# Configuration et vérification de DHCP dans un fabric VxLAN pour Nexus 9000 avec NX-OS et Windows Server 2022

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	Requête sur LEAF-2-vPC		
	Requête reçue sur le serveur DHCP		
	Envoi ACK par le serveur DHCP		
	ACK sur LEAF-2-vPC		
	ACK sur SPINE		
	ACK sur LEAF-1		
	ACK sur HOST-1		
Informations connexes			
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# Introduction

Ce document décrit comment configurer et dépanner DHCP dans un fabric VxLAN avec des commutateurs Nexus 9000.

# Conditions préalables

### Exigences

Cisco vous recommande de prendre connaissance des rubriques suivantes :

- Logiciel Nexus NX-OS.
- Virtual Port Channel (vPC).
- VxLAN BGP L2VPN EVPN
- BGP address-family IPv4
- OSPF
- PIM multidiffusion (mode intermédiaire)
- DHCP

### Composants utilisés

Les informations contenues dans ce document sont basées sur les versions de matériel et de logiciel suivantes :

- Cisco Nexus 9000 avec Cisco NX-OS.
  - N9K-C93180YC-EX
  - N9K-C93180YC-FX
  - NX-OS 10.3(4a)
- Centre de données Windows Server 2022

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. Si votre réseau est en ligne, assurez-vous de bien comprendre l'incidence possible des commandes.



Remarque : toute question relative à la configuration et à l'intégrabilité de logiciels ou de matériels tiers n'est pas prise en charge par Cisco. L'utilisation d'outils tiers est le meilleur moyen de démontrer votre configuration et votre fonctionnement avec les équipements Cisco au client.

# Informations générales

Configuration de sous-couche et de superposition pour VxLAN en laboratoire



Schéma de fabric VxLAN en laboratoire

- COLONNE VERTÉBRALE :
  - Ce commutateur Nexus envoie des paquets DHCP (Discover, Offer, Request, Ack) sans être décapsulé dans ce scénario. Seul l'en-tête externe est utilisé.
  - Sert de points de routage centraux dans la structure du réseau.
  - Responsable de l'interconnexion de tous les commutateurs LEAF et de la facilitation du flux de données entre eux.
  - Participe au protocole BGP pour distribuer des routes EVPN aux commutateurs LEAF.
  - Effectue le routage IP et peut acheminer le trafic entre différents sous-réseaux ou segments VxLAN en examinant les en-têtes IP externes.
  - Sépare le réseau de superposition (VxLAN) du réseau physique sous-jacent.
  - Gère le sous-réseau avec les protocoles de routage IP traditionnels, tandis que le sous-réseau est géré par VxLAN avec BGP EVPN, fournissant une architecture réseau évolutive et flexible.
- LEAF-1 :
  - Les commutateurs LEAF fournissent une connectivité physique pour les terminaux tels que les serveurs, les périphériques de stockage et d'autres appareils réseau.
  - Les commutateurs LEAF agissent comme des VTEP, ce qui signifie qu'ils encapsulent et désencapsulent les paquets VxLAN.
  - Dans ce scénario, HOST#1 effectue la requête d'adresse IP.
  - LEAF-1 est responsable de l'encapsulation des paquets DHCP dans l'en-tête VxLAN.
  - L'HÔTE 1 reçoit des paquets DHCP de manière transparente en tant qu'Ethernet classique.
- LEAF-1-vPC et LEAF-2-vPC :
  - Les commutateurs LEAF participent au plan de contrôle EVPN en exécutant le protocole BGP et en échangeant des informations de route. Cela permet la distribution

des informations d'adresses MAC et IP, garantissant que le trafic peut être acheminé efficacement à travers le fabric VxLAN.

- Dans ce scénario, le serveur DHCP est associé au VLAN 10 avec le VNI 101010, tout comme l'HÔTE 1. Cela signifie qu'il s'agit uniquement du pontage VxLAN.
- Si le serveur DHCP était associé à un VNI autre que l'hôte 1, un L3VNI serait strictement nécessaire pour le routage. Le VNI source et de destination doit être créé.
- Le serveur DCHP reçoit des paquets DCHP de manière transparente en tant qu'Ethernet classique.
- Le trafic du module BUM est reçu par les deux commutateurs Nexus dans vPC, mais seul le commutateur Nexus principal opérationnel dans vPC envoie le trafic. Le commutateur Nexus secondaire abandonne le trafic. Dans ce scénario, LEAF-1-vPC est le principal système opérationnel.
- L'utilisation d'infra-VLAN est obligatoire, car si l'interface de LEAF-2-vPC vers SPINE tombe en panne, les paquets DHCP ne peuvent pas être envoyés. Pour envoyer du trafic encapsulé par VxLAN à LEAF-1-vPC, ce VLAN de sauvegarde est requis. De cette façon, LEAF-1-vPC pouvait envoyer des paquets DCHP à SPINE.
- N9K-ACCESS :
  - Ce commutateur Nexus fournit uniquement la connectivité aux deux leafs à l'aide d'un port-channel vPC à des fins de redondance vers HOST#2

### DOS

```
nv overlay evpn
feature ospf
feature bgp
feature pim
feature netconf
feature nv overlav
ip pim rp-address 192.168.11.11 group-list 224.10.10.0/24
ip pim ssm range 232.0.0/8
ip pim anycast-rp 192.168.11.11 192.168.0.11
ip prefix-list direct_routes seq 5 permit 10.104.11.0/30 le 32
route-map redistribution permit 10
 match ip address prefix-list direct_routes
interface Ethernet1/1
 speed 1000
 ip address 10.104.11.1/30
 ip ospf network point-to-point
 ip router ospf 1 area 0.0.0.0
 ip pim sparse-mode
 no shutdown
interface Ethernet1/2
 ip address 10.102.11.1/30
 ip ospf network point-to-point
 ip router ospf 1 area 0.0.0.0
 ip pim sparse-mode
 no shutdown
```

```
interface Ethernet1/3
 speed 1000
 ip address 10.103.11.1/30
 ip ospf network point-to-point
 ip router ospf 1 area 0.0.0.0
 ip pim sparse-mode
 no shutdown
interface loopback0
 description ANYCAST-RP
 ip address 192.168.0.11/32
 ip router ospf 1 area 0.0.0.0
 ip pim sparse-mode
interface loopback1
 description ANYCAST-RP-CANDIDATE
 ip address 192.168.11.11/32
 ip router ospf 1 area 0.0.0.0
 ip pim sparse-mode
router ospf 1
router bgp 65000
 neighbor 192.168.3.3
    remote-as 65000
    update-source loopback0
    address-family 12vpn evpn
      send-community
      send-community extended
      route-reflector-client
 neighbor 192.168.4.4
    remote-as 65000
    update-source loopback0
    address-family 12vpn evpn
      send-community
      send-community extended
      route-reflector-client
 neighbor 192.168.5.5
    remote-as 65000
    update-source loopback0
    address-family 12vpn evpn
      send-community
      send-community extended
      route-reflector-client
```

#### LEAF-1

nv overlay evpn feature ospf feature bgp feature pim feature interface-vlan feature vn-segment-vlan-based feature dhcp feature nv overlay

fabric forwarding anycast-gateway-mac 0000.0a0a.0a0a

ip pim rp-address 192.168.11.11 group-list 224.10.10.0/24 ip pim ssm range 232.0.0.0/8 vlan 1,10,20,300 vlan 10 vn-segment 101010 vlan 20 vn-segment 202020 vlan 300 vn-segment 303030 spanning-tree vlan 10 priority 4096 ip prefix-list host\_subnets seq 5 permit 10.10.10.0/24 le 32 ip prefix-list host\_subnets seq 10 permit 192.168.20.0/24 le 32 ip prefix-list host\_subnets seq 15 permit 172.16.10.8/32 route-map direct\_routes\_tenant-a permit 10 match ip address prefix-list host\_subnets vrf context tenant-a vni 303030 rd auto address-family ipv4 unicast route-target both auto route-target both auto evpn interface Vlan10 no shutdown vrf member tenant-a no ip redirects ip address 10.10.10.1/24 no ipv6 redirects fabric forwarding mode anycast-gateway ip dhcp relay address 10.10.10.150 ip dhcp relay source-interface loopback100 interface Vlan20 no shutdown vrf member tenant-a no ip redirects ip address 192.168.20.1/24 no ipv6 redirects fabric forwarding mode anycast-gateway interface Vlan300 no shutdown vrf member tenant-a no ip redirects ip forward no ipv6 redirects interface nve1 no shutdown host-reachability protocol bgp source-interface loopback0 member vni 101010 suppress-arp mcast-group 224.10.10.10 member vni 202020 suppress-arp mcast-group 224.10.10.10

```
member vni 303030 associate-vrf
interface Ethernet1/1
 ip address 10.104.11.2/30
 ip ospf network point-to-point
 ip router ospf 1 area 0.0.0.0
 ip pim sparse-mode
 no shutdown
interface loopback0
 description UNDERLAY-VERIFICATION
 ip address 192.168.5.5/32
 ip router ospf 1 area 0.0.0.0
 ip pim sparse-mode
interface loopback100
 vrf member tenant-a
 ip address 172.16.10.8/32
router ospf 1
router bgp 65000
 address-family ipv4 unicast
 neighbor 192.168.0.11
    remote-as 65000
    update-source loopback0
    address-family 12vpn evpn
      send-community
      send-community extended
 vrf tenant-a
    address-family ipv4 unicast
      redistribute direct route-map direct_routes_tenant-a
evpn
 vni 101010 12
    rd auto
    route-target import auto
    route-target export auto
 vni 202020 12
    rd auto
    route-target import auto
    route-target export auto
```

#### LEAF-1-vPC

nv overlay evpn feature ospf feature bgp feature pim feature interface-vlan feature vn-segment-vlan-based feature lacp feature dhcp feature vpc feature nv overlay

fabric forwarding anycast-gateway-mac 0000.0a0a.0a0a

ip pim rp-address 192.168.11.11 group-list 224.10.10.0/24 ip pim ssm range 232.0.0/8 vlan 1,10,300,777 vlan 10 vn-segment 101010 vlan 300 vn-segment 303030 vlan 777 name BACKUP\_VLAN\_ROUTING\_NVE\_INFRA spanning-tree vlan 1,10,300 hello-time 4 ip prefix-list host\_subnets seq 5 permit 10.10.10.0/24 le 32 ip prefix-list host\_subnets seq 15 permit 172.16.10.9/32 route-map direct\_routes\_tenant-a permit 10 match ip address prefix-list host\_subnets vrf context tenant-a vni 303030 rd auto address-family ipv4 unicast route-target both auto route-target both auto evpn system nve infra-vlans 777 vpc domain 1 peer-switch peer-keepalive destination 10.88.238.195 peer-gateway layer3 peer-router ip arp synchronize interface Ethernet1/3 switchport switchport mode trunk switchport trunk allowed vlan 1,10,20 channel-group 10 mode active no shutdown interface Ethernet1/19 switchport switchport mode trunk channel-group 1 mode active no shutdown interface port-channel1 switchport switchport mode trunk spanning-tree port type network vpc peer-link interface port-channel10 switchport switchport mode trunk switchport trunk allowed vlan 1,10 vpc 10 interface mgmt0 vrf member management ip address 10.88.238.194/29 interface loopback0

```
description UNDERLAY-VERIFICATION
 ip address 192.168.3.3/32
 ip router ospf 1 area 0.0.0.0
 ip pim sparse-mode
interface loopback1
 description OVERLAY-NVE
 ip address 192.168.13.1/32
 ip address 192.168.13.254/32 secondary
 ip router ospf 1 area 0.0.0.0
 ip pim sparse-mode
interface loopback10
 vrf member tenant-a
 ip address 172.16.10.1/32
interface loopback100
 vrf member tenant-a
 ip address 172.16.10.9/32
interface Vlan10
 no shutdown
 vrf member tenant-a
 no ip redirects
 ip address 10.10.10.1/24
 no ipv6 redirects
 fabric forwarding mode anycast-gateway
 ip dhcp relay address 10.10.10.150
 ip dhcp relay source-interface loopback100
interface Vlan300
 no shutdown
 vrf member tenant-a
 no ip redirects
 ip forward
 no ipv6 redirects
interface Vlan777
 description BACKUP_UNDERLAY_INFRA-VLAN
 no shutdown
 no ip redirects
 ip address 10.255.77.1/30
 no ipv6 redirects
 ip ospf network point-to-point
 ip router ospf 1 area 0.0.0.0
 ip pim sparse-mode
interface Ethernet1/2
 ip address 10.102.11.2/30
 ip ospf network point-to-point
 ip router ospf 1 area 0.0.0.0
 ip pim sparse-mode
 no shutdown
interface nve1
 no shutdown
 host-reachability protocol bgp
 advertise virtual-rmac
 source-interface loopback1
 member vni 101010
    suppress-arp
    mcast-group 224.10.10.10
```

member vni 303030 associate-vrf router ospf 1 router bgp 65000 address-family ipv4 unicast address-family 12vpn evpn advertise-pip neighbor 192.168.0.11 remote-as 65000 update-source loopback0 address-family 12vpn evpn send-community send-community extended neighbor 192.168.88.2 remote-as 65000 description OVERLAY\_BACKUP update-source Vlan888 address-family 12vpn evpn send-community send-community extended vrf tenant-a address-family ipv4 unicast redistribute direct route-map direct\_routes\_tenant-a evpn vni 101010 12 rd auto route-target import auto route-target export auto vni 202020 12 rd auto route-target import auto route-target export auto

#### LEAF-2-vPC

nv overlay evpn feature ospf feature bgp feature pim feature interface-vlan feature vn-segment-vlan-based feature lacp feature dhcp feature vpc feature nv overlay fabric forwarding anycast-gateway-mac 0000.0a0a.0a0a ip pim rp-address 192.168.11.11 group-list 224.10.10.0/24 ip pim ssm range 232.0.0/8 vlan 1,10,20,300,777 vlan 10 vn-segment 101010 vlan 20 vn-segment 202020

vlan 300 vn-segment 303030 vlan 777 name BACKUP\_VLAN\_ROUTING\_NVE\_INFRA spanning-tree vlan 1,10,20,300 hello-time 4 ip prefix-list host\_subnets seq 5 permit 10.10.10.0/24 le 32 ip prefix-list host\_subnets seq 10 permit 192.168.20.0/24 le 32 ip prefix-list host\_subnets seq 15 permit 172.16.10.10/32 route-map direct\_routes\_tenant-a permit 10 match ip address prefix-list host\_subnets vrf context tenant-a vni 303030 rd auto address-family ipv4 unicast route-target both auto route-target both auto evpn system nve infra-vlans 777 vpc domain 1 peer-switch peer-keepalive destination 10.88.238.194 peer-gateway layer3 peer-router ip arp synchronize interface Ethernet1/1 ip address 10.103.11.2/30 ip ospf network point-to-point ip router ospf 1 area 0.0.0.0 ip pim sparse-mode no shutdown interface Ethernet1/19 switchport switchport mode trunk channel-group 1 mode active no shutdown interface port-channel1 switchport switchport mode trunk spanning-tree port type network vpc peer-link interface port-channel10 switchport switchport mode trunk switchport trunk allowed vlan 1,10,20 vpc 10 interface mgmt0 vrf member management ip address 10.88.238.195/29 interface loopback0 description UNDERLAY-VERIFICATION ip address 192.168.4.4/32 ip router ospf 1 area 0.0.0.0 ip pim sparse-mode

```
interface loopback1
 description OVERLAY-NVE
 ip address 192.168.13.2/32
 ip address 192.168.13.254/32 secondary
 ip router ospf 1 area 0.0.0.0
 ip pim sparse-mode
interface loopback10
 vrf member tenant-a
 ip address 172.16.10.2/32
interface loopback100
 vrf member tenant-a
 ip address 172.16.10.10/32
interface Vlan10
 no shutdown
 vrf member tenant-a
 no ip redirects
 ip address 10.10.10.1/24
 no ipv6 redirects
 fabric forwarding mode anycast-gateway
 ip dhcp relay address 10.10.10.150
 ip dhcp relay source-interface loopback100
interface Vlan20
 no shutdown
 vrf member tenant-a
 no ip redirects
 ip address 192.168.20.1/24
 no ipv6 redirects
 fabric forwarding mode anycast-gateway
interface Vlan300
 no shutdown
 vrf member tenant-a
 no ip redirects
 ip forward
 no ipv6 redirects
interface Vlan777
 description BACKUP_UNDERLAY_INFRA-VLAN
 no shutdown
 no ip redirects
 ip address 10.255.77.2/30
 no ipv6 redirects
 ip ospf network point-to-point
 ip router ospf 1 area 0.0.0.0
 ip pim sparse-mode
interface nve1
 no shutdown
 host-reachability protocol bgp
 advertise virtual-rmac
 source-interface loopback1
 member vni 101010
    suppress-arp
    mcast-group 224.10.10.10
 member vni 202020
    suppress-arp
    mcast-group 224.10.10.10
```

member vni 303030 associate-vrf router ospf 1 router bgp 65000 address-family ipv4 unicast address-family 12vpn evpn advertise-pip neighbor 192.168.0.11 remote-as 65000 update-source loopback0 address-family 12vpn evpn send-community send-community extended neighbor 192.168.88.1 remote-as 65000 description OVERLAY\_BACKUP update-source Vlan888 address-family 12vpn evpn send-community send-community extended vrf tenant-a address-family ipv4 unicast redistribute direct route-map direct\_routes\_tenant-a evpn vni 101010 12 rd auto route-target import auto route-target export auto vni 202020 12 rd auto route-target import auto route-target export auto

#### ACCÈS N9K

feature lacp

vlan 1,10

interface port-channel10
 switchport
 switchport mode trunk

interface Ethernet1/11
 switchport
 switchport access vlan 10
 no shutdown

interface Ethernet1/45
switchport
switchport mode trunk
channel-group 10 mode active
no shutdown

interface Ethernet1/46
 switchport

switchport mode trunk channel-group 10 mode active no shutdown

### Configuration DHCP sur les commutateurs Nexus

LEAF-1

Étape 1. Activez la fonctionnalité DCHP.

LEAF-1(config)# feature dhcp



Remarque : le serveur DHCP et la commande relay agent service dhcp, ip dhcp relay, et ipv6 dhcp relay sont activés par défaut depuis NX-OS 7.x.

Étape 2. Appliquez la commande ip dhcp relay information option.

LEAF-1(config)# ip dhcp relay information option



Remarque : cette commande permet à l'agent de relais DHCP d'insérer et de supprimer des informations de l'option 82 sur les paquets qui sont transférés.

Étape 3. Appliquez la commande ip dhcp relay information option vpn.

LEAF-1(config)# ip dhcp relay information option vpn



Remarque : cette commande active les requêtes de relais DHCP qui arrivent sur un VRF différent auquel appartient le serveur DHCP.

Étape 4. Appliquez la commande « ip dhcp relay address [ip address of DCHP server] ».



Remarque : dans cet exemple, l'adresse IP du serveur DHCP est 10.10.10.150.

LEAF-1(config)# interface vlan 10
LEAF-1(config-if)# ip dhcp relay address 10.10.10.150

Étape 5. Appliquez la commande « ip dhcp relay source-interface [unique loopback] ».



Remarque : cette commande configure l'adresse IP source de l'agent de relais DHCP pour qu'elle gère les commandes Discover, Offer, Request et ACK pour les communications monodiffusion, l'agent de relais DHCP utilisant l'adresse IP de l'interface SVI comme adresse IP source de l'agent de relais DHCP. Cela n'est pas souhaitable, car cette adresse IP est partagée par plusieurs VTEP et un trou noir des paquets DHCP peut se produire. Pour éviter cela, une adresse IP unique (à l'aide d'une interface de bouclage) est nécessaire pour différencier chaque VTEP.

LEAF-1(config)# interface vlan 10
LEAF-1(config-if)# ip dhcp relay source-interface loopback100

Étape 6. Dans le locataire correspondant VRF dans BGP, redistribuez directement la route avec une liste de préfixes et une route-map qui inclut l'adresse IP de l'interface de bouclage.



Remarque : cette interface de bouclage appartient au locataire de l'interface SVI.

```
LEAF-1(config)# show running-config interface loopback 100
interface loopback100
vrf member tenant-a
ip address 172.16.10.8/32
LEAF-1(config)# ip prefix-list host_subnets seq 15 permit 172.16.10.8/32
LEAF-1(config)# route-map direct_routes_tenant-a permit 10
LEAF-1(config-route-map)# match ip address prefix-list host_subnets
LEAF-1(config-route-map)# router bgp 65000
LEAF-1(config-router)# vrf tenant-a
LEAF-1(config-router-vrf)# address-family ipv4 unicast
LEAF-1(config-router-vrf-af)# redistribute direct route-map direct_routes_tenant-a
```

Étape 7. Vérifiez que l'adresse IP de l'interface de bouclage est annoncée dans BGP L2VPN EVPN aux Spines avec la commande : show bgp l2vpn evpn [loopback IP] vrf [tenant vrf].

LEAF-1(config)# show bgp 12vpn evpn 172.16.10.8 vrf tenant-a BGP routing table information for VRF default, address family L2VPN EVPN Route Distinguisher: 192.168.5.5:4 (L3VNI 303030) BGP routing table entry for [5]:[0]:[32]:[172.16.10.8]/224, version 421 Paths: (1 available, best #1) Flags: (0x000002) (high32 0000000) on xmit-list, is not in 12rib/evpn Advertised path-id 1 Path type: local, path is valid, is best path, no labeled nexthop Gateway IP: 0.0.0.0 AS-Path: NONE, path locally originated 192.168.5.5 (metric 0) from 0.0.0.0 (192.168.5.5) Origin incomplete, MED 0, localpref 100, weight 32768 Received label 303030 Extcommunity: RT:65000:303030 ENCAP:8 Router MAC:707d.b9b8.4daf Path-id 1 advertised to peers: 192.168.0.11 <<<< Spine

Étape 8. Vérifiez que l'adresse IP de l'interface de bouclage est injectée dans l'EVPN L2VPN BGP où se trouve le serveur DHCP.



Remarque : s'il y a des commutateurs Nexus dans vPC, vérifiez qu'ils apprennent tous les deux l'adresse IP de l'interface de bouclage dans BGP L2VPN EVPN.

```
LEAF-1# show bgp 12vpn evpn 172.16.10.8
BGP routing table information for VRF default, address family L2VPN EVPN
Route Distinguisher: 192.168.5.5:4
BGP routing table entry for [5]:[0]:[32]:[172.16.10.8]/224, version 754
Paths: (1 available, best #1)
Flags: (0x000002) (high32 0000000) on xmit-list, is not in l2rib/evpn, is not in HW
 Advertised path-id 1
 Path type: internal, path is valid, is best path, no labeled nexthop
             Imported to 2 destination(s)
             Imported paths list: tenant-a L3-303030
 Gateway IP: 0.0.0.0
 AS-Path: NONE, path sourced internal to AS
    192.168.5.5 (metric 45) from 192.168.0.11 (192.168.0.11)
     Origin incomplete, MED 0, localpref 100, weight 0
     Received label 303030
     Extcommunity: RT:65000:303030 ENCAP:8 Router MAC:707d.b9b8.4daf
     Originator: 192.168.5.5 Cluster list: 192.168.0.11
```

Path-id 1 not advertised to any peer

Route Distinguisher: 192.168.3.3:4 (L3VNI 303030) BGP routing table entry for [5]:[0]:[0]:[32]:[172.16.10.8]/224, version 761 Paths: (1 available, best #1) Flags: (0x000002) (high32 00000000) on xmit-list, is not in l2rib/evpn, is not in HW Advertised path-id 1 Path type: internal, path is valid, is best path, no labeled nexthop Imported from 192.168.5.5:4:[5]:[0]:[0]:[32]:[172.16.10.8]/224 Gateway IP: 0.0.0.0 AS-Path: NONE, path sourced internal to AS 192.168.5.5 (metric 45) from 192.168.0.11 (192.168.0.11) Origin incomplete, MED 0, localpref 100, weight 0 Received label 303030 Extcommunity: RT:65000:303030 ENCAP:8 Router MAC:707d.b9b8.4daf Originator: 192.168.5.5 Cluster list: 192.168.0.11

Path-id 1 not advertised to any peer

Étape 9. Vérifiez qu'il y a une route pour le serveur DHCP sur le locataire source avec la commande show ip route [DHCP server IP] vrf [tenant vrf].



Remarque : l'entrée de route à utiliser doit être de VxLAN à VRF par défaut. Si aucune route n'est disponible, vérifiez si le VTEP connaît localement l'adresse IP du serveur DHCP.

```
LEAF-1# show running-config interface vlan 10
interface Vlan10
no shutdown
vrf member tenant-a <<<< source tenant
no ip redirects
ip address 10.10.10.1/24
no ipv6 redirects
fabric forwarding mode anycast-gateway
ip dhcp relay address 10.10.10.150 <<<< DHCP server
ip dhcp relay source-interface loopback100
LEAF-1# show ip route 10.10.10.150 vrf tenant-a
10.10.150/32, ubest/mbest: 1/0
    *via 192.168.13.254%default, [200/0], 2w0d, bgp-65000, internal, tag 65000, segid: 303030 tunnelid:</pre>
```

Étape 10. Vérifiez que l'adresse IP du serveur DHCP est accessible en utilisant l'interface de bouclage et le VRF correspondant comme source VRF avec la commande ping [DHCP server IP] source-interface loopback [x] vrf [tenant vrf].

