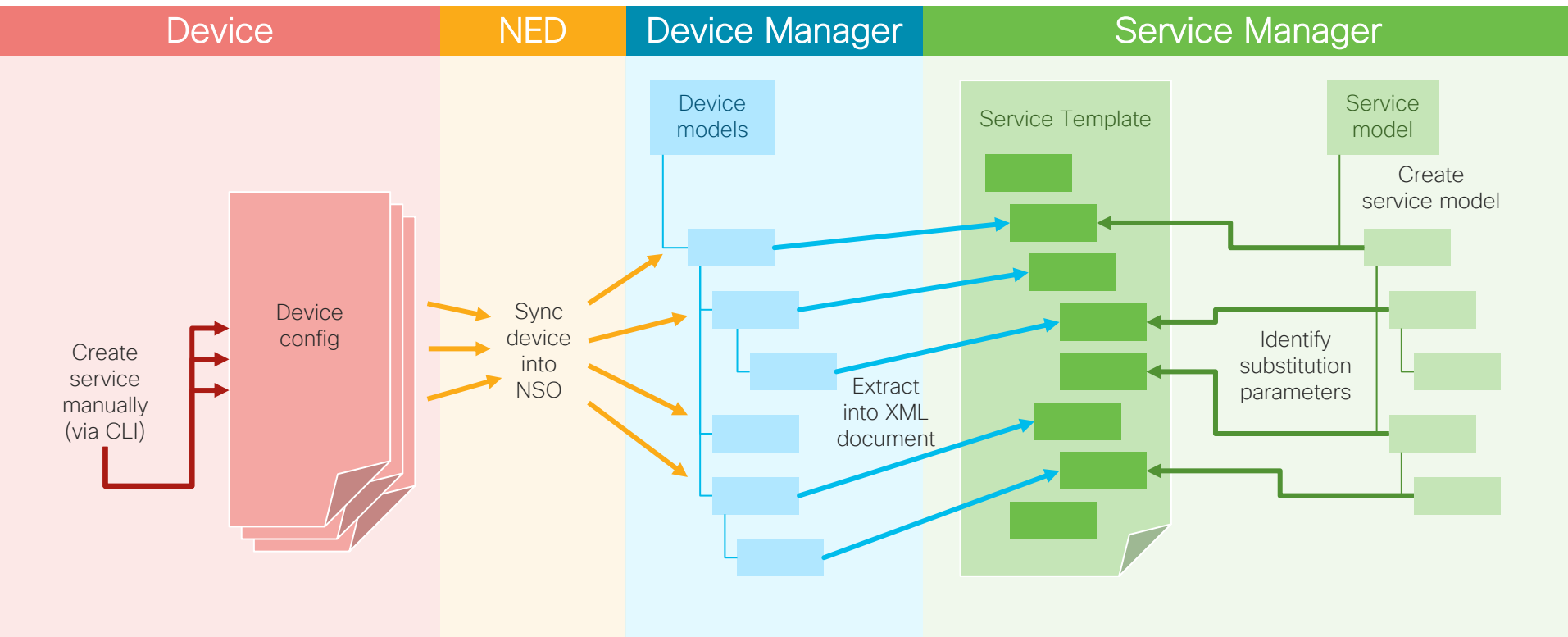
Multi-domain Networks

- Model-driven, end-to-end service lifecycle and customer experience focused
- Seamless integration with existing and future OSS/BSS environment
- Loosely-coupled and modular architecture leveraging open APIs and standard protocols
- Orchestration across multi-domain and multi-layer for network-wide, centralized policy and services

