

Address ACI Fault Code F1344/F1425: Address Configuration Failure

Contents

[Introduction](#)

[Background Information](#)

[Fault Code F1344](#)

[Fault Code F1425](#)

[Detailed Steps to Address Fault](#)

[Example](#)

Introduction

This document describes the steps for remediation of ACI faults F1344 and F1425.

Background Information

Both ACI faults F1344 and F1425 remediation procedures are included in the same document as there can be a similarity in how to approach these faults.

Fault Code F1344

Fault code 1344 occurs when there is a configuration failure due to subnet overlap in the same Virtual Routing and Forwarding (VRF).

You can likely have more than one Layer 3 (L3) interface configured with the same subnet in the same VRF which can trigger the fault.

```
APIC# moquery -c faultInst -f 'fault.Inst.code=="F1344"'
Total Objects shown: 3
```

```
# fault.Inst
code : F1344
ack : yes
annotation :
cause : config-failure
changeSet : ipv4CfgFailedBmp (New: ipv4:Addraddr_failed_flag,ipv4:Addrctrl_failed_flag,ipv4:AddrlcOwn_f
childAction :
created : 2019-05-05T14:35:10.660+03:00
delegated : no
descr : Address configuration failure. Reason: 1
dn : topology/pod-1/node-1003/sys/ipv4/inst/dom-TN_PROD:VRF_PROD_CRIT/if-[vlan37]/addr-[192.168.88.126/
domain : infra
extMngdBy : undefined
highestSeverity : warning
lastTransition : 2019-05-05T14:37:18.540+03:00
lc : raised
modTs : never
occur : 1
```

origSeverity : warning
prevSeverity : warning
rn : fault-F1344
rule : ipv4-addr-ipv4-cfg-ctrl
severity : warning
status :
subject : failure-to-deploy
type : config
uid :

Common Examples of Fault Generation:

1. Loopback IPs on L3Outs overlap with IP addresses on L3Out.
2. Combination of overlap of subnet prefixes under Bridge Domains (BDs) and/or EPG Subnets.

Fault Code F1425

Fault code F1425 occurs when the operational state of the IPv4 address state is changed to subnet-overlap/no primary/address already configured as the next hop in a static route.

Recommended Action: In order to recover from this fault, try these actions:

- Look at any configuration issues.
- Verify the configuration is correct/complete.
- If the interface is down, fix connectivity/configuration in order to bring the interface state back up.

```
APIC# moquery -c faultInst -f 'fault.Inst.code=="F1425"'  
Total Objects shown: 3
```

```
# fault.Inst  
code : F1425  
ack : no  
alert : no  
annotation :  
cause : ip-provisioning-failed  
changeSet : ipv4CfgFailedBmp (New: ipv4:Addraddr_failed_flag,ipv4:Addrctrl_failed_flag,ipv4:AddrlcOwn_f  
childAction :  
created : 2022-06-19T03:25:56.759+03:00  
delegated : no  
descr : IPv4 address(10.66.212.97/28) is operationally down, reason:Subnet overlap on node 211 fabric h  
dn : topology/pod-1/node-211/sys/ipv4/inst/dom-mgmt:OSS/if-[vlan102]/addr-[10.66.212.97/28]/fault-F1425  
domain : access  
extMngdBy : undefined  
highestSeverity : major  
lastTransition : 2022-06-19T03:28:24.946+03:00  
lc : raised  
modTs : never  
occur : 1  
origSeverity : major  
prevSeverity : major  
rn : fault-F1425  
rule : ipv4-addr-oper-st-down  
severity : major  
status :  
subject : oper-state-err  
title :
```

```
type : operational
uid :
userdom : all
```

Detailed Steps to Address Fault

1. Isolate any L3Out interfaces that can overlap with the loopback address on L3Outs.
2. Isolate any subnets that overlap between EPG Subnets and/or BDs.

Since the IP address overlap can be for loopbacks/L3Outs or BD subnets, it is best to get the full dump of the IP addresses.

```
apic# moquery -c ipv4Addr
```

Once you identify the overlap, you can use one of these commands in order to check if the overlap is tied to any specific BD configuration.

```
apic# moquery -c fvSubnet
```

```
apic# moquery -c fvBD
```

It requires some level of data analysis using grep in order to extract and identify the specific conflicts.

Example

Fault:

```
# fault.Inst
code : F1344
ack : no
cause : config-failure
changeSet : ipv4CfgFailedBmp (New: ipv4:Addraddr_failed_flag,ipv4:Addrctrl_failed_flag,ipv4:Addr1cOwn_f
childAction :
created : 2018-03-14T23:12:40.354+01:00
delegated : no
descr : Address configuration failure. Reason: 1
dn : topology/pod-1/node-301/sys/ipv4/inst/dom-0-HMPO-Prod:0-HMPO-DB-DMZ-Prod-VRF/if-[1o21]/addr-[10.23
domain : infra
highestSeverity : warning
lastTransition : 2018-03-14T23:14:47.336+01:00
lc : raised
modTs : never
occur : 1
origSeverity : warning
prevSeverity : warning
rn : fault-F1344
rule : ipv4-addr-ipv4-cfg-ctrl
severity : warning
status :
subject : failure-to-deploy
type : config
uid :
```

Analysis:

There are two loopbacks:

```
apic# moquery -c ipv4Addr
```

```
<SNIP>
```

```
# ipv4.Addr
addr : 10.23.255.3/32
childAction :
ctrl :
dn : topology/pod-1/node-301/sys/ipv4/inst/dom-0-HMPO-Prod:0-HMPO-DB-DMZ-Prod-VRF/if-[lo21]/addr-[10.23.255.3/32]
ipv4CfgFailedBmp : ipv4:Addraddr_failed_flag,ipv4:Addrctrl_failed_flag,ipv4:AddrlcOwn_failed_flag,ipv4:AddrmonPo1Dn_failed_flag,ipv4:AddroperSt_failed_flag,ipv4:AddroperStQual_failed_flag,ipv4:Addrpref_failed_flag,ipv4:Addrstatus_failed_flag,ipv4:Addrtag_failed_flag,ipv4:Addrtype_failed_flag,ipv4:AddrvpcPeer_failed_flag
ipv4CfgFailedTs : 00:00:00:00.000
ipv4CfgState : 1
lcOwn : local
modTs : 2018-03-14T16:11:58.033+01:00
monPo1Dn :
operSt : down
operStQual : subnet-overlap
pref : 1
rn : addr-[10.23.255.3/32]
status :
tag : 0
type : primary
vpcPeer : 0.0.0.0
```

```
# ipv4.Addr
addr : 10.23.255.3/32
childAction :
ctrl :
dn : topology/pod-1/node-301/sys/ipv4/inst/dom-0-HMPO-Prod:0-HMPO-DB-DMZ-Prod-VRF/if-[lo23]/addr-[10.23.255.3/32]
ipv4CfgFailedBmp :
ipv4CfgFailedTs : 00:00:00:00.000
ipv4CfgState : 0
lcOwn : local
modTs : 2018-03-14T16:11:54.905+01:00
monPo1Dn :
operSt : up
operStQual : up
pref : 1
rn : addr-[10.23.255.3/32]
status :
tag : 0
type : primary
vpcPeer : 0.0.0.0
```

Lo21 overlaps with Lo23.

It belongs to two different L3Outs in the same VRF.