Replacement of Controller Server UCS C240 M4 - CPAR

Contents

Introduction

Background Information

Abbreviations

Workflow of the MoP

Prerequisites

Backup

Preliminary Status Check

Disable Fencing in the Controller Cluster

Install the New Controller Node

Controller Node Replacement in Overcloud

Prepare to Remove Failed Controller Node

Prepare to Add New Controller Node

Manual Intervention

Verify Overcloud Services in the Controller

Finalize the L3 Agent Routers

Finalize Compute Services

Restart Fencing on the Controller Nodes

Introduction

This document describes the steps required to replace a faulty controller server in an Ultra-M setup.

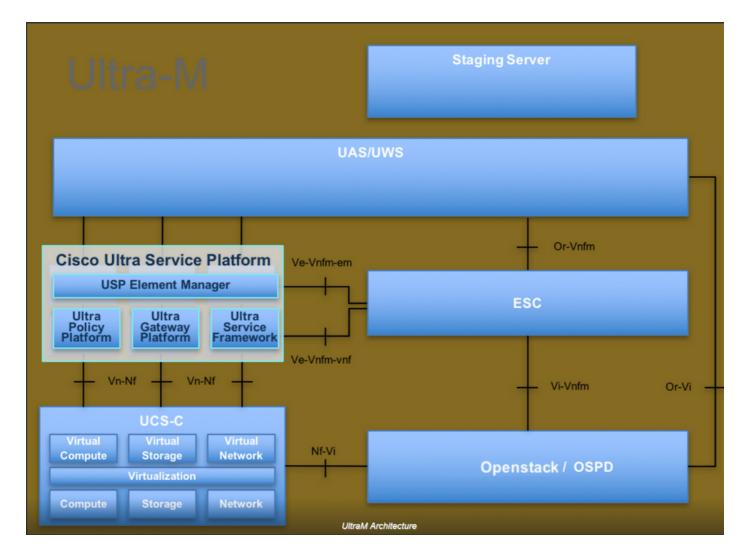
This procedure applies for an Openstack environment using NEWTON version where Elastic Services Controller (ESC) does not manage Cisco Prime Access Registrar (CPAR) and CPAR is installed directly on the VM deployed on Openstack.

Background Information

Ultra-M is a pre-packaged and validated virtualized mobile packet core solution that is designed in order to simplify the deployment of VNFs. OpenStack is the Virtualized Infrastructure Manager (VIM) for Ultra-M and consists of these node types:

- Compute
- Object Storage Disk Compute (OSD Compute)
- Controller
- OpenStack Platform Director (OSPD)

The high-level architecture of Ultra-M and the components involved are shown in this image:



This document is intended for Cisco personnel who are familiar with Cisco Ultra-M platform and it details the steps that are required to be carried out at OpenStack and Redhat OS.

Note: Ultra M 5.1.x release is considered in order to define the procedures in this document.

Abbreviations

MOP Method of Procedure

OSD Object Storage Disks

OSPD OpenStack Platform - Director

HDD Hard Disk Drive

SSD Solid State Drive

VIM Virtual Infrastructure Manager

VM Virtual Machine

EM Element Manager

UAS Ultra Automation Services

UUID Universally Unique IDentifier

Workflow of the MoP

This image shows the high level workflow of the replacement procedure.