

# CPAR安裝步驟

## 目錄

---

[簡介](#)

[背景資訊](#)

[安裝步驟](#)

---

## 簡介

本檔案介紹安裝Cisco Prime Access Registrar(CPAR)的程式。

此安裝過程適用於使用NEWTON版本的Openstack環境，其中ESC不管理CPAR，CPAR直接安裝在Openstack上部署的VM上。

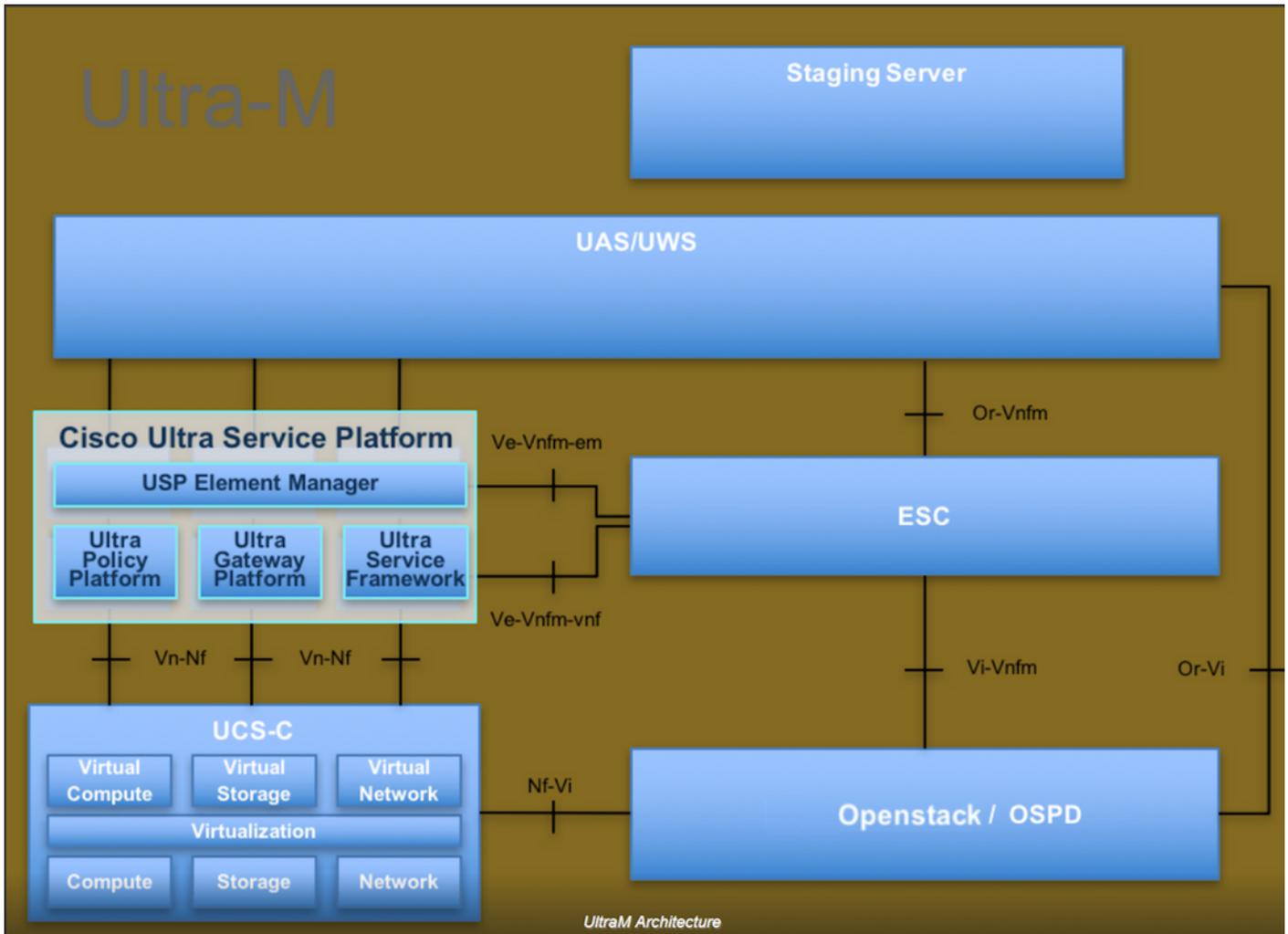
## 背景資訊

Ultra-M是經過預先打包和驗證的虛擬化移動資料包核心解決方案，旨在簡化VNF的部署。

OpenStack是適用於Ultra-M的Virtualized Infrastructure Manager(VIM)，包含以下節點型別：

- 計算
- 對象儲存磁碟 — 計算 ( OSD — 計算 )
- 控制器
- OpenStack平台 — 導向器(OSPD)

