



Service Description: Unified Communications Optimization Service

This document describes Cisco's Unified Communications Optimization Service.

- **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.
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Service Summary

- Unified Communications Optimization Service provides a Network Support module in support of Cisco's family of Unified Communication products.
- This Unified Communications Optimization 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 Network Optimization Service. Cisco shall provide the Unified Communications Optimization Service 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.

Unified Communications Optimization Service

Cisco's Unified Communications Optimization Service consists of the provision of, at a minimum, Unified Communications Advanced Services Engineer, from the 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 Unified Communications Optimization Service.

General Support

- Designate an engineer ("Advanced Services Engineer") to act as the primary interface with Customer for its Network.
- Schedule with Customer up to five visits per year (not to exceed seven (7) days in aggregate) to Customer's site to kick off the engagement, 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.
- Schedule periodic conference calls (usually weekly) to review Customer's Unified Communications system status, planning and the Services being provided.
- Establish a Customer-specific Cisco email alias to facilitate communication with Advanced Services Engineer.
- Provide certain Data Collection Tools that Cisco identifies as appropriate for Unified Communications system data collection during the Term of the Services, provided that all fees due and owing to Cisco under this Appendix have been paid. Data Collection Tools may or may not include Hardware or Software. Customer acknowledges and agrees that Cisco shall retain full right, title and interest to the Data Collection Tools. In addition to Cisco provided tools, the Advanced Services Engineer may utilize Customer provided data, scripts or internal tools to assist in collecting data from the Unified Communications system.

Unified Communications Business Alignment

This Service provides a Unified Communication and Collaboration (UC+C) strategy and business alignment "check-up" through a review of business requirements/imperatives and planned UC+C initiatives.

Typical tasks performed under this Service may include, amongst other information, the following:

- Review existing Unified Communication and Collaboration technology network infrastructure and service catalog
- Review of Customer Unified Communication and Collaboration technology architecture and strategy
- Review of Customer business imperatives and key enterprise applications
- Conduct up to ten (10) business stakeholder interviews to identify possible Unified Communication and related business transformation opportunities
 - Summarize findings and provide Unified Communication and Collaboration technology Business / Technology alignment Recommendations
 - Identify two (2) business benefit use cases
- Facilitation via meetings or workshop to discuss identified business collaboration/application optimization opportunities
- Summary of findings and workshop outcomes, with feedback on UC architecture strategy, business collaboration/application optimization opportunities, and anticipated business value.

Unified Communications Application Strategy

The solution will help identify the right application roadmap based on business imperatives/requirements, potential transformation opportunities and a review of application leading practices/best in class innovation examples in similar industry/vertical customers. Typical tasks performed under this Service may include, amongst other information, the following:

- Review of current voice-enabled applications and existing integration points
- Review of major enterprise applications (ERP, CRM, PLM, etc.)
- Review of current support operations and IT process dependencies
- Identify business requirements and initiatives that will most influence a UC applications strategy (through interviews and/or working session)
- Creation of a 2-3 year application roadmap
 - Mapping of Cisco UC applications and solutions to identified requirements and business initiatives
 - Evaluation of Customer's UC/application maturity compared to similar organizations in the same industry and best in class examples
 - Creation of a phased 2-3 year plan based on requirements and the Customer's vision/desired maturity.
 - Description of potential business transformation/optimization opportunities associated with each roadmap phase.
- Work with Customer to create a services/tying model for service delivery (map application services to user segments)
- Identify dependencies

- Identify the major architectural and technical components required to provide the UC applications and services
- Identify potential application dependencies and operational support implications
- Review and recommend investments in technology and process necessary to support the application roadmap.

UC Ongoing Design Support

The UC Ongoing Design Support Service evaluates the Customer's existing IPT design collateral based on published best practices and industry standards. This service evaluates serviceability, scalability, and security components as well as the infrastructure and practices used to deploy a Unified Communications solution.

The UC Ongoing Design Support Service is specifically tailored to evaluate the Customer's current design criteria with a view on future growth and expansion.

The UC Ongoing Design Support Service will assist the Customer in developing a growth plan and expansion plan to their existing Unified Communications (UC) deployment. The current deployment footprint will be audited to include a more broad based deployment.

The UC Ongoing Design Support Service is geared to assist the Customer in overcoming many common practical and technical challenges involved in UC service expansion. An Advanced Services Engineer will provide the Customer with design guidance within a particular growth area.

The UC Ongoing Design Support Service consists of the following:

- Review the short-term and long-term business goals.
- Review the Customer's IPC and Network infrastructure design for each CUCM cluster.
- Comprehensive review for each site model in multi-site deployments.
- Analysis of documented feature and functionality requirements as well as business direction compared against current design and needs.
- Review of system capacity will be conducted evaluating device, CTI ports and applications.
- Review of the potential impacts to Customer's UC environment.
- Review of protocol selections and dial plan.
- Design recommendations regarding how to make the necessary expansions.
- A list of necessary Hardware and Software needed to accommodate the growth.
- Basic review of Hardware and Software for issues related to end of life (EOL) or end of sale (EOS) components.

- Installation guidance and configuration directives for installing any new Hardware/Software.
- Review the Customer's third party implementation partner's step-by-step plan to achieve the stated growth, while mitigating potential issues.
- Report describing design review with recommendations.

Focus will be placed on the review of Customer's design documents, dial plans, feature functionality requirements, application security, change control process and business plans.

