CISCO

Service Description: Operations Systems Support ("OSS") Optimization Support Services

This document describes OSS Optimization 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 OSS Optimization Support Service 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 OSS Optimization 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.

OSS Optimization Support

Service Summary

OSS Optimization Support Services provides specific help for your Operations support staff in the form of OSS Health Checks, Custom Software Support, Continuous Learning, and Program Management service modules. This post-implementation optimization and solution support service is available for most OSS and Network Management Systems (NMS) platforms technologies and solutions deployed by Cisco Services. Following is a sample list of supported technologies and solutions:

Cisco Prime Network

Cisco Prime Optical

Cisco Prime Central

Cisco Prime Performance Manager

Cisco Prime Provisioning

Cisco Prime Fulfillment

Cisco Prime Home

Cisco Prime for IP NGN

Cisco Prime for Mobility

Cisco Prime Collaboration

Cisco Prime Infrastructure

Cisco Prime LAN Management Solution

Cisco Prime Network Control System

Cisco Prime Access Registrar

Cisco Prime Network Registrar

Cisco Prime Cable Provisioning

IBM Tivoli Netcool for Cisco Prime

Services performed under this Service Description that are comparable to those services performed under Cisco's Foundation Technology Service Provider Optimization Service will build upon the original service and will be focused on the OSS and NMS software.

Cisco Responsibilities

Cisco's OSS Optimization Support Service consists of the provision of, at a minimum, Custom Software Support, from the Services described below, which Cisco shall provide for the Customer's OSS Infrastructure during Standard Business Hours (unless stated otherwise). Cisco shall provide the following General Support provisions for all Services selected by Customer under the OSS Optimization Support Service:

General Support

- o Designate an engineer ("OSS Network Consulting Engineer") to act as the primary interface with the Cisco project manager appointed for the Customer.

- o 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.

o Designate engineer(s) to work with the Cisco project management and the primary OSS Network Consulting Engineer.

o Participate in periodic conference calls (usually weekly) to review Customer's OSS status, planning and the Services being provided.

o Monitor a Customer-specific Cisco email alias to facilitate communication with primary OSS Network Consulting Engineer as well as the engineers on the Cisco's OSS team.

o OSS Engineer may utilize Customer provided data, scripts or internal tools to assist in collecting data from the Customer operations environment.

Custom Software Support

- **Scheduled Change Support**

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

  o Collaboration with the Customer during network and OSS system change windows and help address the issues as they arise during change windows into live production environments in addition to the support provided under the standard TAC process.
  o Collaborate with Customer to verify OSS systems readiness during change windows on the request of the Customer.
  o 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 Hardware or Software installations, major site installation and/or major configuration changes.

- **Unscheduled Change Support**

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

o Collaborate with Customer during emergency maintenance of covered OSS / NMS systems
o Collaborate with Customer and provide possible assistance during disaster recovery scenarios

Cisco will make an attempt to provide remote support during unscheduled or emergency change windows, but cannot always guarantee the availability of a support person when Customer has provided less than fifteen (15) days of written notice to Cisco or when conditions cannot guarantee the safety of Cisco support personal.

- **Onsite Option**

  o 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.
  o 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.

- **Integration Support**

  Provide remote OSS application support on how to use or integration with the application in question, which may include:

  o Addressing issues concerning the operation of the application programming interface.

  o Support on how the API should be used within the context of an overall workflow.

- **Detailed Design Report**

  Consult with Customer's Operations and IT support staff in a series of meetings to develop a thorough understanding of Customer's OSS infrastructure and future requirements, Focus on areas such as:

  o Resource Management
  o Service Management
  o Fault and Performance Management
  o Configuration Management

  The conclusion of the deliverable will be to provide a detailed design report with recommendations that takes into consideration, among other things, the following:

  o Customer's design requirements, priorities, and goals.

o   Analysis of impact of new requirements on existing OSS.
o   Management protocol selection and configuration.
o   Feature selection and configuration of existing OSS applications.
o   Security considerations.

- **Design Collaboration**

The activities and deliverables for the Design Collaboration tasks are the following:
- Review of Customer's design requirements, priorities and goals
- Analysis of impact of new requirements on existing operations support and network management infrastructure
- Engaging during network design whiteboards and workshops, and providing OSS / NMS expertise
- Providing design assistance in aligning OSS / NMS design with network architecture evolution
- Design interlock sessions with Cisco engineering experts
- Maintaining As-built documentation

- **Deployment Planning and Readiness Assessment**

Assist the Customer in preparing for ongoing OSS / NMS solution maintenance activities.

o   Validate OSS / NMS Application implementation plans and processes
o   Validate test cases and test results
o   Advise Customer on migration issues
o   Advise on impact to operational processes

- **Software Management Strategy Review**

Provide a Software Strategy Report for NMS or OSS applications, containing an overall set of recommendation, which typically include the following:

o   Identification of appropriate Software versions
o   Review of Software Feature Set Upgrade triggers and lifecycle considerations
o   Identify overall software and feature set recommendations & dependencies on any upgrade testing
o   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
o   Forecast licensing requirement

- **Incident and Problem Management (Bug Analysis)**

Cisco will perform one or more of following service activities:

o   Implement the incident and problem management processes
o   Identify and Document software bugs
o   Recreate bugs in lab to validate
o   Provide bug advisories/report
o   Help create & Implement workaround
o   Assist Cisco business units to understand the impact and drive bug resolution in subsequent releases of software or point patches
o   Drives product development/enhancement interlock with the Cisco product business units.