Using Service Templates



Creating Service Templates



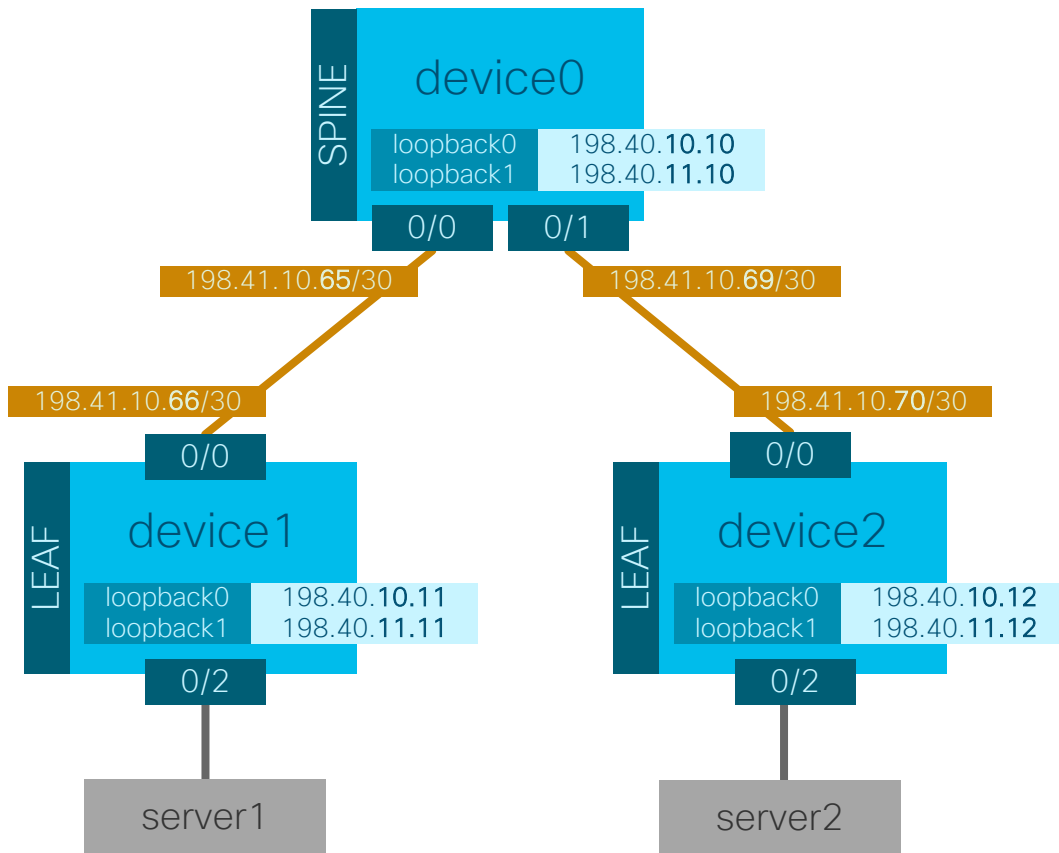
Template Features

- XPath 1.0 expressions
- YANG extensions
 - deref(), re-match(), derived-from()
- Processing Instructions
 - Conditions, loops, variables, context switching
- Tags
 - merge, replace, create, ncreate, delete
- Ordered list handing
 - Insert, guard