LEAF-1# ping 10.10.10.150 source-interface loopback 100 vrf tenant-a PING 10.10.10.150 (10.10.10.150): 56 data bytes 64 bytes from 10.10.10.150: icmp\_seq=0 ttl=126 time=1.262 ms 64 bytes from 10.10.10.150: icmp\_seq=1 ttl=126 time=0.833 ms 64 bytes from 10.10.10.150: icmp\_seq=2 ttl=126 time=0.808 ms 64 bytes from 10.10.10.150: icmp\_seq=3 ttl=126 time=0.795 ms 64 bytes from 10.10.10.150: icmp\_seq=4 ttl=126 time=0.78 ms --- 10.10.10.150 ping statistics ---5 packets transmitted, 5 packets received, 0.00% packet loss

Étape 11. Vérifiez l'état de l'agent de relais DHCP.

LEAF-1# show ip dhcp status Current CLI Operation: show ip dhcp status Last CLI Operation: DME: ip dhcp relay information option enable Last CLI Operation Status: SUCCESS

Étape 12. Vérifiez l'option82, telle que l'option vpn et l'adresse IP de relais correcte sous l'agent de relais.

LEAF-1# show ip dhcp relay DHCP relay service is enabled <<<<< Insertion of option 82 is enabled <<<<< Insertion of option 82 customize circuitid is disabled TLV format in CircuitId and RemoteId suboptions is enabled Insertion of VPN suboptions is enabled <<<<<< Insertion of cisco suboptions is disabled Global smart-relay is disabled Relay Trusted functionality is disabled Relay Trusted Port is Globally disabled V4 Relay Source Address HSRP is Globally disabled Server-ID-override-disable is disabled

Smart-relay is enabled on the following interfaces:

Subnet-broadcast is enabled on the following interfaces:

Relay Trusted Port is enabled on the following interfaces:

Relay Source Address HSRP is enabled on the following interfaces:

-----

Helper addresses are configured on the following interfaces:InterfaceRelay AddressVRF Name------------------Vlan1010.10.10.150<<<<<<<<<>><<<<>><<<<>><</td>

Étape 13. Vérifiez les statistiques des paquets traités et transférés.

LEAF-1# show ip dhcp global statistics Packets processed 1297177 Packets received through cfsoe 0 Packets forwarded 1297175 Packets forwarded on cfsoe 0 Total packets dropped 0 Packets dropped from untrusted ports 0 Packets dropped due to MAC address check failure 0 Packets dropped due to Option 82 insertion failure 0 Packets dropped due to o/p intf unknown 0 Packets dropped which were unknown 0 Packets dropped due to no trusted ports 0 Packets dropped due to dhcp relay not enabled 0 Packets dropped due to no binding entry 0 Packets dropped due to interface error/no interface 0 Packets dropped due to max hops exceeded 0 Packets dropped due to Queue full 0

Étape 14. Vérifiez les statistiques des paquets de relais.

Message Type	Rx	Tx		Drops	
Discover	260521	260520		0	
Offer	289330	289330		0	
Request(*)	267162	267161		0	
Ack	8322	8322		0	
Release(*)	181121	181121		0	
Decline	1	1		0	
Inform(*)	0	0		0	
Nack	289280	289280		0	
Total	1295737	1295735		0	
DHCP L3 FWD:					
Total Packets	Received			0	
Total Packets Forwarded			:	0	
Total Packets	Dropped		:	0	
Non DHCP:					
Total Packets	Received		:	0	
Total Packets		:	0		

LEAF-1# show ip dhcp relay statistics

Total Packets Dropped	:	0			
DROP:					
DHCP Relay not enabled	:	0			
Invalid DHCP message type	:	0			
Interface error	:	0			
Tx failure towards server	:	0			
Tx failure towards client	:	0			
Unknown output interface	:	0			
Unknown vrf or interface for server	:	0			
Max hops exceeded	:	0			
Option 82 validation failed	:	0			
Packet Malformed	:	0			
DHCP Request dropped on MCT	:	0			
Relay Trusted port not configured	:	0			
* - These counters will show correct value when	ı switch				
receives DHCP request packet with destination ip as broadcast					
address. If request is unicast it will be HW switched					

DHCP LEAF-1-vPC

Étape 1. Activez la fonctionnalité DCHP.

LEAF-1-VPC(config)#feature dhcp



Remarque : le serveur DHCP et la commande relay agent service dhcp, ip dhcp relay, et ipv6 dhcp relay sont activés par défaut depuis NX-OS 7.x.

Étape 2. Appliquez la commande ip dhcp relay information option.

LEAF-1-VPC(config)#ip dhcp relay information option



Remarque : cette commande permet à l'agent de relais DHCP d'insérer et de supprimer des informations de l'option 82 sur les paquets qui sont transférés.

Étape 3. Appliquez la commande « ip dhcp relay information option vpn ».

LEAF-1-VPC(config)# ip dhcp relay information option vpn



Remarque : cette commande active les requêtes de relais DHCP qui arrivent sur un VRF différent auquel appartient le serveur DHCP.

Étape 4. Appliquez la commande ip dhcp relay address [adresse ip du serveur DHCP].



Remarque : dans cet exemple, l'adresse IP du serveur DHCP est 10.10.10.150.

LEAF-1-VPC(config)#interface vlan 10 LEAF-1-VPC(config-if)#ip dhcp relay address 10.10.10.150

Étape 5. Appliquez la commande « ip dhcp relay source-interface [unique loopback] ».



Remarque : cette commande configure l'adresse IP source de l'agent de relais DHCP pour qu'elle gère les commandes Discover, Offer, Request et ACK pour les communications monodiffusion, l'agent de relais DHCP utilisant l'adresse IP de l'interface SVI comme adresse IP source de l'agent de relais DHCP. Cela n'est pas souhaitable, car cette adresse IP est partagée par plusieurs VTEP et un trou noir des paquets DHCP peut se produire. Pour éviter cela, une adresse IP unique (à l'aide d'une interface de bouclage) est nécessaire pour différencier chaque VTEP.

LEAF-1-VPC(config)#interface vlan 10
LEAF-1-VPC(config-if)# ip dhcp relay source-interface loopback100

Étape 6. Dans le locataire correspondant VRF dans BGP, redistribuez directement la route avec une liste de préfixes et une route-map qui inclut l'adresse IP de l'interface de bouclage.



Remarque : cette interface de bouclage appartient au locataire de l'interface SVI.

```
LEAF-1-VPC(config)# show running-config interface loopback 100
interface loopback100
vrf member tenant-a
ip address 172.16.10.9/32
LEAF-1-VPC(config)# ip prefix-list host_subnets seq 15 permit 172.16.10.9/32
LEAF-1-VPC(config)# route-map direct_routes_tenant-a permit 10
LEAF-1-VPC(config-route-map)# match ip address prefix-list host_subnets
LEAF-1-VPC(config-route-map)# router bgp 65000
LEAF-1-VPC(config-router)# vrf tenant-a
LEAF-1-VPC(config-router)# vrf tenant-a
LEAF-1-VPC(config-router-vrf)# address-family ipv4 unicast
LEAF-1-VPC(config-router-vrf-af)# redistribute direct route-map direct_routes_tenant-a
```

Étape 7. Vérifiez que l'adresse IP de l'interface de bouclage est annoncée dans BGP L2VPN EVPN aux Spines avec la commande : show bgp l2vpn evpn [loopback IP] vrf [tenant vrf].

LEAF-1-VPC# show bgp 12vpn evpn 172.16.10.9 vrf tenant-a BGP routing table information for VRF default, address family L2VPN EVPN Route Distinguisher: 192.168.3.3:4 (L3VNI 303030) BGP routing table entry for [5]:[0]:[32]:[172.16.10.9]/224, version 637 Paths: (1 available, best #1) Flags: (0x000002) (high32 00000000) on xmit-list, is not in 12rib/evpn Advertised path-id 1 Path type: local, path is valid, is best path, no labeled nexthop Gateway IP: 0.0.0.0 AS-Path: NONE, path locally originated 192.168.13.1 (metric 0) from 0.0.0.0 (192.168.3.3) Origin incomplete, MED 0, localpref 100, weight 32768 Received label 303030 Extcommunity: RT:65000:303030 ENCAP:8 Router MAC:6026.aa85.9887 Path-id 1 advertised to peers: 192.168.0.11

Étape 8. Vérifiez que l'adresse IP de l'interface de bouclage est injectée dans l'EVPN L2VPN BGP où se trouve le serveur DHCP.



Remarque : s'il y a des commutateurs Nexus dans vPC, vérifiez qu'ils apprennent tous les deux l'adresse IP de l'interface de bouclage dans BGP L2VPN EVPN.

LEAF-1-VPC# show bgp 12vpn evpn 172.16.10.9 BGP routing table information for VRF default, address family L2VPN EVPN Route Distinguisher: 192.168.3.3:4 (L3VNI 303030) BGP routing table entry for [5]:[0]:[32]:[172.16.10.9]/224, version 637 Paths: (1 available, best #1) Flags: (0x000002) (high32 0000000) on xmit-list, is not in 12rib/evpn Advertised path-id 1 Path type: local, path is valid, is best path, no labeled nexthop Gateway IP: 0.0.0.0 AS-Path: NONE, path locally originated 192.168.13.1 (metric 0) from 0.0.0.0 (192.168.3.3) Origin incomplete, MED 0, localpref 100, weight 32768 Received label 303030 Extcommunity: RT:65000:303030 ENCAP:8 Router MAC:6026.aa85.9887 Path-id 1 advertised to peers: 192.168.0.11

Étape 9. Vérifiez qu'il existe une route pour le serveur DHCP sur le locataire source à l'aide de la commande show ip route [DHCP server IP] vrf[tenant vrf].



Remarque : l'entrée de route à utiliser doit être de VxLAN à VRF par défaut. Si aucune route n'est disponible, vérifiez si le VTEP connaît localement l'adresse IP du serveur DHCP.

LEAF-1-VPC# show running-config interface vlan 10 interface Vlan10 no shutdown vrf member tenant-a <<<< source tenant no ip redirects ip address 10.10.10.1/24 no ipv6 redirects fabric forwarding mode anycast-gateway ip dhcp relay address 10.10.10.150 ip dhcp relay source-interface loopback100
LEAF-1-VPC# show ip route 10.10.10.150 vrf tenant-a 10.10.10.150/32, ubest/mbest: 1/0, attached \*via 10.10.10.150, Vlan10, [190/0], 6d07h, hmm

Étape 10. Vérifiez que l'adresse IP du serveur DHCP est accessible à l'aide de l'interface de bouclage et du VRF correspondant en tant que source VRF avec la commande ping [DHCP server IP] source-interface loopback [x] vrf [tenvrf].

LEAF-1-VPC# ping 10.10.10.150 source-interface loopback 100 vrf tenant-a PING 10.10.10.150 (10.10.10.150): 56 data bytes 64 bytes from 10.10.10.150: icmp\_seq=0 ttl=126 time=0.965 ms 64 bytes from 10.10.10.150: icmp\_seq=1 ttl=126 time=0.57 ms 64 bytes from 10.10.10.150: icmp\_seq=2 ttl=126 time=0.488 ms 64 bytes from 10.10.10.150: icmp\_seq=3 ttl=126 time=0.524 ms 64 bytes from 10.10.10.150: icmp\_seq=4 ttl=126 time=0.502 ms

--- 10.10.10.150 ping statistics ---

Étape 11. Vérifiez l'état de l'agent de relais DHCP.

LEAF-1-VPC# show ip dhcp status Current CLI Operation: show ip dhcp status Last CLI Operation: DME: ip dhcp relay information option vpn enable Last CLI Operation Status: SUCCESS

Étape 12. Vérifiez l'option82, telle que l'option vpn et l'adresse IP de relais correcte sous l'agent de relais.

LEAF-1-VPC# show ip dhcp relay DHCP relay service is enabled <<<<< Insertion of option 82 is enabled <<<<< Insertion of option 82 customize circuitid is disabled TLV format in CircuitId and RemoteId suboptions is enabled Insertion of VPN suboptions is enabled <<<<<< Insertion of cisco suboptions is disabled Global smart-relay is disabled Relay Trusted functionality is disabled Relay Trusted Port is Globally disabled V4 Relay Source Address HSRP is Globally disabled Server-ID-override-disable is disabled

Smart-relay is enabled on the following interfaces:

Subnet-broadcast is enabled on the following interfaces:

Relay Trusted Port is enabled on the following interfaces:

Relay Source Address HSRP is enabled on the following interfaces:

Helper addresses are configured on the following interfaces:InterfaceRelay AddressVRF Name------------------Vlan1010.10.10.150<<<<<<<</td>

Étape 13. Vérifiez les statistiques des paquets traités et transférés.

LEAF-1-VPC# show ip dhcp global statistics Packets processed 263162 Packets received through cfsoe 0 Packets forwarded 263161 Packets forwarded on cfsoe 0 Total packets dropped 0 Packets dropped from untrusted ports 0 Packets dropped due to MAC address check failure 0 Packets dropped due to Option 82 insertion failure 0 Packets dropped due to o/p intf unknown 0 Packets dropped which were unknown 0 Packets dropped due to no trusted ports O Packets dropped due to dhcp relay not enabled 0 Packets dropped due to no binding entry 0 Packets dropped due to interface error/no interface 0 Packets dropped due to max hops exceeded 0 Packets dropped due to Queue full 0

Étape 14. Vérifiez les statistiques des paquets de relais.

Message Type	Rx	Тх	Drops	
Discover	8	7	0	
Offer	29304	29304	0	
Request(*)	5029	5029	0	
Ack	6535	6535	0	
Release(*)	191482	191482	0	
Decline	0	0	0	
Inform(*)	3	3	0	
Nack	29281	29281	0	
Total	261642	261641	0	

LEAF-1-VPC# show ip dhcp relay statistics

DHCP L3 FWD: Total Packets Received

0

:

Total Packets Forwarded	:	0	
Total Packets Dropped	:	0	
Non DHCP:			
Total Packets Received	:	0	
Total Packets Forwarded	:	0	
Total Packets Dropped	:	0	
DROP:			
DHCP Relay not enabled	:	0	
Invalid DHCP message type	:	0	
Interface error	:	0	
Tx failure towards server	:	0	
Tx failure towards client	:	0	
Unknown output interface	:	0	
Unknown vrf or interface for server :			
Max hops exceeded	:	0	
Option 82 validation failed	:	0	
Packet Malformed	:	0	
DHCP Request dropped on MCT	:	0	
Relay Trusted port not configured	:	0	
* - These counters will show correct value whe	n switch		
receives DHCP request packet with destination ip	as broado	ast	
address. If request is unicast it will be HW swi	tched		

## DHCP LEAF-2-vPC

Étape 1. Activez la fonctionnalité DCHP.

LEAF-2-VPC(config)# feature dhcp



Remarque : le serveur DHCP et la commande relay agent service dhcp, ip dhcp relay et ipv6 dhcp relay sont activés par défaut depuis NX-OS 7.x.

Étape 2. Appliquez la commande « ip dhcp relay information option ».

LEAF-2-VPC(config)# ip dhcp relay information option



Remarque : cette commande permet à l'agent de relais DHCP d'insérer et de supprimer des informations de l'option 82 sur les paquets qui sont transférés.

Étape 3. Appliquez la commande « ip dhcp relay information option vpn ».

LEAF-2-VPC(config)# ip dhcp relay information option vpn



Remarque : cette commande active les requêtes de relais DHCP qui arrivent sur un VRF différent auquel appartient le serveur DHCP.

Étape 4. Appliquez la commande « ip dhcp relay address [ip address of DCHP server] ».



Remarque : dans cet exemple, l'adresse IP du serveur DHCP est 10.10.10.150.

LEAF-2-VPC(config)# interface vlan 10
LEAF-2-VPC(config-if)# ip dhcp relay address 10.10.10.150

Étape 5. Appliquez la commande « ip dhcp relay source-interface [unique loopback] ».



Remarque : cette commande configure l'adresse IP source de l'agent de relais DHCP pour qu'elle gère les commandes Discover, Offer, Request et ACK pour les communications monodiffusion, l'agent de relais DHCP utilisant l'adresse IP de l'interface SVI comme adresse IP source de l'agent de relais DHCP. Cela n'est pas souhaitable, car cette adresse IP est partagée par plusieurs VTEP et un trou noir des paquets DHCP peut se produire. Pour éviter cela, une adresse IP unique (à l'aide d'une interface de bouclage) est nécessaire pour différencier chaque VTEP.

LEAF-2-VPC(config)# interface vlan 10
LEAF-2-VPC(config-if)# ip dhcp relay source-interface loopback 100

Étape 6. Dans le locataire correspondant VRF dans BGP, redistribuez directement la route avec une liste de préfixes et une route-map qui inclut l'adresse IP de l'interface de bouclage.



Remarque : cette interface de bouclage appartient au locataire de l'interface SVI.

```
LEAF-2-VPC(config-if)# show running-config interface loopback 100
interface loopback100
vrf member tenant-a
ip address 172.16.10.10/32
LEAF-2-VPC(config)# ip prefix-list host_subnets seq 15 permit 172.16.10.10/32
LEAF-2-VPC(config)# route-map direct_routes_tenant-a permit 10
LEAF-2-VPC(config-route-map)# match ip address prefix-list host_subnets
LEAF-2-VPC(config-route-map)# router bgp 65000
LEAF-2-VPC(config-router)# vrf tenant-a
LEAF-2-VPC(config-router)# vrf tenant-a
LEAF-2-VPC(config-router-vrf)# address-family ipv4 unicast
LEAF-2-VPC(config-router-vrf-af)# redistribute direct route-map direct_routes_tenant-a
```

Étape 7. Vérifiez que l'adresse IP de l'interface de bouclage est annoncée dans BGP L2VPN EVPN aux Spines avec la commande : show bgp l2vpn evpn [loopback IP] vrf [tenant vrf].

LEAF-2-VPC(config-if)# show bgp 12vpn evpn 172.16.10.10 vrf tenant-a BGP routing table information for VRF default, address family L2VPN EVPN Route Distinguisher: 192.168.4.4:4 (L3VNI 303030) BGP routing table entry for [5]:[0]:[32]:[172.16.10.10]/224, version 49 5 Paths: (1 available, best #1) Flags: (0x000002) (high32 0000000) on xmit-list, is not in 12rib/evpn Advertised path-id 1 Path type: local, path is valid, is best path, no labeled nexthop Gateway IP: 0.0.0.0 AS-Path: NONE, path locally originated 192.168.13.2 (metric 0) from 0.0.0.0 (192.168.4.4) Origin incomplete, MED 0, localpref 100, weight 32768 Received label 303030 Extcommunity: RT:65000:303030 ENCAP:8 Router MAC:6026.aa85.9587 Path-id 1 advertised to peers: 192.168.0.11 <<<<< Spine

Étape 8. Vérifiez que l'adresse IP de l'interface de bouclage est injectée dans l'EVPN L2VPN BGP où se trouve le serveur DHCP.



Remarque : s'il y a des commutateurs Nexus dans vPC, vérifiez qu'ils apprennent tous les deux l'adresse IP de l'interface de bouclage dans BGP L2VPN EVPN.

LEAF-2-VPC(config-if)# show bgp l2vpn evpn 172.16.10.10 BGP routing table information for VRF default, address family L2VPN EVPN Route Distinguisher: 192.168.4.4:4 (L3VNI 303030) BGP routing table entry for [5]:[0]:[0]:[32]:[172.16.10.10]/224, version 49 5 Paths: (1 available, best #1) Flags: (0x000002) (high32 00000000) on xmit-list, is not in l2rib/evpn Advertised path-id 1 Path type: local, path is valid, is best path, no labeled nexthop Gateway IP: 0.0.0.0 AS-Path: NONE, path locally originated 192.168.13.2 (metric 0) from 0.0.0.0 (192.168.4.4) Origin incomplete, MED 0, localpref 100, weight 32768 Received label 303030 Extcommunity: RT:65000:303030 ENCAP:8 Router MAC:6026.aa85.9587

Path-id 1 advertised to peers:

Étape 9. Vérifiez qu'il y a une route pour le serveur DHCP sur le locataire source avec la commande show ip route [DHCP server IP] vrf[tenvrf].



Remarque : l'entrée de route à utiliser doit être de VxLAN à VRF par défaut. Si aucune route n'est disponible, vérifiez si le VTEP connaît localement l'adresse IP du serveur DHCP.

LEAF-2-VPC(config-if)# show running-config interface vlan 10
interface Vlan10
no shutdown
vrf member tenant-a
no ip redirects
ip address 10.10.10.1/24
no ipv6 redirects
fabric forwarding mode anycast-gateway
ip dhcp relay address 10.10.10.150

ip dhcp relay source-interface loopback100

Étape 10. Vérifiez que l'adresse IP du serveur DHCP est accessible en utilisant l'interface de bouclage et le VRF correspondant comme source VRF avec la commande ping [DHCP server IP] source-interface loopback [x] vrf [tenant vrf].

LEAF-2-VPC(config-if)# ping 10.10.10.150 source-interface loopback 100 vrf tenant-a PING 10.10.10.150 (10.10.10.150): 56 data bytes 64 bytes from 10.10.10.150: icmp\_seq=0 ttl=127 time=0.928 ms 64 bytes from 10.10.10.150: icmp\_seq=1 ttl=127 time=0.475 ms 64 bytes from 10.10.10.150: icmp\_seq=2 ttl=127 time=0.455 ms 64 bytes from 10.10.10.150: icmp\_seq=3 ttl=127 time=0.409 ms 64 bytes from 10.10.10.150: icmp\_seq=4 ttl=127 time=0.465 ms

--- 10.10.10.150 ping statistics ---

Étape 11. Vérifiez l'état de l'agent de relais DHCP.

LEAF-2-VPC(config)# show ip dhcp status Current CLI Operation: show ip dhcp status Last CLI Operation: DME: ip dhcp relay information option vpn enable Last CLI Operation Status: SUCCESS

Étape 12. Vérifiez l'option82, telle que l'option vpn et l'adresse IP de relais correcte sous l'agent de relais.

LEAF-2-VPC(config)# show ip dhcp relay DHCP relay service is enabled <<<<<< Insertion of option 82 is enabled <<<<<< Insertion of option 82 customize circuitid is disabled TLV format in CircuitId and RemoteId suboptions is enabled Insertion of VPN suboptions is enabled <<<<<< Insertion of cisco suboptions is disabled Global smart-relay is disabled Relay Trusted functionality is disabled Relay Trusted Port is Globally disabled V4 Relay Source Address HSRP is Globally disabled Server-ID-override-disable is disabled

Smart-relay is enabled on the following interfaces:

Subnet-broadcast is enabled on the following interfaces:

\_\_\_\_\_

Relay Trusted Port is enabled on the following interfaces:

Relay Source Address HSRP is enabled on the following interfaces:

Helper addresses are configured on the following interfaces:InterfaceRelay AddressVRF Name------------------Vlan1010.10.10.150 <<<</td>

Étape 13. Vérifiez les statistiques des paquets traités et transférés.

```
LEAF-2-VPC(config)# show ip dhcp global statistics
Packets processed 103030
Packets received through cfsoe 0
Packets forwarded 103030
Packets forwarded on cfsoe 0
Total packets dropped 0
Packets dropped from untrusted ports 0
Packets dropped due to MAC address check failure 0
Packets dropped due to Option 82 insertion failure 0
Packets dropped due to o/p intf unknown 0
Packets dropped which were unknown 0
Packets dropped due to no trusted ports 0
Packets dropped due to dhcp relay not enabled 0
Packets dropped due to no binding entry O
Packets dropped due to interface error/no interface 0
Packets dropped due to max hops exceeded 0
Packets dropped due to Queue full 0
```

Étape 14. Vérifiez les statistiques des paquets de relais.

Rx	Тх	Drops	
29312	29311	0	
300001	300001	0	
29324	29324	0	
1574	1574	0	
191493	191493	0	
0	0	0	
1540	1540	0	
472890	472890	0	
1026134	1026133	0	
	Rx 29312 300001 29324 1574 191493 0 1540 472890 1026134	RxTx2931229311300001300001293242932415741574191493191493001540154047289047289010261341026133	RxTxDrops2931229311030000130000102932429324015741574019149319149300001540154004728904728900102613410261330

LEAF-2-VPC# show ip dhcp relay statistics

DHCP L3 FWD:			
Total Packets Received	:	0	
Total Packets Forwarded	:	0	
Total Packets Dropped	:	0	
Non DHCP:			
Total Packets Received	:	0	
Total Packets Forwarded	:	0	
Total Packets Dropped	:	0	
DROP:			
DHCP Relay not enabled	:	0	
Invalid DHCP message type	:	0	
Interface error	:	0	
Tx failure towards server :			
Tx failure towards client :			
Unknown output interface :			
Unknown vrf or interface for server :			
Max hops exceeded :			
Option 82 validation failed :			
Packet Malformed :			
DHCP Request dropped on MCT :			
Relay Trusted port not configured	:	0	
* - These counters will show correct value when	n switch		
receives DHCP request packet with destination ip	as broadca	ast	
address. If request is unicast it will be HW swit	cched		

## Configuration du serveur DHCP sous Windows Server 2022

Configuration de l'étendue d'adressage IP pour les hôtes.

