SERVICE DESCRIPTION: HOSTED COLLABORATION SOLUTION (HCS) ASSURED SHARED ARCHITECTURE ADVISE, IMPLEMENT AND OPTIMIZE SERVICE
[AS-UTL-HCS-AIOS, AS-UTL-HCS-AIOD, AS-UTL-HCS-AIOSD]

Services Summary

This Service provides support to manage, onboard, and optimize the HCS platform's availability and performance by managing release compatibility, platform change, and capacity issues.

The Service offers in this Service Description are divided in to two main components: First is the "Advise and Implement" Services to assist with implementation of the HCS Shared Architecture. The second component focuses on the "Optimization" services for the HCS Shared Architecture. This includes release compatibility reporting, platform change support, and capacity reporting.

This Service is intended to supplement a current support agreement for Cisco Products and is only available if all Products in Customer's Network are supported by a minimum of core services such as SmartNet Total Care and Software Subscription Services. If available, Cisco will provide the Service described below as selected and detailed on the Purchase Order for which Cisco has been paid the appropriate fee. Cisco will provide a Quote for the Services ("Quote") setting out the extent and duration of the Services. Cisco requires a Purchase Order referencing a valid and agreed-upon Cisco Quote.

Deliverables

The Cisco HCS Advise, Implement and Optimize (AIO) Service may include the following Service activities and Deliverables:

Advise and Implement Services
     Project Management:
        o   Project Management Plan
     Requirement and Architecture Review:
        o   High Level Design (HLD) document
     Service Creation:
     High Level Design and Ready For Use Document:
        o   High Level Design (HLD) Report
        o   Ready for Use (RFU) Test Plan
     Site Preparation:
        o   Site Requirements Specification (SRS) Document
     Implementation Service

Optimization Services
     Service Delivery Management:
        o   Escalation Plan
        o   Communication Plan
     User Onboarding:
        o   Provisioning Templates
        o   Provisioning Template Release Notes
        o   Provisioning Template Transfer of Information
     Health Reporting:
        o   Health and Optimization Report
     Capacity and Utilization Reporting:
        o   Utilization Report
     Major Release Upgrade:
        o   Cisco published compatibility matrices and upgrade guides
        o   Release notes for new HCS releases
     Provisioning Support:
        o   Bulk Provisioning Templates
        o   Quarterly update on provisioning issues
     Move, Add, Change, Delete (MACD) Support:
        o   MACDs Templates
        o   MACDs Template Release Notes
        o   MACDs Template Transfer of Information
     Knowledge Management – Transition of Service:
        o   Knowledge Transfer Session Materials

Location of Services

Remote unless otherwise expressly set forth below.

PROJECT MANAGEMENT

Cisco Responsibilities	Customer Responsibilities
• Provide Customer with a list of designated Cisco personnel roles and responsibilities. • Provide a Project Schedule highlighting deliverables, corresponding milestones, planned project events, resourcing and timescales in the Project Management Plan ("PMP"). PMP is a baseline document from which the Cisco Project Manager ("PM") can manage deliverables, assess progress, and manage change management issues and any ongoing questions. • Work with Customer to identify and document dependencies, risks and issues associated with the successful completion of the project. • Participate in Cisco-scheduled project review meetings or conference calls, if required. • Provide Customer with the identity of personnel requiring access to Site(s), at least five (5) Business Days prior to the scheduled date such personnel requires access. • Deliver a bi-weekly project status report to the Customer. • Provide a handover, follow on actions, lessons learned, and exception reports (if necessary) upon project completion.	• Provide the Cisco PM with a list of designated Customer personnel roles and responsibilities. • Ensure that key personnel (such as architecture design and planning, network engineering, network operations personnel) are available to provide information and to participate in review sessions, workshops and other information gathering activities. The Customer's PM will also ensure that Cisco is provided with all information, data and documentation as Cisco reasonably requires to provide the Services. This information includes, but is not limited to: (i) information relating to Customer's network, design, business and other applicable requirements; (ii) functional and/or technical documentation relating to such requirements; and (iii) topology maps, configuration information and existing and proposed network infrastructure. • Identify primary and backup authorized Site contacts who shall provide necessary information, obtain access clearances and coordinate with other organizations/third parties with respect to Services at that Site. • Participate in scheduled project review meetings or conference calls, if required. • Coordinate with any external third parties, such as the country carrier/telco activities in relation to deliverables and schedules. • Ensure that any request by Cisco for information or documentation needed for the project is provided within five (5) Business Days of the request, unless the parties agree to another time period. • Provide an authorized signature for delivery confirmation of Cisco Products at the delivery location.