UC Proactive Software Recommendation Report

The UC Proactive Software Recommendation Report service is a core component of the Unified Communications service portfolio and should be implemented during any of the following events: Software bugs, Field Notices, EoX releases, Customer TAC case increases, IPC network growth, new Customer feature/functionality requests, configuration management problems, new Cisco Software releases and Software train upgrades.

The UC Proactive Software Recommendation Report evaluates and identifies the current Unified Communication Software levels and its feature/functionality and capabilities to be used in the short, medium and long term to meet the current and future requirements to establish the process and the frequency of proactive code upgrades.

The Service identifies and evaluates the list of open defects present in a Software version that contains features that meet the current and new feature/functionality requirements and/or capabilities required by the Customer. The process also assesses how scheduled Events such as Hardware and Software upgrades would impact the current code. The Customer will use this information to determine the proper timing and procedure for upgrades.

The UC Proactive Software Recommendation Report service may include:

- Obtaining the Customer Unified Communications Software inventory.
- Gathering all the Software information and feature/functionality and capability requirements from the Customer.
- Evaluating the current Software releases and new levels for interoperability issues.
- Determine if the Software levels will support current and new Customer requirements.
- Based on the Customer environment and future feature requirements, articulating a short/medium/long term Software strategy determining what releases are best suited to achieving these objectives.

- Determine the upgrade and patch strategy for the IPC (UC) solution based on the Customer's operational requirements.
- Depending on the complexity of the environment and the capabilities, the Advanced Services Engineer will:
 - Provide advice to implement work arounds
 - Help the Customer with recommendations on what testing is appropriate,
 - Provide recommendations to the Customer to full test in a lab environment.
 - Share field experiences of similar environments.

UC Software Security Alert

Security Alerts - Proactive analysis of the security advisories (PSIRTs) that Cisco generates when security issues are uncovered that may impact Networks in which Cisco products operate and the necessary action to repair and/or protect the Network from these issues. After Cisco publicly releases the security advisory, the assessment is delivered to the Customer via the Software Security Alert ("SSA"). Cisco will provide an analysis of the vulnerability and its resolution with regard to its possible impact on the Customer's Unified Communications solution.

- Performing analysis of how PSIRT notifications will impact the Customer's Unified Communications solution.
- Depending on the proposed PSIRT resolution, Cisco's Advanced Services Engineer may:
 - Help the Customer with recommendations on what testing is appropriate on the Customer premises.
 - Review similar environments and correlate features and code.

UC Stability Audit

The UC Stability Audit service component involves the collection and analysis of several areas of the Network, including IPT Network Infrastructure design and device health, CallManager and Communications Manager Cluster, CallManager Express, Unity Server, Unity Express, UCCX, CallManager and Communications Manager application-specific configuration, Unity configuration, Voice gateway configuration and Software versions (CM OS, CallManager and Communications Manager, Voice gateway, Device loads) based upon adherence to Cisco Advance Service leading practices for Unified Communications. The process will identify deficiencies within the system that should be resolved to reach a stable environment based on these leading practices and known working models.

As part of this service, Cisco may:

- Conduct interviews with various administrators and operations personnel either onsite or remote for information gathering, analysis of gathered information and determination of proper levels and recommended changes.

- Provide approval from Customer to deploy Cisco and/or third-party tools for Network discovery, inventory and performance data gathering as necessary.
- Gather Cisco CallManager and Unity configuration data by using Unified Communications audit tool and if required leveraging the Stability Audit worksheet.
- Gather a complete inventory of the Unified Communications Network infrastructure.
- Obtain inventory, reports and design information via Cisco's Network Optimization Service ("NOS") offering or Cisco's Remote Operations Support ("ROS") offering as applicable.
- Obtain Cisco Unified Communications Operations Manager (formally ITEM), Cisco Unified Communications Service Monitor, Cisco Unified Communications Service Statistics Manager as applicable.
- Responsible for capturing information through examination of Unified Communications network components and data, identifying deficiencies based on analysis of that data against a detailed design and leading practices in each of the following applicable components and applications
- Provide Unified Communication UCAT as-build output from Unity audit, CallManager Unified Communications Manager.

UC Change Support

UC Change Support provides remote assistance to Customer during pre-scheduled change management windows to institute any major upgrades or changes noted to stabilize the UC (Unified Communications) environment that Customer elects to perform. No onsite assistance is provided under the UC Change Support and any request to perform such is subject to Cisco's sole discretion and Customer will responsible for any costs associated with such onsite visit.

Unified Communications Operational Risk Management Analysis (UC-ORMA Reactive)

The Unified Communications Operational Risk Management Analysis ("UC-ORMA Reactive") is a gap analysis and improvement plan for the operation of a Unified Communications environment. The UC-ORMA Reactive analyzes the reactive operational support areas that are critical to on-going operational excellence and UC service availability. Cisco will conduct an assessment of the current operating environment related to Unified Communications (UC) to determine gaps and strengths in the service life cycle processes.

The assessment will evaluate several critical areas of Unified Communications service availability as defined by Cisco, the Information Technology Infrastructure Library (ITIL), the International Standards Organization (ISO), and the ITU FCAPS (Fault, Configuration, Accounting, Performance and Security) model.