Étape 1. Ouvrez le Gestionnaire de serveur et vérifiez qu'aucune alarme n'est présente sur le serveur DHCP dans le tableau de bord.



Tableau de bord du Gestionnaire de serveur sur Windows Server 2022







## The Action Vise Hole Image: Second Second

Serveur DHCP sur Windows Server 2022

UHCP

## Étape 3. Cliquez avec le bouton droit sur IPv4, puis cliquez sur New Scope.



Étape 4. Cliquez sur Next (Suivant).



Étape 5. Indiquez un nom et une description. Dans cet exemple, le nom est le sous-réseau qui appartient au VLAN 10 et la description est L2VNI comme L2VNI répertorié au VLAN 10.

New Scope Wizard			
Scope Name You have to provide an identifying scope name. You also have the option of providing a description.			
Type a name ar how the scope	nd description for this scope. This information helps you quickly identify is to be used on your network.		
Name:	10.10.10/24		
Description:	L2VNI 101010		
	< Back Next > Cancel		

Étape 6. Configurez la plage d'adresses IP. Il s'agit du pool d'hôtes.

New Scope Wizard				
IP Address Range You define the scope address range by identifying a set of consecutive IP addresses.				
Configuration settings for DHCP Server				
Enter the range of addresses that the scope distributes.				
Start IP address: 10 . 10 . 1				
End IP address: 10 . 10 . 254				
Configuration settings that propagate to DHCP Client				
Length: 24				
Subnet mask: 255 . 255 . 255 . 0				
< Back Next > Cancel				

Étape 6. Excluez l'adresse IP partagée de la configuration SVI dans les VTEP. Dans cet exemple, l'interface VLAN 10 a l'adresse IP.10.10.1/24.



Avertissement : si l'adresse IP n'est pas exclue de l'interface SVI (ou de la passerelle par défaut), la duplication des adresses IP peut avoir un impact sur la livraison du trafic.

LEAF-1# show running-config interface vlan 10
<snip>
interface Vlan10
 no shutdown
 vrf member tenant-a
 no ip redirects
 ip address 10.10.10.1/24
 no ipv6 redirects
 fabric forwarding mode anycast-gateway
 ip dhcp relay address 10.10.10.150
 ip dhcp relay source-interface loopback100

New Scope Wizard
Add Exclusions and Delay Exclusions are addresses or a range of addresses that are not distributed by the server. A delay is the time duration by which the server will delay the transmission of a DHCPOFFER message.
Type the IP address range that you want to exclude. If you want to exclude a single address, type an address in Start IP address only.
Start IP address:     End IP address:       Image: I
Excluded address range: Address 10.10.10.1 Remove
Subnet delay in milli second:
< Back Next > Cancel

Étape 7. Configurez la durée du bail de l'adresse IP. Il s'agit de la durée pendant laquelle un hôte peut utiliser l'adresse IP attribuée avant de la renouveler.

New Scope Wizard
Lease Duration The lease duration specifies how long a client can use an IP address from this scope.
Lease durations should typically be equal to the average time the computer is connected to the same physical network. For mobile networks that consist mainly of portable computers or dial-up clients, shorter lease durations can be useful. Likewise, for a stable network that consists mainly of desktop computers at fixed locations, longer lease durations are more appropriate.
Set the duration for scope leases when distributed by this server. Limited to:
Days: Hours: Minutes:
< Back Next > Cancel

Étape 8. Sélectionnez Yes, I want to configure these options now.

New Scope Wizard
Configure DHCP Options You have to configure the most common DHCP options before clients can use the scope.
When clients obtain an address, they are given DHCP options such as the IP addresses of routers (default gateways), DNS servers, and WINS settings for that scope.
The settings you select here are for this scope and override settings configured in the Server Options folder for this server.
Do you want to configure the DHCP options for this scope now?
Yes, I want to configure these options now
C No, I will configure these options later
< Back Next > Cancel

Étape 9. Configurez l'adresse IP de la passerelle par défaut.

w Scope Wizard Router (Default Gateway)			
You can specify the routers, or default gateways, to be distributed by this scope.			
To add an IP address for a r	router used by clients, enter the address below.		
IP address:	Add		
10.10.10.1	Remove		
	Up		
	Down		
	< Back Next >	Cancel	

Étape 10. Configurer le nom de domaine et le serveur DNS

New Scope Wizard			
Domain Name and DNS Servers The Domain Name System (DNS) maps and translates domain names used by clients on your network.			
You can specify the parent domain you want the client computers on your network to use for DNS name resolution. Parent domain: cisco.com			
To configure scope clients to use DNS servers servers.	on your network, enter the IP add	iresses for those	
Server name:	IP address:		
google.com	142 . 250 . 114 . 102	Add	
Resolve		Remove	
		Up	
		Down	
	< Back Next >	Cancel	

Étape 11. Configurez le serveur WINS, le cas échéant. Cette opération peut être ignorée si les informations ne sont pas connues.

New Scope Wizard			
WINS Servers Computers running Windows can use WINS servers to convert NetBIOS computer names to IP addresses.			
Entering server IP addresses here enables Windows clients to query WINS before they use broadcasts to register and resolve NetBIOS names.			
Server name:	IP address:		
	Add		
Resolve	Remove		
	Up		
	Down		
To change this behavior for Windows DHCP clients modify option 046, WINS/NBT Node Type, in Scope Options.			
	< Back Next > Cancel		

Étape 12. Sélectionnez Oui, je souhaite activer cette étendue maintenant.

New Scope Wizard	
Activate Scope Clients can obtain address leases only if a scope is activated.	Solution
Do you want to activate this scope now? Yes, I want to activate this scope now No, I will activate this scope later	
< Back Next >	Cancel

Configuration de l'étendue pour les adresses IP uniques des boucles dans SVI en tant qu'agent de relais DHCP.

Étape 1. Cliquez avec le bouton droit sur IPv4 et sélectionnez IPv4Scope.



Nouvelle étendue dans DCHP

Étape 2. Indiquez un nom et une description. Dans cet exemple, name est le sous-réseau utilisé pour le sous-réseau avec adresse de bouclage.



IPte : un bouclage est utilisé en mode bouclé adresse IP unique dans le fabric VxLAN pour le locataire VxLAN. Ceci doit être annoncé dans la redistribution de route EVPN L2VPN BGP dans BGP dans le VRF du locataire correspondant dans l'adresse IPv4-famIPv4

LEAF-1# show running-config interface loopback 100
<snip>
interface loopback100
vrf member tenant-a
ip address 172.16.10.8/32

New Scope Wizard	
Scope Name You have to pr a description.	ovide an identifying scope name. You also have the option of providing
Type a name a how the scope	nd description for this scope. This information helps you quickly identify is to be used on your network.
Name:	172.16.10.0/24
Description:	Unique IP Gateway Address (SVI)
	< Back Next > Cancel

Étape 3. Configurez la plage d'adresses IPip. Il s'agit du pool pour les boucles.

New Scope Wizard
IP Address Range You define the scope address range by identifying a set of consecutive IP addresses.
Configuration settings for DHCP Server
Enter the range of addresses that the scope distributes.
Start IP address: 172 . 16 . 10 . 1
End IP address: 172 . 16 . 10 . 254
Configuration settings that propagate to DHCP Client
Length: 24 -
Subnet mask: 255 . 255 . 0
< Back Next > Cancel

Étape 4. Configurez les exclusions (facultatif car le serveur DHCP loue les adresses IP appartenant à ce sous-réseau).

New Scope Wizard
Add Exclusions and Delay Exclusions are addresses or a range of addresses that are not distributed by the server. A delay is the time duration by which the server will delay the transmission of a DHCPOFFER message.
Type the IP address range that you want to exclude. If you want to exclude a single address, type an address in Start IP address only.
Start IP address:     End IP address:
Excluded address range:           Remove
Subnet delay in milli second:
< Back Next > Cancel

Étape 5. Ignorez la durée du bail et cliquez sur Next.

New Scope Wizard
Lease Duration The lease duration specifies how long a client can use an IP address from this scope.
Lease durations should typically be equal to the average time the computer is connected to the same physical network. For mobile networks that consist mainly of portable computers or dial-up clients, shorter lease durations can be useful. Likewise, for a stable network that consists mainly of desktop computers at fixed locations, longer lease durations are more appropriate.
Set the duration for scope leases when distributed by this server.
Days: Hours: Minutes:
< Back Next > Cancel

Étape 6. Sélectionnez Non, je configurerai ces options ultérieurement.

New Scope Wizard		
Configure DHCP Options You have to configure the most common DHCP options before clients can use the scope.		
When clients obtain an address, they are given DHCP options such as the IP addresses of routers (default gateways), DNS servers, and WINS settings for that scope.		
The settings you select here are for this scope and override settings configured in the Server Options folder for this server.		
C Yes, I want to configure these options now		
No, I will configure these options later		
< Back Next > Cancel		

Étape 7. Cliquez sur Finish (Terminer).

New Scope Wizard	
	Completing the New Scope Wizard
	You have successfully completed the New Scope wizard.
	Before clients can receive addresses you need to do the following:
	1. Add any scope specific options (optional).
	2. Activate the scope.
	To provide high availability for this scope, configure failover for the newly added scope by right clicking on the scope and clicking on configure failover.
	To close this wizard, click Finish.
< Back Finish Cancel	

Étape 8. Cliquez avec le bouton droit sur l'étendue créée et sélectionnez Activer.
File Action View H	felp	
Þ 🔿   🖄 📷 😽 🕯	🗊 🗟 🗟 🛛 🔂	
DHCP cxlabs-win2k22dc lPv4 Scope [172.1 Scope ] Server ( Policie: Filters IPv6	.16.10.0] 172.16.10.0/24 Display Statistics Advanced Configure Failover Reconcile Activate	Contents of Scope Address Pool Address Leases Reservations Scope Options > Policies
	View Delete Refresh Export List Properties Help	>

Configuration de la super-étendue pour le fabric VxLAN.

Étape 1. Cliquez avec le bouton droit dans IPv4 et sélectionnez Nouvelle étendue globale.



Étape 2. Cliquez sur Next (Suivant).

New Superscope Wizard	
	Welcome to the New Superscope which expands the number of IP network addresses that you can use in a network.         A superscope allows several distinct scopes to be logically grouped under a single name.         To continue, click Next.
	< Back Next > Cancel

Étape 3. Écrivez le nom de l'étendue globale.

New Supersco	pe Wizard
Superscop You hav	e Name re to provide an identifying superscope name.
Name:	Scopes for VxLAN Fabric (with Opt 82)
	< <u>B</u> ack <u>N</u> ext > Cancel

Étape 4. Sélectionnez toutes les étendues qui appartiennent au fabric VxLAN.

New Superscope Wizard
Select Scopes You create a superscope by building a collection of scopes.
Select one or more scopes from the list to add to the superscope. Available scopes:
[10.10.10.0] 10.10.10.0/24 [172.16.10.0] 172.16.10.0/24
< <u>B</u> ack <u>N</u> ext > Cancel

Étape 5. Sélectionnez toutes les étendues qui appartiennent au fabric VxLAN.

New Superscope Wizard
Select Scopes You create a superscope by building a collection of scopes.
Select one or more scopes from the list to add to the superscope. Agailable scopes:
[10.10.10.0] 10.10.10.0/24 [172.16.10.0] 172.16.10.0/24
< <u>B</u> ack <u>N</u> ext > Cancel

Étape 6. Vérifiez que toutes les étendues globales de fabric VxLAN sont en place et cliquez sur Finish.

New Superscope Wizard	
	Completing the New Superscope Wizard
	You have successfully completed the New Superscope wizard.
	The following superscope will be created:
	Name: Scopes for VxLAN Fabric (with Opt 82)
	Scopes included in this superscope:
	[172.16.10.0] 172.16.10.0/24
	To close this wizard, click Finish.
	< Back Finish Cancel

Configurez l'option 82 dans les étendues d'hôte.

Étape 1. Cliquez avec le bouton droit sur Stratégies (dernière option) dans l'étendue de l'hôte et cliquez sur Nouvelle stratégie.

🔶 🙇 📰 🗟 🕞 🛛							
DHCP Colabs-win2k22dc V III Superscope Sco V III Scope (10.10 IIII Address Address Address IIII Reservati Scope (17 IIIII Scope (17 IIII Scope (17) Scope	pes for VilLAN Fabr n0.03 10.10.10.00/24 Pool Leases prions Netw Policy Deactivate View Refresh Export List Hele	ric (with Opt 82)	Pulicy Name	Description	Processin	Level There are no	Address Range Rems to show in this view.

Étape 2. Écrivez un nom et une description, puis cliquez sur Next.



Remarque : dans cet exemple, la stratégie est créée pour sélectionner l'adressage IP palPicularly pour les hôtes dans Leaf-1 pour VNI 101010 basé sur VNI Remote-ID (paramètre de l'option 82).

DHCP Policy Config	uration Wizard
Policy based IP	Address and Option Assignment
This feature allow clients based on o This wizard will ge	ide you setting up a new policy. Provide a name (e.g. VoIP Phone
Policy Name:	cy) and description (e.g. NTP Server option for VoTP Phones) for your
Description:	Policy to select scope for Leaf-1 using Remote-ID
	< Back Next > Cancel

Étape 3. Cliquez sur Add. Dans Critères, sélectionnez Informations sur l'agent relais. Dans Opérateur, sélectionnez Égal à. Sélectionnez ensuite Agent Remote ID et saisissez la valeur. Cliquez sur OK, puis sur Suivant.



Remarque : l'ID distant est obtenu à partir de l'adresse MAC de l'interface SVI à laquelle l'interface SVII est associée.



Conseil : une stratégie peut être appliquée à plusieurs ID distants (ou VTEP) en ajoutant d'autres conditions et en sélectionnant OU au lieu de ET.

LEAF-1# show interface vlan 10
Vlan10 is up, line protocol is up, autostate enabled
Hardware is EtherSVI, address is 707d.b9b8.4daf <<<<
 Internet Address is 10.10.10.1/24
<snip>

DHCP Policy Configuration Wizard		
Cor Add/Edit Condition	?	× S
Specify a condition for the policy being configured. Select a criteria, and values for the condition. Criteria: Relay Agent Information Operator: Equals Value (in hex) Relay Agent Information: Agent Circuit ID: Agent Remote ID: 707db9b84daf Subscriber ID: Prefix wildcard(*) Append wildcard(*) Ok Ca	operator	
< Back Next >		Cancel

Étape 4. Configurez l'adressage IP que l'adresse IP existante peut utiliser sur le ou les VTEP sélectionnés par l'ID, puis cliquez sur Next.



Remarque : dans cet exemple, il n'y a qu'une seule machine virtuelle connectée à Leaf-1, donc une seule adresse IP est requise. Ici, une deuxième adresse IP est ajoutéeIPn si un autre hôte se connecte.

DHCP Policy Configuration Wizard
Configure settings for the policy If the conditions specified in the policy match a client request, the settings will be applied.
A scope can be subdivided into multiple IP address ranges. Clients that match the conditions defined in a policy will be issued an IP Address from the specified range. Configure the start and end IP address for the range. The start and end IP addresses for the range must be within the start and end IP addresses of the scope. The current scope IP address range is 10.10.10.1 - 10.10.10.254 If an IP address range is not configured for the policy, policy clients will be issued an IP address from the scope range. Do you want to configure an IP address range for the policy: Yes C No
Start IP address:       10 . 10 . 10 . 2         End IP address:       10 . 10 . 10 . 3         Percentage of IP address range:       0.8
< Back Next > Cancel

Étape 5. Cochez la case à gauche de Routeur 003 sous DCHP Standard Option. Ensuite, écrivez l'adresse IP de la passerelle par défaut pour les hôtes qui appartiennent à cette stratégie et appuyez sur Add. Cliquez sur Next (Suivant).



Attention : vous pouvez sélectionner plusieurs options, mais si vous ne savez pas quelle valeur entrer, ne le faites pas. Une configuration incohérente ou erronée peut provoquer un comportement inattendu.

DHCP Policy Configurat	ion Wizard		
Configure settings for If the conditions spe applied.	or the policy cified in the policy mate	ch a client request, the settings	will be
Vendor class:	DHCP Standard Op	tions	•
Available Options		Description	^
002 Time Offset		UTC offset in seco	onds
003 Router		Array of router add	resses order
004 Time Server <		Array of time serve	r addresses, ¥
Data entry			
Server name:			
		Resolve	
IP address:			
	Add		
10.10.10.1	Remove		
	Up		
	Down		
		< Back Next >	Cancel

Étape 6. Vérifiez les conditions de la stratégie et cliquez sur Finish.

2 DHCP								- c	s ×
File Action View Help									
🗢 🔶 🙍 💽 🔒 📓 🖬									
P DHCP	Policy Name	Description	Processin	Level	Address Range	State	Actions		
CXLabs-WIN2K22DC	UNI 101010	Policy to select scope for Leaf-1 using Remote-ID	1	Scope	10.10.10.2 - 10.10.10.3	Enabled	Policies		
<ul> <li>IPv4</li> <li>Superscope Scopes for VxLAN Fabric (with Opt 82)</li> <li>Scope [10.10.10.0] L2VNI 101010</li> <li>Address Pool</li> <li>Address Pool</li> <li>Scope Options</li> <li>Policies</li> <li>Scope Options</li> <li>Scope Options</li> <li>Server Options</li> <li>Policies</li> <li>Filters</li> <li>Filters</li> <li>Filters</li> </ul>							More Actions		,

DCHP packet-walk du début à la fin dans le fabric VxLAN.

Détection envoyée par HOST-1

```
Ethernet II, Src: 00:50:56:a5:fd:dd, Dst: ff:ff:ff:ff:ff:ff
> Internet Protocol Version 4, Src: 0.0.0.0, Dst: 255.255.255.255
> User Datagram Protocol, Src Port: 68, Dst Port: 67

    Dynamic Host Configuration Protocol (Discover)

    Message type: Boot Request (1)
    Hardware type: Ethernet (0x01)
    Hardware address length: 6
    Hops: 0
    Transaction ID: 0xe9e35087
    Seconds elapsed: 0

    Bootp flags: 0x8000, Broadcast flag (Broadcast)

      1... .... = Broadcast flag: Broadcast
      .000 0000 0000 0000 = Reserved flags: 0x0000
    Client IP address: 0.0.0.0
    Your (client) IP address: 0.0.0.0
    Next server IP address: 0.0.0.0
    Relay agent IP address: 0.0.0.0
    Client MAC address: 00:50:56:a5:fd:dd
    Client hardware address padding: 0000000000000000000
    Server host name not given
    Boot file name not given
    Magic cookie: DHCP

    Option: (53) DHCP Message Type (Discover)

      Length: 1
      <Value: 01>
      DHCP: Discover (1)
  Option: (61) Client identifier
      Length: 7
      <Value: 01005056a5fddd>
      Hardware type: Ethernet (0x01)
      Client MAC address: 00:50:56:a5:fd:dd

    Option: (12) Host Name

      Length: 10
      <Value: 43584c6162732d573130>
      Host Name: CXLabs-W10
  v Option: (60) Vendor class identifier
      Length: 8
      <Value: 4d53465420352e30>
      Vendor class identifier: MSFT 5.0

    Option: (55) Parameter Request List

      Length: 14
      <Value: 0103060f1f212b2c2e2f7779f9fc>
      Parameter Request List Item: (1) Subnet Mask
      Parameter Request List Item: (3) Router
      Parameter Request List Item: (6) Domain Name Server
      Parameter Request List Item: (15) Domain Name
      Parameter Request List Item: (31) Perform Router Discover
      Parameter Request List Item: (33) Static Route
      Parameter Request List Item: (43) Vendor-Specific Information
      Parameter Request List Item: (44) NetBIOS over TCP/IP Name Server
      Parameter Request List Item: (46) NetBIOS over TCP/IP Node Type
      Parameter Request List Item: (47) NetBIOS over TCP/IP Scope
      Parameter Request List Item: (119) Domain Search
      Parameter Request List Item: (121) Classless Static Route
      Parameter Request List Item: (249) Private/Classless Static Route (Microsoft)
      Parameter Request List Item: (252) Private/Proxy autodiscovery

    Option: (255) End

      Option End: 255
    Padding: 000000000000000000
```

### Découverte sur LEAF-1

Détection reçue sur LEAF-1	Détection envoyée par LEAF-1
	<ul> <li>Ethernet II, Src: 70:7d:b9:b8:4d:af, Dst: 10:b3:d6:a4:85:97</li> <li>Internet Protocol Version 4, Src: 5.5.5, Dst: 13.13.13.254</li> <li>User Datagram Protocol, Src Port: 65233, Dst Port: 4789</li> <li>Virtual ethensible Local Area Network</li> </ul>
	> Flags: 0x0000, VXLAN Network ID (VNI) Group Policy ID: 0
Ethernet II, Src: 00:50:56:a5:fd:dd, Dst: ff:ff:ff:ff:ff:ff	VXLAN Network Identifier (VNI): 303030 Received: 0
Internet Protocol Version 4, Src: 0.0.0.0, Dst: 255.255.255.255	> Ethernet II, Src: 70:7d:b9:b8:4d:af, Dst: 02:00:0d:0d:0d:fe
<ul> <li>Dynamic Host Configuration Protocol (Discover)</li> </ul>	Internet Protocol Version 4, Src: 172.16.10.8, Dst: 10.10.10.150 User Datagram Protocol, Src Port: 67, Dst Port: 67
Message type: Boot Request (1)	Dynamic Host Configuration Protocol (Discover) Message type: Boot Request (1)
Hardware type: Ethernet (0x01)	Hardware type: Ethernet (0x01)
Hardware address length: 6 Hons: 0	Hardware address length: 6 Hops: 1
Transaction ID: 0xe9e35087	Transaction ID: 0xe9e35087
Seconds elapsed: 0	> Bootp flags: 0x8000, Broadcast flag (Broadcast)
<ul> <li>Bootp flags: 0x8000, Broadcast flag (Broadcast)</li> </ul>	Client IP address: 0.0.0.0 Your (client) IP address: 0.0.0.0
1 = Broadcast tlag: Broadcast	Next server IP address: 0.0.0.0
Client IP address: 0.0.0.0	Client MAC address: 1/2.16.10.8 Client MAC address: 00:50:56:a5:fd:dd
Your (client) IP address: 0.0.0.0	Client hardware address padding: 000000000000000000000
Next server IP address: 0.0.0.0	Boot file name not given
Relay agent IP address: 0.0.0.0	Magic cookie: DHCP © Option: (53) DHCP Message Type (Discover)
Client hardware address padding: 0000000000000000000	Length: 1
Server host name not given	DHCP: Discover (1)
Boot file name not given	Option: (61) Client identifier Length: 7
Magic cookie: DHCP	<value: 0100505635fddd=""></value:>
Length: 1	Client MAC address: 00:50:56:a5:fd:dd
<value: 01=""></value:>	Option: (12) Host Name Length: 10
DHCP: Discover (1)	<value: 43584c6162732d573130=""></value:>
<pre>v Option: (61) Client identifier length: 7</pre>	<pre>v Option: (60) Vendor class identifier</pre>
<value: 01005056a5fddd=""></value:>	Length: 8 <value: 4d53465420352e30=""></value:>
Hardware type: Ethernet (0x01)	Vendor class identifier: MSFT 5.0
Client MAC address: 00:50:56:a5:fd:dd	<ul> <li>Option: (55) Parameter Request List Length: 14</li> </ul>
v Uption: (12) Host Name	<value: 0103060f1f212b2c2e2f7779f9fc=""> Parameter Request List Tem: (1) Submet Mask</value:>
<value: 43584c6162732d573130=""></value:>	Parameter Request List Item: (3) Router
Host Name: CXLabs-W10	Parameter Request List Item: (6) Domain Name Server Parameter Request List Item: (15) Domain Name
<ul> <li>Option: (60) Vendor class identifier</li> </ul>	Parameter Request List Item: (31) Perform Router Discover
Length: 8	Parameter Request List Item: (43) Vendor-Specific Information
Vendor class identifier: MSFT 5.0	Parameter Request List Item: (44) NetBIOS over TCP/IP Name Server Parameter Request List Item: (46) NetBIOS over TCP/IP Node Type
V Option: (55) Parameter Request List	Parameter Request List Item: (47) NetBIOS over TCP/IP Scope
Length: 14	Parameter Request List Item: (19) Dumain Search Parameter Request List Item: (121) Classless Static Route
<value: 0103060t1t21202c2e2t7779t9tc=""> Parameter Request List Item: (1) Subnet Mack</value:>	Parameter Request List Item: (249) Private/Classless Static Route (Microsoft) Parameter Request List Item: (252) Private/Proxy autodiscovery
Parameter Request List Item: (3) Router	Option: (82) Agent Information Option
Parameter Request List Item: (6) Domain Name Server	Length: 4/ <value: 010e0108000600018a9200a0000000000206707db9b84daf97090074656e616e742d610b040a0a0a0105040a0a0a00=""></value:>
Parameter Request List Item: (15) Domain Name	<ul> <li>Option 82 Suboption: (1) Agent Circuit ID Length: 14</li> </ul>
Parameter Request List Item: (31) Perform Router Discover	<value: 0108000600018a9200a00000000=""></value:>
Parameter Request List Item: (43) Vendor-Specific Information	Agent Circuit ID: 010800000018092000000000 v Option 82 Suboption: (2) Agent Remote ID
Parameter Request List Item: (44) NetBIOS over TCP/IP Name Server	Length: 6
Parameter Request List Item: (46) NetBIOS over TCP/IP Node Type	Agent Remote ID: 707db9b84daf
Parameter Request List Item: (47) NetBLUS over ICP/IP Scope Parameter Request List Item: (119) Domain Search	Option 82 Suboption: (151) VRF name/VPN ID Length: 9
Parameter Request List Item: (121) Classless Static Route	<value: 0074656e616e742d61=""></value:>
Parameter Request List Item: (249) Private/Classless Static Route (Microsoft)	<pre>&gt; [Expert Info (Warning/Undecoded): Trailing stray characters]</pre>
Parameter Request List Item: (252) Private/Proxy autodiscovery	Option 82 Suboption: (11) Server ID Override (10.10.10.1) Length: 4
> Uption: (255) End Padding: 00000000000000000	<value: 0a0a0a01=""></value:>
	<pre>&gt; Option 82 Suboption: (5) Link selection (10.10.10.0)</pre>
	Length: 4 <value: 0a0a0a00=""></value:>
	Link selection: 10.10.10.0
	Padding: 0000000000000000



Conseil : l'image s'agrandit lorsque vous double-cliquez.

