



Service Description: Cisco Mobility Telco Cloud Optimization and Operational Support Services

This document describes Cisco Mobility Telco Cloud Optimization and Operational Support Services.

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 Mobility Telco Cloud Optimization and Operational Support Services 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 Cisco's Foundation Technology Service Provider Optimization Service. Cisco shall provide the Cisco Mobility Telco Cloud Optimization and Operational Support 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 Mobility Telco Cloud Optimization and Operational Support Services

Service Summary

Cisco Mobility Telco Cloud Optimization and Operational Support Services are designed to address the different operational support requirements that the Customer may have, to aid them in supporting and maintaining applications and services within the Telco Cloud environment. For Voice over LTE (VOLTE), this includes:

- IMS Core
- TAS
- SBC

The range of services includes Telco Cloud Optimization Support, Operational Support Service, Continuous Learning and Program Management to address management of Telco Cloud applications and services, improving network stability and performance.

Cisco Responsibilities

Cisco's Mobility Telco Cloud Optimization and Operational Support Services consists of the provision of Services described below, which Cisco shall provide for the Customer's Network during Standard Business Hours (unless stated otherwise). Cisco shall provide the following General Support provisions for all Services selected by Customer under the Cisco Mobility Telco Cloud Optimization and Operational Support Service:

General Support

- Designate an engineer ("Cisco Telco Cloud Network Consulting Engineer") to act as the primary interface with the Cisco project manager appointed for the Customer.
- Participate in regular visits to the Customer as required by the project manager either via phone or in-person to review proactive deliverables and activities and to plan for next quarter. Additional visits will be mutually agreed at Cisco's then current travel and labor rates.
- Designate engineer(s) to work with the Cisco
- Project management and the primary Cisco Telco Cloud Network Consulting Engineer.
- Participate in periodic conference calls (usually weekly) to review Customer's Network status, planning and the Services being provided.
- Monitor a Customer-specific Cisco email alias to facilitate communication with primary Cisco Telco Cloud Network Consulting Engineer as well as the engineers on the Cisco's Telco Cloud support team.
- Cisco Telco Cloud Network Consulting Engineer may utilize Customer provided data, scripts or internal tools to assist in collecting data from the Network.

Telco Cloud Optimization Support

Telco Cloud Optimization Support consists of a range of service modules that include: Design Support, Software Strategy & Support, Change & Implementation Support, and Network Health Check.

Design Support

- **Detailed Design Report**
 - Consult with Customer design team in a series of meetings to develop a thorough understanding of the Customer's Network design requirements, with a focus on concerns such as:
 - resiliency
 - self-recovery
 - scalability
 - disaster recovery
 - virtualization
 - security
 - application traffic requirements
 - Quality of Service
 - Provide a detailed design report with recommendations that takes into consideration, among other things, the following:
 - Customer's design requirements, priorities, and goals
 - Analysis of impact of new requirements on the existing network
 - Architecture and topology for the Network
 - Protocol selection and configuration
 - Feature selection and configuration
 - Security considerations
- **Detailed Consultation**
 - Provide ongoing design consultation that may include, amongst other information, the following:
 - Review of Customer's design requirements, priorities, and goals
 - Analysis of impact of new requirements on the existing network
 - Review of Network architecture and topology
 - Provide guidelines for testing new configurations

Software Strategy & Support

- **Software Recommendation Report**
 - Provide proactive Software Recommendation Report (each report covers a single Software Track), which may include:
 - Review of new software feature releases for that specific Network area.
 - Inclusion of Software referral version and risk analysis
 - Overall Software recommendation to proceed with testing and Feature Set Upgrade deployment or wait for future Maintenance Release
 - Contingency plan for transitioning Software in Customer environment

- **Major Software Upgrade Support**
 - Provide remote or optional onsite support for activities related to Customer's major upgrade of Telco Cloud software for specified duration.
 - Provide remote or optional onsite support for activities related to Customer's Major Network upgrade to make sure there is no adverse impact to the Telco Cloud applications and services.
 - Provision of Software Release(s) are not a part of this Service and must be purchased separately by Customer or received under a separate service contract.
- **Minor Software Upgrade Support**
 - Provide remote support for activities related to Customer's Minor upgrade of Telco Cloud software for specified duration.
 - Provision of Software Release(s) are not a part of this Service and must be purchased separately by Customer or received under a separate service contract.

Change and Implementation Support

- **Scheduled Change Support**
 - Provide Customer with a Cisco resource to assist in making network changes to reduce potential outages. This support covers a maximum 8-hour window and can be done remotely.
- **Unscheduled Change Support**
 - Unscheduled Change support provides the Customer with a Cisco resource to assist in making network changes to reduce potential outages, similar to a Scheduled Change Support. However, this must be requested during Standard Business Hours.
- **Implementation Plan Review**
 - Review customer Method of Procedure and provide recommendations, that may include:
 - Impact assessment of change
 - Recommendations to prevent or limit service impact.
 - Alignment with Best practices
 - Suitable health checks

Network Health Check

- **Performance Audit and Recommendations**
 - Provide Performance Audit and Recommendations report, based on Key Performance Indicator (KPI) Audit of the Telco Cloud systems:
 - Review KPI's on a platform level to identify any performance issues related to the platform that could impact the applications and services that reside on it.
 - Review KPI's on an application / node level to identify any performance issues localized to that specific node / application.

- Review KPI's at the network level to identify any performance issues in the network
- Review KPI's on a service level, to provide more end-to-end visibility of network performance
- **Configuration Best Practice Report**
 - Review the configuration across the Telco Cloud System and provide a report with recommendations, that may include:
 - Optimization of existing configuration, that may result in improved performance / capacity
 - Alignment with Best Practices
 - Alignment of configuration across the same node / application.

