

Service Description

Routers (or) Switches Migration Service with Remote Support

This Service Description is part of the Services Agreement (as defined in the <u>Services Guide</u>) and describes various Services that Cisco will provide to You. Capitalized terms, unless defined in this document, have the meaning in the Services Guide.

1. Summary

Service Summary: As part of Routers (or) Switches Migration Service with Remote Support (AS Fixed SKU: ASF-SP1-G-NGN-UPG2), Cisco will provide support to migrate/upgrade routers (or) switches to Customers.

2. Deliverables

- Hardware & Software Analysis Report
- Master Method of Procedure (Master MoP)
- Physical Port/Interface Mapping
- Configuration Conversion
- Device Specific Method of Procedure (MoP)
- MoP Execution
- Change Verification
- Activity Report

3. Service Scope

The Scope of Service delivery is limited per project as follows:

- 1 Router / Chassis / Role
- Up to 3 Line Cards (LC) PID types/variants
- 1 Route Processor (RP) type
- 1 Switch Fabric Card (SFC) type
- Up to 80 ports or 4 Line Cards

Below activities will be part of the Service:

- Prerequisite questionnaire to be completed by Customer
- Hardware & Software Analysis
- Feature, configuration, scale recommendation
- Future feature check / recommendation
- Software Version and SMU [Software Maintenance Upgrade] referral
- Master Method of Procedure (MoP)
- Migration Execution



4. General Project Management

4.1 Cisco Responsibilities:

 Provide a Project Management Plan ("PMP"). The PMP is a baseline document from which the Cisco PM can manage deliverables, assess progress, and manage change management issues and any ongoing questions.

5. Assessment (Hardware and Software Analysis)

5.1 Cisco Responsibilities:

- Conduct a 1 Business Day assessment workshop remotely to review Customer's upgrade readiness, Service redundancy, high level upgrade strategy and Customer preferences for portmapping/line card layout.
- Draft an Assessment Report for upgrading devices within the scope of migration, which includes:
 - o Hardware & Software Analysis Report.
 - o Validation of BOM.
 - o Chassis layout to reflect HW consolidation.
- Provide Customer with the Assessment Report.
- Conduct a short remote executive presentation of the Assessment Report for Customer's key stakeholders.

5.2 Customer Responsibilities:

Provide any long-term feature requirements that may impact software referral.

6. Migration Plan Development

6.1 Cisco Responsibilities:

- Work with Customer to agree on Device specific port-mappings for the designated devices based on hardware consolidation.
- Provide the Method of Procedure (MoP), which is a guide for the migration engineer to perform basic tests and actions carried out prior / during the migration. The MoP provides the following:
 - Steps to migrate/upgrade existing device type as per recommended guidelines.
 - Any changes for which Customer operations staff should be alerted; and
 - o Any switchover dependencies.
- Device specific MoP will include:
 - Detail steps and activities performed during migration window including roll-back procedures.
 - Converted configuration based on agreed port-mappings.
 - Pre/Post Migration Change Verification procedure.
- The MoP includes information necessary to carry out the migration/upgrade of hardware in the bill
 of materials identified in the MoP, as installed at the Customer location, and to verify basic



operation and network is Ready for Service. "Ready for Service" means that the Customer environment, or a sub-set of it, is functioning as per the specifications documented in the MoP.

- The MoP does not include testing of application availability beyond connectivity.
- Review configured features, scale and provide recommendation / best practices to Customers.
- Review the features that Customer is planning to migrate/upgrade and provide a software referral
 with expertise in Cisco best practices including experience gained with other Customers having
 similar profiles.
- Software referral does not include Customer-specific software risk analysis or a specific software recommendation.
- Provide list of recommended SMU's [Software Maintenance Upgrade] to be installed by Customer based on features configured.

