

Service Description: Cisco Optimization Service for Service Orchestration

This document describes Cisco Optimization Service for Service Orchestration.

Related Documents: This document should be read in conjunction with the following documents also posted at www.cisco.com/go/servicedescriptions/: (1) Glossary of Terms; (2) List of Services Not Covered; and (3) Severity and Escalation Guidelines. All capitalized terms in this description have the meaning ascribed to them in the Glossary of Terms.

Direct Sale from Cisco. If you have purchased these Services directly from Cisco, this document is incorporated into your Master Services Agreement (MSA) or equivalent services agreement executed between you and Cisco. In the event of a conflict between this Service Description and your MSA or equivalent services agreement, this Service Description shall govern.

This Cisco Optimization Service for Service Orchestration is intended to supplement a current support agreement for Cisco products and is only available where all Product(s) in Customer's Network is supported by the necessary maintenance contracts for Cisco products or third party products. Cisco shall provide the Optimization Services described below as selected and detailed on the Purchase Order for which Cisco has been paid the appropriate fee. Cisco shall provide a Quote for Services ("Quote") setting out the extent of the Services and duration that Cisco shall provide such Services. Cisco shall receive a Purchase Order that references the Quote agreed between the parties and that, additionally, acknowledges and agrees to the terms contained therein. Availability of Services described herein and service delivery may vary by geographical region.

Cisco Optimization Service for Service Orchestration

Service Summary

Cisco Optimization Service for Service Orchestration provides post-implementation optimization, solution support and adoption acceleration by identifying potential gaps as necessary as Customer evolves software, design and solution business requirements. Cisco will review Customer's current service orchestration and evaluate future state requirements of business and operations needs, recommend a roadmap for improvements targetting service orchestration outcomes and service lifecycle management.

Cisco Responsibilities

Cisco Optimization Service for Service Orchestration consists of the Services described below, which Cisco shall provide for the Customer's during Standard Business Hours (unless stated

otherwise). Cisco shall provide the following General Support provisions for all Services selected by Customer under the Cisco Optimization Service for Service Orchestration:

General Support

- Designate an engineer ("Network Consulting Engineer") to act as the primary interface with the Cisco project manager appointed for the Customer.
- Participate in regular meetings with the Customer as required by the project manager either via phone or in-person to review proactive deliverables, activities and to plan for next quarter. In-person visits not to exceed eight (8) days in aggregate. Additional visits will be mutually agreed at Cisco's then-current travel and labor rates.
- Designate additional engineer(s) to work with the Cisco project management and the primary NCE (Network Consulting Engineer).
- Monitor a Customer-specific Cisco email alias to facilitate communication with primary Network Consulting Engineer as well as the engineers on Cisco's other engineering teams.
- Engineer may utilize Customer provided data, scripts or internal tools to assist in collecting data from the Customer operations environment.

Design Collaboration

The activities and deliverables for the Design Collaboration tasks are the following:

- Review of Customer's design requirements, priorities and goals and/or review of Customer's design document.
- Analysis of impact of new requirements on existing Service Orchestration.
- Engaging during design whiteboards and workshops, and providing Service Orchestration knowledge.
- Providing design assistance in aligning service orchestration design with deployment architecture evolution and service model development.
- Design interlock sessions with Cisco engineering experts.

• Platform Performance Audit

Cisco will consult with Customer to understand Customer's network service orchestration (NSO) focusing on capacity, performance and scalability.

- Documentation of any existing Customer issues with application performance and projected capacity planning needs.
- o Review of overall system resource utilization.
- o Review of system resource utilization by application.
- State recommendations on optimizations of existing product configurations and on changes to platform resources.

• Service Platform Implementation and Maintenance

After Cisco's review of Customers current NSO deployment and identification of gaps in operation, scalability and offering, Cisco may then implement/deploy recommended changes at the Customers request to the platform to increase reliability of the platform and its offering.