Leveraging Cisco leading practices and the ITIL v3 framework, Cisco will evaluate the following process areas:

- Staffing & Expertise
 - Roles & Responsibilities Definitions
 - Skill Requirements
 - Training & Development Plans
- Service Design
 - Service Level Management
 - Critical Success Factor Definitions
 - Key Progress Indicator Definitions & Mapping
 - Service Catalog Management
 - Service Definitions
 - Service Level Commitments
 - Service Component Decomposition
- Service Transition
 - Change Management
 - Change Communication Plan
 - Knowledge Management
 - Work Instruction Production and Maintenance
 - Network Documentation Production and Maintenance
 - Service Asset and Configuration Management
 - Configuration Standards and Compliance
 - Knowledge Management Integration
- Service Operation
 - Incident Management
 - Incident Management Process (Workflow)
 - Incident Tracking System and Compliance
 - Incident Priority, Escalation, and Notification Procedures
 - Event Management Integration (Work Instructions)
 - Troubleshooting Tools Integration
 - Incident Management Reporting and Metrics
 - Event Management
 - Network Management Architecture
 - Event Validation, Corrélation and De-duplication
 - Knowledge Management Integration (Managed Event Development)
- Analysis is conducted in a five step process:
 - Gather technical documents, processes, tools architecture, organizational data, and templates
 - Interview business and IT leaders, technical engineers, and other stakeholders
 - Analyze Customer information and interview data to determine gaps from Cisco leading practices

- Document gaps and develop recommendations for improvement of UC service availability
- Present the findings to the Customer

UC Remote Knowledge Transfer Session

The UC Remote Knowledge Transfer Session component of the Unified Communications Optimization Service allows the Advanced Services Engineer to have direct and interactive communication with the Customer. Based on intimate knowledge of the Customer deployment, Advanced Services Engineer will deliver training based on Customer specific needs which may include whiteboard sessions, virtual web conferencing sessions, or transfer of information mentoring tailored to the Customer's needs to make the training most effective. This knowledge transfer is not meant to replace any authorized Cisco AS Education classes.

Knowledge transfer can be delivered in a one-on-one format and can be delivered whenever gaps are found in the Customer processes or when changes occur that change Cisco leading practices.

Knowledge transfer and leading practices can be delivered during pre or post deployment. It is recommended that knowledge transfer be delivered every quarter and leading practices delivered on an on-going basis or as needed.

This optional UCOS service component is intended for Customers that want their Advanced Services Engineer to provide learning sessions and mentoring.

The UC Remote Knowledge Transfer Session will typically be done by the NCE for the Customer in response to the Customer's needs. As an optional component the priority of this service module is secondary to the primary components. Thus, the delivery timing should be worked in an as available basis.

UC Implementation Support Service

The UC Implementation Support Service offering is designed to provide project continuity and hand-off from the Planning and Design phase and to support network implementation of a designed IP Communications system in a Customer's Network by providing subject matter expert(s) as mentor.

UC Implementation Support Service is performed remotely to support the expansion of the Customer's current environment, problem solving, implementation support and pilots in the lab.

The UC Implementation Support Service will provide the Customer with remediation support to the recommendations found in other Unified Communications Optimization Services such as UC Stability Audit and UC ORMA-Reactive. The Advanced Services Engineer will work with the appropriate personnel to implement changes deemed necessary and address any recommendations for future planning and

designs. Testing will be completed to validate changes take effect. Remediation issues range from low, medium and high priority with varying level of complexity in implementation.

As part of this service, Cisco may:

- Work with Customer during implementation to address integration issues and provide subject matter expertise
- Be available for remote assistance during cutover activities
- Provide direct TAC escalation support if needed during implementation, and involve a virtual support team as necessary.
- Work with the Cisco TAC in regard to S1 or S2 issues during implementation and Day 1 (First day of Post Implementation).
- Perform limited lab verification work in order to validate questions and recommendations
- Advanced Services Engineer will review pertinent Customer supplied documentation
- Advanced Services Engineer will act as a subject matter expert to mentor the Customer's implementation team.
- Review and analyze the Reports/Recommendations from the UC Stability Audit and UC ORMA-Reactive findings
- Perform Lab testing against the proposed remediation changes
- Issue any change control processes accordingly
- Schedule remediation changes with Customer
- Perform remediation changes

UC Security Assessment

The Unified Communications Security Assessment provides Customers with a security assessment report, recommendations and risk analysis of four critical solution elements - UC network infrastructure, the call processing system, endpoints and applications

- UC Network Infrastructure security includes: switches, routers and connecting links comprising the foundation network that carries IP data, voice and video traffic.
- UC Call processing Security Features: includes servers, and router-based call processing systems for call management and control.
- UC Endpoint Security - includes IP phones, soft phones, video terminals and devices that connect to the IP network.
- UC Applications Security – includes user applications such as unified messaging, conferencing, Customer contact, and custom tools extend the capabilities of IP Communications systems.

The Service provides project management with the following key Service activities:

UC Security Audit Discovery and Data Gathering. Cisco will carry out a discovery on the UC infrastructure and UC components required to conduct a UC Security Audit.

UC Security Audit and Data Analysis. Cisco will conduct the UC Security Audit using the data gathered.

UC Security Audit Reporting and Recommendations- Cisco will report on the UC Security Audit findings and provide best practice recommendations to mitigate the risks found in the UC environment.

