

**Network Simplification AT&T Mexico**

Integration Carrier to Carrier &

Integration/Migration MOP Netsimp

Error! MergeField was not found in header record of data source. Error! MergeField was not found in header record of data source. Error! MergeField was not found in header record of data source.

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About This Integration/Migration MOP Netsimp

|  |  |
| --- | --- |
| Author | Day1 IPBH/Netsimp team |
| Change Authority | Cisco Day1 Netsimp team |
| Project ID | **Error! MergeField was not found in header record of data source.** |

History

|  |  |  |  |
| --- | --- | --- | --- |
| Version No. | Issue Date | Status | Reason for Change |
| 1.0 | **Error! MergeField was not found in header record of data source.** | Released | First draft |
|  |  |  |  |

Review

|  |  |  |
| --- | --- | --- |
| Reviewer’s Details | Version No. | Date |
|  |  |  |
|  |  |  |

Document Conventions

|  |  |
| --- | --- |
| D:\Pad and pen.jpg | Alerts readers to take note. Notes contain helpful suggestions or references to material not covered in the document. |
| D:\Caution.jpg | Alerts readers to be careful. In this situation, you might do something that could result in equipment damage or loss of data. |
| D:\Warning.JPG | Alerts readers of a situation that could cause bodily injury. They need to be aware of the hazards involved with electrical circuitry and familiarize themselves with standard practices for preventing accidents. |
| D:\clock.jpg | Alerts the reader that they can save time by performing the action described in the paragraph affixed to this icon. |
| D:\Tip icon.jpg | Alerts the reader that the information affixed to this icon will help them solve a problem. The information might not be troubleshooting or even an action, but it could be useful information similar to a Timesaver. |

# Introduction

## Preface

This document is created for the Network simplification project. Its main audience is AT&T Mexico Engineering and Operations teams which oversee execution of the Maintenance Windows to integrate Error! MergeField was not found in header record of data source. devices to AT&T Network. The MOP is structured to be stages and the Scripts to be executed are specific to the device involved during the Maintenance Window.

The Goal of the MOP is to change the configuration of installed Error! MergeField was not found in header record of data source. devices in the Netsimp project to adjust to the latest Golden Configuration document. It contains the necessary steps to modify the configuration and check points to validate the device is correctly behaving.

In this case also the scope of the MOP is to configure the interfaces for **Error! MergeField was not found in header record of data source.** of an installed **Error! MergeField was not found in header record of data source.** device to receive the end host connections according with Golden Configuration. Once the interface is configured, the connection from current router is migrated to the **Error! MergeField was not found in header record of data source.** device and verifications take place.

## Audience

AT&T Mexico Engineering, Deployment, NOC and Operations teams involved in the migrations for Network Simplification project

## Related Documents

|  |  |
| --- | --- |
| Document | Version |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## Assumptions

This document assumes that the reader is familiar with Cisco solutions and IP networks. It is assumed that ATT has provided accurate and current information used in the authoring of this document at the time of document creation.

Assumed to same time must be configuration in Huawei CX-600 and AGGs.

Host found in production, like Microwaves devices or BBU devices, are assumed to follow standard connections and protocols.

## Devices involved

Table 1 –Cisco Site-names and Hostnames

|  |  |  |
| --- | --- | --- |
| Location | Hostname | IP address |
| Error! MergeField was not found in header record of data source. | Error! MergeField was not found in header record of data source. | Error! MergeField was not found in header record of data source. |

Non-Cisco devices that are involved and require configuration are:

Table 2 – Non-Cisco Site-names and Hostnames

|  |  |  |
| --- | --- | --- |
| Sitename | Hostname | IP Address |
| **Error! MergeField was not found in header record of data source.** | **Error! MergeField was not found in header record of data source.** | **Error! MergeField was not found in header record of data source.** |
| **Error! MergeField was not found in header record of data source.** | **Error! MergeField was not found in header record of data source.** | **Error! MergeField was not found in header record of data source.** |
| **Error! MergeField was not found in header record of data source.** | **Error! MergeField was not found in header record of data source.** | **Error! MergeField was not found in header record of data source.** |

* AT&T team is responsible to configure non-Cisco devices

# Overview

The purpose of this document is to provide a consistent method to achieve network migration of the current AT&T devices CX-600-XX to cisco Error! MergeField was not found in header record of data source.base devices, we must go through carrier to carrier integration first.

