

# 排除CNDP解決方案中的伺服器問題

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## 簡介

本文說明如何識別整合運算系統(UCS)，並在雲端原生部署平台(CNDP)中檢查其上的錯誤專案。

## 背景資訊

與硬體相關的警報在Ultra雲核心訂戶微服務基礎架構(SMI)群集管理器(CM)通用執行環境(CEE)中報告。在CM虛擬IP(VIP)中報告Kubernetes(K8)、docker等相關資訊。

**注意：**請參閱網路設計和客戶資訊調查表(CIQ)以驗證IP。

## 問題

show alerts中報告錯誤「Equipment Alarm」。

- 登入到CM-CEE，運行命令**show alerts active detail**和**show alerts history summary**以顯示所有活動警報和歷史警報。
- 注意警報中報告的伺服器IP。

```
-----show alerts active detail
alerts active detail server-alert 9c367ce5ee48
severity      major
type          "Equipment Alarm"
startsAt      2021-10-27T17:10:37.025Z
source        10.10.10.10
summary       "DDR4_P1_C1_ECC: DIMM 5 is inoperable : Check or replace DIMM"
labels        [ "alertname: server-alert" "cluster: cr-chr-deployer" "description:
DDR4_P1_C1_ECC: DIMM 5 is inoperable : Check or replace DIMM" "fault_id: sys/rack-unit-
1/board/memarray-1/mem-5/fault-F0185" "id: 134219020" "monitor: prometheus" "replica: cr-chr-
deployer" "server: 10.10.10.10" "severity: major" ]
annotations   [ "dn: cr-chr-deployer/10.10.10.10/sys/rack-unit-1/board/memarray-1/mem-5/fault-
F0185/134219020" "summary: DDR4_P1_C1_ECC: DIMM 5 is inoperable : Check or replace DIMM" "type:
Equipment Alarm" ]
```

```
[lab-deployer/labceec01] cee# show alerts history summary
```

NAME	UID	SEVERITY	STARTS AT	DURATION	SOURCE	SUMMARY
vm-alive	f6a65030b593	minor	09-02T10:28:28	1m40s	10-192-0-13	labd0123 is alive.
vm-error	3a6d840e3eda	major	09-02T10:27:18	1m	10-192-0-13	labd0123 is down.
vm-alive	49b2c1941dc6	minor	09-02T10:25:38	1m40s	10-192-0-14	labd0123 is alive.

## 解決方案

識別在SMI CM的伺服器上託管的服務 ( 容器 ) 和/或虛擬機器(VM)或基於核心的虛擬機器 (KVM) , 運行命令**show running-config** , 然後查詢伺服器IP的配置。

1. 登入到CM VIP(使用者名稱 : 雲使用者)
2. 從OPS Center獲取smi-cm命名空間
3. 登入到OPS Center , 然後檢查群集配置
4. 確定伺服器上運行的節點和虛擬機器

```
cloud-user@lab-deployer-cm-primary:~$ kubectl get svc -n smi-cm
NAME                                TYPE                CLUSTER-IP          EXTERNAL-IP
PORT(S)                              AGE
cluster-files-offline-smi-cluster-deployer ClusterIP           10.102.200.178      <none>
8080/TCP                               98d
iso-host-cluster-files-smi-cluster-deployer ClusterIP           10.102.100.208      192.168.1.102
80/TCP                                  98d
iso-host-ops-center-smi-cluster-deployer ClusterIP           10.102.200.73       192.168.1.102
3001/TCP                                98d
netconf-ops-center-smi-cluster-deployer ClusterIP           10.102.100.207      192.168.184.193
3022/TCP,22/TCP                         98d
ops-center-smi-cluster-deployer      ClusterIP           10.10.20.20         <none>
8008/TCP,2024/TCP,2022/TCP,7681/TCP,3000/TCP,3001/TCP 98d
squid-proxy-node-port                NodePort            10.102.60.114       <none>
3128:32261/TCP                         98d
```

```
cloud-user@lab-deployer-cm-primary:~$ ssh -p 2024 admin@10.10.20.20
admin@10.10.20.20's password:
Welcome to the Cisco SMI Cluster Deployer on lab-deployer-cm-primary
Copyright © 2016-2020, Cisco Systems, Inc.
All rights reserved.
admin connected from 192.168.1.100 using ssh on ops-center-smi-cluster-deployer-7848c69844-xzdw6
[lab-deployer-cm-primary] SMI Cluster Deployer# show running-config clusters
```

## 容器的輸出示例

在本示例中 , 伺服器由節點primary-1使用。

```
[lab-deployer-cm-primary] SMI Cluster Deployer# show running-config clusters lab01-smf nodes
primary-1
clusters lab01-smf
nodes primary-1
maintenance false
k8s node-type      primary
k8s ssh-ip         10.192.10.22
k8s sshd-bind-to-ssh-ip true
k8s node-ip        10.192.10.22
k8s node-labels    smi.cisco.com/node-type oam
exit
k8s node-labels    smi.cisco.com/node-type-1 proto
exit
```

```
ucs-server cimc user admin
ucs-server cimc ip-address 10.10.10.10
```

## VM輸出示例

伺服器可用於基於KVM的虛擬機器。

在本示例中，伺服器具有使用者平面功能(UPF)- upf1和upf2。

```
[lab-deployer-cm-primary] SMI Cluster Deployer# show running-config clusters lab01-upf nodes
labupf
clusters lab01-upf
nodes labupf
maintenance false
ssh-ip      10.192.30.7
type       kvm
vms upf1
  upf software lab...
...
type upf
exit
vms upf2
  upf software lab...
...
type upf
exit
ucs-server cimc user admin
...
ucs-server cimc ip-address 10.10.10.10
...
exit
```

## 通過SSH連線到UCS主機

連線到UCS主機並驗證具有scope fault的故障條目、show fault entries和show fault history。

```
labucs111-cmp1-11 /fault # show fault-entries
Time Severity Description -----
-----
2021-03-26T10:10:10 major "DDR4_P1_C1_ECC: DIMM 19 is inoperable : Check or replace DIMM"

----- show fault-history
Time          Severity      Source          Cause          Description
-----
2021 Dec 10 02:02:02 UTC info          %CIMC          EQUIPMENT_INOPERABLE
"[F0174][cleared][equipment-inoperable][sys/rack-unit-1/board] IERR: A catastrophic fault has
occurred on one of the processors: Cleared "
2021 Dec 1 01:01:01 UTC critical     %CIMC          EQUIPMENT_INOPERABLE
"[F0174][critical][equipment-inoperable][sys/rack-unit-1/board] IERR: A catastrophic fault has
occurred on one of the processors: Please check the processor's status. "
```