UC Incident & Problem Management Services

The UC Incident & Problem Management Service is intended to provide proactive building blocks to enhance the Incident & Problem Management process by enabling key serviceability tools and applying platform tool leading practice configurations in the customer's UC environment. Provide preventive activities of support to minimize the adverse impact of unplanned incidents, recurring problems and database backup and restore integrity. There is also an element to have an additional layer of reactive UC support for P1/P2 severity cases as well as Root Cause Analysis support for recurring incidents. The UC Incident & Problem Management Service has 5 elements;

- UC Serviceability Tools Enablement: Cisco will provide UC Serviceability tools along with leading practice recommendations within the Customer's UC operations environment. Setting up trace configurations, scheduling system health daily reporting, performance trend analysis weekly reporting and alarm configuration will also be provided.
- UC Hands On Back up and Restore: Cisco will provide a remote back up service along with leading practice recommendations and procedures within the Customer's UC operations environment. For restoration support, Advanced Services Engineer will be available to support the Customer upon request. . As part of the offering, Cisco and Customer will agree on what data will be backed up, configure a data source server, configure the schedule, configure the backup storage location and perform a manual back up (if requested by the Customer).
- UC P1/P2 Incident Support: Cisco will assist the Customer, TAC or ROS with the resolution of any specific UC incident that has been identified by Customer as P1/ P2 case under a separate Cisco support contract. Advanced Services Engineer will proactively monitor Customer open P1/P2 cases and keep the communication channels open between Cisco and Customer; (and, where appropriate) the HTOM (High-Touch Operations Manager if Customer has a FTS support contract. Advanced Services Engineer will analyze Customer's UC issues and provide assistance related to open case based on familiarity with Customer's UC operations environment.
- UC Problem Trending Analysis: Advanced Services Engineer will provide a monthly UC problem trending

analysis based on platform/tool historical trending data and opened cases by Customer.

- UC Recurring Problem & Root Cause Analysis Support: Identified recurring problems will be analyzed and given an appropriate plan of action to address recurring incidents. This may initially be in the form of a work around to minimize adverse impact to the business, but with ultimate goal of identifying root cause of a reoccurring problem. This will not replace the normal Customer/Cisco incident process under other services purchased but add another layer of support.

Unified Communications Network Testing Services

The Unified Communications Network Testing Services are verification and validation services. Cisco performs this remotely while the Customer is able to remotely access the test bed via WebEx or by one of three ubiquitous Virtual Private Network (VPN) connection types.

This Unified Communications Network Testing Service is provided in a standard eight (8) week test cycle. The service provides the following options:

Four - Two (2) Week Mini-Test

- Test Scope limited to one (1) platform
- UC Architecture NCE must be engaged to code scrub and code requirements.
- The test is executed in a 5-phase delivery model
Example: 2 days assessment, 2 days of test plan development, 1 or 2 days of build, 2 to 3 days of testing and 2 to 3 days of documentation. This scenario can be varied according to Customer and test requirements

Two - Four (4) week Mini-test

- Several platforms can be tested as long as they are build and test execution can be supported within a 4 week/20 day model
- UC Architecture NCE must be engaged for code scrubs and code requirements
 - This test is executed in a 5-phase delivery model, as explained in the two (2) week Mini-Test. Times can be modified based on efficiencies.

Standard Eight (8) week Hosted Test Cycle

Cisco performs the following tasks to deliver a standard eight (8) week Test Cycle using a Cisco Lab:

- Draft Testing Objectives – Focus on the goal, timeframe and any compelling events with the customer.
- Test Planning – Develop & refine the test plan, schedule facilities, equipment and resources
- Test Set Up – Perform the Physical Lab Setup
- Test Execution – Execute the Test Plan
- Test Results Analysis – Document the results in a Test Report Deliverable

UC GAP Resolution Services

UC GRS: Staffing & Expertise

• Roles and Responsibilities Matrix

Cisco will assist in the development of a Customer-specific Roles and Responsibilities Matrix using the collaborative workshops to:

- Map the Customer's Unified Communications Service Organization to the Cisco UC Roles and Responsibilities Matrix template
- Understand required Customer Operational Level Agreements ("OLA") based on the Customer's UC Roles and Responsibilities Matrix

Cisco will provide the following deliverables:

- Unified Communications Roles and Responsibilities Matrix
- List of recommended Operational Level Agreements (OLAs)
- Knowledge Transfer (presentation) on purpose and development of Roles and Responsibilities Matrix

• Skills Matrix

Cisco will assist in Skills Matrix development by:

- Collaborating to map the Customer's Unified Communications Service Organization to the Cisco UC Skills Matrix template
- Explain the assessment scale

Cisco will provide the following deliverables:

- Unified Communications Skills Matrix
- Knowledge Transfer (presentation) on purpose and development of Skills Matrix
- Knowledge Transfer (workshop) on use of Skills Matrix in service governance

UC GRS; Proactive Problem Management – syslog

Cisco will assist Customer with assigning support responsibilities and understanding the skills required to perform the recommended activities. Development of workflow diagrams enables support teams to understand their role in the overall process and provides opportunities for fine tuning and improving services. Active collaboration with Cisco team members while executing the newly-defined process facilitates knowledge transfer, solidifies the schedule, and clarifies on-going responsibilities.

Cisco will interview business & IT leaders, technical engineers, and other stakeholders to establish goals, collect data and obtain additional information as needed. This will be done through collaborative workshops which include:

- Identify required skills and assign Roles & Responsibilities for the recommended activities identified as leading practices for Proactive Problem Management via syslog instrumentation.
- Comprehensively define the process for leveraging syslog instrumentation for the customer's Cisco Unified Communication environment.

- Explain recommended and required configuration to enable syslog instrumentation from Cisco Unified Communications Manager clusters, Cisco Unity Connection servers, Cisco Unity servers, Cisco IOS devices used as voice gateways, etc.
- Assist Customer in establishing Proactive Problem Management via syslog instrumentation process by participating in the new process with the Customer's team members.
- Present the findings and results of the engagement.

