Service Description: Cisco Managed Service for Collaboration: Unified Communications and Unified Contact Center

Technology Addendum to Cisco Managed Service for Enterprise Common Service Description

This document referred to as a Technology Addendum describes the Cisco Managed Service for Collaboration: Unified Communications and Unified Contact Center (UC & UCC) Service Offer.

Related Documents: This document should be read in conjunction with the Cisco Managed Service for Enterprise Common Service Description.

Direct Sale from Cisco

If you have purchased these Services directly from Cisco, this document is incorporated into your Master Services Agreement (MSA), Advanced Services Agreement (ASA), or equivalent services agreement executed between you and Cisco. If not already covered in your MSA or equivalent services agreement, this document should be read in conjunction with the Related Documents identified above. In the event of a conflict between this Service Description and your MSA or equivalent services agreement, this Service Description shall govern.

Sale via Cisco Authorized Reseller

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The Service

This Technology Addendum is designed to be read in conjunction with the Cisco Managed Service Common Service Description that describes the activities and deliverables that make up Cisco Managed Service. In addition to the activities and deliverables outlined in the Common Service Description, this Technology Addendum outlines the unique activities and deliverables for the Customer’s UC and UCC devices and infrastructure that are being managed by Cisco. Both service descriptions should be read in combination to fully understand the scope of the services being purchased.

The Cisco Managed Service offering described herein and other optional services are intended to supplement a current support agreement for Cisco products, and only available where all the Managed Components in a Customer’s network and Cisco Unified Communications Solution are supported through a minimum of core services such as Cisco’s SMARTnet, Software Application Services, Essential and Essential Onsite, as applicable. Cisco shall provide the 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. Cisco only provides support for Managed Components, unless specifically noted. For any device, component or solution element not specifically designated as a Managed Component, Cisco shall have no responsibilities whatsoever.

This Technology Addendum describes the services capabilities, supported devices, elective changes, and reports delivered.
1. Service Levels

The Service is offered in two service levels:

- Monitoring Service
- Managed Service

These service levels are described in detail in the Common Service Description. In addition to these two service levels, the Customer can also purchase Optional services as needed to augment their standard Managed Service. The table below outlines the activities and deliverables that are covered under the two service levels and Optional Services for the Service.

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2. Reporting

2.1. Standard Level Reports

The Cisco service delivery platform constantly gathers device level information from the Managed Components covered within the Service. This information is compiled and made available via reports available on the Services portal. Device level reports available are listed below.

- Bandwidth Utilization - Bandwidth usage per day across monitored devices
- Graph Export - Downloadable reports of performance metrics
- Hardware Inventory Report - Identify hardware components under management
- Key Performance Indicators - Performance metrics and resource utilization
- System Infrastructure Report - Identifies IOS image per managed device
- Top Active Devices - Devices that caused the most incidents
- Registered Phone Count Report - Identifies registered phones at the time that the report is generated
- Voice Service Levels - Voice service levels per device pool. Cisco measures mean opinion scores (MOS) to determine call quality.
2.2. Advanced Level Reports

Advanced Reports provide a detailed look at the Service and the Managed Components covered by the Service. Specific reports are itemized below.

- **System Hardware Report** - Identifies each hardware component under management and provides the following information: Host name, IP address, device model, serial #, site name, contract expiration date

- **System Infrastructure Report** - Identifies IOS image and flash/RAM per managed device and consists of the following information: Site name, Host name, device model, modules, IOS version, IOS subset, IOS image name, Flash (size), RAM

- **System Application Report** - Identifies OS releases and fixes per MCS and equivalent server under management. The report contains the following: Site, device name, device model, model #, device manufacturer, OS type, OS version, application version, hot fixes

- **Registered phone count report** - Identifies registered phones at the time that the report is generated. The report shall contain the following: CUCM Host name, CUCM IP address, CUCM cluster site location, device type, device registered ID (MAC address), device description, calling search space, partition, device IP address, status (registered or not registered); creates summary report xx phones registered; create a historical trend report month by month

- **Inventory Report** - Lists all “active” Customer managed devices, by site name, device type/model, device name, “managed” Customer IP address (if NAT), last good backup (IOS/CAT OS) and lists config archive exceptions. The report consists of the following: site name, site location, device type, device name, IP address Natted, IP Address (not Natted), SNMP community string, activation date (optional); date of last back-up.