Demo

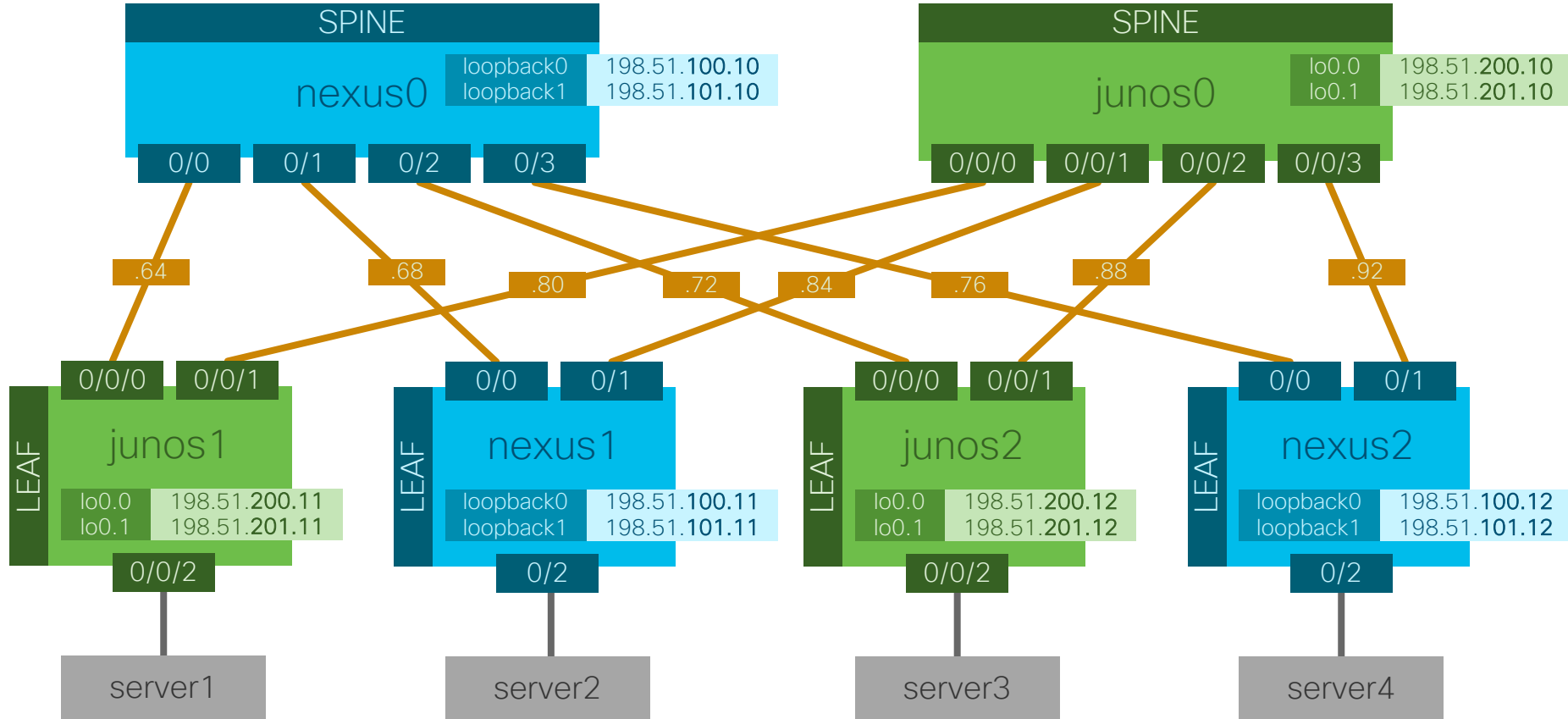


Existing Data-Centre Topology



New Data-Centre Topology

Connection IP Networks 198.51.10.xx/30



Service Model

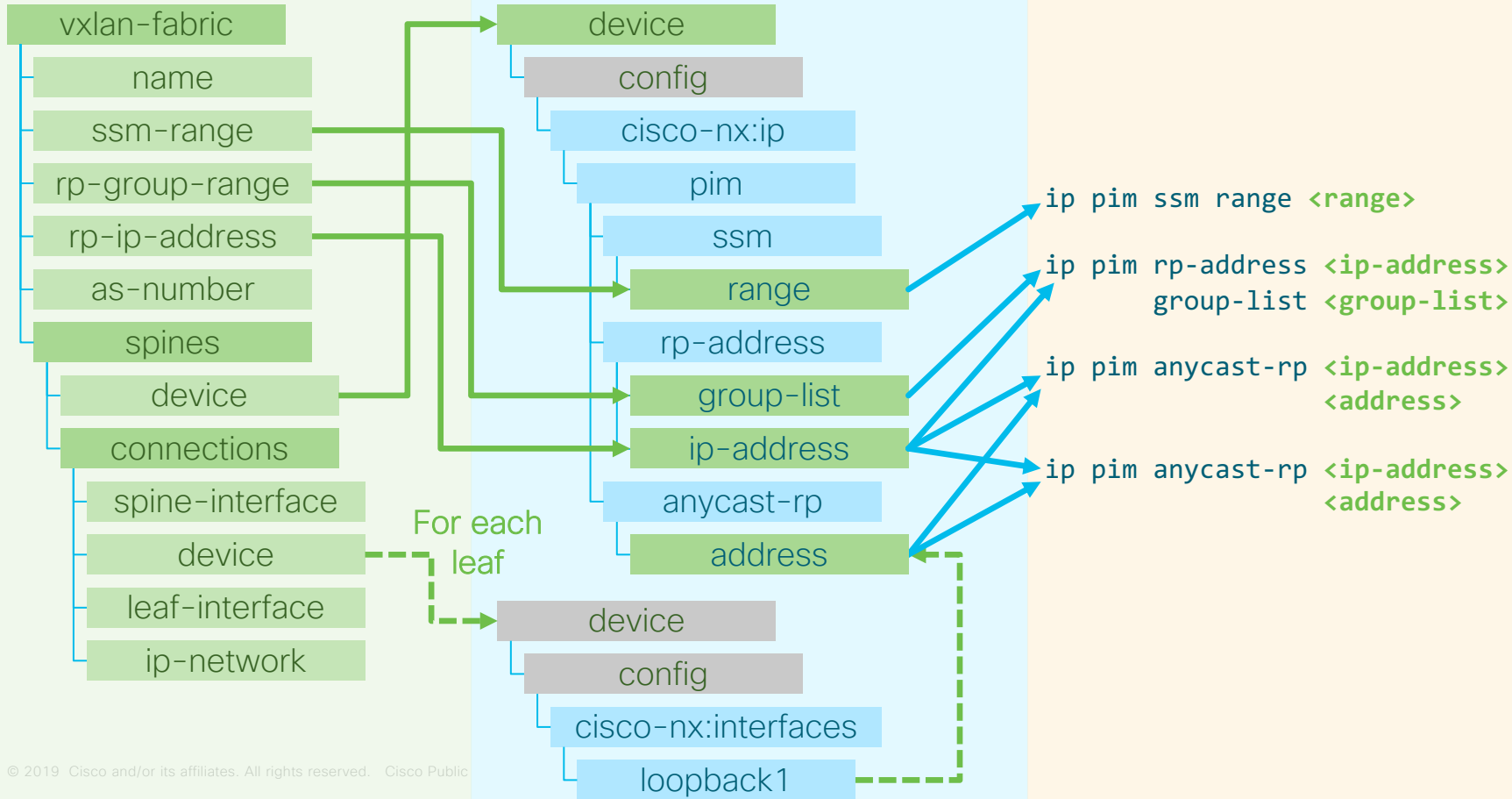
