

Replacement of Compute Server UCS C240 M4 - vEPC

Contents

[Introduction](#)

[Background Information](#)

[Abbreviations](#)

[Workflow of the MoP](#)

[Prerequisites](#)

[Backup](#)

[Identify the VMs Hosted in the Compute Node](#)

[Graceful Power Off](#)

[Case 1. Compute Node Hosts only SF VM](#)

[Migrate SF Card to Standby State](#)

[Shutdown SF VM from ESC](#)

[Remove the Compute Node from Nova Aggregate List](#)

[Case 2. Compute Node Hosts CF/ESC/EM/UAS](#)

[Migrate CF Card to Standby State](#)

[Shutdown CF and EM VM from ESC](#)

[Migrate ESC to Standby Mode](#)

–

[Remove the Compute Node from Nova Aggregate List](#)

[Compute Node Deletion](#)

[Delete Compute Node from the Service List](#)

[Delete Neutron Agents](#)

[Delete from the Ironic Database](#)

[Delete from Overcloud](#)

[Install the New Compute Node](#)

[Add the New Compute Node to the Overcloud](#)

[Post Server Replacement Settings](#)

[Restore the VMs](#)

[Case 1. Compute Node Hosts only SF VM](#)

[Addition to Nova Aggregate List](#)

[SF VM Recovery from ESC](#)

[Case 2. Compute Node Hosts CF, ESC, EM and UAS](#)

[Addition to Nova Aggregate List](#)

[Recovery of UAS VM](#)

[Recovery of ESC VM](#)

[Handle ESC Recovery Failure](#)

[Auto-Deploy Configuration Update](#)

[Enabling Syslogs](#)

[Related Information](#)

Introduction

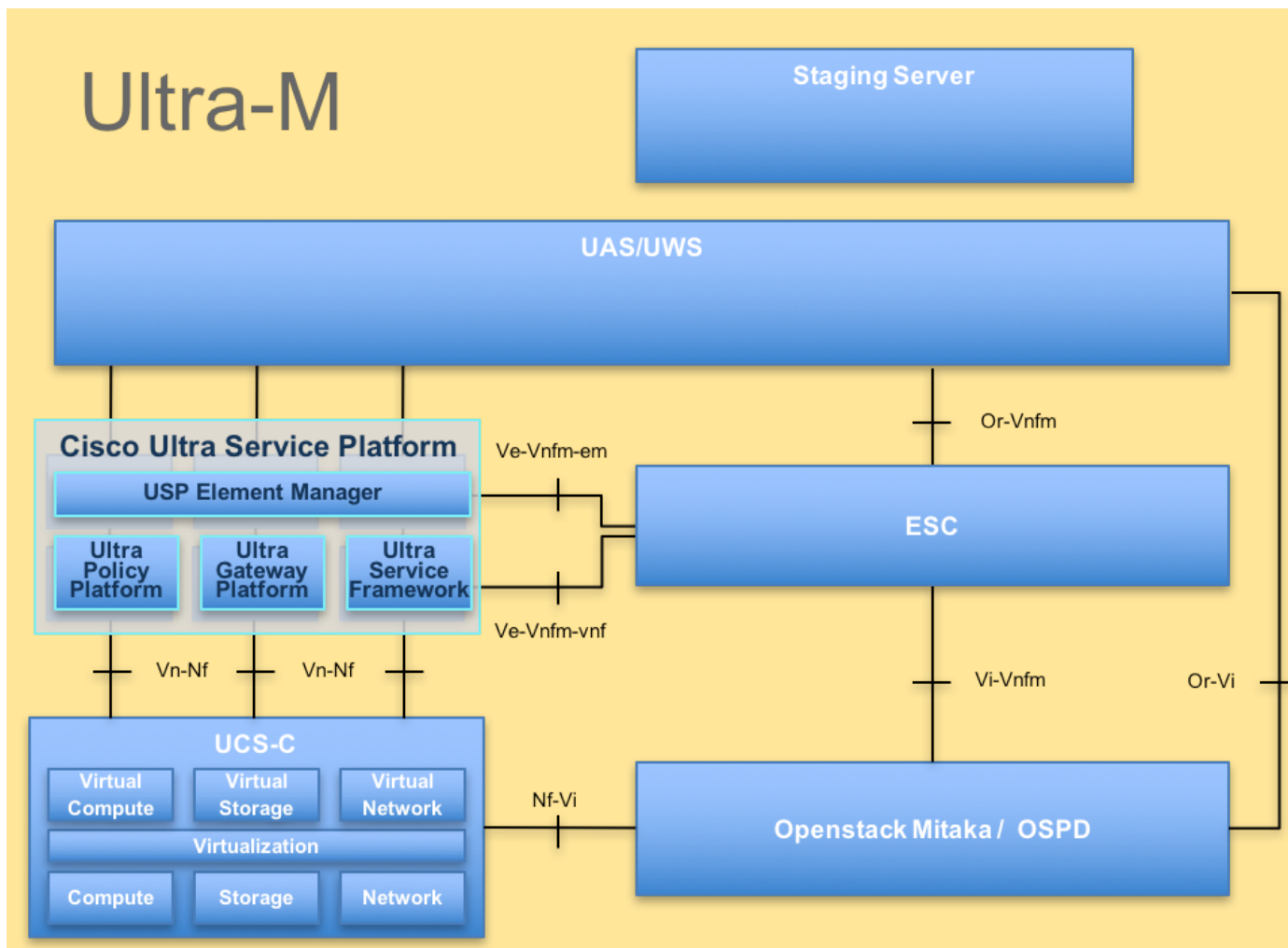
This document describes the steps required to replace a faulty compute server in an Ultra-M setup that hosts StarOS Virtual Network Functions (VNFs).

Background Information

Ultra-M is a pre-packaged and validated virtualized mobile packet core solution designed 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 depicted in this image:



UltraM Architecture

This document is intended for the Cisco personnel familiar with Cisco Ultra-M platform and it details the steps required to be carried out at OpenStack and StarOS VNF level at the time of the Compute Server Replacement.

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

Abbreviations

VNF	Virtual Network Function
CF	Control Function
SF	Service Function
ESC	Elastic Service Controller
MOP	Method of Procedure
OSD	Object Storage Disks
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