REQUIREMENTS AND ARCHITECTURE REVIEW

Cisco Responsibilities	Customer Responsibilities
• Conduct a design workshop of up to two (2) Business Days for the purposes of (a) gathering the Customer's high-level service requirements related to the standard HCS feature availability to provision to Customer and, (b) to confirm the accuracy and completeness of the Bill of Materials ("BOM") needed for implementation of the HCS Platform. • Following completion of the design workshop, develop the High Level Design ("HLD") document based on Customer's documented requirements in accordance with the high-level architecture to be used for the HCS Platform, which	• Ensure that the appropriate Customer solution architect provides the high-level service requirements to Cisco, in writing, at least five (5) Business Days prior to commencement of the Design Workshop. • Ensure Customer resources who have knowledge and authority to review and agree on the HLD functionality attend the Design Workshop and any other meetings that may be required by Cisco. • Provide Cisco with information to allow Cisco to develop the HLD, including but not limiting to, high level network diagrams, data center specifications, storage solution details, projected number

shall include input on aspects of dial-plan configuration, call-flow, design and management of the Cisco HCS Shared Architecture.

- and size of customer deployment.
- Provide Cisco with documentation of Customer's compliance with Cisco's suggested practices and templates for network readiness including, but not limited to, data loss, data delay, and data variation (jitter).

SERVICE CREATION

Cisco Responsibilities	Customer Responsibilities
• Work with Customer to explain the supported features within HCS shared architecture platform and finalize on the included offered features. • Assist Customer to define Service Packages as per the supported features. • Define provisioning templates as per the agreed Service Packages.	• Review the HCS Shared Architecture features and feature restrictions. • Review and define the Service Packages as per the agreed features. • Offer HCS Services as per the finalized Service Packages.

HIGH LEVEL DESIGN AND READY FOR USE DOCUMENT

Cisco Responsibilities	Customer Responsibilities
• Work with Customer to understand Customer's data center environment as it relates to implementation of the HCS Platform and to analyze and confirm Customer's implementation requirements for the HCS Platform. • Update the HLD with the agreed upon Customer's implementation requirements. Cisco will provide recommendations and best practices for Quality of Service ("QoS"), Security, as well as IP connectivity, network and storage requirements as part of the HLD for implementing HCS Shared Architecture. After that, Cisco will provide the finalized HLD to Customer for review and approval. • Prepare the Ready For Use ("RFU") Test Plan that details the features and tests to be carried out with the Customer to test that the HCS Platform has been installed and meets the high-level service requirements of Customer as detailed in the HLD. The RFU Test Plan defines and records the specific set of procedures and/or tests developed by Cisco that are necessary to test the Cisco HCS Platform and to declare that it is Ready for Use. "Ready for Use" means that the HCS Platform meets the specifications in the HLD as tested by the performance of the RFU testing in accordance with the RFU Test Plan is ready for Customer provisioning onto the HCS Platform. • Provide the RFU Test Plan to Customer for review and approval.	• Provide the Customer's requirements and information that shall, at a minimum, include the following: IP addressing and subnet masks, naming conventions, PSTN dial plan information, network physical and logical schematics, required security policies and any other necessary data required by Cisco as part of the HLD. • If requested by Cisco, provide physical and logical network schematics for other network elements. • Review and approve the HLD. • Provide Cisco with the IP network connectivity test plan and interconnect process required by any third parties including but not limited to in country Carrier/Telco. • Provide input necessary for Cisco to develop the criteria to be used in the RFU Test Plan. • Review and approve the RFU Test Plan. • Provide HLD covering Data Center architecture, IP connectivity, security, storage, and compute. • Testing document covering test cases for the Data Center architecture, IP connectivity, security, storage and compute.

SITE PREPARATION

Cisco Responsibilities	Customer Responsibilities
• Provide Customer with the Site Requirements Specification ("SRS") document, which provides a detailed specification of the physical, electrical and environmental conditions (e.g. racking, floor space, cabling requirements, power supply, air conditioning, site access, etc.) required to install the HCS Platform at the Customer's Data	• Perform site survey(s) at Data Center location(s) to inspect the location(s) and confirm all aspects of the Data Center location(s) are prepared for HCS Platform installation in accordance with the SRS. • Ensure that the Data Center(s) meet the requirements set forth in

Center(s).