- **Global Ticket Report** - Identifies the devices in the system that has been impacted by an Incident or Problem and extent of AutoCase activity. The device names indicate the location in production environments. End user selects the system, time frame and generates a report via Web portal.

- **Service Experience Report** - Identifies top ten sites that have experienced the most tickets and causes. The report consists of: site names, site location, # of Change tickets, # of Incident tickets, device type, device name, major cause

- **Application Server Report** - Identifies the following key server statistics: Utilization of CPU, Memory, Disk space, Network. Service status of all monitored services on Cisco UC & UCC servers. End user selects the server time frame and generates a report via Web portal.

- **Voice Service Level Summary Report** - Cisco Unified Communications Manager cluster-based report representing: mean opinion score (MOS), latency, jitter, packet loss, disconnect cause summary, call type report and inbound/outbound call report.

- **Operations Report** - A monthly report that provides ticket activity, detail by user, suppression, created by, notification and response times
2.3. Custom Reports

Provides for the ability to create or modify the types of reports based upon the available data. Each request for Custom Reporting must be evaluated and mutually agreed upon between the Cisco Operations Manager and the Customer. Operations Manager Level 2 is a pre-requisite for Custom Reporting.

3. Remote Monitoring Capabilities

The Service provides real-time monitoring on key UC and UCC components under the Monitoring and Managed Services and proactively declares incident events for:

- System and/or application availability
- System and/or application performance
- Hardware environmental
- Operating system availability
- Syslog and traps

Further details specific to the technical parameters and levels used to trigger Incidents and other management details can be provided by your Cisco sales or service representative.

4. Quality of Service Ticketing

Voice Quality of Service (QoS) monitoring and ticketing is an important element of the UC & UCC offer. The capability provides for monitoring of QoS metrics like jitter, latency and packet loss as indicated within a Mean Opinion Score (MOS).

The Cisco service delivery platform analyzes Call Manager call processing metrics - ranking individual QoS attributes and providing a corresponding Mean Opinion Score (MOS) for each call - providing staff with an estimation of the call quality as it may have been perceived by the telephone user. The quality analysis engine is tunable within the Cisco MAP Portal to map directly to the level of call quality that a support organization wishes to establish as the benchmark. Benchmarks, or threshold criteria, is configured to match the level of monitoring mutually agreed by the Customer and Cisco.

5. Unified Communications and Unified Contact Center Backups

Backup activities include monitoring the state of the backup service/process within applications such as Cisco Unified Communications Manager. Services do not include the verification of the content or completion of a backup, but simply the status of the backup process. See the Managed Services for Enterprise Networks service description for backup services for IOS and CatOS devices.

6. Customer Requested Change Management

Customers purchase a block of support hours that can be leveraged across all Defined Changes and Custom Scoped Elective Changes that a Customer has purchased as part of their service contract for this offer. The Customer must have a sufficient balance of support hours on account to cover the requested change. Additional support hours may be purchased if required.

6.1. Defined Changes

Defined Changes are categorized into Small, Medium, and Large activities. A Defined Change is a requested change by the Customer that is pre-approved and does not cause a risk to the environment. Defined Changes are not the result of Cisco Incident Management and/or Problem Management processes. The Customer identifies the needed type of change and submits a Defined Change Request via the Service Portal.
6.1.1. Defined Changes - Unified Communications

Defined Changes Type 1:

Phone Administration (single phone):
- Adding a new phone
- Adding a new user
- Configure/Change/Delete Lines
- Configure Speed Dials
- Configure XML Services (e.g. Extension Mobility) NOTE: If service is provided
- Agent Association with skillset/queues

Dial Plan Administration
- Time of day routing of calls (THIS DOES NOT INCLUDE DESIGN)
- Configuring line and hunt groups
- Configuring and administering UC Attendant Console

MeetingPlace/MeetingPlace Express
- Managing user accounts and groups

Note: Customer may submit up to 12 type 1 MACDs per business day. More than 12 per customer per business day will be negotiated.