Fast Track Migration ("Migration")

Site/Architecture Discovery and Validation

- Provide Customer with questionnaire requesting information regarding the following: Network Infrastructure; UC infrastructure; Hardware; Software; existing configuration of CallManager; Network connectivity; Cisco Emergency Responder (CER) configurations; IP Contact Center (IPCC) Express; connectivity to Cisco Unified Communications Manager (CUCM); and, security as applicable.
- Complete an audit of the existing CUCM configurations; and, alert Customer of the remediation that may be required before the Migration is attempted.
- Analyze existing Unified Communications architecture to validate a successful migration path to Unified Communications Manager 6.x
- Analyze existing Cisco Unified Communications Manager (CUCM) hardware components for compatibility with CUCM 6.x prior to Migration.
- Audit the existing solution component software versions compatibility with Unified Communications Manager 6.x.
- Provide a summary of findings and recommendations which identify ranking, complexity and priority of actions required to prepare for the migration.

Pre-Migration Lab Test

- Setup the lab to perform the Pre-Migration Lab Test of Customer's CUCM Cluster.
- Test the required features, limited to features and functionalities on the CUCM 6.x only.

Pre-Migration Readiness Support

- Review the Customer's up-to-date UC topology diagrams for the Sites to be migrated along with information about the current architecture, configurations of these devices, usage requirements, and security policy.
- Provide recommendations for software code changes.

- Provide CER 1.3(x) to 2.0(3) upgrade as an optional work that should be completed prior to the CUCM Migration.
- Work with Customer to request approval for the Megacluster (11+ CUCM server) from the appropriate Cisco business unit one month prior to the scheduled migration, as applicable.
- Provide and review the checklist of pre-migration readiness with due dates required for the completion prior to the CUCM Migration.

- Define facilities requirements and tools required to perform tests.
- Conduct acceptance testing of the upgraded Cisco Unified CM limited only to those features identified as functional in the previous version prior to the upgrade.

Post Migration Cut over Support

- Provide On Site service support on CUCM for issues related to the scope of this Migration project and limited to the Services provided herein.
- Provide guidance and assistance limited to two (2) days commencing with the first day the system starts receiving live calls.

Network Implementation Plan Development

- Develop a site specific Network implementation plan to migrate CUCM from 4.1(3) or 4.2(3) to 6.1.
- Review implementation plan for each CUCM server Site to be migrated.
- Develop Network Implementation Plan, containing sequenced and detailed events required to migrate the Unified Communications solution as designed and within the scope of this project.
- Define timelines for post-implementation testing.
- Develop contingency and rollback plans to restore back to the original Call Manager version.
- Present Network Implementation Plan and obtain Customer's feedback and concurrence of the implementation schedule.

Optional CUWL Licensing Enablement

If BLF and directory enablement are selected:

- Setup a pilot of 25 users, identified by Customer, and configure BLF and directory enablement.
- Provide documentation to Customer to be able to implement the features for the remaining users.

If Mobility is selected:

- Setup a pilot of 25 users, identified by the Customer, and configure them for Mobility.
- Provide documentation to the Customer to be able to implement Mobility for the remaining users.

On-Site Migration Service

- Review pertinent Customer-provided documentation prior to Migration.
- Provide Pre-migration checklist to verify that all pre-requisites have been met prior to Migration.
- Assist Customer with escalation of any items at risk during the migration process pertaining to timely completion of events as scheduled in the Project Plan; Cisco may guide the Customer by identifying the appropriate Cisco contacts within Cisco's Advanced Services team, as well as the appropriate product-specific business unit and TAC organizations.

If Soft Client is selected:

- Setup a pilot of 25 users, identified by the Customer, and configure them for Soft Client.
- Provide documentation to the Customer to be able to implement Soft Client for the remaining users.

Migration Acceptance Test

- Review Customer's documented acceptance criteria and expected results for development of the solution and site acceptance test plan.
- Develop and document the acceptance test plan which validates communication between the servers, systems, application and networks.
- Identify the tools required for executing test cases.

If Cisco Unified Presence (CUP) is selected:

- If CUP integration is required with CUP features and functionalities, CUP installation and integration with Cisco Unified Communications Manager must be performed as a separate orderable service outside of this UCOS offering.

If Unity 5.x Migration is selected:

- If Unity migration is required, then the Unity Migration must be performed as a separate orderable service outside of this UCOS offering.

Knowledge Transfer

- Provide one (1) day of informal knowledge transfer to the Customer's designated personnel following the Migration in the form of Q&A, white-boarding and other informal communication methods covering migration related topics.

Customer Responsibilities

General Responsibilities

- Designate at least two (2) but not more than six (6) technical representatives, 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 Advanced Services Engineer. 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 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 Advanced Services 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. Customer must immediately return Data Collection Tool(s) to Cisco as instructed by Cisco, upon the earlier of: (i) expiration or termination of the Service Description or (ii) Cisco's request to Customer that the Data Collection Tools(s) be returned to Cisco.
 - Provide a Network topology map, configuration information, and information of new features being implemented as needed.
 - In the event the Network composition is altered, after the Services selected in this Service Description are in effect, 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 Advanced Services Engineer.
 - Retain overall responsibility for any business process impact and any process change implementations.
 - Provide its designated person(s) with instructions on process and procedure to initiate cases and access the Advanced Services Engineer.
 - Notify Cisco of its standard operating procedures related to its business practices, its internal operational nomenclature and Network to allow Cisco to effectively communicate and discuss cases with Customer in the context of Customer's business environment.
 - Provide all necessary information to enable Cisco to perform root cause analysis.
 - Information on any Unified Communications service level agreements
 - Information on additional Unified Communications applications supported by the Unified Communications solution.
 - Identify Customer Unified Communications issues and concerns
 - Ensures key engineering and operational personnel are available to participate in interview sessions as needed.
 - Provide support to Cisco team to collect needed information for performance and optimization services that may or may not use automated tool.
 - Inform Cisco of Unified Communications-related projects and critical changes that may impact the Unified Communications solution that Customer has implemented.
 - Provide Cisco with detailed information that describes Customer's requirements and objectives for its Network including but not limited to scalability, security and manageability, roadmap and changes, solution components such as Hardware, quantity and Software releases
- UC Business Alignment.** In addition to the general responsibilities, Customer shall provide the following:
- Work with the appropriate IT and business stakeholders to schedule discussions and distribute workshop invitations.
 - Review strategy and roadmap recommendations.
 - Provide access to UC+C and business initiative documentation and interview resources.
 - Provide documented business goals/imperatives.
 - Provide contact details and schedule meetings/discussions with internal stakeholders.
 - Assist with workshop scheduling and resource/facility coordination.