Ultra-M的高級架構和涉及的元件如下圖所示：



本文檔面向熟悉Cisco Ultra-M平台的思科人員，詳細說明了在OpenStack和Redhat作業系統上執行的步驟。

 註：為定義本文檔中的過程，需要考慮Ultra M 5.1.x版本。

## 安裝步驟

在開始安裝之前，請確保已經達到這些要求。

1. CPAR軟體映像複製到/tmp/ CSCoar-x.x.x.x.-lnx26\_64-install.sh
2. CPAR許可證複製在/tmp/xxxxxx.lic中
3. Java 64位安裝1.7.\*或1.8.\* 64位版本。
4. 更新主機名，且主機名應該位於/etc/hosts中
5. 該清單包括安裝CPAR GUI所需的RPM：

### Required 64-bit rpms for Relevant RHEL OS Versions

rpm	RHEL OS Version 6.6	RHEL OS Version 7.0	RHEL OS Version 7.2
glibc	Yes	Yes	Yes
gdome2	Yes	Yes	Yes
glib	Yes	Yes	Yes
glib2	Yes	Yes	Yes
libgcc	Yes	Yes	Yes
libstdc++	Yes	Yes	Yes
libxml2	Yes	Yes	Yes
ncurses	No	No	No
nspr	Yes	Yes	Yes
nss	No	No	No
zlib	Yes	Yes	Yes
nss-softokn-freebl	Yes	Yes	Yes
ncurses-libs	Yes	Yes	Yes
nss-util	Yes	Yes	Yes
gamin	Yes	Yes	Yes
libselinux	Yes	Yes	Yes

以root使用者身份登入Prime Access Registrar工作站。

步驟 1. 執行命令`cd /tmp`時，導航到/tmp目錄。

步驟 2. 發出`chmod 775 ./CSCCOar-x.x.x.x.-lnx26_64-install.sh`命令更改./CSCCOar-x.x.x.x.-lnx26\_64-install.sh檔案的許可權。

步驟 3. 通過命令`./CSCCOar-x.x.x.x.-lnx26_64-install.sh`啟動安裝指令碼。

```
[cloud-user@rhel-instance tmp]$ sudo ./CSCOar-7.2.2.2-lnx26_64-install.sh
./CSCOar-7.2.2.2-lnx26_64-install.sh: line 343: [: 148: unary operator expected
Name       : CSCOar           Relocations: /opt/CSCOar
Version    : 7.2.2.2         Vendor: Cisco Systems, Inc.
Release    : 1491821640     Build Date: Mon Apr 10 04:02:17 2017
Install Date: (not installed) Build Host: nm-rtp-view4
Signature  : (none)
build_tag: [Linux-2.6.18, official]

Copyright (C) 1998-2016 by Cisco Systems, Inc.
This program contains proprietary and confidential information.
All rights reserved except as may be permitted by prior written consent.

Where do you want to install <CSCOar>? [/opt/CSCOar] [?,q]
```

步驟 4.對於「Where do you want to install <CSCOar> ? ( 您要在何處安裝<CSCOar> ? )」問題 [/opt/CSCOar] [?,q]，按enter選擇預設位置(/opt/CSCOar/)。

步驟 5.在FLEXlm許可證檔案位於何處？ [] [?,q]提供許可證的位置，該位置應按前提條件 /tmp/xxxxx.lic為/tmp。

```
Cisco Prime Access Registrar requires FLEXlm license file to operate.
A list of space delimited license files or directories can be supplied
as input; license files must have the extension ".lic".
```

```
Existing license files found. To use the existing license files,
just press ENTER to the prompt below.
```

```
Note: To enable other features within this package, additional FLEXlm
license files can be specified below.
```

```
Where are the FLEXlm license files located? [] [?,q]
```

步驟 6.指定是否要啟用智慧許可。 如果要使用傳統的許可方法，請繼續執行下一步。

```
是否要啟用smartlicensing?[y/n] [n]: [y, n, ?,q] y
```

步驟 7.對於問題J2RE安裝在何處？ [] [?,q]輸入安裝Java的目錄。例如： /usr/java/jre1.8.0\_144/。

---

 注意：如果未提供JRE路徑，或者該路徑為空或不支援，則安裝過程將退出。Prime Access Registrar需要JRE 1.7.x或JRE 1.8.x 64位版本。

---

Cisco Prime Access Registrar provides a Web GUI. It requires J2RE version 1.7.\* or 1.8.\* to be installed on the server.