- Provide Customer with a list of the equipment that must be provisioned prior to implementation of the HCS Platform within the Customer's Data Center.

the SRS and that the power supply has been appropriately tested for compliance and capacity.

- Ensure adequate HVAC, floor space and floor preparation, cable, rack, and fuse or breaker positions, including as may be specified by Cisco, and provision of all cables.
- Install and/or verify installation of the operation of all provided equipment prior to Cisco's installation of the HCS Platform.
- Establish two circuits (IP Paths) to each of Customer's Data Center(s) for service connectivity into Customer's core network. Unless otherwise agreed by Cisco, the required circuit delivery mechanism is dedicated, point to point, redundant circuits between the Customer's Data Center and Customer's core network in accordance with Specifications defined in the SRS.
- Provide two (2) diverse connectivity paths into the Customer's Data Center for remote management and monitoring of the Cisco HCS Platform as per Cisco provided specifications as outlined in the SRS.
- Provide bearer trunks and signaling (SIP).
- Provide for geographic redundancy between Data Centers.

IMPLEMENTATION

Cisco Responsibilities	Customer Responsibilities
- Inspect equipment to check products delivered are as per the Bill of Materials ("BOM"), and conduct an inventory listing. - Install, configure and test operating software and application software contained within the BOM. - Install and configure standard service fulfillment tools as part of the HCS Platform. - Install and configure standard UC applications as part of the HCS Platform. - Implement the dial plan and features per the HLD. - Perform testing within the Data Center as part of the RFU Test Plan. - Upon completion of implementation and RFU Testing, provide Customer with the final version of the RFU Test Plan with the test results recorded.	- Ensure that Responsibilities for Site Preparation have been completed prior to the commencement of Implementation Services. - Deploy the equipment as listed in the BOM, including perform racking, stacking and power connectivity to the power strip contained in each rack circuit after Customer's completion of its responsibilities for Site Preparation. - Provide all necessary specialist test equipment, unless otherwise agreed with Cisco. - Manage delivery, installation and configuration of equipment that is not Cisco equipment or equipment that is required to work with, or act as, part of the solution. - Perform integration to any applications that are not within the scope of the HCS Platform being provided by Cisco. - Dispose of unwanted equipment packaging. - Provide a voice telephone line and number (near the Cisco product) for the Cisco installer to use if required by Cisco. - Ensure that correct physical cables are accessible to the cabinet and assume responsibility for the installation, labeling and testing of all cabling that Customer supplies. - De-commission and remove or dispose of any legacy equipment. - Ensure proper security/firewalling of the HCS Platform. Provide and manage the necessary equipment to enable remote VPN access to Cisco. - Implement the underlying Data Center components including but not limited to Nexus switches, compute, storage and firewalls. - Implement IP connectivity from end points to HCS applications to provide the required services. - Ensure timely and correct (per Customer's requirements) activations of test users on the HCS Platform in order for Cisco to perform testing per the RFU Test Plan. - Provide all relevant resource(s) as Cisco may require to assist in RFU testing.

SERVICE DELIVERY MANAGEMENT

Cisco Responsibilities	Customer Responsibilities
• Provide Customer with a single-point-of-contact ("Cisco Service Delivery Manager or Cisco SDM") for management and escalation, to whom all communications may be addressed. The SDM shall focus on management of Cisco deliverables, delivery schedules, and Cisco resources, and has the authority to act on all aspects of the optimization services. Note: The SDM is different than the PM mentioned in the Project Management phase above. The SDM has responsibilities for all technical related issues occurring in the optimization Services provided herein, including any Cisco related activities and deliverables, whereas PM does not. • Provide a governance structure for the execution of optimization services. • Develop and provide Customer with an Escalation Plan and Communications Plan. • Establish and maintain a consolidated documentation repository. • Identify and document any dependencies, risks, and issues associated with successful completion of any HCS platform upgrades. • Participate in Cisco-scheduled service review meetings or conference calls, if required. • Provide a list of designated Cisco roles and responsibilities for this Service. • Provide Customer with the details of personnel requiring access to Customer's site(s) at least five (5) business days prior to the date that such access is required.	• Provide Cisco with a single-point-of-contact ("Customer Service Delivery Manager or SDM") to whom all communications may be addressed and has the authority to act on all aspects of the optimization services. • Review governance structure for the section of optimization services. • Review Escalation Plan and Communications Plan. • Participate in scheduled service review meetings or conference calls. • Provide Cisco SDM with a list of designated Customer's roles and responsibilities for the various Services activities and Deliverables. • Coordinate with any third-party supplier activities, deliverables and schedules as applicable.