UC Application Strategy. In addition to the general responsibilities, Customer shall provide the following:

- Work with the appropriate IT and business stakeholders to schedule discussions and distribute workshop invitations.
- Review strategy and roadmap recommendations.
- Provide access to UC initiative documentation.
- Provide documented business goals/imperatives.
- Provide contact details and schedule meetings/discussions with internal stakeholders.
- Assist with workshop scheduling and resource/facility coordination.

UC Ongoing Design Support In addition to the General Responsibilities, Customer/Partner shall provide the following:

- Completes site survey templates
- Develops the test & acceptance document
- Develop a post cutover day 2 support plan
- Implements UC design changes and acceptance testing
- Reviews findings of the Design Consultation Report and approves any design changes, process or procedure changes, and any existing infrastructure remediation needed.
- Provides access to all network documentation.
- Provides onsite/remote access to the network devices included in the design review.

UC Proactive Software Recommendations Report and UC Software Security Alert In addition to the General Responsibilities, Customer shall provide the following:

- Provide details of its current Software release and Hardware version for Unified Communications solution components (for example, Call Manager and peripheral gateways).
- Provide high-level architectural drawing that shows where components are located (for example, geographical location or location within the Network).
- Provide current and new feature/functionality and capability requirements including the initial IPC design requirements documents.
- Commits resources as needed
- Reviews proposed solution or workaround for the Customer's issues and provides approval to implement the solution(s).
- Provides onsite/remote access to network devices related to the issue.
- Provides the Advanced Services engineer with any relevant information.

UC Stability Audit. In addition to the general responsibilities, Customer shall provide the following:

- Customer's Operations Engineer provides access to the network environment including access to inventory and documented network information as well as approved diagnostic equipment connections for information gathering.
- Provides Cisco with a security exemption to utilize any Cisco or third-party software on their network for the use of data inventory gathering, performance.
- Customer acknowledges and declares stability problems (if exists).
- Discusses recent network outages and TAC case experience.
- Provides detailed network topology diagram. (if available)
- Provides a complete inventory of the Unified Communications Infrastructure network.
- Provides IPT Network inventory and discovery reports and performance statistics and reports, if available.
- Provides CROS and NOS inventory, reports, and design information (if available).
- Provides Unified Communications Operations Manager (formally ITEM) information and statistics (if available).
- Provides Cisco Unified Communications engineer with Customer (main) point of contact (POC).
- Manages communication between Customer and Cisco.
- Provides management expectations of service requirements.
- Provides candidates and Customer roles to be interviewed by the Advanced Services engineer for the audit.
- Executes recommendations recorded in the Unified Communications Stability Audit Report.
- Postpones any scheduled changes in the network during the Audit process.

Unified Communications Operational Risk Management Analysis (UC-ORMA). In addition to the general responsibilities, Customer shall provide the following:

The level of commitment and collaboration is critical to the success and value of the UC-ORMA engagement. The ability of Cisco staff to accurately assess the current operations environment and provide recommendations is dependent on the amount and accuracy of the data provided as well as the level of participation in the items listed below.

- Designation of an Executive Sponsor to provide leadership and oversight for the project to ensure timely and effective participation of all Customer participants.
- Assignment of a Primary Customer Contact who will work with Cisco team members to coordinate schedules, collect information, and host the engagement team while onsite including obtaining a conference room for all interviews and access badges for the Cisco Advanced Services team.
- Ensure participation in the UC-ORMA Kick-off meeting of appropriate operations process owners and other IT stakeholders.
- Ensure participation of designated stakeholders and process owners in all onsite interviews.
- Ensure delivery of items on the Data Collection Worksheet seven days prior to onsite interviews.
- Provide reasonable access to buildings, conference rooms, facilities, and workspaces for assigned Cisco team members during the project.
- Unless otherwise agreed to by the parties, Customer shall respond within two (2) business days of Cisco's request for documentation or information needed for the project.
- Ensure that contracts and licenses with all third-party vendors are fully executed and reflect the correct terms to enable Customer's business requirements to be met in full. In addition, Customer shall be responsible for all payments to, and the work performance of, all non-Cisco entities assigned to, or working on this Project.

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

- Customer reviews the proposed solution or workaround for the Customer's issues and provides approval to implement the solution(s).
- Provides access to any information required by TAC to troubleshoot and resolve the issues.
- Provides a description of the problem and systems (only one problem description per service request)
- Provides status of current and past Customer issues that might help resolve the case.
- Provides onsite/remote access to the network devices related to the issue.
- Commits resources to resolve the situation as needed.