### Détection sur SPINE

Détection reçue sur SPINE	Détection envoyée par SPINE
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<pre>Ethernet II, Src: 70:7d:b9:b0:4d:af, Dst: 10:b3:d6:a4:85:97 Internet Protocol Version 4, Src: 5.5.5, Dst: 13.13.13.254 User Datagram Protocol, Src Port: 65233, Dst Port: 4789 Virtual extensible Local Area Network &gt; Flags: 0x8080, VXLWN Network ID (VNI) Group Policy ID: 0 VXLAN Network ID (VNI): 303030 Reserved: 0 Ethernet II, Src: 70:7d:b9:b0:4d:af, Dst: 02:00:0d:d0:0d:fe Internet Protocol Version Protocol, Src Port: 67, Dst Port: 67 Vmanic Mest Configuration Protocol (Discover) Wessage type: Boot Request (1) Hardware address length: 6 HOps: 1 Transaction ID: 0xe9e35087 Seconds elapsed: 0 Sobot Plags: 0x8080, Broadcast flag (Broadcast) Client IP address: 0.0.0.0 Next server IP address: 0.0.0 Next Server</pre>	Ethernet II, Src: 10:b3:d6:a4:85:97, Dst: 60:26:aa:85:98:87 Internet Protocol Version 4, Src: 5.5.5.5, Dst: 13.13.13.254 User Datagram Protocol, Src Part: 65233, Dst Port: 4789 Virtual extensible Local Area Network Flags: 8x880, VXLAN Network 10 (WI) Group Policy ID: 0 VXLAN Network Identifier (WI): 383030 Reserved: 0 Ethernet II, Src: 70:7d:b9:b8:4d:af, Dst: 02:00:0d:0d:0d:fe Internet Protocol Version 4, Src: 172.16.10.8, Dst: 10.10.18.150 User Datagram Protocol, Src Port: 67, Dst Port: 67 Oynamic Most Configuration Protocol (Discover) Message type: Boot Request (1) Hardware type: Ethernet (0x01) Hardware ddress length: 6 Hops: 1 Transaction ID: 0xe0e35087 Seconds elapsed: 0 Bootp flags: 0x8008, Broadcast flag (Broadcast) Client IP address: 0.0.0.0 Your (client IP address: 0.0.0.0 Net Server IP
Client MAC address: 00:50:56:a5:fd:dd Client Hardware address padding: 000000000000000000000000000000000000	<pre>Relay agent 1# address: 1/2.16.10.8 Client Mardware address padding: 000000000000000000000000000000000000</pre>
<pre>Parameter Request List Item: (b) Jomain Name Server Parameter Request List Item: (c) Domain Name Server Parameter Request List Item: (c) Domain Name Server Parameter Request List Item: (c) Static Route Discover Parameter Request List Item: (c) Static Route Discover Parameter Request List Item: (c) NetBIOS over TCP/IP Node Type Parameter Request List Item: (c) NetBIOS over TCP/IP Node Type Parameter Request List Item: (c) NetBIOS over TCP/IP Node Type Parameter Request List Item: (c) NetBIOS over TCP/IP Node Type Parameter Request List Item: (c) NetBIOS over TCP/IP Node Type Parameter Request List Item: (c) Items Static Route Parameter Request List Item: (c) Items Static Route (Microsoft) Parameter Request List Item: (c) Private/Classless Static Route (Microsoft) Parameter Request List Item: (c) Private/Classless Static Route (Microsoft) Parameter Request List Item: (c) Private/Classless Static Route (Microsoft) Parameter Request List Item: (c) Private/Classless Static Route (Microsoft) Length: 47 <value: 01e0080600018a0200000000000000000000000000000000<="" td=""><td>Parameter Request List Item: (b) Domain Name Server           Parameter Request List Item: (c) Domain Name           Parameter Request List Item: (c) Domain Name           Parameter Request List Item: (c) Domain Name           Parameter Request List Item: (c) Static Route           Parameter Request List Item: (c) Static Route           Parameter Request List Item: (c) NetBIOS over TCP/IP Name Server           Parameter Request List Item: (c) NetBIOS over TCP/IP Node Type           Parameter Request List Item: (c) NetBIOS over TCP/IP Node Type           Parameter Request List Item: (c) NetBIOS over TCP/IP Node Type           Parameter Request List Item: (c) NetBIOS over TCP/IP Node Type           Parameter Request List Item: (c) Clossless Static Route           Parameter Request List Item: (c) Clossless Static Route (Microsoft)           Parameter Request List Item: (c) Private/Classless Static Route (Microsoft)           Parameter Request List Item: (c) Private/Proxy autodiscovery           Option: (c) Agent Information Option           Length: 47           -value: elecel08000600018a9200a000000000           Option: 25 Suboption: (l) Agent Circuit ID           Length: 34           -value: 0108000600018a9200a00000000           Option 32 Suboption: (l) Agent Remote ID           Length: 6           -value: 707db9b84daf&gt;           Agent Remote ID           <t< td=""></t<></td></value:></pre>	Parameter Request List Item: (b) Domain Name Server           Parameter Request List Item: (c) Domain Name           Parameter Request List Item: (c) Domain Name           Parameter Request List Item: (c) Domain Name           Parameter Request List Item: (c) Static Route           Parameter Request List Item: (c) Static Route           Parameter Request List Item: (c) NetBIOS over TCP/IP Name Server           Parameter Request List Item: (c) NetBIOS over TCP/IP Node Type           Parameter Request List Item: (c) NetBIOS over TCP/IP Node Type           Parameter Request List Item: (c) NetBIOS over TCP/IP Node Type           Parameter Request List Item: (c) NetBIOS over TCP/IP Node Type           Parameter Request List Item: (c) Clossless Static Route           Parameter Request List Item: (c) Clossless Static Route (Microsoft)           Parameter Request List Item: (c) Private/Classless Static Route (Microsoft)           Parameter Request List Item: (c) Private/Proxy autodiscovery           Option: (c) Agent Information Option           Length: 47           -value: elecel08000600018a9200a000000000           Option: 25 Suboption: (l) Agent Circuit ID           Length: 34           -value: 0108000600018a9200a00000000           Option 32 Suboption: (l) Agent Remote ID           Length: 6           -value: 707db9b84daf>           Agent Remote ID <t< td=""></t<>
<pre>vvaud: 00/403000100//40300010 VExpert Info (Warning/Undecoded): Trailing stray characters) &gt; [Expert Info (Warning/Undecoded): Trailing stray characters] &gt; Option 82 Suboptions (11) Server ID Override (10.10.10.10.1) Length: 4 - value: 000000000 Length: 4 - value: 00000000000000 Link selection: 10.10.10.0 Option End: 255 Padding: 000000000000000 </pre>	<pre><value: 007465660166742061="">     VWF name:     [Expert Info (Warning/Undecoded): Trailing stray characters]     0ption 82 Subpotions (11) Server ID Override (10.10.10.1)     Length: 4     &lt;4(alue: 8000001)     Server ID Override: 10.10.10.1     Option 82 Subpotions (5) Link selection (10.10.10.0)     Length: 4     &lt;4(alue: 8000000000000000000000000000000000000</value:></pre>

# Découverte sur LEAF-1-vPC

Détection reçue sur LEAF-1-vPC	Détection envoyée par LEAF-1-vPC
--------------------------------	----------------------------------

Ethernet II, Src: 10:D3:06:84:85:97, Dst: 60:26:88:85:98:87	> Ethernet II, Src: 60:26:aa:85:98:87, Dst: 00:50:56:a5:dc:ca
> Internet Protocol Version 4, Src: 5.5.5.5, Dst: 13.13.13.254	Internet Protocol Version 4, Src: 172.16.10.8, Dst: 10.10.10.150
User Datagram Protocol, Src Port: 65233, Dst Port: 4789	liser Datagram Protocol Src Port: 67 Dat Port: 67
Vietnal avtancibla Local Area Naturak	user batagram riotocot, sit Port: 0/, Ust Port: 0/
Virtual extensione Local AFEA NECKOFK	Uynamic Host Configuration Protocol (Discover)
> Flags: 0x0800, VXLAN Network ID (VNI)	Message type: Boot Request (1)
Group Policy ID: 0	Hardware type: Ethernet (0x01)
VXLAN Network Identifier (VNI): 303030	Ward are address leads 6
Presented A	hardware address length: 6
Reserved: 0	Hops: 1
> Ethernet II, Src: 70:7d:b9:b8:4d:af, Dst: 02:00:0d:0d:0d:fe	Transaction ID: 0xe9e35087
Internet Protocol Version 4, Src: 172, 16, 10, 8, Dst: 10, 10, 10, 150	Forende al anotation a
- Internet (Fordet (Fisien 4) Ster All Die Die 1 (11) (11) (11)	seconds etapsed: 0
User Datagram Protocol, Src Port: 67, Dst Port: 67	<ul> <li>Bootp flags: 0x8000, Broadcast flag (Broadcast)</li> </ul>
V Dynamic Host Configuration Protocol (Discover)	1 = Broadcast flag: Broadcast
Message type: Boot Request (1)	200,0000,0000,0000 = December 1 2 and 1 2 an
	.000 0000 0000 = Reserved rtags: 0x0000
hardware type: Ethernet (0x01)	Client IP address: 0.0.0.0
Hardware address length: 6	Your (client) IP address: 0.0.0.0
Hops: 1	Next conver TD address: 0.0.0.0
Transaction TD: 0ve0e3E007	Next Server 1P address: 0.0.0.0
Transaction iD: 0xe9e35067	Relay agent IP address: 172.16.10.8
Seconds elapsed: 0	Client MAC address: 00:50:56:a5:fd:dd
Booto flags: 0x8000, Broadcast flag (Broadcast)	
Client ID address, 0.0.0.0	ctient hardware address padding: 0000000000000000000
CLEAR IF ADDRESS: 0.0.0.0	Server host name not given
Your (client) IP address: 0.0.0.0	Boot file name not given
Next server IP address: 0.0.0.0	Manie cookie: DHCP
Relay agent TP address: 172 16 18 8	hagit cookle. Dhep
Client MAC address An Co. Co. C. Advad	<ul> <li>option; (55) DRCP Message Type (Discover)</li> </ul>
CTTGUT NWC 900(L622: 00:20:20:30:40:00	Length: 1
Client hardware address padding: 00000000000000000000	<value: 01=""></value:>
Server host name not given	DUCD. Discourse (1)
Boot file some not given	UNCP: DISCOVER (1)
DOOL LILE NAME HOL GIVEN	<ul> <li>Option: (61) Client identifier</li> </ul>
Magic cookie: DHCP	Length: 7
<ul> <li>Option: (53) DHCP Message Type (Discover)</li> </ul>	-151.000 0100505555fddd
Length: 1	//d/nc: araabababinngs
Long the A	Hardware type: Ethernet (0x01)
<value: 01=""></value:>	Client MAC address: 00:50:56:a5:fd:dd
DHCP: Discover (1)	Ontion: (12) Host Name
Option: (61) Client identifier	option: (12) Host Name
- vyskavni (vaz) eskent avelltilter	Length: 10
Length: 7	<value: 43584c6162732d573130=""></value:>
<value: 01005056a5fddd=""></value:>	Host Name: CVI abs-W10
Hardware type: Ethernet (0x01)	TOST Malle. CALabs-MID
	Option: (60) Vendor class identifier
Client MAC address: 00:50:56:a5:Td:dd	Length: 8
<ul> <li>Option: (12) Host Name</li> </ul>	<value: 4d53d65420352e30=""></value:>
Length: 10	
Value: 42594c6162722d573120-	Vendor class identifier: HSFI 5.0
<value: 31362<="" 3203="" 43364c0102="" td=""><td>v Option: (55) Parameter Request List</td></value:>	v Option: (55) Parameter Request List
Host Name: CXLabs-W10	length: 14
<ul> <li>Option: (60) Vendor class identifier</li> </ul>	
length: 8	<value: 010300011121202c2221="" 9191c=""></value:>
	Parameter Request List Item: (1) Subnet Mask
<value: 4053465420352e30=""></value:>	Parameter Request List Item: (3) Router
Vendor class identifier: MSFT 5.0	Parameter Pequert Lift Item: (6) Demain Name Server
Option: (55) Parameter Request List	Parameter Request List item: (6) Domain Name Server
i anatis 14	Parameter Request List Item: (15) Domain Name
Length: 14	Parameter Request List Item: (31) Perform Router Discover
<value: 0103060f1f212b2c2e2f7779f9fc=""></value:>	Parameter Request List Item (22) Static Reute
Parameter Request List Item: (1) Subnet Mask	Parameter Request List item: (33) Static Route
Descretes Descret List Them, (2) Dester	Parameter Request List Item: (43) Vendor-Specific Information
Parameter Request List Item: (3) Router	Parameter Request List Item: (44) NetBIOS over TCP/IP Name Server
Parameter Request List Item: (6) Domain Name Server	Parameter Request List Item; (46) NetBIOS over TCP/ID Node Type
Parameter Request List Item: (15) Domain Name	Parameter Request List item. (40) Netbros over iter/ir noue type
Parameter Pequest List Item: (21) Perform Pouter Discover	Parameter Request List Item: (47) NetBIOS over TCP/IP Scope
Parameter Request List Item. (51) Perform Router Discover	Parameter Request List Item: (119) Domain Search
Parameter Request List Item: (33) Static Route	Parameter Request List Item: (121) Classless Static Route
Parameter Request List Item: (43) Vendor-Specific Information	Fordineter Request List item. (122) classics static Route
Parameter Request List Item: (44) NetBIOS over TCP/IP Name Server	Parameter Request List Item: (249) Private/Classless Static Route (Microsoft)
Parameter negative Light Ltem: (44) Netblog Ver Ltr/ir Home Scive	Parameter Request List Item: (252) Private/Proxy autodiscovery
Parameter Request List Item: (46) NetBIDS over ILP/IP Node Type	Antion: (82) Agent Information Ontion
Parameter Request List Item: (47) NetBIOS over TCP/IP Scope	length a
Parameter Reguest List Item: (119) Domain Search	Length: 4/
December Dequest List Team, (121) Classifier Static Poute	<value: 010e0108000600018a9200a000000000206707db9b84daf97090074656e616e742d610b040a0a0a0105040a0a0a00=""></value:>
Forameter nequest List item; (iii) tidsstess static Koute	<ul> <li>Option 82 Suboption: (1) Agent Circuit ID</li> </ul>
Parameter Request List Item: (249) Private/Classless Static Route (Microsoft)	Landby 14
Parameter Request List Item: (252) Private/Proxy autodiscovery	Lengths 14
Option: (82) Agent Information Option	<value: 0108000600018a9200a00000000=""></value:>
Longhi 47	Agent Circuit ID: 0108000600018a9200a00000000
Length: 4/	<ul> <li>Ontion 82 Subortion: (2) Agent Remote TD</li> </ul>
<value: 010e0108000500018a9200a00000000000205707db9b84daf97090074655e616e742d610b040a0a0a0105040a0a0a00=""></value:>	Landth 6
<ul> <li>Option 82 Suboption: (1) Agent Circuit ID</li> </ul>	rendru: o
length: 14	<value: 707db9b84daf=""></value:>
Legin at	Agent Remote ID: 707db9b84daf
<a9 01000000199370090000000="" 06:=""></a9>	Option 82 Subortion: (151) VPE page/VPN TD
Agent Circuit ID: 0108000600018a9200a00000000	- opcion of Subprion: (151) VKr name/VFW 10
Option 82 Subortion: (2) Agent Remote ID	Length: 9
Longth: 6	<value: 0074656e616e742d61=""></value:>
	VRF name:
<value: d="" db9b84dat=""></value:>	[Event Toto (Warning/Undecoded): Trailing stress sharestern]
Agent Remote ID: 707db9b84da1	<pre>&gt; [cxpert into (warning/undecoded): frailing stray characters]</pre>
Option 82 Subortion: (151) VRF name/VPN TD	[Trailing stray characters]
Least of Subjectory (151) the Hame/ the Lo	<pre><message: characters="" stray="" trailing=""></message:></pre>
Length: 9	[Severity Jave] + Marging]
<value: 0074656e616e742d61=""></value:>	(severity tevet; warning)
VRF name:	[Group: Undecoded]
[Evpert Info (Warping/Undecoded): Trailing stray characters]	<ul><li>Option 82 Suboption: (11) Server ID Override (10.10.10.1)</li></ul>
Compare and the final formation and the second seco	Length: 4
<ul> <li>option az suboption: (11) Server ID Override (10.10.10.1)</li> </ul>	
Length: 4	Synthe: popopopt/
<value: 0a0a0a01=""></value:>	Server ID Override: 10.10.1
<value: 0a0a0a01=""> Server ID Override: 10 10 10 1</value:>	Server ID Override: 10.10.10.1 • Option 82 Suboption: (5) Link selection (10.10.10.0)
<value: 0a0a0a01=""> Server ID Override: 10.10.10.1</value:>	Server ID Override: 10.10.10.1 • Option 82 Suboption: (5) Link selection (10.10.10.0) i enoth 4
<ul> <li><value: 0a0a0a0j=""></value:></li> <li>Server 1D Override: 10.10.10.1</li> <li>Option 82 Suboption: (5) Link selection (10.10.10.0)</li> </ul>	Server ID Override: 10.10.10.1 ∽ Option 82 Suboption: (5) Link selection (10.10.10.0) Length: 4
<ul> <li><value: 00000001<="" li=""> <li>Server ID 0verride: 10.10.10.1</li> <li>&gt; Option 82 Suboption: (5) Link selection (10.10.00) Length: 4</li> </value:></li></ul>	Server ID Override: 10.10.10.1 ∨ Option 82 Suboption: (5) Link selection (10.10.10.0) Length: 4 <value: 0a0a0a00=""></value:>
<ul> <li><value: 0a0a0a0j=""></value:></li> <li>Server 10 Override: 10.10.10.1</li> <li>Option 82 Suboption: (5) Link selection (10.10.10.0)</li> <li>Length: 4</li> <li><value: 0a0a0a0b=""></value:></li> </ul>	Server ID Override: 10.10.10.1 ∽ Option 82 Suboption: (5) Link selection (10.10.10.0) Length: 4 <value: 0a0080005<br="">Link selection: 10.10.10.0</value:>
<ul> <li><value: 00000001<="" li=""> <li>Server ID Override: 10.10.10.1</li> <li>&gt; Option 82 Suboption: (5) Link selection (10.10.10.0) Length: 4</li> <li><value: 00000000-<br="">Link celection: 10.10.10.0</value:></li> </value:></li></ul>	Server ID Override: 10.10.10.1 <ul> <li>Option 82 Suboption: (5) Link selection (10.10.10.0) Length: 4</li> <li><value: 0a0a0a000=""> Link selection: 10.10.10.0</value:></li> <li>Votion: (255) End</li> </ul>
- <value: 0@a@a@ad=""> Server ID Override: 10.10.10.1 Option 82 Suboption: (5) Link selection (10.10.10.0) Length: 4 - <value: 0@a@a@a@a.<br="">Link selection: 10.10.10.0</value:></value:>	Server ID Override: 10.10.10.1 ~ Option 82 Suboption: (5) Link selection (10.10.10.0) Length: 4 ~ Value: 0a0080000> Link selection: 10.10.10.0 ~ Option: (255) End
<pre> Server ID Override: 10.10.10.1 &gt; Option 02 Suboption: (5) Link selection (10.10.10.0) Length: 4  Link selection: 10.10.10.0 &gt; Option: (255) End</pre>	Server ID Override: 10.10.10.1 ~ Option & Suboption: (5) Link selection (10.10.10.0) Length: 4 ~ value: 08003008> Link selection: 10.10.10.0 ~ Option: (255) End Option End: 255
<pre> Server ID Override: 10.10.10.1 </pre> Option 82 Suboption: (5) Link selection (10.10.10.0) Length: 4 Link selection: 10.10.10.0 Option: (255) End Padding: 0000000000000000	Server ID Override: 10.10.10.1 <pre>     Option 82 Suboption: (5) Link selection (10.10.10.0) Length: 4 <value: 0a080808=""> Link selection: 10.10.10.0 </value:></pre> <pre>     Option: (255) End Option End: 255 </pre> Padding: 080000000000000
<pre> Server ID Override: 10.10.10.1 &gt; Option 02 Suboption: (5) Link selection (10.10.10.0) Length: 4  Link selection: 10.10.10.0 &gt; Option: (255) End Padding: 000000000000000</pre>	Server ID Override: 10.10.10.1 ∽ Option 82 Suboption: (5) Link selection (10.10.10.0) Length: 4 <value: 0a808080<br="">Link selection: 10.10.10.0 ∽ Option: (255) End Option End: 255 Padding: 00000000000000</value:>



Remarque : LEAF-2-vPC reçoit le paquet Discovert, mais uniquement commuté. L'adresse MAC de destination appartient au serveur DHCP.