USER ONBOARDING

Cisco Responsibilities	Customer Responsibilities
• Deliver templates based on pre-defined service bundles (i.e. Foundation Bundle, Standard Bundle, and Premium Bundle) • Deliver transfer of information on how to populate the templates with the required information. • Provision the HCS shared architecture platform within three (3) days from the date that completed templates have been received from Customer.	• Review and understand the provisioning templates. • Fill out the templates with the required info and deliver to Cisco. • Dispatch, roll out and implement the end points at the Customer's premise. • Test end points and features within the service bundles at the Customer's premise, if required. • Gather the required information from existing set up and fill out the templates in case of migration from a brown field environment. • Arrange for maintenance window for cut over.

HEALTH REPORTING

Cisco Responsibilities	Customer Responsibilities
• Deploy Advanced Services Health Reporting package into HCS environment as well as data collectors and log parsing scripts necessary to support report generation. • Configure report generation and mail reports out on an agreed frequency. • Maintain the reporting tool software (e.g. Cisco UC Assessment Tool (UCAT)/Audit and Assessment Tool) release update and	• Review the Health and Optimization Report(s). • Attend quarterly platform health and optimization review. • Take the corrective measurements as highlighted in above mentioned report(s).

upgrade in the Health Reporting package.

- Host a quarterly platform health and optimization review meeting in a format (remote or on-site) and schedule agreed upon by Cisco and Customer at the kickoff of Service; this review shall be limited to:
    - o Recommendations to Customer's configurations which should be optimized
    - o Detected security vulnerabilities and prioritization for remediation
    - o Known bugs and discussion of remediation plans

UTILIZATION REPORTING

Cisco Responsibilities	Customer Responsibilities
- Deploy Advanced Services Utilization Reporting package into the HCS environment as well as data collectors and log parsing scripts necessary to support report generation. - Configure report generation and mail reports out on an agreed to frequency. - Maintain the reporting tool software (e.g. Cisco UC Assessment Tool (UCAT)/Audit and Assessment Tool) in the Utilization Reporting package. - Recommend additional Cisco hardware and/or software for the HCS platform to meet current and forecasted demand from the Customer; such additional Cisco hardware and/or software shall be purchased by Customer separately under terms outside this Service. - Host a quarterly platform utilization review in a format and schedule agreed-upon by Cisco and Customer at the kickoff of Service; this review shall be limited to: - o Recommendation on Customer's solution elements which should be scaled to support predicted demand. - o Design recommendations on the HCS platform when major changes, such as new functionality/features become available.	- Review the Utilization Report. - Inform Cisco of any additional forecasted demand as soon as it is known. - Customer is responsible for the purchase of any additional Cisco hardware, software licenses needed for extra capacity and implement it or engage Cisco to implement it separately under terms outside this Service.

MAJOR RELEASE UPGRADE

Cisco Responsibilities	Customer Responsibilities
- Inform Customer regarding the availability of new releases of Cisco software for the HCS platform within approximately thirty (30) days of such new releases being generally available. - Review new releases of Cisco software for the HCS platform with Customer within sixty (60) days of such new releases being generally available, and provide Customer with recommendations on whether to upgrade or install the new release. - Review and discuss published compatibility matrices and Cisco published upgrade guides. - Perform up to one Major upgrade per calendar year. - Perform minor upgrades in case of Severity 1 issues, if necessary.	- Review the release notes and provide input to Cisco. - Provide approval(s) and maintenance window to upgrade the platform.

PROVISIONING SUPPORT

Cisco Responsibilities	Customer Responsibilities
- Provide Network Consulting Engineer contacts to reach out to Advanced Services in case of provisioning issues. - Provide support to platform and end users provisioning issues	

during Normal Business Hours (i.e. 8am to 5PM or likewise).
- Provide information to Customer on quarterly basis on issues related to provisioning, as needed.