6.2 Customer Responsibilities:

- Provide detailed procedure to reroute traffic on the device to be upgraded which will be referenced
 in Master MoP. Customer must ensure that the list of all traffic to be migrated at each site is
 accurate and provide continuous management of those Services.
- Provide Customer's migration requirements and provide the following information:
 - Verified interface specifications and requirements (e.g., cabling standards and specifications for interconnect of Cisco and Customer equipment);
 - Information on distance and interference limitations of interface cables to be used at installation; and
 - Test plan and interconnect process required by any third parties including but not limited to in country carrier/telco.
- Determine Customer's migration requirements and retain overall responsibility for any business process impact and any process change resulting from the migration Services.
- Agree with Cisco on appropriate and timely maintenance windows in advance to enable migration activities planning at each site detailed in the Migration Plan.

7. Migration Execution

7.1 Cisco will provide the following:

- Deliver device specific Migration Plan's utilizing Master MoP for migration.
- The Migration Execution Services will be provided by Cisco as remote consultative support to assist the Customer with the following:
 - o Pre-stage configuration and configuration changes.
 - o Migration of end devices in the MoP document
 - Cutover support.
- Execute configuration conversion, including:
 - Deploying router configurations onto the target equipment prior to cutover (for software migration, source router is same as target router).



- Preceding cutover, validating via remote location the load of new configurations on designated device.
- Migration execution.
- Software upgrade (cXR to cXR or cXR to eXR).
- Provide network level verification based on device logs and outputs from the device under migration only.
- Share Activity completion report including Device Pre/Post Service status, Activity logs, updated
 configurations in case of change to Target device configuration & Cisco TAC SR details in case of
 any incident encountered during the Migration activity.

7.2 Customer Responsibilities:

- Ensure that the software/OS required and recommended by Cisco for migration/upgrade running on the router.
- Ensure that all required hardware is present at the site for the migration/upgrade to be carried out by either partner or Customer.
- Ensure hardware has been unpacked and ready to be migrated.
- Ensure all cables checked, patch panels and port mappings are accurate before migration.
- Engage Cisco TAC for RMA process in case of any hardware failures, if applicable.
- Update any related databases or Customer network tools as required and any perform end-user testing, Services/application testing, monitoring alarms and performance.
- Assist in developing action plan for correcting any issues in expected results.
- Make all corrections to installed hardware as required in mutually agreed upon action plan.
- Provide timely approval for key decisions to be taken during the upgrade/migration window, such as traffic-diversion, line card power-down, traffic recovery and backout/rollback if required.
- Ensure any change management approvals required are obtained in advance and that the approved change/maintenance windows are available for Cisco to perform migration/upgrade activities with sufficient time to perform the change as estimated by Cisco engineers for the particular change window.
- Ensure that a partner or Customer be present onsite during maintenance window to take care of hardware insertion/removal into (or) out of chassis and also other port cabling as per steps in master MOP.
- Communicate to Customer's affected end users regarding the change window and any expected downtime.

8. Assumptions and Exclusions

- Fixed 1RU/2RU/3RU chassis are NOT covered as part of this Service.
- Routers less than or equal to 10 slots are NOT covered as part of this Service.
- Customer should take responsibility to unpack all hardware, check hardware, insert hardware into router / remove old hardware from router, check cable, check ports, check connectivity, check



accessibility, check optics, check configuration end to end, traffic shift during maintenance window, follow step-by-step instructions as per master MOP.

- Only product families, line card generations, route processors and switch fabrics listed as follows will be supported under this Service:
 - o ASR 9912/9922
 - o NCS 4016 (No Support for TDM/Optical Only Support IP/IOS-XR)
 - o NCS 4216 (No Support for TDM/Optical Only Support IP/IOS-XE)
 - o NCS 520/540/560 Series
 - o NCS 5500/5700 Series
 - o NCS 6008 Single Chassis
 - o Nexus 9000 Series
 - o Cisco 8812, 8818
 - o CRS X Single Chassis
- For Migration Execution it is assumed that redundant nodes and paths are available in the network to support the traffic diversion and node isolation for the device to be upgraded.
- Design/Architecture changes and addition of new features/protocols is not in scope.