Détection reçue sur le serveur DHCP

```
Ethernet II, Src: 60:26:aa:85:98:87, Dst: 00:50:56:a5:dc:ca
Internet Protocol Version 4, Src: 172.16.10.8, Dst: 10.10.10.150
User Datagram Protocol, Src Port: 67, Dst Port: 67
Dynamic Host Configuration Protocol (Discover)
  Message type: Boot Request (1)
  Hardware type: Ethernet (0x01)
  Hardware address length: 6
  Hops: 1
  Transaction ID: 0xe9e35087
  Seconds elapsed: 0
 Bootp flags: 0x8000, Broadcast flag (Broadcast)
    1... .... = Broadcast flag: Broadcast
    .000 0000 0000 0000 = Reserved flags: 0x0000
  Client IP address: 0.0.0.0
  Your (client) IP address: 0.0.0.0
  Next server IP address: 0.0.0.0
  Relay agent IP address: 172.16.10.8
  Client MAC address: 00:50:56:a5:fd:dd
  Client hardware address padding: 0000000000000000000
  Server host name not given
  Boot file name not given
  Magic cookie: DHCP
 Option: (53) DHCP Message Type (Discover)
    Length: 1
    <Value: 01>
    DHCP: Discover (1)

    Option: (61) Client identifier

    Length: 7
    <Value: 01005056a5fddd>
    Hardware type: Ethernet (0x01)
    Client MAC address: 00:50:56:a5:fd:dd

    Option: (12) Host Name

    Length: 10
    <Value: 43584c6162732d573130>
    Host Name: CXLabs-W10

    Option: (60) Vendor class identifier

    Length: 8
    <Value: 4d53465420352e30>
    Vendor class identifier: MSFT 5.0
Option: (55) Parameter Request List
    Length: 14
    <Value: 0103060f1f212b2c2e2f7779f9fc>
    Parameter Request List Item: (1) Subnet Mask
    Parameter Request List Item: (3) Router
    Parameter Request List Item: (6) Domain Name Server
    Parameter Request List Item: (15) Domain Name
    Parameter Request List Item: (31) Perform Router Discover
    Parameter Request List Item: (33) Static Route
    Parameter Request List Item: (43) Vendor-Specific Information
    Parameter Request List Item: (44) NetBIOS over TCP/IP Name Server
    Parameter Request List Item: (46) NetBIOS over TCP/IP Node Type
    Parameter Request List Item: (47) NetBIOS over TCP/IP Scope
    Parameter Request List Item: (119) Domain Search
    Parameter Request List Item: (121) Classless Static Route
    Parameter Request List Item: (249) Private/Classless Static Route (Microsoft)
    Parameter Request List Item: (252) Private/Proxy autodiscovery

    Option: (82) Agent Information Option

    Length: 47
    <Value: 010e0108000600018a9200a0000000000206707db9b84daf97090074656e616e742d610b040a0a0a0105040a0a0a00>

    Option 82 Suboption: (1) Agent Circuit ID

      Length: 14
      <Value: 0108000600018a9200a00000000>
      Agent Circuit ID: 0108000600018a9200a00000000

    Option 82 Suboption: (2) Agent Remote ID

      Length: 6
      <Value: 707db9b84daf>
      Agent Remote ID: 707db9b84daf

    Option 82 Suboption: (151) VRF name/VPN ID

      Length: 9
      <Value: 0074656e616e742d61>
     VRF name:

    [Expert Info (Warning/Undecoded): Trailing stray characters]

           [Trailing stray characters]
           <Message: Trailing stray characters>
           [Severity level: Warning]
           [Group: Undecoded]

    Option 82 Suboption: (11) Server ID Override (10.10.10.1)

      Length: 4
      <Value: 0a0a0a01>
      Server ID Override: 10.10.10.1
   Option 82 Suboption: (5) Link selection (10,10,10,0)
      Length: 4
      <Value: 0a0a0a00>
      Link selection: 10.10.10.0
 Option: (255) End
    Option End: 255
  Padding: 000000000000000000
```

Offre DHCP envoyée par le serveur DHCP

```
Ethernet II, Src: 60:26:aa:85:98:87, Dst: 00:50:56:a5:dc:ca
Internet Protocol Version 4, Src: 172.16.10.8, Dst: 10.10.10.150
User Datagram Protocol, Src Port: 67, Dst Port: 67
Dynamic Host Configuration Protocol (Discover)
  Message type: Boot Request (1)
  Hardware type: Ethernet (0x01)
  Hardware address length: 6
  Hops: 1
  Transaction ID: 0xe9e35087
  Seconds elapsed: 0
  Bootp flags: 0x8000, Broadcast flag (Broadcast)
    1... .... = Broadcast flag: Broadcast
    .000 0000 0000 0000 = Reserved flags: 0x0000
  Client IP address: 0.0.0.0
  Your (client) IP address: 0.0.0.0
  Next server IP address: 0.0.0.0
  Relay agent IP address: 172.16.10.8
  Client MAC address: 00:50:56:a5:fd:dd
  Client hardware address padding: 0000000000000000000
  Server host name not given
  Boot file name not given
  Magic cookie: DHCP

    Option: (53) DHCP Message Type (Discover)

    Length: 1
    <Value: 01>
    DHCP: Discover (1)

    Option: (61) Client identifier

    Length: 7
    <Value: 01005056a5fddd>
    Hardware type: Ethernet (0x01)
    Client MAC address: 00:50:56:a5:fd:dd

    Option: (12) Host Name

    Length: 10
    <Value: 43584c6162732d573130>
    Host Name: CXLabs-W10

    Option: (60) Vendor class identifier

    Length: 8
    <Value: 4d53465420352e30>
    Vendor class identifier: MSFT 5.0

    Option: (55) Parameter Request List

    Length: 14
    <Value: 0103060f1f212b2c2e2f7779f9fc>
    Parameter Request List Item: (1) Subnet Mask
    Parameter Request List Item: (3) Router
    Parameter Request List Item: (6) Domain Name Server
    Parameter Request List Item: (15) Domain Name
    Parameter Request List Item: (31) Perform Router Discover
    Parameter Request List Item: (33) Static Route
    Parameter Request List Item: (43) Vendor-Specific Information
    Parameter Request List Item: (44) NetBIOS over TCP/IP Name Server
    Parameter Request List Item: (46) NetBIOS over TCP/IP Node Type
    Parameter Request List Item: (47) NetBIOS over TCP/IP Scope
    Parameter Request List Item: (119) Domain Search
    Parameter Request List Item: (121) Classless Static Route
    Parameter Request List Item: (249) Private/Classless Static Route (Microsoft)
Parameter Request List Item: (252) Private/Proxy autodiscovery

    Option: (82) Agent Information Option

    Length: 47
    <Value: 010e0108000600018a9200a0000000000206707db9b84da197090074656e616e742d610b040a0a0a0105040a0a0a00>

    Option 82 Suboption: (1) Agent Circuit ID

      Length: 14
       <Value: 0108000600018a9200a00000000>
      Agent Circuit ID: 0108000600018a9200a00000000
  · Option 82 Suboption: (2) Agent Remote ID
      Length: 6
       <Value: 707db9b84daf>
      Agent Remote ID: 707db9b84daf

    Option 82 Suboption: (151) VRF name/VPN ID

      Length: 9
       <Value: 0074656e616e742d61>
     VRF name:

    [Expert Info (Warning/Undecoded): Trailing stray characters]

           [Trailing stray characters]
           <Message: Trailing stray characters>
           [Severity level: Warning]
           [Group: Undecoded]

    Option 82 Suboption: (11) Server ID Override (10.10.10.1)

      Length: 4
       <Value: 0a0a0a01>
      Server ID Override: 10.10.10.1

    Option 82 Suboption: (5) Link selection (10.10.10.0)

      Length: 4
       <Value: 0a0a0a00>
      Link selection: 10.10.10.0
  Option: (255) End
    Option End: 255
  Padding: 00000000000000000
```

#### Offre DHCP sur LEAF-2-vPC

Offre reçue sur LEAF-2-vPC	Offre envoyée par LEAF-2-vPC
<pre>&gt; Ethernet II, Src: 80:50:55:55:dc:ca, Dst: 00:80:80:80:80:80 Internet Planagram Protocol, Src: Port: 67, Dst Port: 67 Dymail: Mask Configuration Protocol (Offer) Hardware toye: Ethernet (0x01) Hardware address length: 6 Mops: 0 Transaction ID: 8x:9e:3587 Seconds elapsed: 0 Tosot flags: 8x8000, Broadcast flag (Broadcast) 1</pre>	<pre>duce flow for the first state is a first state is a</pre>
Agent Circuit ID: 0108000600018a9200a00000000 Option 82 Suboption: (2) Agent Remote ID Length: 6 <value: 7070bpb84daf=""> Agent Emerts ID: 707dpbB84daf</value:>	<pre><value: 010e0108000600018a3200a00000000206707db9b84daf97090074656e616e742d610b040a0a0a0105040a0a0a00="">     Option 82 Suboption: (1) Agent Circuit ID     Length: 14     </value:></pre>
Option 82 Suboption: (151) VRF name/VPN ID Length: 9                April 100            VPN in ane:              VVPN in ane:               VPN	<pre>^ nyett Circuit DF 010000000000000000000000000000000000</pre>
[Expert Info (Warning/Undecoded): Trailing stray characters] [Trailing stray characters]	Option 82 Suboption: (151) VRF name/VPN ID     Leonth: 9
<pre></pre> <pre>&lt;</pre>	
<pre>isever:xy (vevel: Warning) [Group: Undecoded]</pre>	<pre>VMF name: [Expert Info (Warning/Undecoded): Trailing stray characters] [Trailing stray characters] -Message: Trailing stray characters&gt; [Severity level: Warning] [Group: Undecoded] •Option &amp; Suboption: (1) Server ID Override (10.10.10.1) Length: 4 -dvalue: daabaalt&gt;</pre>
Link selection: 10.10.00 • Option: (255) End Option End: 255	<pre><value: 00000015<br="">Server ID Override: 10.10.10.1 &gt; Option 82 Suboption: (5) Link selection (10.10.10.0) Length: 4 <value: 000000000<br="">Link selection: 10.10.10.0 &gt; Option (255) End Option End: 255</value:></value:></pre>

### Offre DHCP vPC SPINE

Offre reçue sur SPINE Offre envoyée par SPINE

<pre>Interfaces interfaces interf</pre>		
<pre>improve interval with it, but is highly strained into the second is highly strain</pre>	Ethernet II, Src: 60:26:aa:85:95:87, Dst: 10:D3:d6:a4:85:97	
<pre>Bit decision function, bit for the function for the</pre>	> Internet Protocol Version 4, Src: 13.13.13.254, Dst: 5.5.5.5	
With the start is the	> User Datagram Protocol, Src Port: 65518, Dst Port: 4789	
<ul> <li>Juge 108, 50.8 History 10 (K)</li> <li>Juge 108, 50.8 History 100 (K)</li> <li>J</li></ul>	<ul> <li>Virtual eXtensible Local Area Network</li> </ul>	1
<ul> <li>Jose Parls II. J. S. J. J.</li></ul>	> Flags: 0x0800, VXLAN Network ID (VNI)	
Duck make Section Sect	Group Policy ID: 8	
<ul> <li>Determine a set of a set o</li></ul>	VXIAN Network Identifier (VNI): 303030	> Ethernet II, Src: 10:b3:d6:a4:85:97, Dst: 70:7d:b9:b8:4d:af
<pre></pre>	Percented a	> Internet Protocol Version 4, Src: 13.13.13.254, Dst: 5.5.5.5
<ul> <li>Address Act Act Act Act Act Act Act Act Act Act</li></ul>	Keserved: 0	lier Ditagram Protocol Src Port: 65518 Det Port: 4789
<pre>Internal function ( Just ( Just ( Just ( Just ) ( Just ( Just ) ( Just ( Just ) ( Just )</pre>	Ethernet II, Src: 02:00:0d:0d:0d:fe, Dst: 70:7d:b9:b8:4d:af	Viser Valagiam Pilotocot, Sic Polt, 65316, DSt Polt, 4769
Jose Barger Jose Star Jose Arte J, Bar Pert D Restar Versi Barger J, Bar Barger J, Bar Barger J, Barger J	> Internet Protocol Version 4, Src: 10.10.10.150, Dst: 172.16.10.8	Virtual extensible Local Area Network
Prove the test per part of test per p	User Datagram Protocol, Src Port: 67, Dst Port: 67	> Flags: 0x0800, VXLAN Network ID (VNI)
With the first (b):         With the first (b):           With the first (b):         With the first (b): <td>Dynamic Host Configuration Protocol (Offer)</td> <td>Group Policy ID: 0</td>	Dynamic Host Configuration Protocol (Offer)	Group Policy ID: 0
<ul> <li>Ander Figs: The Horner (a)</li> <li>Ander Figs: The Horner (b)</li> <li>Ander Figs: The Horner (b)</li></ul>	New Provide Contragent Contract (Content)	VXLAN Network Identifier (VNI): 303030
<ul> <li>And And States 6</li> <li>And And States 6</li> <li>And And And And And And And And And And</li></ul>	Hessage type: boot kepty (2)	Received: 0
market ingin 6	Hardware type: Ethernet (0x01)	Ethernet TT Src. 07.00.0d.0d.0d.fo Date 70.7d.b0.k0.4d.of
<ul> <li>Hunst in the backboship</li> <l< td=""><td>Hardware address length: 6</td><td>7 Ethernet 11, Src: 02:00:00:00:00:10, DSt: 70:70:D9:08:40:31</td></l<></ul>	Hardware address length: 6	7 Ethernet 11, Src: 02:00:00:00:00:10, DSt: 70:70:D9:08:40:31
Transmission of the first set of the fir	Hops: 0	> Internet Protocol Version 4, Src: 10.10.100, Dst: 172.16.10.8
beenet degree in a serie of a ser	Transaction ID: 0xe9e35087	> User Datagram Protocol, Src Port: 67, Dst Port: 67
<ul> <li>Description</li> <li>Descript</li></ul>	Seconds elansed: A	Opnamic Host Configuration Protocol (Offer)
<ul> <li>J. J. J</li></ul>	Second Second Constant () - (December )	Message type: Boot Reply (2)
List in set in a first f	<pre>&gt; bootp flags: example, broadcast flag (broadcast)</pre>	Hardware type: Ethernet (0x01)
<pre>res to the set of the set of</pre>	1 = Broadcast tlag: Broadcast	Hardware operations (over
Clust partners 0.0.0.0 bus core of partners 1.0.0.0.0 bus core of partners 1.0.0.0.0 bus core of partners 1.0.0.0.0 bus core of partners 1.0.0.0.0 Clust base of partners 1.0.0.0.0 bus core of partners 1.0.0.0.0.0 bus core of partners 1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0	.000 0000 0000 = Reserved flags: 0x0000	Hardware address tength. 0
Two (file)         Products 18, 18, 18, 18, 18, 18, 18, 18, 18, 18,	Client IP address: 0.0.0.0	Hops: 0
Inter spring P sectors 11 10, 10, 10, 10         Sector Liquid 20           Clust W Derrors 13 21, 10, 10         Sector Liquid 20           Clust W Derrors 14 21, 10, 10         Clust W Derrors 14, 10, 10           Clust W Derrors 14, 10, 10, 10         Clust W Derrors 14, 10, 10           Clust W Derrors 14, 10, 10, 10         Februari 20           Clust W Derrors 14, 10, 10, 10         Februari 20           W Derrors 14, 10, 10, 10         Februari 20           Perform 14, 10, 10, 10         Februari 20, 10, 10, 10           Perform 14, 10, 10, 10         Februari 20, 10, 10, 10           Perform 14, 10, 10, 10, 10         Februari 20, 10, 10, 10, 10           Perform 14, 10, 10, 10, 10         Februari 20, 10, 10, 10, 10           Perform 14, 10, 10, 10, 10         Februari 20, 10, 10, 10, 10, 10           Perform 14, 10, 10, 10, 10, 10         Februari 20, 10, 10, 10, 10, 10, 10, 10, 10, 10, 1	Your (client) IP address: 10.10.10.3	Transaction ID: 0xe9e35087
Rity gent p isorres: 17.1.5.1.5.4         Field (M. S. 1000)           Cites M. S. Anderson (M. S. 1000)         Field (M. S. 1000)           Cites M. S. Anderson (M. S. 1000)         Field (M. S. 1000)           Start A. S. 10000         Field (M. S. 1000)           Start A. S. 10000         Field (M. S. 1000)           Start A. S. 10000         Field (M. S. 10000)           Start A. S. 10000         Field (M. S. 100000)           Start A. S. 10000         Field (M. S. 100000)           Start A. S. 100000         Field (M. S. 10000000000000000000000000000000000	Next server IP address: 10.10.10.150	Seconds elapsed: 0
ClusterProductionCluster Number of SectionCluster Number of SectionThe Section of A. A. B. S.	Polav agent IQ address; 172 16 0 0	> Bootp flags: 0x8000, Broadcast flag (Broadcast)
<pre>clicking in the interview inter</pre>	Climat MAC addresses addresses for addresses	Client IP address: 0.0.0.0
Luce instruct arts is	Clent but dud(ESS: 00:30:30:30:30:000000000000000000000	Your (client) IP address: 10.10.10.3
Artor, Not, Stat, S	Litent naroware address padding: 000000000000000000000000000000000000	Next corver TP address: 10.10.10.150
bee fit is as men is just print (1) all of the starts is print (1) and (1) an	Server host name not given	Delay access TD educations 10:10:10:10
Physic costs: norm         Clust IN Pressure type (offer)           Clust IN Pressure type (offer)         Secret Pressure type (offer)           Clust IN Pressure type (offer)         Secret Pressure type (offer)           Clust IN Pressure type (offer)         Secret Pressure type (offer)           Clust IN Pressure type (offer)         Secret Pressure type (offer)           Clust IN Pressure type (offer)         Secret Pressure type (offer)           Clust IN Pressure type (offer)         Secret Pressure type (offer)           Clust IN Pressure type (offer)         Secret Pressure type (offer)           Clust IN Pressure type (offer)         Secret Pressure type (offer)           Clust IN Pressure type (offer)         Secret Pressure type (offer)           Secret Time Nume         Secret Pressure type (offer)           Clust IN Pressure type (offer)         Secret Time Nume           Secret Time Nume         Secret Time Nume           Secret	Boot file name not given	retay agent 17 dudress: 1/2.10.10.0
<ul> <li>grigen (13) BUC Message pige (Offer)</li> <li>(bit in hardbard statistic pacing in Bucketsensensensensensensensensensensensensens</li></ul>	Magic cookie: DHCP	CLIENT MAC address: 00:50:56:a5:Td:dd
Logit:         Server has Lake new jowe           option:         Server has Lake new j	<ul> <li>Option: (53) DHCP Message Type (Offer)</li> </ul>	Client hardware address padding: 00000000000000000000
Twister         Bot Tile næm og vinne           eptiger. 10         Bot Tile næm og vinne           eptiger. 11         Her Streft Right Tils 15, 155, 155, 155, 155, 155, 155, 155,	Length: 1	Server host name not given
<ul> <li>Matter State Stat</li></ul>	aligner a	Boot file name not given
<ul> <li>ment info 10 Length 4 value: 100 Length 4 value: 500 (1) Value: 100 Value: 100</li></ul>		Manic cookie: DHCP
- Guine (1) short fask (25,25,25,3) - Guine (1) short fask (25,25,25,3) - Guine (25,25,25,3) - Guine (25,25,25,3) - Guine (25,25,25,3) - Guine (25,25,25,3) - Guine (25,25,25,3) - Guine (25,25,25,25,3) - Guine (25,25,25,25,25,3) - Guine (25,25,25,25,25,3) - Guine (25,25,25,25,25,3) - Guine (25,25,25,25,25,3) - Guine (25,25,25,25,25,3) - Guine (25,25,25,25,25,25,25,25,25,25,25,25,25,2	DHCP: Offer (2)	- Options (52) DHC Message Type (Offer)
Legit: 4 Salat THY SI 352-352. Salat THY SI	Option: (1) Subnet Mask (255.255.0)	- option, (J) once nessage type (offer)
what supwhat supwhat supJohnt supwhat sup <td>Length: 4</td> <td>Length: 1</td>	Length: 4	Length: 1
<ul> <li>beside Note: 255.255.256.0</li> <li>cycles: (3) Anote: (4) 100 Value (4) 100 Value</li></ul>	<value: ffffff00=""></value:>	<value: 02=""></value:>
- optice: (3) Reneal 1 are wine tests: 4 tests: 4 optice: (3) Reneal 1 are wine tests: 53 renear 1 are wine tests: 54 re	Cubnat Marki 255 255 2	DHCP: Offer (2)
- Unititititititititititititititititititit	Action (E) Account Time Value	<ul> <li>Option: (1) Subnet Mask (255.255.25.0)</li> </ul>
<ul> <li>digits 1 a field of the set of</li></ul>	option: (58) Renewal Time Value	Length: 4
"Wite: 1989ads/b"Mater: 1989ads/boptice: 1997 Boxing Jize YueCash Companyoptice: 1997 Boxing Jize YueCash CompanyDDCF Server Jeentifier 198.18.18.1Cash Tize YueDDCF Server Jeentifier 198.18.18.1Cash Tize YueRestore: 198 Tize YueCash Tize YueNue: 198 Tize YueCash Tize Yue <t< td=""><td>Length: 4</td><td></td></t<>	Length: 4	
Rescal Tize Value: 1 Dars: (1289)         - Option: 10000           Unit: 1 Value: 1 Dars: (1289)         - Option: 10000           Value: 1 Name         - Option: 100000           Value: 1 Name         - Option: 100000           Value: 1 Name         - Option: 10000000000           Value: 1 Name         - Option: 1000000000000000000000000000000000000	<value: 0000a8c0=""></value:>	Charles Harden 255 255 2
- ortice: (3) Relating Time Value destrict: (3) Relating Time Value (4) August: (4) August: (4) (4) August: (4) Aug	Renewal Time Value: 12 hours (43200)	Subnet mask: 255.255.255.0
<pre> true; tries true; true;</pre>	<ul> <li>Option: (59) Rebinding Time Value</li> </ul>	Option: (58) Renewal Time Value
<ul> <li>Avie: 482739- Residing The Vulue: 2007. 42288</li> <li>Grites: 151 Pr Address Losse Time</li> <li>Grites: 152 Address Losse Time</li> <li>Grites: 152 Address Losse Time</li> <li>Grites</li></ul>	Length: 4	Length: 4
Besiding Turk Villes (2) hours (13500)         Percent (1100 Villes (2) hours (13200)           Options (51) P Address Lease Tuse Length: 4         Options (51) P Address Lease Tuse Length: 5() IP Address Length: 5() IP Address Leng	dalue dest2750-	<value: 0000a8c0=""></value:>
org::::::::::::::::::::::::::::::::::::		Renewal Time Value: 12 hours (43200)
- Option: (15) P Address Lease Time - option: (15) Option (15) Modess Lease Time - option: (15) Option (15) Modess Lease Time - option: (15) Modess Lease Time: 1 day (6640) - option: (16) Modess Lease Line: (10) Line:	Rebinding Time Value: 21 hours (75600)	- Antions (50) Rebinding Time Value
Length: 4 - Gylice: 8401185 -	Option: (51) IP Address Lease Time	option (39) Replicing the value
dvalue: <t< td=""><td>Length: 4</td><td>Length: 4</td></t<>	Length: 4	Length: 4
IP Address Lesse Tisse: 1 day (66489)     Rebrinding Tise Value: 21 hours (75680)       Option: (54) (0PC Sever Identifier (18.10.10)     Bebrinding Tise Value: 21 hours (75680)       (a) Uption: (15) Noticer     Potion: (15) Noticer       (c) Uption: (15) Noticer     Potion: (15) Noticer 10 Noticer       (c) Uption: (15) Noticer     Potion: (15) Noticer       (c) Uption: (15) Noticer     Potion: (15) Noticer       (c) Uption: (15) Noticer     Potion: (15) Noter       (c) Uption: (15) Noticer	<value: 00015180=""></value:>	<value: 00012750=""></value:>
option: (3) DPC Surver identifier (10.10.10.1)       - option: (3) DPC Address Lesse Time         Lengin: 4       - value: 00013186         - value: 00013186       - value: 00013186         - option: (3) DPC Surver identifier (10.10.10.1)       - option: (3) DPC Surver identifier (10.10.10.1)         - option: (3) DPC Surver identifier (10.10.10.1)       - option: (3) DPC Surver identifier (10.10.10.1)         - option: (3) DPC Surver identifier (10.10.10.1)       - option: (3) DPC Surver identifier (10.10.10.1)         - option: (3) DPC Surver identifier (10.10.10.1)       - option: (3) DPC Surver identifier (10.10.10.1)         - option: (3) Agent information Option       - option: (2) Agent information Option         - option: (2) Agent information Option       - option: (2) Agent information Option         - option: (2) Agent information Option       - option: (2) Agent information Option         - option: (2) Agent information Option       - option: (2) Agent information Option         - option: (3) DPC Subprint (1) Agent Circuit D       - value: 000000000000000000000000000000000000	TP Address Losse Time: 1 day (06400)	Rebinding Time Value: 21 hours (75600)
<ul> <li>a pitch: 15 mm/ server leentifier (10:10:10:1)</li> <li>b length: 4</li> <li>c length: 4</li> <l< td=""><td>IF Address Lease Time: I day (00400)</td><td><ul> <li>Option: (51) IP Address Lease Time</li> </ul></td></l<></ul>	IF Address Lease Time: I day (00400)	<ul> <li>Option: (51) IP Address Lease Time</li> </ul>
<ul> <li>c-optin: 4</li> <li>c-optin: (3) Fourier</li> <li>optin: (3) Fourier</li></ul>	<pre>&gt; Option: (54) DHCP Server Identifier (10.10.10.1)</pre>	length: 4
vAlue: #abababi> DHC Server Identifie: 10.10.10.1vAlue: #abababi> VALUE: #abababi> DHC Server Identifie: 10.10.10.10.100 Ption: (1) After Value: #abababi> Value: #abababi> Value: #abababi> Densin Hame Length: 4 value: #abababi> DHC Server Identifie: 10.10.10.100 Ption: (1) Domain Hame Length: 10DHC Server Identifier: 10.10.10.100 Ption: (1) Domain Hame Length: 10DHC Server Identifier: 10.10.10.100 Ption: (1) Domain Hame Length: 10DHC Server Identifier: 10.10.10.100 Ption: (2) Agent Information Option Length: 4Option (2) Agent Information Option Length: 40 Ption: (2) Agent Information Option Length: 4Option (2) Agent Information Option Value: 1080000003028000000000000000000000000000	Length: 4	Length: 4
DPC Server LentIfier: 10:10:11:         TP Address Lease Time: 1 day (8640)           Option: (15) Doubter         Option: (15) Doubter           Length: 4	<value: 0a0a0a01=""></value:>	<value: 00015180=""></value:>
• Option: (1) Noute:         - Option: (2) Noute:         - Option:	DHCP Server Identifier: 10.10.10.1	IP Address Lease Time: 1 day (86400)
<pre>Length: 4 v4bit: 08408401&gt; v4bit: 08408401&gt; v4bit: 08408401&gt; v4bit: 08408401&gt; v4bit: 08408401&gt; pvF Server Identifer: 10.10.10.1 pF Server Identifer: 10.10.10.10 pF Server Identifer: 10.10.10.10.10 pF Server Identifer: 10.10.10.10.10 pF Server Identifer: 10.10.10.10 pF Server Identifie: 10.10.10.10 pF Server Identifie: 10.10.10.10 pF Server Identifie: 10.10.10.10 pF Server Identifie: 10.10.10.10 pF Server Identifie:</pre>	(Option: (3) Router	<ul><li>Option: (54) DHCP Server Identifier (10.10.10.1)</li></ul>
<ul> <li>cvlui:: abababi&gt;</li> <li>cvlui:: abababi&gt;</li></ul>	Length A	Length: 4
Avalue: BadeBadeJ> Ruder: ID: R18.10.18.10.8.10.8.10.8.10.8.10.8.10.8.	Length: 4	<value: 0a0a0a01=""></value:>
Router: 13. 19. 10.1     "Outcom: (13. Domain Ruse"       Option: (13. Domain Ruse"     "Outcom: (13. Domain Ruse"       Length: 18     "Outcom: (13. Domain Ruse"       Length: 18     "Outcom: (13. Domain Ruse"       Length: 18     "Outcom: (13. Domain Ruse"       Option: (23. Agent Information Option     Control (23. Septement Ruse"       Length: 14     "Outcom: (13. Domain Ruse"       - Volue: 010e01808000002080707005084047970900746556c616c74206100408080800165240808080000000000000000000000000000000	<value: 0a0a0a01=""></value:>	DMCP Secure Identifier: 10 10 10 1
<ul> <li>Option: (15) Domain Name</li> <li>Option: (15) Domain Name</li> <li>Uength: 47</li> <li>value: 6369736437e5367640e&gt;</li> <li>Option: (12) Agent Information Option</li> <li>Uength: 47</li> <li>value: 108080660013a3208060000000000000000000000000000000000</li></ul>	Router: 10.10.1	
Length: 10 v4 Value: 50573507265326576080- Domain Name: cisco com (ength: 47 v4 Value: 100e080800000020570709b084daf97090074656e6164742d610b0400000805105400000000020570709b084daf97090074656e6166742d610b0400008080000020570709b084daf97090074656e6166742d610b04000080800000020570709b084daf97090074656e6166742d610b04000080800000020570709b084daf97090074656e6166742d610b040000808000000020570709b084daf97090074656e6166742d610b0400008080000000000000000000000000000	<ul> <li>Option: (15) Domain Name</li> </ul>	v oprion: (12) nomain Mane
<pre>     value: 38973357263576308&gt;     Demain Nume: Lisc.com      option: (82) Agent Information Option     Length: 47</pre>	Length: 10	Length: 10
Domain Name: Clisco.com         Domain Name: Clisco.com           Option: (2) Apprt Information Option         Comptin: (3) Apprt Clircuit ID           Length: 14         Comptin: (3) Apprt Clircuit ID           Value: 1080000000026070703050540319709007465666166742d618b0400000015054000000026070703050540403709007465666166742d618b040000015054000000026070705950544049709007465666166742d618b040000015054000000026070705950544049709007465666166742d618b0400000150540000000260707059505440497090074656666166742d618b040000015054000000000           Value: 10800000000000000000000000000000000000	<value: 636973636f2e636f6d00=""></value:>	<value: 636973636f2e636f6d00=""></value:>
Option: (23) Agent Information Option         Option: (23) Agent Information Option           Length: 47	Domain Name: cisco.com	Domain Name: cisco.com
Option: (82) Agent Information Option         Impleter Information Option           Length: 47         CVAlue: 010e000000000000000000000000000000000	PURCH RUNCE VASUVEUR	<ul> <li>Option: (82) Agent Information Option</li> </ul>
Length: 47    -Value: 010e010000000000000000000000000000000	<ul> <li>Option: (82) Agent Information Option</li> </ul>	Length: 47
<pre>value: 01ed10000000000000000000000000000000000</pre>	Length: 47	
<ul> <li>Option 22 Subpotion: (1) Agent Circuit ID</li> <li>Length: 14</li> <li>Value: 018980660013e3208a00000000</li> <li>Option 82 Subpotion: (2) Agent Remote ID</li> <li>Length: 4</li> <li>Value: 78709084daf&gt;</li> <li>Agent Remote ID: 787040984daf</li> <li>Option 82 Subpotion: (151) VRF name/VFN ID</li> <li>Length: 9</li> <li>Value: 0878506616742d61&gt;</li> <li>VFF name/VFN ID</li> <li>Length: 4</li> <li>Value: 08780600110: (11) Server ID Override (10.10.10.1)</li> <li>Length: 4</li> <li>Value: 08780601</li> <li>Server ID Override: 10.18.10.1</li> <li>Option 82 Subpotion: (10.18.10.8</li> <li>Option 82 Subpotion: (13) Ket circuit ID: 0100000000000000000000000000000000000</li></ul>	<value: 010e0108000600018a9200a0000000000206707db9b84da197090074656e616e742d610b040a0a0a0105040a0a0a0a0<="" td=""><td>Antion Arcorregeneration (1) Years (clearing 10) Antion Arcorregeneration (1) Years (clearing 10)</td></value:>	Antion Arcorregeneration (1) Years (clearing 10) Antion Arcorregeneration (1) Years (clearing 10)
Length: 14 <td><ul> <li>Option 82 Suboption: (1) Agent Circuit ID</li> </ul></td> <td><ul> <li>uption of Supprise (1) Agent Circuit 10</li> </ul></td>	<ul> <li>Option 82 Suboption: (1) Agent Circuit ID</li> </ul>	<ul> <li>uption of Supprise (1) Agent Circuit 10</li> </ul>
<pre></pre> <pr< td=""><td>length: 14</td><td>Length: 14</td></pr<>	length: 14	Length: 14
Agent Circuit ID: 00000000000000000000000000000000000		<value: 0108000600018a9200a00000000=""></value:>
Agent Curcuit DF BacewooreDials/DB00000000000 <ul> <li>Option 82 Subption: (2) Agent Remote ID</li> <li>Length: 6</li> <li><value: 707db984daf=""></value:></li> <li>Agent Remote ID: 707db984daf&gt;</li> <li>Agent Remote ID: 707db984daf&gt;</li> <li>Option 82 Subption: (15) VRF name/VPN ID</li> <li>Length: 9</li> <li><value: 00746566616e742d61=""></value:></li> <li><value: 007465674<="" li=""> <li><value: 00746566616e742d61=""></value:></li> <li><value: 00746566616e742d61=""></value:></li> <li><value: 00746566616e742d61=""></value:></li> <li><value: 0074676674<="" li=""> <li><value: 00746982de7<="" li=""></value:></li></value:></li></value:></li></ul>		Agent Circuit ID: 0108000600018a9200a00000000
<ul> <li>Option 52 Subption: (2) Agent Remote ID</li> <li>Length: 6</li> <li>(Value: 707db9b8daf&gt;</li> <li>Agent Remote ID: 707db9b8daf</li> <li>(Portion 52 Subption: (151) VKF name/VPN ID</li> <li>Length: 9</li> <li>(Value: 00746566616742d61&gt;</li> <li>(Frailing stray characters)</li> <li>(Frailing stray characters)</li> <li>(Frailing stray characters)</li> <li>(Irrailing stray characters)</li> <li>(Irrailing</li></ul>	wdeur riignit in: alasaaapaaalsaazaasaaaaaaaaaa	<ul> <li>Option 82 Suboption: (2) Agent Remote ID</li> </ul>
Length: 6 <pre><value: 797db9b8dafs=""> Agent Remote ID: 797db9b8dafs&gt; Agent Remote ID: 797db9b8dafs&gt; Agent Remote ID: 797db9b8dafs&gt; Agent Remote ID: 797db9b8dafs</value:></pre> Agent Remote ID: 797db9b8dafs Agent R	<ul> <li>Option 82 Suboption: (2) Agent Remote ID</li> </ul>	Length: 6
<pre>vValue: 787040584dafs Agent Rendet Di: 787040584daf 0ption 82 Subption: (151) VRF name/VFN ID Length: 9 <value: 087465666162742d61=""> VRF name: VRF name: VRF</value:></pre>	Length: 6	dalue: 787dbbb8ddafs
Agent Remote ID: 797d/0508/daf       Agent Kemote LD: 797d/0508/daf         Option 82 Subption: (151) VRF name/VPN ID       Uength: 9 </td <td><value: 707db9b84daf=""></value:></td> <td>Agent Denote TD, ToTabbbeddof</td>	<value: 707db9b84daf=""></value:>	Agent Denote TD, ToTabbbeddof
<ul> <li>Option 82 Suboption: (151) VRF mame/VPN ID         <ul> <li>Length: 9</li> <li>VRF name:</li> <li>VRF name:</li> <li>VRF name:</li> <li>VRF name:</li> <li>(Start 00/455666166742d61&gt;</li> <li>VRF name:</li> <li>(Peptr Info (Warning/Undecoded): Trailing stray characters]             <ul> <li>[Frailing stray characters]</li> <li>[Frailing stray characters]</li> <li>[Severity level: Warning]</li> <li>(Group: Undecoded]</li> <li>Option 82 Suboption: (11) Server ID Override (10.10.10.1)</li> <li>Length: 4</li> <li>value: 00040000</li> <li>(Dition 82 Suboption: (5) Link selection (10.10.10.1)</li> <li>Length: 4</li> <li>value: 00040000</li> <li>Link selection: (10.10.10.10.10.10.10.10.10.10.10.10.10.1</li></ul></li></ul></li></ul>	Agent Remote ID: 707db9b84daf	Agent Render DF: / 07/090040401
Length: 9 <value: 00746566616742d61=""> (VRF name: (Frailing stray characters) (Frailing stray charact</value:>	Option 82 Suboption: (151) VRF name/VPN TD	V Uption 82 SUDOPTION: (151) VRF name/VPN ID
<pre>value: 00745566166742d61&gt; </pre> VBF name:  Value: 00745566166742d61>  Value: 00745566166742d61>  Value: 0074566166742d61>  Value: 007456616742d61>  Value: 0074566166742d61>  Value: 007456616742d61>  Value: 00745661041001 Length: 4 Value: 0074566101: (10.10.10.0) Length: 4 Value: 00746104: (255 End Value: 00746104: (2	langhi û	Length: 9
<pre>value: 00/H05000102/4C0012 VRF name:</pre>		<value: 0074656e616e742d61=""></value:>
<pre>vWr name: [Expert Info (Warning/Undecoded): Trailing stray characters] [Trailing stray characters] [Trailing stray characters] [Severity level: Warning] [Group: Undecoded] [Orion: Undecod</pre>	<va(ue: 00="" 400000166="" 42061=""></va(ue:>	> VRF name:
<pre>~ [Expert Info (Warning/Undecoded): Trailing stray characters] [Trailing stray characters]</pre>	VKP name:	<ul> <li>Option 82 Suboption: (11) Server ID Override (10.10.10.1)</li> </ul>
[Trailing stray characters]     -vialue: 9000001> <pre>dMessage: Trailing stray characters&gt;</pre> Server ID Override: 10.10.10.1       [Severity level: Warning]     Option 22 Subption: (5) Link selection (10.10.10.1) <pre>option 23 Subption: (11) Server ID Override (10.10.10.1)     Length: 4       <value: 0000000="">     Link selection: 10.10.10.0       Server ID Override: 10.10.10.1     Option 25 Subption: (5) Link selection (10.10.10.0)       <pre>option 22 Subption: (5) Link selection (10.10.10.0)</pre>      Length: 4     -value: 0000000&gt;       <pre>cvalue: 0000000&gt;     Link selection: 10.10.10.0       Length: 4     -value: 0000000&gt;       <pre>Link selection: (10.10.10.0)     Option End: 255       Link selection: 10.10.10.0     Option End: 255       Option End: 255     Solution: (10.10.10.0)</pre></pre></value:></pre>	<ul> <li>[Expert Info (Warning/Undecoded): Trailing stray characters]</li> </ul>	Length: 4
<pre></pre>	[Trailing stray characters]	dialine analogante
[Severity level: Warning]     Server 10 Override: 10.18.10.1       [Group: Undecoded]     Option Ed: Suboption: (1) Server ID Override (10.10.10.1)       Length: 4     -       <3Ububtion: (1) Server ID Override: 10.10.10.1)	<pre><message: characters="" stray="" trailing=""></message:></pre>	
Local V, deccd end          • Option 82 Suboption: (5) Link selection (10.10.10.0) Length: 4                       Server ID Override: 10.10.10.1	[Severity level: Warning]	Server ID Override: 10.10.10.1
Length: 4         Center 10           0 Option 82 Subption: (11) Server ID Override (10.10.10.1)         Length: 4           <	(Severally vereli Wolliang)	<ul> <li>Option 82 Suboption: (5) Link selection (10.10.10.0)</li> </ul>
• Option & Supportion: (11) Server 10 Override (10.10.10.1)         - <value: 00000000="">           Length: 4         - <value: 00000000="">         Link selection: 10.10.10.0            - <value: 00000000="">         - <value: 0000000="">           Server 10 Override: 10.10.10.1         - <value: 0000000="">         - <value: 0000000="">            - <value: 0000000="">         - <value: 0000000="">         - <value: 0000000="">           Link selection: 10.10.10.0         - <value: 0000000="">         - <value: 0000000="">         - <value: 0000000="">           Link selection: 10.10.10.0         - <value: 0000000="">         - <value: 0000000="">         - <value: 0000000="">           Link selection: 10.10.10.0         - <value: 0000000="">         - <value: 0000000="">         - <value: 0000000="">           Link selection: 10.10.10.0         - <value: 0000000="">         - <value: 0000000="">         - <value: 0000000="">           Unik selection: 10.10.10.0         - <value: 0000000="">         - <value: 0000000="">         - <value: 0000000="">           Option End: 255         - <value: 0000000="">         - <value: 0000000="">         - <value: 0000000="">         - <value: 0000000="">           Option End: 255         - <value: 0000000="">         - <value: 0000000="">         - <value: 00000000="">         - <value: 00000000=""></value:></value:></value:></value:></value:></value:></value:></value:></value:></value:></value:></value:></value:></value:></value:></value:></value:></value:></value:></value:></value:></value:></value:></value:></value:></value:></value:></value:></value:></value:></value:></value:>	[uroup: undecode]	Length: 4
Length: 4 Link selection: 10.10.10.0 <pre></pre> <pre>Link selection: 10.10.10.0 </pre> <pre>&gt; Option Ed: 255</pre> <pre>Comparison Comparison Comparison</pre>	<ul> <li>Uption 82 Suboption: (11) Server ID Override (10.10.10.1)</li> </ul>	<value: 0a0a0a00=""></value:>
<pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre>Cvalue: 00000001&gt; </pre> <pre>Server ID Override: 10.10.10.10.1 </pre> <pre></pre> <pre></pre> <pre></pre> <pre>Cup Server ID Override: 10.10.10.10.10.10.10.10.10.10.10.10.10.1</pre>	Length: 4	Link selection: 10.10.10.0
Server ID Override: 10.10.10.1 • Option 82 Suboption: (5) Link selection (10.10.10.0) Length: 4 < Value: 000000000 Link selection: 10.10.10.0 • Option: (255) End Option End: 255	<value: 0a0a0a01=""></value:>	v Option: (255) Erd
<pre>&gt; Option 22 Suboption: (5) Link selection (10.10.10.0)</pre>	Server ID Override: 10.10.10.1	Option (255) Line
Length: 4 <value: 00000000=""> Link selection: 10.10.00 • Option: (255) End Option End: 255</value:>	<ul> <li>Option 82 Suboption: (5) Link selection (10.10.10.0)</li> </ul>	obriou cua: 522
<pre></pre>	Landhi A	1
Value. Vesuevee Link selection: 10.10.10.0 • Option: (255) End Option End: 255		1
Link SeteCition: 10-10-10-0 Option End: 255	<value: paparatory<="" td=""><td>1</td></value:>	1
v Option: (255) End Option End: 255	Link selection: 10.10.10.0	
Option End: 255	Ortions (DEE) End	
	option: (255) End	
	Option End: 255	