UC Remote Knowledge Transfer Session. In addition to the General Responsibilities, Customer shall provide the following:

- Customer's primary contact is responsible for collecting the training requirements and providing them to the Advanced Services engineer.
- Customer's primary contact is responsible to organize the knowledge transfer and mentoring events.

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

- Customer/Partner should open cases with Cisco TAC for all reactive issues. This helps the Cisco AS engineer or Cisco TAC to engage Development engineers if the resolution involves bug fixes, etc.
- The Customer may purchase additional Implementation Support hours to ensure continuation of the support, otherwise the engineer will be removed at the end of the agreed funded engagement
- Provide Cisco with required documentation
- Provide Cisco with appropriate physical and remote access sufficient to perform mentor duties
- Provide a project management team to manage and own all aspects of the Unified Communications implementation
- Provide, for the duration of the project, personnel certified to perform the Unified Communications tasks and any onsite Implementation duties required for implementation
- Perform Solution Implementation to include: installation of Software, provisioning of Unified Communications platforms

UC Security Assessment. In addition to the General Responsibilities, Customer shall provide the following:

- Provide Cisco Network Consulting Engineers with up-to-date UC infrastructure topology diagrams and information about the current UC architecture, configuration UC devices, and security policy.
- Provide Cisco Network Consulting Engineer with access to the existing network devices.
- Provide Cisco Network Consulting Engineer remote access to the network.
- Customer will ensure that no changes are made to the UC infrastructure while Security Assessment is in progress, which may take up to 4 weeks depending on the complexity of the environment.
- Provide Cisco with a security exemption to utilize any Cisco or third-party software on their network for the use of data inventory gathering, performance.
- Assist with Cisco Network Consulting Engineers in providing timely answers to all the questions asked during the interview process.
- Ensure that the appropriate staff members are involved from Customer site and co-ordinate for all meetings.

- If needed, Customer will be responsible for providing remote access to its network.
- Customer will not make changes to the UC infrastructure during the time period that the Security Assessment is being conducted.
- Customer project team members agree to meet with Cisco UC Security Assessment team for initial screening and review prior to drafting final copy and formal audit presentation.

Incident & Problem Management

In addition to the general responsibilities, Customer shall provide the following:

Roles & Responsibilities for the UCOS Incident & Problem Management service NCE will depend on the make up of the customer's day 2 operations team and what other day 2 service offerings they may or may not be utilizing.

There are three typical scenarios; 1) Customers who leverages Cisco ROS. 2) Customer who leverages a partner's Managed Service. 3) Customer who takes on operations independently and works directly with TAC/HTTS.

- Service Desk will provide a single point of contact for Help/Service Requests Tightly Coupled with Incident, Change, and Event Management & Request Fulfillment.
- Incident Management with the purpose to restore Normal Service as Quickly as Possible to Minimize Business Impact. Tightly Coupled with Service Desk, Event Management, Service Level Management
- Problem Management with the purpose to Prevent Problems and Resulting Incidents from Happening & Eliminate Recurring Incidents. Tightly Coupled with Incident, Event, Change, Availability & Capacity Management

UC GRS: Staffing & Expertise

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

The level of commitment and collaboration is critical to the success and value of the UC-GRS: Staffing & Expertise engagement. The ability of Cisco staff to accurately assess the current operations environment and provide recommendations is dependent on the amount and accuracy of the data provided as well as the level of participation in the items listed below.

- Designation of an Executive Sponsor to provide leadership and oversight for the project to ensure timely and effective participation of all customer participants.

- Assignment of a Primary Customer Contact who will work with Cisco team members to coordinate schedules, collect information, and host the engagement team while onsite (if necessary) including obtaining a conference room for all interviews and access badges for the Cisco Advanced Services team.
- Ensure participation of appropriate operations process owners and other IT stakeholders in the UC-GRS: Staffing & Expertise Kick-off meeting and workshops.
- Ensure participation of designated stakeholders and process owners in all interviews.
- Ensure delivery of items on the data collection worksheet seven days prior to onsite interviews.
- Provide reasonable access to buildings, conference rooms, facilities, and workspaces for assigned Cisco team members during the project.
- Unless otherwise agreed to by the parties, Customer shall respond within two (2) business days of Cisco's request for documentation or information needed for the project.
- Ensure that contracts and licenses with all third-party vendors are fully executed and reflect the correct terms to enable Customer's business requirements to be met in full. In addition, Customer shall be responsible for all payments to, and the work performance of, all non-Cisco entities assigned to, or working on this Service.

UC GRS: Proactive Problem Management - syslog

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

The level of commitment and collaboration is critical to the success and value of the **UC-GRS: Proactive Problem Management – syslog** engagement. The ability of Cisco staff to accurately assess the current operations environment and provide recommendations is dependent on the amount and accuracy of the data provided as well as the level of participation in the items listed below.

- Ensure participation of appropriate operations process owners and other IT stakeholders in the **UC-GRS: Proactive Problem Management – syslog** Kick-off meeting and workshops.
- Ensure participation of designated stakeholders and process owners in all interviews.
- Ensure delivery of items on the data collection worksheet seven days prior to onsite interviews.
- Provide reasonable access to buildings, conference rooms, facilities, and workspaces for assigned Cisco team members during the project.

- Unless otherwise agreed to by the parties, Customer shall respond within two (2) business days of Cisco's request for documentation or information needed for the project.
- Ensure that contracts and licenses with all third-party vendors are fully executed and reflect the correct terms to enable Customer's business requirements to be met in full. In addition, Customer shall be responsible for all payments to, and the work performance of, all non-Cisco entities assigned to, or working on this Service.