Defined Changes Type 2:

- Configuring and administering Auto-Attendant (options, recordings, prompts)
- IP Communicator setup (includes call-manager config and personal computer walkthrough)
- CUCM: Add or update user directory entries - per 20 entries
- CUCM: Configuration of BV Endpoint, simple - per change
- CUCM: Reboot a single CUCM node
- CUCM, UC, UCCX, CER, Presence: Install SW feature COP file - Additional nodes

Defined Changes Type 4:

Cisco Unity
- Unity Call Handler changes

Gateway Administration
- Allocate Directory Numbers (DN) to trunks for analog ports (1 trunk)
Cisco Communications Manager
- CUCM: Configuration of call routing or feature
- Reboot multiple CUCM nodes and verify database sync
- Configure Disaster Recovery per cluster
- CUCM, UC, UCCX, CER, Presence: Install SW feature COP file - First node
- Upgrade phone firmware (up to 100 endpoints)

Other
- CUCM, UC, UCCX, CER, Presence: Install SW feature COP file - First node

Defined Changes - Type 8:
- License uploads/audits
- Private Line Ring Down (PLAR)
- Upgrade phone firmware (up to 1000 endpoints)

6.1.2. Defined Changes - Unified Contact Center

Defined Changes - Type 2:
Computer Telephony Integration (CTI)
- Port and route point integration updates
Routing script adjustments
- Perform changes to routing scripts in support of call routing applications
Administration script adjustments
- Perform changes in support of administrative applications
Configuration Manager Changes
- Perform updates to Configuration Manager
Port Administration
- Modifications
- Turn up/down
Wave File, TTS and ASR Administration
- Changes to, prompts, vocabulary, administration, tuning and basic call transfer
- File additions, modifications and deletions
Email Administration
- Administration of application
Ingress Gateway Administration
- Service changes for new application deployments, call service additions and dial peers
- Administer changes to the ingress gateway

Gatekeeper Administration
- Changes to gatekeeper configuration

Outbound campaign modifications
- Administer the system configuration
- Changes to dialer lists, modes and scripts

CVP self-service applications in Audium/Design Studio
- Application changes and enhancements

SIP Proxy Server
- Configuration and Table changes

CVP Operations Console and Reporting server and Database
- Application changes and enhancements
- File additions, modifications and deletions

**Defined Changes Type 4**

Computer Telephony Integration (CTI)
- Scripting updates

Provisioning applications and interfaces
- Provisioning of integration elements between applications

License Administration
- Administer modifications to licenses, including additions and deletions

Outbound campaign modifications
- Administer outbound campaign application

CVP self-service applications in Audium/Design Studio
- File additions, modifications and deletions

**6.2. Custom Scoped Elective Changes**

Custom Scoped Elective Changes are Customer requested changes that fall outside Incident and Problem (Standard) changes for restoring service. Custom Scoped Elective changes require a mutually agreed upon statement of work (SOW) that describes the scope of changes to be executed. See Cisco Managed Service for Enterprise Common Service Description for more details of Custom Scoped Elective Change support.
6.2.1. Unified Communications and Unified Contact Center Custom Changes

Examples of UC and UCC Custom Scoped Elective Change activities are listed below. This list is not intended to be a complete list but rather to show the type of changes Cloud and Management Services for Collaboration: UC and UCC can perform:

Dial plan administration
- Minor dial-plan updates and corrections

Cisco Media Convergence Server (MCS) and Unified Compute System (UCS) administration
- Apply operating system patches (does not include patch evaluation/testing and subject to the Managed Service approval)