The document is written as a guide for the Migration Engineers to follow and contains low level details that cover the Preparation and Execution Phases of the Integration and Migration.

tasks are going to be divided into two phases:

Phase 1: Error! MergeField was not found in header record of data source.router integration to ATT Network. In this module, the integration towards AGGs is going to take part. Protocols such as, IS-IS, BGP, LDP, BFD and NTP will be deployed. Besides, services configuration will be implemented.

The main goal of this phase is to provide transport and remote management for network integration.

Phase 2: Huawei CX-600 Services Migration. In this module, physical connections and migration of services from CX-600 to Error! MergeField was not found in header record of data source.are going to be performed in a service by service basis. Furthermore, services verification and rollback steps are described in this module.

The following high-level steps will be carried out in each maintenance window:

1. Initial checks (pre-check)

2. Connect first integration link (carrier to carrier)

2.1 Integration and Migration

2.2 Connect second integration link (carrier to carrier)

3. Post checks

4. Rollback procedure

This document covers both phases (1 and 2).

Risk involved in this migration

Error! MergeField was not found in header record of data source. site, is scheduled to be integrated to ATT Network

There is a possibility that one or all the following may occur:

• Service outage

• Nodal outage

• Call outage

Below can be found all sites and their nodes that during maintenance window has risk.

|  |  |
| --- | --- |
| **SITE ID** | **Site Name** |
| **Error! MergeField was not found in header record of data source.** | **Error! MergeField was not found in header record of data source.** |
|  |  |

# General information

* Execution engineer must read this section and be sure the Maintenance window is well prepared before starting the activity.

|  |  |
| --- | --- |
| Task description | Answer |
| The activity is scheduled and approved. I know the Change Request number (CRQ #). | Yes  No |
| I can reach **Error! MergeField was not found in header record of data source.** through IP address **Error! MergeField was not found in header record of data source.** | Yes  No |
| I can verify status of **Error! MergeField was not found in header record of data source.** and no major alarm that could impact the activity is showing | Yes  No |
| I can connect to the device **Error! MergeField was not found in header record of data source.** through SSH protocol. I have tested the connection prior to the maintenance window. | Yes  No |
| I understand the activity and I am sure of the procedure. | Yes  No |
| I have read the entire MOP and I have all required Transport and migration scripts as well as rollback scripts for the execution of the activity. | Yes  No |
| I can open a TAC case in Cisco if something in the maintenance window occurs | Yes  No |
| In case this is a sensitive maintenance window: I have opened a TAC case and shared the MOP with them previous to the start of the activity | Yes  No |
| Activity has a Webex link where all parties involved in the activity will join. If not, I can generate the Webex link. | Yes  No |
| I have shared the Webex link with parties involved in the migration activity OR someone involved in the activity have shared it. | Yes  No |
| Personnel in the field has informed me they have gained access to the site OR I have reached personnel in the field to make sure they can access the site. | Yes  No |
| I have sent a mail to gain privilege access to the **Error! MergeField was not found in header record of data source.** device | Yes  No |
| I have sent a mail notifying customer and Cisco about the start of the activity | Yes  No |
| I have received a mail from customer indicating the start of the activity is allowed. | Yes  No |
| I have joined the Webex conference and started recording it. I am sharing my screen to be recorded during the maintenance window. | Yes  No |

* The activity has to be already scheduled.
* Verify with ATT personnel that has been informed of the activity before starting the work and again after the work has been completed.
* An AT&T engineer has to follow the activity.
* The Error! MergeField was not found in header record of data source. must be reachable by the link that connects to the CX-600.
* CX-600 devices migration scripts must be created by AT&T Engineers and must be included in the MW documents.
* All services in CX-600 device are migratable to the Error! MergeField was not found in header record of data source., and CX-600 device can be decommissioned once the migration is considered successful.

# Procedure for AT&T-Network Simplification

This section and its sub-sections are all mandatory.