## Offre DHCP sur LEAF-1

|--|

	<pre>&gt; Ethernet II, Src: 70:7d:b9:b8:4d:af, Dst: ff:ff:ff:ff:ff:ff</pre>
February IV Cons. 10-b3-d6-c4-06-07 Date: 70-7d-b0-b0-d4-c4	> Internet Protocol Version 4, Src: 10.10.10.1, Dst: 255.255.255.255
> Ethernet II, Src: 10:03:06:a4:85:97, DSt: 70:70:09:08:40:at	> User Datagram Protocol, Src Port: 67, Dst Port: 68
User Datagram Protocol, Src Port: 65518, Dst Port: 4789	<ul> <li>Dynamic Host Configuration Protocol (Offer)</li> </ul>
Virtual eXtensible Local Area Network	Message type: Boot Reply (2)
Group Policy ID: 0	Hardware type: Ethernet (0x01)
VXLAN Network Identifier (VNI): 303030	Hardware cype. Ethernet (0.01)
Reserved: 0 Ethernet II. Src: 02:00:0d:0d:0d:0d:fe. Dst: 70:7d:b9:b8:4d:af	Hardware address length: 6
Internet Protocol Version 4, Src: 10.10.10.150, Dst: 172.16.10.8	Hops: 0
User Datagram Protocol, Src Port: 67, Dst Port: 67	Transaction ID: 0xe9e35087
Message type: Boot Reply (2)	Seconds elapsed: 0
Hardware type: Ethernet (0x01)	> Bootp flags: 0x8000, Broadcast flag (Broadcast)
Hops: 0	Client IP address: 0.0.0.0
Transaction ID: 0xe9e35087	Your (client) TP address: 10.10.10.3
Seconds elapsed: 0 > Bootp flags: 0x8000. Broadcast flag (Broadcast)	Next server TP address: 10 10 10 150
Client IP address: 0.0.0.0	Next server if address, 10,10,10,10
Your (client) IP address: 10.10.10.3	Relay agent IP address: 10.10.10.1
Relay agent IP address: 172.16.10.8	Client MAC address: 00:50:56:a5:td:dd
Client MAC address: 00:50:556:a5:fd:dd	Client hardware address padding: 0000000000000000000
Server host name not given	Server host name not given
Boot file name not given	Boot file name not given
Magic cookie: DHCP v Option: (53) DHCP Message Type (Offer)	Magic cookie: DHCP
Length: 1	<pre>v Option: (53) DHCP Message Type (Offer)</pre>
<value: 02=""> DHCP: Offer (2)</value:>	Length: 1
<pre>&gt; Option: (1) Subnet Mask (255.255.0)</pre>	
Length: 4	
Subnet Mask: 255.255.255.0	DHLP: Uffer (2)
Option: (58) Renewal Time Value	Option: (1) Subnet Mask (255.255.255.0)
<value: 0000a8c0=""></value:>	Length: 4
Renewal Time Value: 12 hours (43200)	<value: fffff00=""></value:>
Length: 4	Subnet Mask: 255.255.255.0
<value: 00012750=""></value:>	Option: (58) Renewal Time Value
<pre></pre>	Length: 4
Length: 4	
<value: 00015180=""> IP Address Lease Time: 1 day (86400)</value:>	Repeval Time Value: 12 hours (43200)
<ul><li>Option: (54) DHCP Server Identifier (10.10.10.1)</li></ul>	Ontion: (EQ) Debinding Time Value
Length: 4	v option: (59) Rebinding Time value
DHCP Server Identifier: 10.10.10.1	Length: 4
Option: (15) Domain Name	<value: 00012750=""></value:>
Length: 10 <value: 636973636f2e636f6d00=""></value:>	Rebinding Time Value: 21 hours (75600)
Domain Name: cisco.com	v Option: (51) IP Address Lease Time
Option: (82) Agent Information Option Length: 47	Length: 4
<value: 010e0108000600018a9200a000000000206707db9b84daf97090074656e616e742d610b040a0a0a0105040a0a0a00=""></value:>	<value: 00015180=""></value:>
<ul> <li>Option 82 Suboption: (1) Agent Circuit ID Length: 14</li> </ul>	IP Address Lease Time: 1 day (86400)
<value: 0108000600018a9200a00000000=""></value:>	<pre>v Option: (54) DHCP Server Identifier (10.10.10.1)</pre>
Agent Circuit ID: 0108000600018a9200a00000000	Length: A
Length: 6	
<value: 707db9b84daf=""></value:>	<value: 0a0a0a01=""></value:>
Option 82 Suboption: (151) VRF name/VPN ID	DHCP Server Identifier: 10.10.10.1
Length: 9	<pre>v Option: (3) Router</pre>
VRF name:	Length: 4
Option 82 Suboption: (11) Server ID Override (10.10.10.1)	<value: 0a0a0a01=""></value:>
<value: 0a0a0a01=""></value:>	Router: 10.10.10.1
Server ID Override: 10.10.10.1	v Option: (15) Domain Name
v uption 82 Suboption: (5) Link selection (10.10.10.0) Length: 4	Length: 10
<value: 0a0a0a00=""></value:>	<value: 636973636f2e636f6d00=""></value:>
LINK selection: 10.10.10.0 v Option: (255) End	Domain Name: cisco.com
Option End: 255	Ontion: (255) End
	Option End: 255
	option End: 200

Offre DHCP reçue sur HOST-1

```
> Ethernet II, Src: 70:7d:b9:b8:4d:af, Dst: ff:ff:ff:ff:ff:ff
> Internet Protocol Version 4, Src: 10.10.10.1, Dst: 255.255.255.255
> User Datagram Protocol, Src Port: 67, Dst Port: 68

    Dynamic Host Configuration Protocol (Offer)

   Message type: Boot Reply (2)
   Hardware type: Ethernet (0x01)
   Hardware address length: 6
   Hops: 0
   Transaction ID: 0xe9e35087
    Seconds elapsed: 0
  > Bootp flags: 0x8000, Broadcast flag (Broadcast)
    Client IP address: 0.0.0.0
    Your (client) IP address: 10.10.10.3
   Next server IP address: 10.10.10.150
   Relay agent IP address: 10.10.10.1
    Client MAC address: 00:50:56:a5:fd:dd
    Client hardware address padding: 0000000000000000000
    Server host name not given
    Boot file name not given
   Magic cookie: DHCP

    Option: (53) DHCP Message Type (Offer)

      Length: 1
      <Value: 02>
      DHCP: Offer (2)

    Option: (1) Subnet Mask (255.255.255.0)

      Length: 4
      <Value: ffffff00>
      Subnet Mask: 255.255.255.0

    Option: (58) Renewal Time Value

      Length: 4
      <Value: 0000a8c0>
      Renewal Time Value: 12 hours (43200)
 Option: (59) Rebinding Time Value
      Length: 4
      <Value: 00012750>
      Rebinding Time Value: 21 hours (75600)
 v Option: (51) IP Address Lease Time
      Length: 4
      <Value: 00015180>
      IP Address Lease Time: 1 day (86400)
 v Option: (54) DHCP Server Identifier (10.10.10.1)
      Length: 4
      <Value: 0a0a0a01>
      DHCP Server Identifier: 10.10.10.1
 Option: (3) Router
      Length: 4
      <Value: 0a0a0a01>
      Router: 10.10.10.1

    Option: (15) Domain Name

      Length: 10
      <Value: 636973636f2e636f6d00>
      Domain Name: cisco.com

    Option: (255) End

      Option End: 255
```

Demande envoyée par HOST-1

```
Ethernet II, Src: 00:50:56:a5:fd:dd, Dst: ff:ff:ff:ff:ff:ff
 Internet Protocol Version 4, Src: 0.0.0.0, Dst: 255.255.255.255
 User Datagram Protocol, Src Port: 68, Dst Port: 67

    Dynamic Host Configuration Protocol (Request)

   Message type: Boot Request (1)
   Hardware type: Ethernet (0x01)
   Hardware address length: 6
   Hops: 0
   Transaction ID: 0xe9e35087
   Seconds elapsed: 0

    Bootp flags: 0x8000, Broadcast flag (Broadcast)

     1... .... = Broadcast flag: Broadcast
      .000 0000 0000 0000 = Reserved flags: 0x0000
   Client IP address: 0.0.0.0
   Your (client) IP address: 0.0.0.0
   Next server IP address: 0.0.0.0
   Relay agent IP address: 0.0.0.0
   Client MAC address: 00:50:56:a5:fd:dd
   Client hardware address padding: 0000000000000000000
   Server host name not given
   Boot file name not given
   Magic cookie: DHCP

    Option: (53) DHCP Message Type (Request)

     Length: 1
     <Value: 03>
     DHCP: Request (3)
 Option: (61) Client identifier
     Length: 7
     <Value: 01005056a5fddd>
     Hardware type: Ethernet (0x01)
     Client MAC address: 00:50:56:a5:fd:dd
 Option: (50) Requested IP Address (10.10.10.3)
     Length: 4
     <Value: 0a0a0a03>
     Requested IP Address: 10.10.10.3

    Option: (54) DHCP Server Identifier (10.10.10.1)

     Length: 4
     <Value: 0a0a0a01>
     DHCP Server Identifier: 10.10.10.1

    Option: (12) Host Name

     Length: 10
     <Value: 43584c6162732d573130>
     Host Name: CXLabs-W10
 Option: (81) Client Fully Qualified Domain Name
     Length: 13
     <Value: 00000043584c6162732d573130>

    Flags: 0x00

        0000 .... = Reserved flags: 0x0
        .... 0... = Server DDNS: Some server updates
        .... .0.. = Encoding: ASCII encoding
        .... ..0. = Server overrides: No override
        .... ...0 = Server: Client
     A-RR result: 0
     PTR-RR result: 0
     Client name: CXLabs-W10
  Option: (60) Vendor class identifier
      Length: 8
      <Value: 4d53465420352e30>
      Vendor class identifier: MSFT 5.0

    Option: (55) Parameter Request List

      Length: 14
      <Value: 0103060f1f212b2c2e2f7779f9fc>
      Parameter Request List Item: (1) Subnet Mask
      Parameter Request List Item: (3) Router
      Parameter Request List Item: (6) Domain Name Server
      Parameter Request List Item: (15) Domain Name
      Parameter Request List Item: (31) Perform Router Discover
      Parameter Request List Item: (33) Static Route
      Parameter Request List Item: (43) Vendor-Specific Information
      Parameter Request List Item: (44) NetBIOS over TCP/IP Name Server
      Parameter Request List Item: (46) NetBIOS over TCP/IP Node Type
      Parameter Request List Item: (47) NetBIOS over TCP/IP Scope
      Parameter Request List Item: (119) Domain Search
      Parameter Request List Item: (121) Classless Static Route
      Parameter Request List Item: (249) Private/Classless Static Route (Microsoft)
      Parameter Request List Item: (252) Private/Proxy autodiscovery

    Option: (255) End

      Option End: 255
```