FastMap

Device Model

NED

Native

Device



Service Model

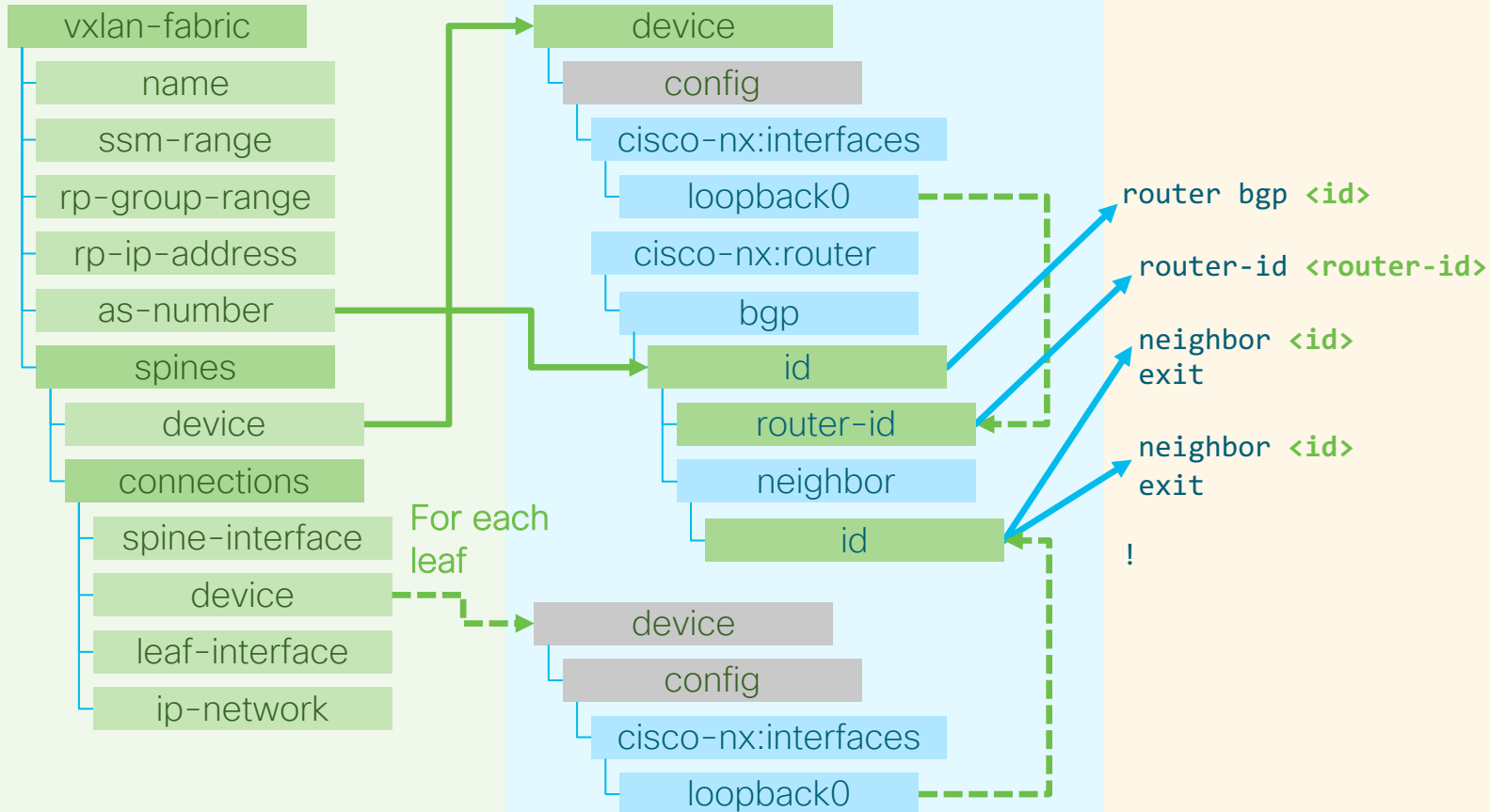
FastMap

Device Model

NED

Native

Device



Service Model

FastMap

Device Model

NED

Native

Device