## Request for read/write permissions with the AT&T’s Network Security team

* Send an email to the Network Security (NS) Team Mailer to request for Read/Write permissions and wait for approval.
* **TO:** Log Net Access Managment <LogNetAccessManagment@mx.att.com>
* **CC:** Hiram Cortes Perez (hcortesp) <hcortesp@cisco.com>
* **Subject:** Solicitud de privilegios **CRQ YYYYY**

Buena noche Team Network Security

Solicitando de su valioso apoyo para la actividad **CRQ YYYYY**, nos pueden ayudar a otorgar los privilegios al equipoError! MergeField was not found in header record of data source.para realizar la integración y Migración de servicios en el proyecto NETSIMPL.

|  |  |
| --- | --- |
| **Usuario:** | XXXXXX**(ISE)** |
| **Actividad CRQ:** | **CRQ YYYYY** |
| **OT de privilegios:** | **WO0000000xxxxxx** |
| **OT de creación/renovación proveedores:** | **WO0000000xxxxxx** |
| **Elementos solicitados: (IP y Hostname)** | **Error! MergeField was not found in header record of data source.*-*Error! MergeField was not found in header record of data source.** |
| **Comentarios:** | Ventana de Integración / Servicios |

* Replace the X values with the user assigned to XXXXXX (ISE) or XXXXXX (TACACs)
* Replace the **Y** values with the correct number of **CRQ** that we have related to the activity in CRQ
* Change the value of **x** to our current WO number in **WO0000000xxxxxx**
* Once approved, test permissions, proceed with the next step.
* In case they do not pass, it is scaled with the support of the AT&T engineering team to get support from Network Security with its approval.

## Confirm with the AT&T’s NOC team that Network Changes will be done before starting

* Send an email to the Network Operations Center (NOC) Team Mailer to request Start of the Activity and wait for approval.
* **TO:** 'ALMAGUER FERNANDEZ, EDUARDO' <ea321v@att.com>; 'Mexico NOC IP Backhaul' <mx.noc.ipbh@mx.att.com>; 'Mexico NOC BO Transporte' <mx.noc.tx@mx.att.com>; 'Mexico NOC FO ATT' <mx.noc.att@mx.att.com>; 'Mexico Noc Bo Core Ip' <mx.noc.ipcore@mx.att.com>; 'Mexico Noc Bo Ran' <mx.noc.ran@mx.att.com>; 'Mexico Soporte Telecom CS' <mx.stcoreipsupport@mx.att.com>
* **CC:**'MX FO Deployment tx' <fo.deployment.tx@att.com.mx>; 'REYES MARTINEZ, EFRAIN' <er462w@att.com>; Emmanuel Perez Guillen (eperezgu) <eperezgu@cisco.com>; day1-attmex-netsimp(mailer list) <day1-attmex-netsimp@cisco.com>; Alberto Rodriguez Sanchez (alberod2) <alberod2@cisco.com>; 'am169m@att.com'; 'francisco.arriaga@verveba.com'; 'netsimp.ext@external.cisco.com'
* **Subject:** Solicitud de inicio de actividad con **CRQ YYYYY** **Error! MergeField was not found in header record of data source.**

Buenas Noches Team NOC,

Su apoyo con el vo.bo. para el inicio del **CRQ YYYYY** el cual consta de: Ventana de **Integración/ Migración C2C.**

Anexo el formato de cisco para el inicio de la ventana y al final se anexarán los pre-checks y post-check.

Sin más por el momento y en espera del apoyo quedo, saludos.

|  |  |
| --- | --- |
| **CISCO** | **AT&T Mexico** |
| [paste here the link of the scheduled webex session] |
| **Notificación de Inicio de Ventana** |
| **V Formato 0.83 AT&T** |  |
|  | |
| **CRQ #** | **CRQ YYYYY** |
| **Caso Proactivo** | ***[paste #]*** |
| **Link Webex** | [paste here the link of the scheduled webex session] |
| **Proyecto** | **Error! MergeField was not found in header record of data source.–**Error! MergeField was not found in header record of data source. ***NETSIMPL*** |
| **Sitios a Intervenir** | **Error! MergeField was not found in header record of data source.*-*Error! MergeField was not found in header record of data source.** |
| **Objectivo De la Actividad  :** | ***Integración y Migración de Servicios C2C*** |
|  |
| **Riesgos de la Actividad:** | **0** |  |
| **OBSERVACIONES** |  |  |

* Replace the **Y** values with the correct number of **CRQ** that we have related to the activity in CRQ
* Once approved, proceed with the next step.
* In case they do not pass, it is scaled with the support of the AT&T engineering team to get support from NOC with its approval or checks.