#### Demande sur LEAF-1

Requete reçue sur LEAF-1	Demande envoyee par LEAF-1
<pre>&gt; Ethernet II, Src: 00:50:56:a5:fd:dd, Dst: ff:ff:ff:ff:ff:ff: Internet Protocol Version 4, Src: 0.0.0.0, Dst: 255.255.255.25 User Datagram Protocol, Src Port: 68, Dst Port: 67 = Dynamic Host Configuration Protocol (Request) Message type: Boot Request (1) Hardware type: Ethernet (0x01) Hardware type: Ethernet (0x01) Hardware type: Ethernet (0x01) Hardware type: Sthernet (0x01) Hardware (0x01) Hardwar</pre>	<pre>Determining Convoyee pair LLAT = 1  Ethernet II, Src: 70:7d:b9:b8:4d:af, Dst: 10:b3:d6:a4:85:97 Internet Protocol Version 4, Src: 5.5.5.5, Dst: 13.13:13.24 User Datagram Protocol, Src Port: 51730, Dst Port: 4789 Virtual Ethershiel Local Area Network     Flags: 0x4800, VXLAN Network ID (VMI)     Group Policy ID: 0     VXLAN Network Identifier (VMI): 303830     Reserved: 0  Ethernet II, Src: 70:7d:b9:b8:4d:af, Dst: 02:00:0d:0d:0d:fe Internet Protocol Version 4, Src: 172.16:10.8, Dst: 10.18.10.159 User Datagram Protocol, Src Port: 67, Dst Port: 67  Oymanic Mest Configuration Protocol (Request) Message type: Boot Request (1) Hardware address length: 6 Hops: 1 Transaction ID: 0xe8e35887 Seconds elapsed: 0  Bootp flags: 0x8000, Broadcast flag (Broadcast) Client Hardware address: 0x-0.0 Relay agent IP address: 10:00:000000000000000000000000000000</pre>
DHCP: Request (3) <pre>Option: (61) Client identifier Length: 7 <value: 01005056a5fddd=""> Hardware type: Ethernet (0x01) Client MAC address: 00:50:56:a5:fd:dd</value:></pre>	Length: 7 <value: 01005056a5fddd=""> Hardware type: Ethernet (0x01) Client MAC address: 00050:56a5:fd:dd Option: (50) Requested IP Address (10.10.3) Length: 4 <value: 00000005<br="">Requested IP Address: 10.10.3</value:></value:>
<pre>Option: (50) Requested IP Address (10.10.10.3) Length: 4</pre>	<pre>~ Option: (54) DHCP Server Identifier (10.10.10.150) Length: 4 <value: 000000000000000000000000000000000000<="" td=""></value:></pre>
<pre>&gt; Option: (54) DHCP Server Identifier (10.10.10.1) Length: 4 &lt;<alue: 0a0a0a01=""> DHCP Server Identifier: 10.10.10.1 &gt; Option: (12) Host Name Length: 10 <value: 43584c6162732d573130=""> Host Name: CXLabs=W10 &gt; Option: (81) Client Fully Qualified Domain Name Length: 13</value:></alue:></pre>	Length: 10 <pre><value: 43584c6162732d573130=""> Host Name: CXLabs=W10 Option: (81) Client Fully Qualified Domain Name Length: 13 <value: 00000043584c6162732d573130=""> &gt; Flags: 0x00 A -MR result: 0 PTR-RR result: 0 PTR-RR result: 0 Client name: CXLabs=W10 Option: (60) Vendor class identifier Length: 8 <value: 4d534e5420352c81=""> Vendor class identifier</value:></value:></value:></pre>
<pre> </pre> Flags: 0x00 0000 = Reserved flags: 0x0 0 = Server DDNS: Some server updates 0 = Encoding: ASCII encoding 0 = Server overrides: No override 0 = Server: Client A-RR result: 0 PTR-RR result: 0 Client name: CXLabs-W10 Client name: CXLabs-W10  Option: (60) Vendor class identifier	<pre>venue (iS) Parameter Request List Length: 14 evalue: sla3s60r1/212b2c2e2/7779f9fc&gt; Parameter Request List Item: (i) Subnet Mask Parameter Request List Item: (i) Subnet Mask Parameter Request List Item: (i) Domain Name Parameter Request List Item: (i) Domain Name Parameter Request List Item: (i) Solver (i) Solver Parameter Request List Item: (i) Solver (i) Solver Parameter Request List Item: (ii) Solver (i) Solver (i) Parameter Request List Item: (ii) Solver (i) Solver (i) Parameter Request List Item: (ii) Solver (i) None Server Parameter Request List Item: (ii) NetBIOS over (i) Name Server Parameter Request List Item: (ii) NetBIOS over (i) Node Type Parameter Request List Item: (ii) Pomain Search Parameter Request List Item: (iii) Domain Search</pre>
Lengtn: 8 <value: 4d53465420352e30=""> Vendor class identifier: MSFT 5.0 Option: (55) Parameter Request List Length: 14 <value: 0103060f1f212b2c2e2f7779f9fc=""> Parameter Request List Item: (1) Subnet Mask Parameter Request List Item: (3) Router Parameter Request List Item: (6) Domain Name Server Parameter Request List Item: (15) Domain Name Parameter Request List Item: (15) Domain Name Parameter Request List Item: (3) Static Route Parameter Request List Item: (43) Vendor-Specific Information Parameter Request List Item: (44) NetBIOS over TCP/IP Name Server Parameter Request List Item: (44) NetBIOS over TCP/IP Node Type Parameter Request List Item: (47) NetBIOS over TCP/IP Node Type Parameter Request List Item: (19) Domain Search Parameter Request List Item: (121) Classless Static Route Parameter Request List Item: (243) Private/Classless Static Route (Microsoft Parameter Request List Item: (252) Private/Proxy autodiscovery Option: (255) Fend</value:></value:>	<pre>Parameter Request List Item: (121) Classless Static Route Parameter Request List Item: (232) Private/Proxy autodiscovery <b>Option 182 Agent Information Option</b> Length: 47 - value: 81e018808066001830200a0000000000000 - Option 82 Suboption: (1) Agent Circuit ID Length: 14 - value: 81808066001830200a00000000 - Option 82 Suboption: (2) Agent Remote ID Length: 14 - ength: 24 - ength:</pre>

#### Demande sur SPINE

Requête reçue sur SPINE

### Demande envoyée par SPINE

Ethernet II, Src: 70:7d:D9:b8:4d:af, Dst: 10:b3:d6:a4:85:97 Internet Protocol Version 4, Src: 5.5.5, Dst: 13.13.13.254 User Datagram Protocol, Src Port: 51730, Dst Port: 4789 Virtual eXtensible Local Area Network - Flags: 0x0000, VXLNN Network ID (WI) Group Policy ID: 0 VXLNN Network Identifier (WI): 303030 Reserved: 0 VALWW RETWOR A USERVATURE 1111 AND A CONSTRUCTION OF A CONSTRUCTIO Hops: 1 Seconds elapsed: 0 Bootp flags: 0x8800, Broadcast flag (Broadcast) Client IP address: 0.0.0.0 Next server IP address: 0.0.0.0 Relay agent IP address: 0.0.0.0 Relay agent IP address: 0.02.16.10.8 Client Mc address: 005/05/a5/fd/dd Seconds elapsed: 0 Client MAC address: 00:50:56:65:66:d0 Client hardware address padding: 0000000000000000000 Server host name not given Boot file name not given Magic cookie: DHKP Option: (53) DHCP Message Type (Request) Length: 1 <Value: 03-> DHCP: Remust (3) DHCP: Request (3) Option: (61) Client identifier Length: 7 <Value: 010050056a5fddd> Hardware type: Ethernet (0x01) Client M& address: 00:50:56:a5:fd:dd Option: (50) Requested IP Address (10.10.10.3) ption: (50) Requested IP Address (10.10.10.3) Length: 4 <Value: 0000003> Requested IP Address: 10.10.10.3 ption: (54) DHCP Server Identifier (10.10.10.150) Length: 4 <Value: 0000005> DHCP Server Identifier: 10.10.10.150 Option: (12) Host Name Value: 43584c6162732d573138> Host Name: CXLabs-W10 Option: (81) Client Fully Qualified Domain Name Length: 13 <Value: 00000043584c6162732d573130> <Value: 00000043584c6162732d573130>
Flags: 0x00
A-RR result: 0
PTR-RR result: 0
Client name: CXLabs-W10
Option: (60) Vendor class identifier
Length: 8
<Value: 4d53465420352438>
Vendor Usi densitien WFFF E 0 Vendor class identifier: MSFT 5.0 Option: (55) Parameter Request List Tomor Coss Jackson Cossenses List Length: 14 «Value: 803860f1f212b2c2e2f7779f9fc> «Value: 803860f1f212b2c2e2f7779f9fc> Parameter Request List Item: (3) Bouter Parameter Request List Item: (3) Bouter Parameter Request List Item: (3) Bouter Parameter Request List Item: (3) Derform Router Discover Parameter Request List Item: (3) Derform Router Discover Parameter Request List Item: (3) Perform Router Discover Parameter Request List Item: (3) Perform Router Discover Parameter Request List Item: (3) Vendor-Specific Information Parameter Request List Item: (4) NetBIOS over TCP/IP Name Server Parameter Request List Item: (4) NetBIOS over TCP/IP Name Server Parameter Request List Item: (4) NetBIOS over TCP/IP Name Server Parameter Request List Item: (12) Itensless Static Route Parameter Request List Item: (12) Itensless Static Route (Microsoft) Parameter Request List Item: (22) Private/Classless Static Route (Microsoft) Parameter Request List Item: (22) Private/Classless Static Route (Microsoft) Parameter Request List Item: (22) Private/Proxy autodiscovery point: 47 «Value: 816e018080060001809208080000000267070tb9b84daf97090074656e616e742d61 Lengtm: 47 <Value: 010e01080006600018a9200a000000000206707db9b84daf97090074656e616e742d610b640a0a0a0105040a0a0a00 Option 82 Suboption: (1) Agent Circuit ID uption 82 Suboption: (1) Agent Circuit II Length: 1080006000183220000000000 Agent Circuit ID: 018000600018320000 Option 82 Suboption: (2) Agent Remote ID Length: 6 <Value: 707db9b04daf> Agent Remote ID: 707db9b84daf Option 82 Suboption: (151) VRF name/VPN ID Length: 9 <Value: 0074656e616e742d61> VRF name: > [Expert Info (Warning/Undecoded): Trailing stray characters] Option 82 Suboption: (11) Server ID Override (10.10.10.1)
 ption 82 Suboption: (11) Server ID Override (10.10. Length: 4 <Value: 000000> Server ID Override: 10.10.10.1 ption 82 Suboption: (5) Link selection (10.10.10.0) Length: 4 <Value: 0000000> Length: 4 <Value: 0a0a0a01> Link selection: 10.10.10.0 Optio Option: (255) End Option End: 255

Ethernet II, Src: 10:b3:d6:a4:85:97, Dst: 60:26:aa:85:95:87 Internet Protocol Version 4, Src: 5.5.5.5, Dst: 13.13.13.254 User Datagram Protocol, Src Port: 13/30, Dst Port: 4789 Virual eXtensible Local Area Network - Flags: 0x0806, VXLAN Network ID (VMI) Group Policy ID: 0 VXLAN Network Identifier (VMI): 303030 Reserved: 0 VXLAN Network Identifier (VMI): 303030 Reserved: 0 Ethernet II, Src: 70:7d;0b;0b;4d;ar, Dst: 02:00:0d:0d:0d;0d;1fe Internet Protocol Version 4, Src: 172.16.10.8, Dst: 10.10.150 User Datagram Protocol, Src: Port: 67, Dst Port: 67 Dymaic Host Configuration Protocol (Request) Message type: Boo Request (1) Hardware type: Ethernet (0x01) Hardware address length: 6 Hoos: 1 Transaction ID: 0xe9e35087 Transaction ID: 0x9953087 Seconds elapsed: 0 Bootp flags: 0x8080, Broadcast flag (Broadcast) Client IP address: 0.0.0 Next server IP address: 0.0.0 Next server IP address: 0.0.0 Relay agent IP address: 00:0056:a5fdrdd Client MAC address: 00:0056:a5fdrdd Client MAC address: 00:50:50:50:10:00 Client hardware address padding: 00000000 Server host name not given Boot file name not given Magic cookie: DHCP Option: (53) DHCP Message Type (Request) Length: 1 <Value: 03> DHCP. Remoter (3) <Value: 03>
DHCP: Request (3)
Option: (61) Client identifier
Length: 7
<Value: 01005056a5fddd>
Hardware type: Ethernet (0x01)
Client MAC address: 00185563a5fddd
Option: (50) Requested IP Address (10.10.10.3)
Length: 4 Option: (50) Requested IP Address (10.10.10.3) Length: 4 <Value: 0800808>> Requested IP Address: 10.10.10.3 Option: (54) DHCP Server Identifier (10.10.10.150) Length: 4 <Value: 08008096> DHCP Server Identifier: 10.10.10.150 Option: (12) Host Name Length: 0 Uption: 147 Length: 14 <Value: 43584c6162732d573130> Host Name: CXLabs=W10 Option: (81) Client Fully Qualified Domain Name Length: 13 <Value: 00000043584c6162732d573130> «Value: U0000043584cb102/32d3/31300 Flags: 00/00 A-RR result: 0 PTR-RR result: 0 Client name: CKLabs-W10 ption: (60) Vendor class identifier Length: 8 <Value: 4d53465420352e30> Vendor class identifier MEET 5 0 Vendor class identifier: MSFT 5.0 Option: (55) Parameter Request List Agent Remote ID: 707db9b84daf Option 82 Suboption: (151) VRF name/VPN ID Length: 9 <Value: 0074656e616e742d61> VRF name: Option 82 Suboption: (11) Server ID Override (10.10.10.1) <Value: 0a0a0a01: Server ID Override: 10.10.10.1 Option 82 Suboption: (5) Link selection (10.10.10.0) Length: 4 <Value: 0a0a0a000-Link selection: 10.10.10.0 ption: (255) End

# Requête sur LEAF-2-vPC

Requête PCd sur LEAF-2-vPC	Demande d'envoi par vPCAF-2-vPC
Ethernet II, Src: 10:b3:d6:a4:85:97, Dst: 60:26:aa:85:95:87 Internet Protocol Version 4, Src: 5.5.5, Dst: 13.13.13.254 User Datagram Protocol, Src Port: 51738, Dst Port: 4789 Virtual extensible Local Area Metwork > Flags: ex8808, VLAN Network ID (VMI) Group Policy ID: 0 VXLAN Hetwork Identifier (VMI): 303030 Reserved: 0 Ethernet II, Src: 70:7d:b9:b8:4d:af, Dst: 02:00:0d:0d:dd:fe Internet Protocol Version 4, Src: 172.16.18.8, Dst: 10.10.10.150 User Datagram Protocol, Src Port: 67, Dst Port: 67 Dynamic Mest Configuration Protocol (Request) Message type: Boot Request (1) Mardware type: Ethernet (0k21)	Ethernet II, Src: 60:26:aa:85:95:87, Dst: 00:50:56:a5:dc:ca Internet Protocol Version 4, Src: 172.16.10.8, Dst: 10.10.10.150 User Datagram Protocol, Src Port: 67, Dst Port: 67 Dynamic Host Configuration Protocol (Request) Message type: Boot Request (1) Hardware address length: 6 Hops: 1 Transaction ID: 0xe9e35087 Seconds elapsed: 0
hopsil Hopsil Transaction ID: 0xe9e35087 Seconds elapsed: 0 Bootp flags: 0x8000, Broadcast flag (Broadcast) Client IP address: 0.0.0.0 Your (client) IP address: 0.0.0.0 Relay agent IP address: 0.0.0.0 Relay agent IP address: 0x10:0.0 Client Mardadress: 0x10:00:000000000000000 Client Mardadress: 0x10:00:000000000000000 Server host name not given Boot file name not given Maglic cookie: DHCP • Option: (53) DHCP Message Type (Request) Length: 1 <value: 03=""> DHCP: Request (3) • Option: (61) Client identifier</value:>	Client Tagi: 0x0000, 0100000000000000000000000000000
<pre>option: (a) Client identifier Length: 7</pre>	<pre>Clent MAC address: 00:30:50:30:10:30 Option: (50) Requested IP Address (10:10.10.3) Length: 4 <value: 00000003=""> Requested IP Address: 10.10.10. Option: (54) DMC5 Perver Identifier (10:10.10.150) Length: 4 <value: 000000435<br="">DMCF Server Identifier: 10:10.10.150 Option: (12) Host Name Length: 10 <value: 43584c5162732d573130=""> Host Name: CXLabs-V10 Option: (81) Clent Fully Qualified Domain Name Length: 13 <value: 0000004354c6162732d573130=""> Flags: 0x00 A -RR result: 0 PTR-RR result: 0 PTR-RR result: 0 Option: (60) Vendor class identifier Length: 8 <value: 4d534d5345232d57<br="">Vendor Class identifier: NST 5.0 Option: (55) Parameter Request List Length: 14 <value: 0103060fif212b2c22d7779f9fc=""> Parameter Request List Item: (13) Bouher Mask Parameter Request List Item: (15) Domain Name Server Parameter Request List Item: (15) Domain Name Server Parameter Request List Item: (13) Router Parameter Request List Item: (13) Static Koute Parameter Request List Item: (13) Static Couter Parameter Request List Item: (14) MetBIOS over CFV/IP Node Type Parameter Request List Item: (15) Domain Name Server Parameter Request List Item: (14) MetBIOS over CFV/IP Node Type Parameter Request List Item: (15) Domain Name Server Parameter Request List Item: (15) Pomain Name Server Parameter Request List Item: (15)</value:></value:></value:></value:></value:></value:></pre>
<pre>parameter Request List Item: (40) MetBIOS over ICP/IP Node Type Parameter Request List Item: (119) NotBIOS over ICP/IP Node Type Parameter Request List Item: (119) Domain Search Parameter Request List Item: (121) Classless Static Route Parameter Request List Item: (222) Private/Classless Static Route (Microsoft) Parameter Request List Item: (222) Private/Classless Static Route Length: 47 </pre> <pre> ************************************</pre>	Parameter Request List Item: (243) Private/classiess Static Route (Microsoft)           Parameter Request List Item: (222) Private/classiess Static Route (Microsoft)           Option: 827. Agent Information Option           Length: 47 <value: 010e0108092000000000000000000000000000000000<="" td=""></value:>

Requête reçue sur le serveur DHCP

Ethernet II, Src: 60:26:aa:85:95:87, Dst: 00:50:56:a5:dc:ca Internet Protocol Version 4, Src: 172.16.10.8, Dst: 10.10.10.150 User Datagram Protocol, Src Port: 67, Dst Port: 67 Dynamic Host Configuration Protocol (Request) Message type: Boot Request (1) Hardware type: Ethernet (0x01) Hardware address length: 6 Hons: 1 Transaction ID: 0xe9e35087 Seconds elapsed: 0 Bootp flags: 0x8000, Broadcast flag (Broadcast) Client IP address: 0.0.0.0 Your (client) IP address: 0.0.0.0 Next server IP address: 0.0.0.0 Relay agent IP address: 172.16.10.8 Client MAC address: 00:50:56:a5:fd:dd Client hardware address padding: 00000000000000000000 Server host name not given Boot file name not given Magic cookie: DHCP Option: (53) DHCP Message Type (Request) Length: 1 <Value: 03> DHCP: Request (3) Option: (61) Client identifier Length: 7 <Value: 01005056a5fddd> Hardware type: Ethernet (0x01) Client MAC address: 00:50:56:a5:fd:dd - Option: (50) Requested IP Address (10.10.10.3) Length: 4 <Value: 0a0a0a03> Requested IP Address: 10.10.10.3 · Option: (54) DHCP Server Identifier (10.10.10.150) Length: 4 <Value: 0a0a0a96> DHCP Server Identifier: 10.10.10.150 Option: (12) Host Name Length: 10 <Value: 43584c6162732d573130> Host Name: CXLabs-W10 Option: (81) Client Fully Qualified Domain Name Length: 13 <Value: 00000043584c6162732d573130> > Flags: 0x00 A-RR result: 0 PTR-RR result: 0 Client name: CXLabs-W10 Option: (60) Vendor class identifier Length: 8 <Value: 4d53465420352e30> Vendor class identifier: MSFT 5.0 Option: (55) Parameter Request List Length: 14 <Value: 0103060f1f212b2c2e2f7779f9fc> Parameter Request List Item: (1) Subnet Mask Parameter Request List Item: (3) Router Parameter Request List Item: (6) Domain Name Server Parameter Request List Item: (15) Domain Name Parameter Request List Item: (31) Perform Router Discover Parameter Request List Item: (33) Static Route Parameter Request List Item: (43) Vendor-Specific Information Parameter Request List Item: (44) NetBIOS over TCP/IP Name Server Parameter Request List Item: (46) NetBIOS over TCP/IP Node Type Parameter Request List Item: (47) NetBIOS over TCP/IP Scope Parameter Request List Item: (119) Domain Search Parameter Request List Item: (121) Classless Static Route Parameter Request List Item: (249) Private/Classless Static Route (Microsoft) Parameter Request List Item: (252) Private/Proxy autodiscovery Option: (82) Agent Information Option Length: 47 <Value: 010e0108000600018a9200a000000000206707db9b84daf97090074656e616e742d610b040a0a0a0105040a0a0a00> Option 82 Suboption: (1) Agent Circuit ID Length: 14 <Value: 0108000600018a9200a00000000> Agent Circuit ID: 0108000600018a9200a00000000 Option 82 Suboption: (2) Agent Remote ID Length: 6 <Value: 707db9b84daf> Agent Remote ID: 707db9b84daf Option 82 Suboption: (151) VRF name/VPN ID Length: 9 <Value: 0074656e616e742d61> VRF name: Option 82 Suboption: (11) Server ID Override (10.10.10.1) Length: 4 <Value: 0a0a0a01> Server ID Override: 10.10.10.1 Option 82 Suboption: (5) Link selection (10.10.10.0) Length: 4 <Value: 0a0a0a00> Link selection: 10.10.10.0 Option: (255) End Option End: 255

Envoi ACK par le serveur DHCP
```
Ethernet II, Src: 00:50:56:a5:dc:ca, Dst: 00:00:0a:0a:0a:0a
Internet Protocol Version 4, Src: 10.10.10.150, Dst: 172.16.10.8
User Datagram Protocol, Src Port: 67, Dst Port: 67
Dynamic Host Configuration Protocol (ACK)
  Message type: Boot Reply (2)
  Hardware type: Ethernet (0x01)
  Hardware address length: 6
  Hops: 0
  Transaction ID: 0xe9e35087
  Seconds elapsed: 0

    Bootp flags: 0x8000, Broadcast flag (Broadcast)

    1... .... = Broadcast flag: Broadcast
    .000 0000 0000 0000 = Reserved flags: 0x0000
  Client IP address: 0.0.0.0
  Your (client) IP address: 10.10.10.3
  Next server IP address: 0.0.0.0
  Relay agent IP address: 172.16.10.8
  Client MAC address: 00:50:56:a5:fd:dd
  Client hardware address padding: 00000000000000000000
  Server host name not given
  Boot file name not given
  Magic cookie: DHCP
  Option: (53) DHCP Message Type (ACK)
    Length: 1
    <Value: 05>
    DHCP: ACK (5)

    Option: (58) Renewal Time Value

    Length: 4
    <Value: 0000a8c0>
    Renewal Time Value: 12 hours (43200)

    Option: (59) Rebinding Time Value

    Length: 4
    <Value: 00012750>
    Rebinding Time Value: 21 hours (75600)
· Option: (51) IP Address Lease Time
    Length: 4
    <Value: 00015180>
    IP Address Lease Time: 1 day (86400)

    Option: (54) DHCP Server Identifier (10.10.10.1)

    Length: 4
    <Value: 0a0a0a01>
    DHCP Server Identifier: 10.10.10.1

    Option: (1) Subnet Mask (255.255.255.0)

    Length: 4
    <Value: ffffff00>
    Subnet Mask: 255.255.255.0
  Option: (81) Client Fully Qualified Domain Name
    Length: 3
    <Value: 00ffff>
    Flags: 0x00
    A-RR result: 255
    PTR-RR result: 255

    Option: (3) Router

    Length: 4
    <Value: 0a0a0a01>
    Router: 10.10.10.1

    Option: (15) Domain Name

    Length: 10
    <Value: 636973636f2e636f6d00>
    Domain Name: cisco.com

    Option: (82) Agent Information Option

    Length: 47
    <Value: 010e0108000600018a9200a00000000000206707db9b84daf97090074656e616e742d610b040a0a0a0105040a0a0a00>

    Option 82 Suboption: (1) Agent Circuit ID

      Length: 14
       <Value: 0108000600018a9200a00000000>
      Agent Circuit ID: 0108000600018a9200a00000000

    Option 82 Suboption: (2) Agent Remote ID

      Length: 6
       <Value: 707db9b84daf>
      Agent Remote ID: 707db9b84daf

    Option 82 Suboption: (151) VRF name/VPN ID

      Length: 9
       <Value: 0074656e616e742d61>
     VRF name:
        [Expert Info (Warning/Undecoded): Trailing stray characters]
           [Trailing stray characters]
<Message: Trailing stray characters>
           [Severity level: Warning]
           [Group: Undecoded]

    Option 82 Suboption: (11) Server ID Override (10.10.10.1)

      Length: 4
       <Value: 0a0a0a01>
      Server ID Override: 10.10.10.1
   Option 82 Suboption: (5) Link selection (10.10.10.0)
      Length: 4
       <Value: 0a0a0a00>
      Link selection: 10.10.10.0
  Option: (255) End
    Option End: 255
```