If you already have a compatible version of J2RE installed, please enter the directory where it is installed. If you do not, the compatible J2RE version can be downloaded from:

<http://java.sun.com/>

Where is the J2RE installed? [] [?,q]

步驟 8.按Enter鍵並跳過Oracle輸入。因為，此部署中不使用Oracle。

If you are not using ORACLE, press Enter/Return to skip this step. ORACLE installation directory is required for OCI configuration. ORACLE\_HOME variable will be set in /etc/init.d/arserver script

Where is ORACLE installed? [] [?,q]

步驟 9.按Enter鍵並跳過SIGTRAN-M3UA功能步驟。此部署不需要此功能。

Do you want to install SIGTRAN-M3UA functionality now? [n]: [y,n,?,q]

SIGTRAN-M3UA related options are disabled. You can enable the options at any time by running the following command

`/opt/CSC0ar/bin/add-sigtran-configuration`

Cisco Prime Access Registrar can be run as non-root user also. This requires the libcap-2.16-5.5 rpm to be installed. If the kernel version is 2.6.24 or later, libcap is already available Please ensure that you have an existing non-root user created prior to this.

If you require to run CPAR as non-root user, and the user does not exist, please choose to exit installation. Once the non-root user is created, you may install CPAR.

步驟 10.對於問題，是否希望CPAR以非根使用者身份運行？[n]: [y, n, ?,q]按Enter鍵使用預設答案n。

Do you want CPAR to be run as non-root user? [n]: [y,n,?,q]

If you want to learn about Cisco Prime Access Registrar by following the examples in the Installation and Configuration Guide, you need to populate the database with the example configuration.

NOTE: If you are using DIRECTOR/DIRECTOR NEXT GEN Licenses, please do not try installing Example configuration, Give the option for Example configuration as "n"

步驟 11.對於問題，是否立即安裝示例配置？[n]: [y, n, ?,q]按Enter鍵使用預設答案n。

Do you want to install the example configuration now? [n]: [y,n,?,q]

You can add the example configuration at any time by running the command:

```
/opt/CSCOar/bin/aregcmd -f /opt/CSCOar/examples/cli/add-example-configuration.rc
```

步驟 12.CPAR安裝開始。

```
unpack the rpm file done
Preparing... ##### [100%]
1:CSCOarui-add ##### [100%]
# setting up the web server.....
# configuring the web server.....
# extracting the web application.....
# extracting the rest application.....
Preparing... ##### [100%]
1:CSCOar ##### [100%]
relink cisco prime arserver
JAVA_ROOT /opt/jdk1.7.0_75
JAVA_HOME /opt/jdk1.7.0_75
# setting ORACLE_HOME and JAVA_HOME variables in arserver
ORACLE_HOME
JAVA_HOME /opt/jdk1.7.0_75
set JAVA_HOME
# removing old session information
# flushing old replication archive
# creating initial configuration database
Rollforward recovery using "/opt/CSCOar/data/db/vista.tjf" started Mon Sep 19 07:21:38 2016
Rollforward recovery using "/opt/CSCOar/data/db/vista.tjf" finished Mon Sep 19 07:21:38 2016

ln: creating symbolic link `/opt/CSCOar/logs/WebGUI.log': File exists
# add-example-config y
calling gen-tomcat
using OPENSSL=/cisco-ar/.system/openssl
Making sure the cert directory exists: /cisco-ar/certs/tomcat
Calling gen-ss-cert to create the cert
/cisco-ar/certs/tomcat/server-cert.pem exists, no action taken.
WARNING: can't open config file: /usr/local/ssl/openssl.cnf
Tomcat private RSA key now resides in /cisco-ar/certs/tomcat/server-key.pem
Starting Cisco Prime Access Registrar Server Agent...completed.
```

步驟 13.等待CPAR安裝過程完成，驗證所有運行的CPAR過程。導航到目錄/opt/CSCOar/bin，然後執行命令。/arstatus。輸出如下圖所示。

```
[root@dalaaa06 bin]# ./arstatus
Cisco Prime AR RADIUS server running      (pid: 1192)
Cisco Prime AR Server Agent running       (pid: 1174)
Cisco Prime AR MCD lock manager running   (pid: 1177)
Cisco Prime AR MCD server running        (pid: 1191)
Cisco Prime AR GUI running                (pid: 1194)
SNMP Master Agent running                 (pid: 1193)
```

步驟 14. 登入到CPAR應用程式CLI。

轉到目錄/opt/CSCOar/bin並執行./aregcmd。

使用admin使用者帳戶「admin」進行連線，將提示輸入新密碼。

```
[root@ar-lnx-vm029 opt]# cd /opt/CSCOar/bin
[root@ar-lnx-vm029 bin]# ./aregcmd -s
Cisco Prime Access Registrar 7.3.0.0 Configuration Utility
Copyright (C) 1995-2016 by Cisco Systems, Inc. All rights reserved.
Logging in to localhost
Enter a new passphrase:
Warning: Passphrase length should be atleast 8 characters
Confirm new passphrase:
```

## 關於此翻譯

思科已使用電腦和人工技術翻譯本文件，讓全世界的使用者能夠以自己的語言理解支援內容。請注意，即使是最佳機器翻譯，也不如專業譯者翻譯的內容準確。Cisco Systems, Inc. 對這些翻譯的準確度概不負責，並建議一律查看原始英文文件（提供連結）。