## Pre-configuration verification

According to the integration configurations in **Error! MergeField was not found in header record of data source.** and **Error! MergeField was not found in header record of data source.** are required in order to perform the Error! MergeField was not found in header record of data source.Integration to the AT&T Network, The configurations need to be done by AT&T during the integration.

## Remote Access Verification on Error! MergeField was not found in header record of data source.

* Perform an SSH connection to the Error! MergeField was not found in header record of data source. Error! MergeField was not found in header record of data source. Management IP Address Error! MergeField was not found in header record of data source..

The Error! MergeField was not found in header record of data source.must be reachable by its interface **interface** Error! MergeField was not found in header record of data source.with sfp **GLC-TE**

* Use the logging facility of the terminal emulator program used to record all activity in the devices. Enable “terminal monitor” to display logs on the terminal connection.
* Make a backup of the configuration and the results of commands used in CLI.

## Power Verification

For the Error! MergeField was not found in header record of data source.confirm both power supplies have energy with no alarms. Verify power supply operation by checking if the respective power supply’s front panel LED (INPUT Ok) is green.



## Verifying Software version and Hardware

At the time of this writing, the recommended Cisco IOS XR versions are:

Table Device and software

|  |  |
| --- | --- |
| **Device** | **Software Version** |
| Error! MergeField was not found in header record of data source. | Error! MergeField was not found in header record of data source. |

The objective of this section is to review and confirm hardware platform, and software versions.

Is mandatory to realize the following validations:

* **show inventory** Reviews the Hardware inventory information for the Cisco router
* **show version** validates that software version IOS in the equipment, is correct
* **show install active** to display active packages
* **show install committed** to display committed software packages

Capture the following outputs:

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# show version

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# show inventory

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# show install active

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# show install committed

Expected results:

* Router must boot with the specified version.
* Confirm that all module interfaces and SFPs are in the router.

## Perform health checks

The following validations are necessary to perform the health checks:

* **show hw-module fpd** to determine if an Field Programmable Device (FPD) upgrade is required. Displays the current FPD image versions for all cards installed in the router.
* **show alarms brief system active** to display active alarm.
* **show platform** Displays information about the status of cards and modules installed in the router. To view the status of all the cards and modules.
* **show environment all** into admin to display environmental monitor parameters for the system shows temperature information.

Capture the following outputs:

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# show hw-module fpd all

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# show alarms brief system active

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# show platform

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# admin

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.(admin)# show environment all

Expected results:

* Confirm sensors display as normal.
* Confirm there are not alarms
* If Error! MergeField was not found in header record of data source. has any condition that may impact its functionality, the MW should be rescheduled to a later date. Executing this may impact service or high availability.

## Pre migration check point

Create a rollback check point before starting the migration.

Execute the following commands to create a checkpoint before the migration. This checkpoint is useful to rollback configuration as it was before the migration. No other use is intended, and command execution here changes nothing in the current configuration of the device.

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.#

Error! MergeField was not found in header record of data source.

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.#

## Integration links (Red or Blue Domain)

**During this activity, the services will be affected because would be occupying the same links of carriers from the current topology to the new topology.**

Both sides of the integration link may vary due an availability on every scenario and density of available ports.

For integration devices, review the physical connections and the awareness of all the stakeholders.

Uplinks Verification between Error! MergeField was not found in header record of data source. **Error! MergeField was not found in header record of data source.** and AGG: (**Error! MergeField was not found in header record of data source.**).

First step in the migration is to disconnect one of the Links in the CX-600 device and connect it to the Error! MergeField was not found in header record of data source. uplink interface. Same must be executed in the other end of the links, where the connection in the CX-600 COREBH device must be moved to the AGG device.

Pre configuration in AGGs are required in order to perform the Error! MergeField was not found in header record of data source.integration to the AT&T Network.