### ACK sur LEAF-2-vPC

ACK reçu sur LEAF-2-vPC	ACK envoyé par LEAF-2-vPC
<pre>Ethermet II, Src: 00:50:56:05:dc:ca, Dst: 00:00:00:00:00:00 Different Protocol Version 4, Src: 10:00:00:00:00:00 Different Protocol Version 4, Src: 10:00:00; Dst: 127.06.00.00 Different Protocol Version 4, Src: 10:00; Dst: 10:00 Different Protocol Version 4, Src: 10:00; Dst: 10:00 Different Protocol Version 4, Src: 10:00:00 Different Protocol Version 4, Src: 10:00 Different Protocol Version 4, Src: 10:00 Different Protocol Version 4, Src: 10:00 Different Protocol Version 4, Src: 10:00:00 Different Protocol Version 4, Sr</pre>	<pre>Ethermet II, Src: 00:26iau:85:05:07, Dat: 10:10:100:a4:85:07 Intermet Protocol, Version 4, Src: 13:331,324, Dat: 5.5.3.5 User Datagram Protocol, Ster Crit 6331a, Dat: Data 12:30 Virtual extensible Local Area Retwork User Datagram Protocol, Ster Crit 6331a, Dati 5.5.3.5 Virtual extensible Local Area Retwork Virtual Extensible Local Area Retwork (Virtual Area Area Area Area Area Area Area Area</pre>
Next server IP address: 0.0.0 Relay agent IP address: 172.16.10.8 Client MAC address: 00:50:56:35:fd:dd Client hardware address padding: 00000000000000000 Server host name not given Boot file name not given Magic cookie: DHCP	Clent IP address: 0.0.0 Your (clent) IP address: 10.10.10.3 Next server IP address: 0.0.0 Relay agent IP address: 172.16.10.8 Client MAC address: 00550:55:03:fd:dd Client hardware address padding: 0000000000000000000 Server host name not given
<pre>Gption: (53) DHCP Message Type (ACK) Length: 1 UPD CPL CPL CPL CPL CPL CPL CPL CPL CPL CPL</pre>	Boot file name not given Magic cookie: DHCP © option: (53) DHCP Message Type (ACK) Length: 1 <value: 05=""> DHCP: ACK (5) DHCP: ACK (5) Renewal Time Value Length: 4</value:>
Renewal Time Value: 12 hours (43200) Option: (59) Rebinding Time Value Length: 4 <value: 00012750-<br="">Rebinding Time Value: 21 hours (75600) Option: (51) IP Address Lease Time Length: 4 <value: 00015180-<="" td=""><td><pre></pre> <value: 0000484c8-<br="">Renewal Time Value: 12 hours (43200)  Option: (59) Rebinding Time Value Length: 4  <value: (75600)="" 00012758-="" 21="" <="" hours="" p="" rebinding="" time="" value:=""> Option: (51) IP Address Lease Time</value:></value:></td></value:></value:>	<pre></pre> <value: 0000484c8-<br="">Renewal Time Value: 12 hours (43200)  Option: (59) Rebinding Time Value Length: 4  <value: (75600)="" 00012758-="" 21="" <="" hours="" p="" rebinding="" time="" value:=""> Option: (51) IP Address Lease Time</value:></value:>
IP Address Lesse Time: 1 day (86400) Option: (54) DHCP Server Identifier (10.10.10.1) Length: 4 <value: 00000001<br="">DHCP Server Identifier: 10.10.10 Option: (1) Subnet Mask (255.255.0) Length: 4 <value: ffffff00-<="" td=""><td>Length: 4 <value: 00015108=""> IP Address Lease Time: 1 day (86400) Option: (S4) DMCP Server Identifier (10.10.10.1) Length: 4 <value: 000008001=""> DMCP Server Identifier: 10.10.10.1 Option: (1) Subnet Mask (255.255.255.0)</value:></value:></td></value:></value:>	Length: 4 <value: 00015108=""> IP Address Lease Time: 1 day (86400) Option: (S4) DMCP Server Identifier (10.10.10.1) Length: 4 <value: 000008001=""> DMCP Server Identifier: 10.10.10.1 Option: (1) Subnet Mask (255.255.255.0)</value:></value:>
Submet Mask: 255.255.0 Option: (81) Client Fully Qualified Domain Name Length: 3 <value: 00ffff=""> &gt; Flags: 0x00 A-RR result: 255 PTR-RR result: 255 • Ontion: (3) Router</value:>	Length: 4 <value: ffffff00=""> Subnet Mask: 255.255.0 Option: (81) Client Fully Qualified Domain Name Length: 3 <value: 00fffr=""> □ Flags: 0x00 0000 = Reserved flags: 0x0</value:></value:>
Length: 4 <value: 00000001=""> Router: 10.10.10.1 Option: (15) Domain Name Length: 30 <value: 63697363672e63676000=""> Domain Nome: clsco.com</value:></value:>	0 = Server DNRS: Some server updates 0 = Encoding: ASCII encoding 0 = Server overrides: No override 0 = Server: Client A-RR result: 255 PTR-R result: 255 Option: (3) Router Length: 4
<pre>const: 47</pre>	<pre></pre>
<pre><viaiue: 787049584daf=""> Agent Remote ID: 787049584daf Uption 82 Suboption: (151) VRF name/VPN ID Agent Part Part Part Part Part Part Part Par</viaiue:></pre>	<pre></pre>
<pre>~dessage: Trailing stray characters&gt; [Severity level: Narring] [Group: Undecoded] • Option 82 Suboption: (11) Server ID Override (10.10.10.1) Leng1h: 4 ~dalue: BabBabBi&gt; Server ID Override: 10.10.10.1 • Option 82 Suboption: (5) Liek estertion (18.10.10.1)</pre>	Agent Remote 10: 70/2009840aT • Option 82 Subportion: (151) VMF name/VMP ID Length: 9 VALue: 00/4556e16e742d61> • VFF name: • [Expert Info (Warning/Undecoded): Trailing stray characters] [Trailing stray characters] dessage: Trailing stray characters>
Length: 4 <value: 00000000<br="">Link selection: 10.10.10.0 Option: (255) End Option End: 255</value:>	<pre>lseverity level: warning] [Group: Undecoded] Option 82 Suboption: (11) Server ID Override (10.10.10.1) Length: 4 <value: 000000000000000000000000000000000000<="" td=""></value:></pre>
	<pre>Link selection:10.10.00 0 Option:(255) End 0 Option End: 255</pre>

## ACK sur SPINE

ACK reçu sur SPINE	ACK envoyé par SPINE
Ethernet II, Src: 60:26:aa:85:95:87, Dst: 10:b3:d6:a4:85:97	Ethernet II, Src: 10:b3:d6:a4:85:97, Dst: 70:7d:b9:b8:4d:af
User Datagram Protocol, Src Port: 65518, Dst Port: 4789	<ul> <li>Internet Protocol Version 4, Src: 13.13.13.254, DSt: 5.5.5.5</li> <li>User Datagram Protocol, Src Port: 65518, Dst Port: 4789</li> </ul>
Virtual eXtensible Local Area Network Flags: 0x0800, VXLAN Network ID (VNI)	<ul> <li>Virtual eXtensible Local Area Network</li> <li>Elager extensible Local Area Network</li> </ul>
Group Policy ID: 0	Group Policy ID: 0
VXLAN Network Identifier (VNI): 303030 Reserved: 0	VXLAN Network Identifier (VNI): 303030 Reserved: 0
Ethernet II, Src: 02:00:0d:0d:0d:fe, Dst: 70:7d:b9:b8:4d:af	> Ethernet II, Src: 02:00:0d:0d:0d:fe, Dst: 70:7d:b9:b8:4d:af
User Datagram Protocol, Src Port: 67, Dst Port: 67	<ul> <li>User Datagram Protocol, Src Port: 67, Dst Port: 67</li> </ul>
<ul> <li>Dynamic Host Configuration Protocol (ACK)</li> <li>Message type: Boot Reply (2)</li> </ul>	<ul> <li>Dynamic Host Configuration Protocol (ACK) Message type: Boot Reply (2)</li> </ul>
Hardware type: Ethernet (0x01)	Hardware type: Ethernet (0x01)
Hops: 0	Hops: 0
Transaction ID: 0xe9e35087 Seconds elapsed: 0	Transaction ID: 0xe9e35087 Seconds elansed: 0
<ul> <li>Bootp flags: 0x8000, Broadcast flag (Broadcast)</li> </ul>	<ul> <li>Bootp flags: 0x8000, Broadcast flag (Broadcast)</li> </ul>
.000 0000 0000 = Reserved flags: 0x0000	.000 0000 0000 = Reserved flag: 0x0000
Client IP address: 0.0.0.0 Your (client) IP address: 10.10.10.3	Client IP address: 0.0.0.0 Your (client) IP address: 10.10.10.3
Next server IP address: 0.0.0.0	Next server IP address: 0.0.0.0
Relay agent IP address: 172.16.10.8 Client MAC address: 00:50:56:a5:fd:dd	Relay agent IP address: 172.16.10.8 Client MAC address: 00:50:56:a5:fd:dd
Client hardware address padding: 00000000000000000000	Client hardware address padding: 0000000000000000000
Boot file name not given	Boot file name not given
Magic cookie: DHCP Option: (53) DHCP Message Type (ACK)	Magic cookie: DHCP - Option: (53) DHCP Message Type (ACK)
Length: 1	Length: 1
DHCP: ACK (5)	DHCP: ACK (5)
<ul> <li>Option: (58) Renewal Time Value</li> <li>Length: 4</li> </ul>	<ul> <li>Option: (58) Renewal Time Value</li> <li>Length: 4</li> </ul>
<value: 0000a8c0=""></value:>	<value: 0000a8c0=""></value:>
Renewal Time Value: 12 hours (43200) Option: (59) Rebinding Time Value	Renewal Time Value: 12 hours (43200) Option: (59) Rebinding Time Value
Length: 4	Length: 4
Rebinding Time Value: 21 hours (75600)	<value: 00012750=""> Rebinding Time Value: 21 hours (75600)</value:>
<ul> <li>Option: (51) IP Address Lease Time Length: 4</li> </ul>	<ul> <li>Option: (51) IP Address Lease Time Length: 4</li> </ul>
<value: 00015180=""></value:>	<value: 00015180=""></value:>
<pre>&gt; Address Lease fime: 1 day (86400) &gt; Option: (54) DHCP Server Identifier (10.10.10.1)</pre>	<pre>Option: (54) DHCP Server Identifier (10.10.10.1)</pre>
Length: 4	Length: 4
DHCP Server Identifier: 10.10.10.1	DHCP Server Identifier: 10.10.10.1
Option: (1) Subnet Mask (255.255.255.0) Length: 4	<ul> <li>Option: (1) Subnet Mask (255.255.25.0)</li> <li>Length: 4</li> </ul>
<value: ffffff00=""></value:>	<value: ffffff00=""></value:>
<ul> <li>Option: (81) Client Fully Qualified Domain Name</li> </ul>	<ul> <li>Option: (81) Client Fully Qualified Domain Name</li> </ul>
Length: 3 <value: 00ffff=""></value:>	Length: 3 <value: 00ffff=""></value:>
Flags: 0x00	Flags: 0x00
0 = Keserved Ttags: 0x0 0 = Server DDNS: Some server updates	0 = Server DDNS: Some server updates
0 = Server: Client	
A-RR result: 255 PTR-RR result: 255	A-RR result: 255 PTR-RR result: 255
<ul> <li>Option: (3) Router</li> </ul>	<ul> <li>Option: (3) Router</li> <li>Leonth: 4</li> </ul>
<value: 0a0a0a01=""></value:>	<value: 0a0a0a01=""></value:>
Router: 10.10.10.1	Router: 10.10.10.1 • Option: (15) Domain Name
Length: 10	Length: 10
Domain Name: cisco.com	Domain Name: cisco.com
Option: (82) Agent Information Option Length: 47	Uption: (82) Agent information uption Length: 47
<value: 010e0108800600018a9200a00000000000206707db9b84daf97090074656e616e742d610b040a0a0a0105040a0a0a00=""></value:>	<value: 010e0108000600018a9200a000000000206707db9b84da197090074656e616e742d610b040a0a0a0105040a0a0a00="">     Ontion 82 Subontion: (1) Ament Circuit ID</value:>
Length: 14	Length: 14
<value: 0108000600018a9200a000000000=""> Apent Circuit ID: 0108000600018a9200a00000000</value:>	<value: 0108000000083920030000000000<br="">Agent Circuit ID: 0108000600018392003000000000</value:>
<ul> <li>Option 82 Suboption: (2) Agent Remote ID</li> </ul>	<ul> <li>Option 82 Suboption: (2) Agent Remote ID</li> <li>Length: 6</li> </ul>
<pre>Length: 6 </pre>	<value: 707db9b84daf=""></value:>
Agent Remote ID: 707db9b84daf	Agent Remote ID: 707db9b84daf © Option 82 Suboption: (151) VRF name/VPN ID
Length: 9	Length: 9
<value: 00="" 405060166742061=""> VRF name:</value:>	VRF name:
<ul> <li>[Expert Info (Warning/Undecoded): Trailing stray characters]</li> <li>[Trailing stray characters]</li> </ul>	<pre>(txpert into (warning/Undecoded): Trailing stray characters) (Trailing stray characters)</pre>
<pre><message: characters="" stray="" trailing=""></message:></pre>	<pre><message: characters="" stray="" trailing=""> [Severity level: Marging]</message:></pre>
[Severity level: Warning] [Group: Undecoded]	[Group: Undecoded]
<ul> <li>Option 82 Suboption: (11) Server ID Override (10.10.10.1)</li> <li>Length: 4</li> </ul>	<ul> <li>Option 82 Suboption: (11) Server ID Override (10.10.10.1) Length: 4</li> </ul>
<value: 0a0a0a01=""></value:>	<value: 0a0a0a01=""></value:>
Server ID Override: 10.10.10.1 • Option 82 Suboption: (5) Link selection (10.10.10.0)	<ul> <li>Option 82 Suboption: (5) Link selection (10.10.10.0)</li> </ul>
Length: 4	Length: 4 <value: 0a0a0a00=""></value:>
Link selection: 10.10.10.0	Link selection: 10.10.10.0
Option: (255) End Option End: 255	Option End: 255

## ACK sur LEAF-1

ACK reçu sur LEAF-1	ACK envoyé par LEAF-1

	> Ethernet II, Src: 70:7d:b9:b8:4d:af, Dst: ff:ff:ff:ff:ff:ff
> Ethernet II, Src: 10:b3:d6:a4:85:97, Dst: 70:7d:b9:b8:4d:af	> Internet Protocol Version 4, Src: 10.10.10.1, Dst: 255.255.255.255
Internet Protocol Version 4, Src: 13.13.13.254, Dst: 5.5.5.5 Hear Datagram Protocol Src Part: 65518 Dst Part: 4780	> User Datagram Protocol, Src Port: 67, Dst Port: 68
<ul> <li>Virtual eXtensible Local Area Network</li> </ul>	> Dynamic Host Configuration Protocol (ACK)
Flags: 0x0800, VXLAN Network ID (VNI)	Message type: Boot Reply (2)
VXLAN Network Identifier (WII): 303030	Hardware type: Ethernet (0x01)
Reserved: 0	Hardware address length: 6
Internet Protocol Version 4, Src: 10.10.10.150, Dst: 172.16.10.8	Hops: 0
User Datagram Protocol, Src Port: 67, Dst Port: 67	Transaction ID: 0xe9e35087
Message type: Boot Reply (2)	Seconds elansed: 0
Hardware type: Ethernet (0x01)	Resta flags: 0x2000 Preadcast flag (Preadcast)
Hardware address length: 6 Hops: 0	> bootp flags: 0x0000, broadcast flag, broadcast)
Transaction ID: 0xe9e35087	I = Broadcast flag: Broadcast
Seconds elapsed; 0 - Booto flads: 0x8000. Broadcast flad (Broadcast)	.000 0000 0000 0000 = Reserved flags: 0x0000
1 = Broadcast flag: Broadcast	Client IP address: 0.0.0.0
.000 0000 0000 = Reserved flags: 0x0000 Client IP address: 0.0.0.0	Your (client) IP address: 10.10.10.3
Your (client) IP address: 10.10.10.3	Next server IP address: 0.0.0.0
Next server IP address: 0.0.0.0 Relay agent IP address: 172.16.10.8	Relay agent IP address: 10.10.10.1
Client MAC address: 00:50:56:a5:fd:dd	Client MAC address: 00:50:56:a5:fd:dd
Client hardware address padding: 000000000000000000000000000000000000	Client hardware address padding: 00000000000000000000
Boot file name not given	Server host name not given
Magic cookie: DHCP - Option: (53) DHCP Message Type (ACK)	Boot file name not given
Length: 1	Magic cookie: DHCP
<value: 05=""></value:>	Pagic COOKIE, DHCP Message Tune (ACK)
<ul> <li>Option: (58) Renewal Time Value</li> </ul>	- option, (55) DHCP Hessage Type (ACK)
Length: 4	Length: 1
Renewal Time Value: 12 hours (43200)	<value: 05=""></value:>
<ul> <li>Option: (59) Rebinding Time Value</li> <li>Length: 4</li> </ul>	DHCP: ACK (5)
<value: 00012750=""></value:>	<ul> <li>Option: (58) Renewal Time Value</li> </ul>
Rebinding Time Value: 21 hours (75600)	Length: 4
Length: 4	<value: 0000a8c0=""></value:>
<value: 00015180=""> IP Address Lease Time: 1 day (86480)</value:>	Renewal Time Value: 12 hours (43200)
· Option: (54) DHCP Server Identifier (10.10.10.1)	Option: (59) Rebinding Time Value
Length: 4	Length: 4
DHCP Server Identifier: 10.10.10.1	<value: 00012750=""></value:>
<ul> <li>Option: (1) Subnet Mask (255.255.255.0)</li> <li>Length: 4</li> </ul>	Rebinding Time Value: 21 hours (75600)
<value: ffffff00=""></value:>	Option: (51) IP Address Lease Time
Subnet Mask: 255.255.255.0 • Option: (81) Client Fully Qualified Domain Name	Length: 4
Length: 3	
<value: 00ffff=""></value:>	TP Address Lesse Time: 1 day (96400)
0000 = Reserved flags: 0x0	Option: (E4) DHCD Server Identifier (10 10 10 1)
0 = Server DDNS: Some server updates 0 = Encoding: ASCII encoding	v uption: (54) DHCP Server Identifier (10.10.10.1)
	Length: 4
A-RR result: 255	<value: 0a0a0a01=""></value:>
PTR-RR result: 255	DHCP Server Identifier: 10.10.10.1
<pre>&gt; Option: (3) Router Length: 4</pre>	<ul> <li>Option: (1) Subnet Mask (255.255.255.0)</li> </ul>
<value: 0a0a0a01=""></value:>	Length: 4
Router: 10.10.10.1 • Option: (15) Domain Name	<value: fffff00=""></value:>
Length: 10	Subnet Mask: 255.255.255.0
<pre>&gt;value: 0309/303012003070000&gt; Domain Name: cisco.com</pre>	Option: (81) Client Fully Qualified Domain Name
Option: (82) Agent Information Option Length: 47	Length: 3
<li> <ul> <li></li></ul> <li> <li> <li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li></li>	<value: 00ffff=""></value:>
<ul> <li>Option 82 Suboption: (1) Agent Circuit ID</li> </ul>	Flags: 0x00
<value: 0108000500018a9200a00000000=""></value:>	0000 = Reserved flags: 0x0
Agent Circuit ID: 0108000600018a9200a00000000	0 = Server DDNS: Some server undates
Length: 6	0 = Encoding: ASCII encoding
<value: 707db9b84daf=""></value:>	A = Server overrides: No override
Option 82 Suboption: (151) VRF name/VPN ID	A = Server Client
Length: 9 <value: 0074656e616e742d61=""></value:>	A DD result. 255
VRF name:	A-RK result: 255
<ul> <li>[Expert Info (Warning/Undecoded): Trailing stray characters]</li> <li>[Trailing stray characters]</li> </ul>	PIR-RK result: 255
<pre><message: characters="" stray="" trailing=""></message:></pre>	v uption: (3) Router
[Severity level: Warning] [Group: Undecoded]	Length: 4
<ul> <li>Option 82 Suboption: (11) Server ID Override (10.10.10.1)</li> </ul>	<value: 0a0a0a01=""></value:>
<pre>Lengtn: 4 <value: 0a0a0a01=""></value:></pre>	Router: 10.10.10.1
Server ID Override: 10.10.10.1	v Option: (15) Domain Name
v uption 82 suboption: (5) Link selection (10.10.10.0) Length: 4	Length: 10
	<value: 636973636f2e636f6d00=""></value:>
v Option: (255) End	Domain Name: cisco.com
Option End: 255	Option: (255) End
	Option End: 255

## ACK sur HOST-1

Ethernet II, Src: 70:7d:b9:b8:4d:af, Dst: ff:ff:ff:ff:ff:ff Internet Protocol Version 4, Src: 10.10.10.1, Dst: 255.255.255.255 > User Datagram Protocol, Src Port: 67, Dst Port: 68 Dynamic Host Configuration Protocol (ACK) Message type: Boot Reply (2) Hardware type: Ethernet (0x01) Hardware address length: 6 Hops: 0 Transaction ID: 0xe9e35087 Seconds elapsed: 0 Bootp flags: 0x8000, Broadcast flag (Broadcast) 1... .... = Broadcast flag: Broadcast .000 0000 0000 0000 = Reserved flags: 0x0000 Client IP address: 0.0.0.0 Your (client) IP address: 10.10.10.3 Next server IP address: 0.0.0.0 Relay agent IP address: 10.10.10.1 Client MAC address: 00:50:56:a5:fd:dd Client hardware address padding: 0000000000000000000 Server host name not given Boot file name not given Magic cookie: DHCP Option: (53) DHCP Message Type (ACK) Length: 1 <Value: 05> DHCP: ACK (5) Option: (58) Renewal Time Value Length: 4 <Value: 0000a8c0> Renewal Time Value: 12 hours (43200) Option: (59) Rebinding Time Value Length: 4 <Value: 00012750> Rebinding Time Value: 21 hours (75600) Option: (51) IP Address Lease Time Length: 4 <Value: 00015180> IP Address Lease Time: 1 day (86400) Option: (54) DHCP Server Identifier (10.10.10.1) Length: 4 <Value: 0a0a0a01> DHCP Server Identifier: 10.10.10.1 Option: (1) Subnet Mask (255.255.255.0) Length: 4 <Value: ffffff00> Subnet Mask: 255.255.255.0 Option: (81) Client Fully Qualified Domain Name Length: 3 <Value: 00ffff> Flags: 0x00 0000 .... = Reserved flags: 0x0 .... 0... = Server DDNS: Some server updates ..... .0.. = Encoding: ASCII encoding .... ..0. = Server overrides: No override .... ...0 = Server: Client A-RR result: 255 PTR-RR result: 255 Option: (3) Router Length: 4 <Value: 0a0a0a01> Router: 10.10.10.1 Option: (15) Domain Name Length: 10 <Value: 636973636f2e636f6d00> Domain Name: cisco.com Option: (255) End Option End: 255

# Informations connexes

Configuration de VXLAN BGP EVPN

Configuration de VXLAN

Résolution des problèmes liés à DHCP sur Nexus 9000

Guide de configuration VXLAN de la gamme Cisco Nexus 9000 NX-OS, version 10.4(x)

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