Deployment Planning and Readiness Assessment

- Assist the Customer in preparing for ongoing Service Orchestration maintenance activities.
- Validate implementation plans and processes, test cases and test results.
- Advise on impact to operational processes.

Scheduled Change Support

Provide Customer with remote resource to act as advisor to the change and as support contact on changes for NSO) within the change periods, which may include:

Provide Customer with remote resource to act as advisor for changes to the sService orchestration and provide a software recommendations report for NSO applications. The following may be included:

- Collaboration with the Customer during network and NSO change windows and help address issues as they arise moving into live production environments (in addition to the support provided under the standard TAC process).
- Collaborate with Customer to verify NSO readiness during change windows on the request of the Customer.
- Provide a review of the change plan or method of procedures (MOPs) provided by the Customer.

Cisco will make available, upon receipt of not less than twenty-one (21) days prior written request by Customer to Cisco, a designated support contact that can accept calls during Standard Business hours and consult with Customer on a 24-hour 7-day standby basis to remotely assist Customer and address no more than three support issues identified by Customer during the change window (typically over a weekend) of major Software installations, major site installation and/or major configuration changes.

Custom SW Reactive Support

Cisco will perform Incident and Problem Management, consisting of one or more of following service activities:

- Implement the incident and problem management processes.
- Identify and document software bugs.
- o Recreate bugs in lab to validate.
- o Provide bug advisories/report.
- Help create and implement workaround.
- Assist Cisco business units to understand the impact and drive bug resolution in subsequent releases of software or point patches for customized SW only (general support provided under the standard TAC support).
- Drives product development/enhancement interlock with the Cisco product business units.

Software Management Strategy Review

Provide a software recommendations report for NSO applications. The following may be included:

- Identification of appropriate Software versions .
- Review of Software Feature Set Upgrade triggers and lifecycle considerations.
- Identify overall software and feature set recommendations & dependencies on any upgrade testing.
- High-level analysis of End of Life or End of Sale, releases and software advisories o Provide critical bug analysis (for P1 and P2 bugs) for identified software versions or key software feature categories .
- Forecast licensing requirement.

Testing and Validation Support

Cisco will consult with Customer via a series of meetings to develop a thorough understanding of Customer's solution-oriented testing goals and requirements. Testing and Validation Support may include, among other information, the following:

- Review of Customer's testing goals and business objectives.
- Test Plan development assistance or review/refine existing test plan.
- Test Results Analysis Document the analysis of the results in a Test Report.
- Testing and Validation Support is only available to certain geographic locations and will be specified in the Quote for Services.

Service Model Development Support

Cisco will work collaboratively with Customer by embracing a DevOps lifecycle of analyzing, developing, enhancing, testing and deploying Customer's NSO service offerings and models with multiple interations / instances. The following may be included as requested by the Customer:

- Analyze and develop new service models in a iterative DevOp environment.
- Assist with device configurations as part of new services
- Advise with YANG modeling, FastMap/Java, NED validation.

Migration Planning Support

Provide migration-consulting services that support migration from one environment to another (e.g. device service config to service model), Service transformation (manual to automated) and device swap) and may include, among other information, the following:

- Review the requisite list of high level events, phased changes and activities in order to introduce new service orchestration solutions.
- Identify solution dependencies and impact and recommend risk mitigation steps for the migration.
- Review Method Of Procedure (MOPs) documentation for pre and post cut-over connectivity and testing.
- Review Master configuration templates for representative device or site types.
- Review solution test procedures for the ready-for-use (RFU) solution testing.
- Assist with migration change windows outcome: remote/on call support during the change window (up to 4 hours).

• Integration Support

Provide remote service orchestration support on how to use or integrate with the application(s) in question, which may include:

- Addressing issues concerning the operation of the application programming interface.
- Support on how the product APIs should be used within the context of an overall workflow.
- Report describing the analysis comparing Customer's current practices and capabilities to Cisco's recommended best practices, and recommendations to meet Customer's service orchestration business requirements.

• Knowledge Transfer

Provides a customized knowledge transfer ("How to") for the service orchestration with emphasis on providing guidance on basic troubleshooting, maintenance, and functionality.