Cisco application software administration
- Apply Cisco-recommended minor software updates and patches
- Apply Cisco-recommended (minor, same code train) software updates security-related purposes
- IOS same-train software upgrades

Capacity Planning – Supplemental activities of Optimization services from Cisco Advanced Services
- Evaluation of Network performance and current resource utilization
- Determining impacts and required modifications to support new applications and services

Creation of custom reports
- Consultation
- Definition
- Configuration

Creation of custom dashboards
- Consultation
- Definition
- Configuration

Session Initiation Protocol (SIP) Proxy Server
- Upgrades, additions, modifications and deletions

Feature Upgrades
- Communications Manager, Unity Connection, Router IOS, etc. major upgrades

6.2.2. Discovery audit

For Customers with existing Cisco equipment, a discovery audit may be required if the details are unknown or unconfirmed of how a UC or UCC solution is deployed in order to turn-up service.

The discovery audit service will be Custom Scoped and conducted by Managed Service Team using Cisco-supplied processes and tools.
If the Customer so elects, Cisco can perform this audit as a Custom Scoped Elective Change Service. The audit process will use Cisco-supplied macros to identify peripherals, routing clients, dialed numbers, dialed number map, call types, services, routes, peripheral targets, labels, device targets, skill groups, skill group members, agents, person and agent person map.

The audit, where applicable, will provide the following documentation:

- Architecture diagrams (to include Trunk and Port counts per peripheral)
- Network diagrams (to include IP addressing for visible and private Networks)
- Design Docs
- Network implementation plan
- As-built documentation
- Customer change control process
- Mapping of DNIS to call types, variables and scripts
- Population points of all variables

### 6.2.3. Synthetic Transactions

Synthetic Transactions is a Custom Scoped service in which the Cisco service delivery platform provides the advanced capability to run both OnDemand call tests and Scheduled AutoTests. This function allows support personnel to easily test call processing throughout the Network – from a centralized support site or any other location. All synthetic call tests are an optional service component and are available for additional fees.

- The OnDemand Call Test function, conducted from within Entity Manager, generates a call to a specific entered number. The number may be an internal or external destination. Following execution, a Call Trace log is presented that states the success or failure of the call. A verbose Call Trace, providing detail on each call step, can also be accessed.

- When the test is complete, the Cisco service delivery platform systematically obtains the Call Manager CDR record for the call and presents it for analysis.

- The AutoTest capability runs under the control of Cisco’s service delivery platform Portal event analysis engine. The test is run at routine intervals to select destinations established in the Cisco service delivery platform Portal configuration. Destinations may be established to test service to a specific location, or to destinations for the purpose of testing a prescribed path. For instance, if a retail location in a store chain opens at 9am, the Cisco service delivery platform can be configured to generate an AutoTest call to the store at 6am. If the test call is not completed successful, an incident ticket is generated explaining the condition and the appropriate support staff notified so that corrective action can be taken before the store opens for business. Customer-assisted configuration for the supporting call processing aspects may be required.

Within the service delivery platform Entity Manager, support personnel can view a log of AutoTest results, including their pass or fail status. From the log, personnel can also access the case that has been generated for failed calls to get additional detail, view the call trace, or view the CDR record that culminated from the test call.

### 7. Optional Services

#### 7.1. Dedicated Reporting Server

The dedicated reporting server option supports extended offline storage of management and performance data gathered through normal operation of the service delivery platform. Data is regularly moved from the primary service delivery platform system to the dedicated report server. Customer can access this data for reporting or data mining. This option is for organizations that need to store call detail records for an extended period of time, or for those that wish to examine historic system performance data.

#### 7.2. Business Continuity

Cisco’s service delivery platform business continuity option optimizes support for geographically-dispersed service delivery platforms. It enables redundant management applications to provide backup capability in the event of data center failures. Cisco
Unified Communications Microsoft Windows servers systematically confirms on a programmable, routine basis that vital configuration files are synchronized between primary and secondary systems, to address redundancy in the event the primary system fails.