MOVE, ADD, CHANGE AND DELETE (MACD) SUPPORT

Cisco Responsibilities	Customer Responsibilities
• Deliver MACDs templates based on pre-defined service bundles (as mentioned in USER ONBOARDING service activity above). • Provide information on how to populate the templates with the required information. • Perform the MACDs on the HCS shared architecture platform within approximately three (3) days from date of the completed and Cisco-approved templates received.	• Review and understand the MACD templates. • Gather the end user information. • Fill out the templates with the required information and deliver to Cisco.

KNOWLEDGE MANAGEMENT

Cisco Responsibilities	Customer Responsibilities
• Gather the necessary information to develop presentations and documents to brief Customer-nominated staff participating in the Knowledge Transfer Sessions. • As part of the Knowledge Transfer sessions, providing Customer's staff with information and/or updates regarding the HCS platform, feature/functionality, technology, design, and operations documentation. • Deliver up to two (2) Knowledge Transfer Sessions (maximum of four (4) business days in length for up to ten (10) Customer employees at a location to be selected by Customer. • Provide Knowledge Transfer Session materials in a suitable format for the selected Customer personnel.	• Provide the list of attendees to the Knowledge Transfer Sessions. • Arrange the location and accessories required for the Knowledge Transfer Sessions, the place and time to be agreed by Cisco. • Attend the Knowledge Transfer Sessions.

Project Assumptions and Exclusions

Services and Service pricing are based upon the following assumptions and exclusions ("Assumptions"):

- Customer is responsible for determination and implementation of Customer's design requirements and implementation of any recommendations provided by Cisco. Cisco recommendations are based upon information provided to Cisco at the time of the services. In no event shall Cisco be liable for the accuracy or completeness of the information contained in the Cisco recommendations.

- All services will be provided in the English language unless otherwise agreed to by Customer and Cisco.

- Services are performed during Standard Business Hours unless otherwise specified by Cisco.

- Cisco provides end state design requirements. Elements of migrations from existing systems to CUCM are not included as part of these services unless explicitly included in services quote and pricing.

- Any 3rd party voice applications are not covered under these Services. Cisco will use commercially reasonable efforts to provide elements required of the System. However, Customer must provide any 3rd party vendor requirements.

- Upgrade to any Software on Customer's Network is outside the scope of these Services, unless explicitly provided otherwise herein.

- Rack, Stack and Cabling of the network elements is the Customer's responsibility.

- Customer must provide the following prior to any requirements workshop(s):

    o Layer 2 and Layer 3 topology of the Customer's LAN, DMZ, and WAN
    o Internal Layer 3 routing and BGP AS
    o Security Policies
    o Unified Communication architecture for off-net and on-net calls

- Customer must ensure readiness of any LAN, WAN, and/or access links connecting their data center and WAN to any cloud services prior to any requirements workshop(s).

- Customer acknowledges that readiness of network for bandwidth, QoS, and network performance metrics is Customer's responsibility unless explicitly stated otherwise herein.

- Network Analysis for QoS and Network Performance Metrics is outside the scope of these Services.

- Licensed hosts not deployed until after Cisco's completion of any implementation services will be Customer's responsibility.

- Customer acknowledges that Advise and Implement services of PSTN gateways, including routing of PSTN calls, are outside of the scope of these Services.

- Customer acknowledges that custom development is outside the scope of these Services.

- Unless otherwise explicitly stated herein, all documentation provided to Customer during the course of the Services shall be limited to documentation published on Cisco Connection Online.

GENERAL

Incorporation by Reference: The **Glossary of Terms, List of Services Not Covered** and **Severity and Escalation Guidelines** posted at www.cisco.com/go/servicedescriptions/ are incorporated by reference into this Service Description.

If you purchased the Services directly from Cisco, your **Master Agreement** (as defined in the Glossary of Terms identified above) is also incorporated by reference. If there is a conflict between this Service Description and any of the documents listed above, this Service Description governs such conflict.

If you purchased the Services through a Cisco Authorized Reseller then your contract, if any, is between you and your Cisco Authorized Reseller. As such, this Service Description is for informational purposes only and is not a contract between you and Cisco. Your Cisco Authorized Reseller should provide you with a copy of this Service Description and related documents, or you can obtain a copy at www.cisco.com/go/servicedescriptions/.