The following information validates correct connection between Error! MergeField was not found in header record of data source. and AGGs devices:

Table IP addressing for NetSim scenario devices

|  |  |  |  |
| --- | --- | --- | --- |
| **IP addressing** | | | |
| **Device AGGs** | **Interface** | **IP address** | **Mask** |
| **Error! MergeField was not found in header record of data source.** | **Error! MergeField was not found in header record of data source.** | **Error! MergeField was not found in header record of data source.** | 255.255.255.254 |
| **Device** Error! MergeField was not found in header record of data source. | **Interface** | **IP address** | **Mask** |
| **Error! MergeField was not found in header record of data source.** | **Error! MergeField was not found in header record of data source.** | **Error! MergeField was not found in header record of data source.** | 255.255.255.254 |

Verify that the cables are connected to the ports assigned.

Once the physical migration is executed, interface active and BGP protocols must be validated. At the Error! MergeField was not found in header record of data source.execute the following commands.

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.#

Configure terminal

interface **Error! MergeField was not found in header record of data source.**

**no shutdown**

router bgp 65000

neighbor **Error! MergeField was not found in header record of data source.**

**no shutdown**

Check the connectivity between devices and use the following information: Ping reachability need to be performed for integration with AGG validation.

Connect to Error! MergeField was not found in header record of data source.and execute next command:

Capture the following outputs:

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# **ping Error! MergeField was not found in header record of data source.**

**!**

* Integration link between Error! MergeField was not found in header record of data source. and AGGs need to be RJ45 type.

Verify protocols

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# show bfd session

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# show isis neighbor

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# show bgp ipv4 label summary

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# show bgp vpnv4 unicast summary

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# show show alarms brief system active

* When reachability to the Error! MergeField was not found in header record of data source. is available through the red or blue domain, default static route to the CX-600 device must be removed.

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.#

router static

vrf ATT\_OAM

address-family ipv4 unicast

no 0.0.0.0/0 **Error! MergeField was not found in header record of data source.**

**commit confirmed minutes 5**

Once the static route is removed, reconnect to the device through the red or blue domain with SSH

If reachability is OK, confirm static route removal changes in the Error! MergeField was not found in header record of data source.

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# commit

If reacheability is OK, reconfigure **Error! MergeField was not found in header record of data source.** and reconfigure NTP

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# configure terminal

interface **Error! MergeField was not found in header record of data source.**

no description

no vrf

no ipv4 address

no load-interval

shutdown

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# **commit confirmed minutes 5**

**--- verify reacheability (If reacheability is OK, then)**

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# commit

!

!

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.#configure terminal

ntp

no server vrf ATT\_OAM Error! MergeField was not found in header record of data source. source **Error! MergeField was not found in header record of data source.**

no server vrf ATT\_OAM Error! MergeField was not found in header record of data source. prefer source **Error! MergeField was not found in header record of data source.**

server vrf ATT\_OAM Error! MergeField was not found in header record of data source.

server vrf ATT\_OAM Error! MergeField was not found in header record of data source. prefer

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# commit

* If reachability is not OK, wait for the changes to rollback and troubleshoot ISIS and BGP adjacency.

## Migration port mapping

The following port mapping and scripts names are listed in the following table.

Table 4 – Port mapping and scripts

|  |  |  |  |
| --- | --- | --- | --- |
| **Interface CX** | **Service Description** | **Interface** Error! MergeField was not found in header record of data source. **Cisco** | **Script name** |
| **Error! MergeField was not found in header record of data source.** | **Error! MergeField was not found in header record of data source.** | **Error! MergeField was not found in header record of data source.** | **Error! MergeField was not found in header record of data source.** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

## Migration procedure

* Log all terminal inputs and outputs using terminal emulator log feature. This can help in case an unexpected event occurs during the execution.

Execute the following steps for each port listed in the Table 4 – Port mapping and scripts

* Verify VLANs hosts in the CX device, use ping commands and/or ARP table.
* Execute script on **Error! MergeField was not found in header record of data source.** named in the Script name field of the table.
* Disconnect CX port state in the Interface CX field.
* Unconfigure CX device VLAN interfaces and Static routes.
* Connect **Error! MergeField was not found in header record of data source.** port listed in the Interface Error! MergeField was not found in header record of data source. field of Table 4 – Port mapping and scripts to the end device described in the Service Description field of the table.
* Verify hosts in each VLAN migrated using ping commands and/or ARP table.
* In case verification failed or service is negatively impacted execute rollback script stated in the rollback section below with rollback configuration last 1.