Fast Track Migration

Site/Architecture Discovery and Validation

- Ensure that key networking, telecommunications, and operational personnel are available to participate in interview sessions to enable Cisco to gather and analyze all required solution components pertinent to the Migration.
- Designate and ensure that key Customer personnel are available for ongoing information gathering and feedback during the discovery phase.
- Provide details for completing the requirements questionnaires regarding the following:
 - Customer's current design of the Unified Communications system.
 - Configuration and connectivity details regarding all UC applications integrated with CUCM.
 - Security associated with the Cisco Unified CM.
 - Additional software installed and/or configured on Unified Communications Manager or elsewhere on the Network that may impact the Migration.
 - Additional applications connected to the Unified Communications Call Manager.
- Communicate any additional design requirements and considerations that may be affected by the migration process.
- Provide physical and logical network schematics for Customer's existing network where applicable.
- Provide voice network topology diagrams and other information which could include details of voice mail, conferencing, and contact center.
- Participate in the review of the completed Deliverable, and acknowledge receipt of the Deliverable by signing the Deliverable.

Pre-Migration Lab Test

- Provide Cisco Network Consulting Engineers with up-to-date UC topology diagrams and information about the current UC architecture, device configuration and security policy.
- Provide Cisco Network Consulting Engineer with access to existing network devices.

- Provide Cisco Network Consulting Engineer with answers to questions asked during the interview process in a timely manner.
- Provide a Backup and Restore System (BARS) file or the CUCM Publisher HDD set in preparation for pre-migration lab testing.
- Gather the following information prior to interviews with Cisco Engineers:
 - Current detailed UC infrastructure diagram
 - Network topology diagram
 - High Level Design (HLD) documentation
 - Low Level Design (LLD) documentation
 - Configuration of other UC devices (such as gateways and routers)
 - IP addressing plan identifying IP route summary in the network core and IP address allocations for telephony
 - Security policy and requirements
- Participate in the review of the completed Deliverable, and acknowledge receipt of the Deliverable by signing the Deliverable.

Pre-Migration Readiness Support

- Arrange for security access for Cisco Personnel at designated Customer Sites where the Pre-Migration Readiness assessment will be performed.
- Provide Cisco Network Consulting Engineers with answers to questions asked during the interview process in a timely manner. Any outstanding answers to questions during the interview process are required prior to starting the Pre-Migration Readiness assessment.
- Identify the appropriate staff members involved at each site and co-ordinate the scheduling for all meetings and data gathering.
- Provide Cisco Network Consulting Engineers with up-to-date UC topology diagrams and information about the current architecture, configuration of these devices, usage requirements, security policy, and utilization reports.
- Upgrade all IOS voice gateways to the recommended software code changes agreed upon prior to the Migration.
- Verify that all of Cisco's recommended software code changes have been implemented.
- Execute recommendations recorded in the Pre-Migration Readiness assessment and confirm in writing to Cisco when all the changes have been completed.
- Participate in the review of the completed Deliverable, and acknowledge receipt of the Deliverable by signing the document.

Network Implementation Plan Development

- Ensure that Customer resources are available during and after the Migration to support all UC applications including Cisco Unified Communications Manager.
- Ensure that Customer internal resources and/or partner(s) are available to conduct the Migration on all third party applications
- Provide hardware hard disk drive (HDD) required for the rollback, as necessary.
- Participate in the review of the completed Deliverables, and acknowledge receipt of the Deliverables by signing the Deliverables.

On Site Migration Service

- Provide On Site contact information to Cisco.
- Provide change control management, limited to the Migration tasks.
- Provide an On Site support engineer to work with Cisco engineer during the Migration.
- Provide Cisco engineer access to the Customer's facility and network equipment.
- Review the Migration Fallback Plan with Cisco engineer and determine a contingency timeframe with a respective fallback schedule.
- Provide Cisco engineer with required documents.
- Participate in the review of the completed Deliverable, and acknowledge receipt of the Deliverable by signing the document.

Migration Acceptance Test

- Designate Customer personnel responsible for assisting in the development and approval of the Test Acceptance Plan.
- Identify the Sites where testing may need to be conducted.
- Provide technical personnel at the remote sites where physical testing may be required.
- Participate in the review of the completed Deliverable, and acknowledge receipt of the Deliverable by signing the Deliverable.

Post Migration Cut Over Support

- Designate key personnel as resources for the Post-Migration Cutover Support.
- Provide access to all designated areas.

- Review the Post-Migration Cutover Support (number of days) with Cisco Project Manager.
- Provide Cisco with appropriate physical and remote access sufficient to perform Cisco Responsibilities as outlined for the Services.
- Participate in the review of the completed Deliverable, and acknowledge receipt of the Deliverable by signing the MCC.

CUWL Licensing Enablement

If BLF and directory enablement are selected:

- Identify the 25 users for BLF directory enablement.
- Ensure that Customer resources are available during the enablement.
- Provide access to the Network.

If Mobility is selected:

- Identify the 25 users for which Mobility would be enabled.
- Ensure that Customer resources are available during the enablement.
- Provide access to the Network.

If Soft Client is selected:

- Identify the 25 users for which soft client will be installed.
- Ensure that Customer resources are available during the enablement.
- Provide access to the Network.

Knowledge Transfer

- Designate Customer personnel who require knowledge transfer concerning migration related topics.
- Prepare appropriate questions regarding the migration to be addressed in the knowledge transfer.
- Participate in the review of the completed Deliverable, and acknowledge receipt of the Deliverable by signing the Deliverable.