OSS Health Checks

- **OSS / NMS System Baseline and Recommendations**

o   Create the scoped number of System Baseline Report to capture steady state configuration of OSS / NMS Solution Components
o   Collection of key system details and data
o   Observe and catch deviation from baseline and take remedial steps to bring the system back to steady state
o   Recommendations such as system configuration improvements, correct OSS / NMS application patch levels etc.

- **OSS / NMS Performance Baseline and Recommendations**

o   Documentation of Customer issues with application performance.
o   Review of overall system resource utilization.
o   Review of system resource utilization by application
o   Recommendations on optimizations of existing product configurations and on changes to platform resources.

- **OSS / NMS KPI Definition, Implementation and Report**

o   Collaborate with the Customer to identify and define key performance indicators (KPIs) and Critical Success Factors (CSFs)
o   KPIs can consist of Customer required KPIs as well as Cisco recommended KPIs
o   KPI scope can include system performance KPIs such as memory, processing, database, etc. and functional KPIs such as service provisioning, fault, performance, configuration management, etc.
o   Define KPI data collection process and automation
o   Define KPI process ownership and frequency
o   Create a baseline KPI report

- **OSS / NMS Regular KPI Trending and Reporting**

o Cisco will provide regular review and reporting of KPI data to identify trends and deviations from the baseline and make recommendations for improvement and or optimization for OSS / NMS systems
- Scheduled service performed at a frequency agreed with the Customer (recommended once every quarter)
- KPI report can provide multiple viewpoints such as Operations, Support, Design, Capacity, Executive, etc.

Continuous Learning

- **Knowledge Transfer and Mentoring**

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

- **Informal Guidance**

  Provide informal technical updates such as a "chalk talk" on an OSS related topic that is mutually agreed upon and relevant to the Products and Cisco technologies. Provides quick basic troubleshooting support and support on day-to-day operational issues or queries. Such informal guidance would be provided by the OSS Engineer or another senior Cisco engineer.

Network Management Architecture Roadmap Review. Cisco will consult with Customer via a series of meetings to understand Customer's Network management architecture practices, focusing on capabilities and scalability. A Network Management Architecture Roadmap Review may include, among other information, the following:
- Review Customer's Network architecture and design
- Review Customer's Network management instrumentation architecture and design
- Review Customer's Network management goals and business requirements
- Analysis of Customer's fault management, performance management, configuration management, and security management practices and capabilities
- Report describing the analysis comparing Customer's current practices and capabilities to Cisco's recommended best practices, and recommendations to meet Customer's Network management business requirements

Network Management Instrumentation Support.
- Automation of troubleshooting techniques, being able to automatically collect log information, optimizing time to resolution and minimizing network engineering manual intervention
- Automation of repetitive network management tasks and configuration management
- Automation of Data Collection and Reporting, optimizing Performance and Capacity capabilities

Program Management

- **Account Kickoff**

  Conduct a kickoff Workshop to initiate a new service engagement to identify key stakeholders, review and agree on service scope and activities and discuss governance & communication process.

- **Weekly conference call**

  Participate in periodic conference calls (usually weekly) to review Customer's OSS status, planning and the Services being provided.

- **Prepare and present Quarterly Business Review (QBR)**

  Prepare and deliver quarterly business review (QBR) presentation to Customer executive team.

- **90 Day Planning**

  Develop and update the 90 day plan in consultation with the Customer. Deliver the 90 day plan as part of QBR presentation.

Customer Responsibilities

- **General Responsibilities**

  o Designate at least two (2) but not more than six (6) technical representatives in each area covered under OSS , 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 OSS Network Consulting Engineer (s). Customer will designate as contacts senior engineers with the authority to make any necessary changes to the OSS 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).

  o Provide reasonable electronic access to Customer's OSS to allow the OSS 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.

o Provide the appropriate information about the OSS systems, network configuration, and information of any new features being implemented as requested by Cisco.

o In the event the numbers of OSS systems 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 OSS composition has increased beyond the original pricing quote for Services.

o Create and manage an internal email alias for communication with OSS Network Consulting Engineer.

o Retain overall responsibility for any business process impact and any process change implementations.

Custom Software Support

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

o Provide the design and process documents describing how Customer OSS 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.

o Ensure key detailed design stakeholders and decision-makers are available to participate during the course of the service(s).

o Provide or extract additional information required in the design effort (e.g., current and planned operational framework).

o Information on current operating system and application levels of the OSS components in scope of these services.

o Information on Customer business and technical requirements for new Software releases.

o Review details of planned changes with OSS Network Consulting Engineer.

o Information on Customer certification process and lab testing process.

o Information on Customer change control process.

OSS Health Checks

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

o Information on any service level agreements or Network performance requirements.

o Information on Customer's plans for business continuance, consolidation, and virtualization.

o Information on expected Network growth and application mix changes.

o Information on any future advanced technology implementations.

o Information on Customers expected KPIs and CSFs

Continuous Learning

In addition to the General Responsibilities, Customer shall provide:

o Details of Customer requirements on the OSS related topics it wants to see covered through transfer and mentoring together with background information on the skill sets of the audience.

o Ensure that facilities and equipment are available to host the informal technical update sessions.