## Verifying Error! MergeField was not found in header record of data source. Error! MergeField was not found in header record of data source. device state after migration

Apply the following commands to verify the state of the device after all ports have been migrated.

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.#

!

**Error! MergeField was not found in header record of data source.**

## Rest- Integration link (Red or Blue Domain)

Final step in carrier to carrier scenario is to disconnect the rest of the Links in the CX-600 that connect the device to the rest of the network (carriers) and connect it to the Error! MergeField was not found in header record of data source..

Disconnect the cable in the CX-600 device and connect it to the Error! MergeField was not found in header record of data source. uplink interface. Same must be executed in the other end of the links, where the connection in the CX-600 COREBH device must be moved to the AGG device.

Pre configuration in AGGs are required in order to perform the Error! MergeField was not found in header record of data source. integration to the AT&T Network.

Uplinks Verification between Error! MergeField was not found in header record of data source. **Error! MergeField was not found in header record of data source.** and AGG: (**Error! MergeField was not found in header record of data source.**).

The following information validates correct connection between Error! MergeField was not found in header record of data source. and AGGs devices:

Table IP addressing for NetSim scenario devices

|  |  |  |  |
| --- | --- | --- | --- |
| **IP addressing** | | | |
| **Device AGGs** | **Interface** | **IP address** | **Mask** |
| **Error! MergeField was not found in header record of data source.** | **Error! MergeField was not found in header record of data source.** | **Error! MergeField was not found in header record of data source.** | 255.255.255.254 |
| **Device** Error! MergeField was not found in header record of data source. | **Interface** | **IP address** | **Mask** |
| **Error! MergeField was not found in header record of data source.** | **Error! MergeField was not found in header record of data source.** | **Error! MergeField was not found in header record of data source.** | 255.255.255.254 |

Verify that the cables are connected to the ports assigned.

Once the physical migration is executed, interface active and BGP protocols must be validated. At the Error! MergeField was not found in header record of data source. execute the following commands.

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.#

Configure terminal

interface **Error! MergeField was not found in header record of data source.**

**no shutdown**

router bgp 65000

neighbor **Error! MergeField was not found in header record of data source.**

**no shutdown**

Check the connectivity between devices and use the following information: Ping reachability need to be performed for integration with AGG validation.

Connect to NCS and execute next command:

Capture the following outputs:

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# **ping Error! MergeField was not found in header record of data source.**

**!**

* Integration link between Error! MergeField was not found in header record of data source. and AGGs need to be RJ45 type.

Verify protocols

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# show bfd session

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# show isis neighbor

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# show bgp ipv4 label summary

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# show bgp vpnv4 unicast summary

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# show show alarms brief system active

## Verifying Error! MergeField was not found in header record of data source. device state

Connect to **Error! MergeField was not found in header record of data source.** and execute following commands, record the output and save the output in a file **POST CHECK.** This file will be shared after the maintenance window activity with team members and customer.

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.#

!

**Error! MergeField was not found in header record of data source.**

* If a minor alarm shows up in the verification and you are sure it doesn’t impact the activity, inform about it during the start of the activity email.
* If device shows a major alarm that could impact the activity or a verification fails, the MW should be rescheduled to a later date. Executing this may impact services or high availability.

## Integration and/or Alarms clearing on EPNM

This section and its sub-sections are all mandatory.

Technical Pre-Requisites:

* The Error! MergeField was not found in header record of data source.router must be already integrated to the AT&T network (Red or Blue Domain).
* Validates communication between CSR with tool EPNM.
* The devices should are integrated to authentication TACACs / ISE.

### Validate configuration SNMP in Devices

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.#

**Error! MergeField was not found in header record of data source.**

**Open EPN Manager with admin privileges**

Click on the navigation button (upper left) and **go to *Inventory >> Device Management >> Network Devices***

In the content section (right of the screen) click on the *Add Device >> Add Device* button (  )

In the *Add Device* window type the IP address of the new device

Select *CERT\_EPN* as the *Credential Profile*

Leave the rest of the data as it is.