• Program Management

- Conduct a kickoff call to initiate a new service engagement to identify key stakeholders, review and agree on service scope and activities and discuss governance & communication process.
- Lead periodic conference calls to review Customer's status, planning and the Services being provided.
- Prepare and deliver quarterly business review (QBR) presentation to Customer executive team.

Onsite Option

- Provide Customer with onsite resource for software solution support and ongoing maintenance activities.
 One instance of service deliverable provides provision for twenty four (24) hours of onsite support.
- Cisco will make available, upon receipt of not less than twenty-one (21) days prior written request by Customer to Cisco, a designated support contact that can provide onsite support during Standard Business Hours at a Customer facility agreed upon between Cisco and Customer in writing.

Customer Responsibilities

General Responsibilities

- Designate at least two (2) but not more than six (6) technical representatives in each area covered under service orchestration, who must be Customer's employees in a centralized operations support center (Customer's technical assistance center), to act as the primary technical interface to the NSO Network Consulting Engineer (s). Customer will designate as contacts senior engineers with the authority to make any necessary changes to the service orchestration configuration. One individual, who is a senior member of management or technical staff, will be designated as Customer's primary point of contact to manage the implementation of services selected under this Service Description (e.g., chair the weekly conference calls, assist with prioritization of projects and activities).
- Provide reasonable electronic access to Customer's service orchestration platform to allow the Network Consulting Engineer to provide support.
- o If Cisco provides Data Collection Tools or scripts located at Customer's site, Customer shall ensure that such Data Collection Tools or scripts are located in a secure area, within a Network environment protected within a firewall and on a secure LAN, under lock and key and with access restricted to those Customer employee(s) or contractor(s) who have a need to access the Data Collection Tools and/or a need to know the contents of the output of Data Collection Tools. In the event Data Collection Tool provided by Cisco is Software, Customer agrees to make appropriate computers available and download Software as needed. Customer shall remain responsible for any damage to or loss or theft of the Data Collection Tools while in Customer's custody.
- Provide the appropriate information about the service orchestration platforms, configuration, and information of any new features being implemented as requested by Cisco.
- In the event the change management if the service orchestration within scope are altered after the Services selected under this Service Description have become effective, Customer is responsible to notify

Cisco in writing within ten days (10) of the change. Cisco may require modifications to the fee if the service orchestration composition has increased beyond the original pricing quote for Services.

- Create and manage an internal email alias for communication with Network Consulting Engineer.
- Retain overall responsibility for any business process impact and any process change implementations.

Design Collaboration

In addition to the General Responsibilities, Customer shall provide the following:

- Provide the design and process documents describing how Customer NSO is built and engineered to meet a specific set of technical requirements and design goals. The level of details must be sufficient to be used as input to review any of the services being delivered to the Customer.
- Ensure key detailed design stakeholders and decision-makers are available to participate during the course of the service(s).
- Provide or extract additional information required in the design effort (e.g., current and planned operational framework).

Software Management & Support

In addition to the General Responsibilities, Customer shall provide:

- Information on current operating system and application levels of the NSO components in scope of these services.
- Information on Customer business and technical requirements for new Software releases.
- Review details of planned changes with Network Consulting Engineer.
- Information on Customer certification process and lab testing process.
- Information on Customer change control process.

• Focused Knowledge Transfer

In addition to the General Responsibilities, Customer shall:

 Provide Details of Customer requirements on the NSO related topics that the customer wants to see covered through transfer and mentoring together with background information on the skill sets of the audience. Ensure that facilities and equipment are available to host the informal technical update sessions, if needed.

Testing and Validation Support

In addition to the General Responsibilities, Customer shall:

- Perform the physical test setup.
- Document the Test plan.
- Execute the test plan with Cisco's assistance.

• Migration Planning Support

In addition to the General Responsibilities, Customer shall:

- Provide all the Customer required migration documents.
- o Plan the migration schedule.