Telco Cloud Operational Support Service

Cisco Telco Cloud Operational Support Service provides support addressing operational process and procedures for Telco Cloud applications and services.

- **Incident Analysis and Recommendations:**
 - Cisco will provide a detailed root cause analysis for a particular incident.
 - The analysis tracks the details and updates related to the incident as well as provides an impact report on how it affects the Customer network.
 - A workaround, if feasible, is also provided
- **Configuration / Change Management**
 - Review and Optimize Customer's change definition/qualifications, methods and procedures, change validation / implementation.
- **Service Performance Recommendations**
 - Provide support to Customer for end to end network performance optimization for Telco Cloud Services for selected KPIs.
 - Provide support to Customer for end-user customer experience performance optimization for Telco Cloud Services for selected KPIs.
- **Capacity Planning Recommendations**
 - Provide support and review capacity utilization of individual elements in the network based on the Cisco best Practices for design.
 - Analyze and support Customer network's traffic trends and call model variation and recommend for capacity augmentation if needed.

Continuous Learning

- **Knowledge Transfer and Mentoring.**
 - Provide informal technical update training such as a "chalk talk" on a topic that is mutually agreed upon and relevant to the Products and Cisco technologies. Such training would be provided by the Cisco Telco Cloud Network Consulting Engineer or another senior Cisco engineer.

Program Management

- Program management provides a comprehensive set of services, including planning, executing, and delivering multiple interdependent Telco Cloud activities in an efficient and coordinated manner. The program management is responsible for managing stakeholder relationships to prioritizing project activities to coordinating activities and resources across multiple departments and involved parties.
- Communications management is vital to the successful implementation and operation of any network. It provides visibility and proactive risk management, which reduces operational surprises. Communications management consists of:
 - Account kickoff meeting
 - Arranging for weekly conference calls
 - 90 day planning reports
 - Portfolio resource management including quarterly business reviews

Customer Responsibilities

• **General Responsibilities**

- Designate at least two (2) but not more than six (6) technical representatives in each area covered under Telco Cloud, who must be Customer's employees in a centralized Network support center (Customer's technical assistance center), to act as the primary technical interface to the Cisco Telco Cloud Network Consulting Engineer(s). Customer will designate as contacts senior engineers with the authority to make any necessary changes to the Network 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).
- Customer's technical assistance center shall maintain centralized network management for its Network supported under this Service Description, capable of providing Level 1 and Level 2 support.
- Provide reasonable electronic access to Customer's Network to allow the Cisco Telco Cloud Network Consulting Engineer to provide support.
- 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 a Network topology map, configuration information, and information of new features being implemented as needed.
- Notify Cisco Telco Cloud Network Consulting Engineer of any major Network changes (e.g., topology, configuration, new OSS / HSS software releases.).
- In the event the Network composition is 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 Network composition has increased beyond the original pricing quote for Services.
- Create and manage an internal email alias for communication with Cisco Telco Cloud Network Consulting Engineer.
- Retain overall responsibility for any business process impact and any process change implementations.
- Customer should respond to all of the Cisco requests or queries within 5 business days
- Customer should provide access to any internal performance monitoring tools.

Telco Cloud Optimization Support

Design Support

- In addition to the General Responsibilities, Customer shall provide the following:
 - Provide the low level design document describing how Customer's Network needs to be 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 an implementation plan.
 - Ensure key detailed design stakeholders and decision-makers are available to participate during the course of the service.
 - Provide or extract additional information required in the design effort (e.g. current and planned traffic characteristics)

Software Strategy & Support

- In addition to the General Responsibilities, Customer shall provide the following:
 - Information on current releases running in the Network and current configuration templates
 - Information on Customer business and technical requirements for new Software releases

- Review details of planned changes with Cisco Telco Cloud Network Consulting Engineer
- Information on Customer certification process and lab testing processes
- Information on Customer change control process

Change & Implementation Support

- In addition to the General Responsibilities, Customer shall provide the following:
 - Provide Method of Procedure for proposed change along with the lab verification plan and results for the change, if applicable.
 - Discuss MOP recommendations with Cisco Telco Cloud Network Consulting Engineer and implement as needed.

Network Health Check

- In addition to the General Responsibilities, Customer shall provide the following:
 - Information on any service level agreements or network performance requirements
 - Information on critical applications supported by the Network
 - Information on which applications are mission-critical and their priority schemes
 - Information on Customer's plans for business continuance, consolidation and virtualization
 - Information on expected Network growth and application mix changes
 - Data collection activities as needed to facilitate a specific Cisco analyses
 - Review Performance audit results with Cisco and implement changes recommended by Cisco Telco Cloud Network Consulting Engineer.
 - Review Configuration Best Practices audit results with Cisco Telco Cloud Engineer and define action plan to mitigate identified issues.

Telco Cloud Operational Support Service

- In addition to the General Responsibilities, Customer shall provide the following:
 - Information on any service level agreements or network performance requirements
 - Information on critical applications supported by the Network
 - Information on which applications are mission-critical and their priority schemes
 - Provide physical and remote access to the NOC and associated monitoring systems necessary to be able to monitor and support the Telco Cloud applications and services.
 - Provide access to Fault management and Performance management systems.
 - Provide access to all tools/applications that are expected to be required to fulfil an Operational Support role.

- Customer to provide necessary training of any operational processes and procedures that the Telco Cloud support engineers are required to follow.
- Information on current releases running in the Network and current configuration templates
- Information on Customer business and technical requirements for new Software releases
- Information on Customer change control process

Continuous Learning

- In addition to the General Responsibilities, Customer shall provide the following:
 - Details of Customer requirements on the topics it 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.