Click on *Verify Credentials* in order to check SNMP and SSH connectivity. **If** connectivity is fine, a popup window will appear informing it (lower left); **if not**, the popup window will appear in the center of the screen

If credentials are not ok, Review once again the SNMP and Logging configuration on the Error! MergeField was not found in header record of data source.. Ensure they are as stated in the golden config and that the Error! MergeField was not found in header record of data source. can ping the EPNM IP Addresses.

If credentials are ok, click on *Add* to continue

Search the new device in the device list, using the filter *Device Name* or *IP Address*

EPN will discover and synchronize the new device, this process should take about five minutes; wait until it finishes.

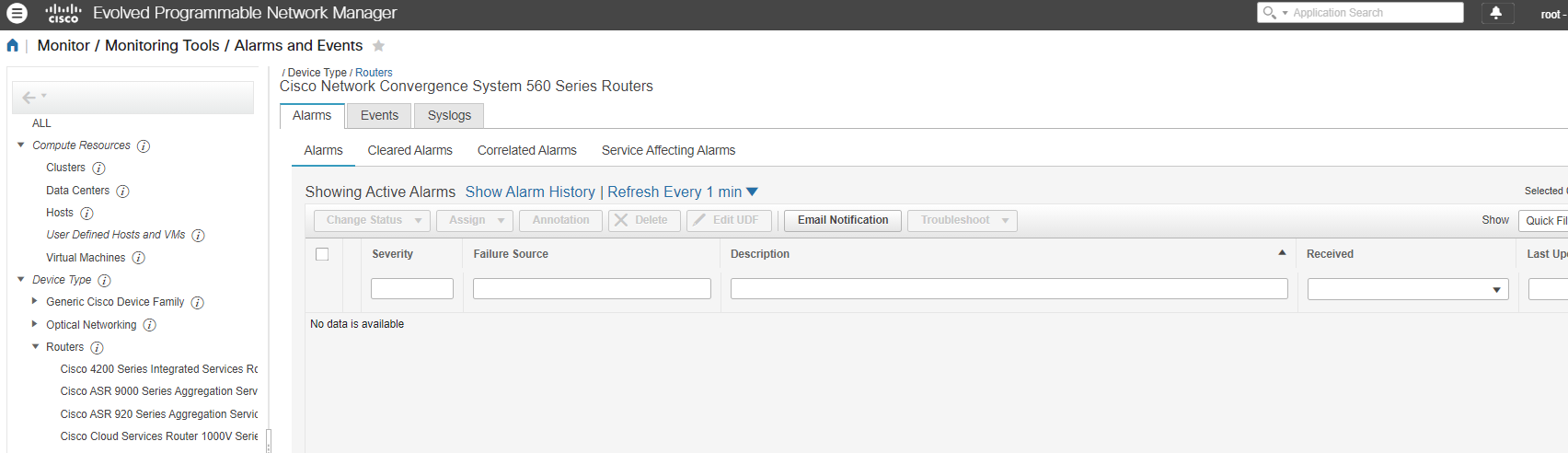
The *Admin Status* column should be in *Managed*

The *Last Inventory Collection Status* should be in *Completed*

The *Last Successful Collection Time* should be the current time

### Cleared Alarms

If there are alarms, need to clear alarms on EPNM as showing following the image



# Rollback

Execute script name listed in Script name filed of the table below to execute a rollback.

Table 5 – Port mapping and Rollback scripts

|  |  |  |  |
| --- | --- | --- | --- |
| **Interfaces CX** | **Service** | **Interfaces** Error! MergeField was not found in header record of data source. **Cisco** | **Script name** |
| **Error! MergeField was not found in header record of data source.** | **Error! MergeField was not found in header record of data source.** | **Error! MergeField was not found in header record of data source.** | Rollback\_**Error! MergeField was not found in header record of data source.** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

In case of the last port migrated being rolled back, use the following command

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# rollback configuration last 1

In case of the migration being rolled back, use the following command

RP/0/RP0/CPU0:Error! MergeField was not found in header record of data source.# rollback configuration pre-migration

* Reconfigure CX device VLAN interfaces and Static routes.

Connect to Error! MergeField was not found in header record of data source. by ssh using TACACS / ISE username and password and proceed to validate Error! MergeField was not found in header record of data source. configuration is the same as the one previous to the Maintenance Window.

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