7.3. IP SLA Monitoring

This option provides access to analyze IP SLA statistics from within the Service delivery platform, for a consistent, scheduled approach to voice management. These statistics are monitored and recorded within the IP SLA section of the service delivery platform.

The Cisco Managed Service team utilizes IP SLA, in conjunction with MoS scoring, to enhance monitoring of converged voice networks. IP SLA monitoring is based on regularly-scheduled testing, while individual phone calls are random and less frequent.

To provide additional insight, Cisco employs in-depth IP SLA analysis. The test requires the use of two routers, configured as a source and a responder, running IP SLA, a feature within Cisco IOS.

Each minute, the source router generates 100 packets at a rate of 50 per second, which are tagged with the voice class of service. This method ensures that the test packets follow the same path as voice packets, with a small size that does not impact network performance.

As the packets leave the initiator, they are tagged with a date/time stamp. The packets are also date/time stamped when arriving at the responder. These same packets are then marked in the same fashion when leaving the responder, and once again when arriving back at the initiator. Test data is analyzed to determine jitter, latency, and packet loss.

7.4. IP Phone Problem Reporting

The Cisco service delivery platform XML Integration enables users who are experiencing an incident with voice services to use the dynamic capabilities of Cisco IP telephone menus to report the problem to support personnel, using the service delivery platform. When an incident report is submitted from a phone, the service delivery platform automatically opens a case that includes the available Call Manager detail reported for the event. Support personnel analyze the issue, take the appropriate actions, and work the case through to completion using the service delivery platform's Incident Management capabilities. Case data is archived to form a centralized repository on the time, type, and frequency of incidents, as well as the stations impacted.

Subscription services include:

- Cisco IP Telephone XML integration application
- XML code maintenance support

Activation services include:

- Provide XML code and configuration guidelines for installation of application on Cisco Communications Manager
- Testing
APPENDIX A

Glossary of Terms

**Advanced Reports** means reporting that provides in-depth data and analysis for the Customer’s usage of the UC/UCC solutions.

**ASR** means access services router.

**CDR** means the call detail record of a transaction that is processed and recorded within a managed application such as Cisco Communications Manager, the application that provides control over voice signaling and processing.

**Customer Branding** means customization of the reports by embedding the Customer’s logo at the top of the report template, clearly identifying the Customer for which the data and analysis are prepared.

**Customer Designate** means the person(s) (alias) identified to receive the emailed reports.

**Environmental Issues** means the condition of the physical environment and may be impacted by such elements as heating and ventilation, air conditioning, lighting, room cleanliness or noise.

**Essential and Essential Onsite** means Cisco service and support provided through Cisco Operate Services. Customers have a choice of 8x5x Next Business Day (NBD), 8x5xNBD onsite, 8x5x4 hour onsite support or 24x7x4hour onsite support. Please check with your local Service Account Manager for availability of 8x5x4 onsite and 24x7x4hour support. Service and Support are required for managed components and is a pre-requisite for Managed Services for UC and UCC.

**FCS** means First Customer Release.

**MACD** means move, add, change or delete change activities executed against a managed component. Is often referred to a soft user move, add, change or delete of a user profile within a UC or UCC applications.

**Managed Component** means an element for which remote IT-infrastructure management services are provided by Cisco.

**Management Services** means a service that provides Monitoring, Incident Resolution, Reactive Problem Management, service level management and Standard Changes to resolve all Incidents.

**Non-Managed Component** means any element for which management services is not provided by Cisco.

**On-demand** means a last minute request made without preparation, reservation or advance notice.

**Partner** means the third party contracted by Customer to act as its technical point of contact with respect to the Service and/or Product.

**Portal** means the online Web user interface supplied for Customers and Partners to receive and submit information to and from the NOC.

**Quote** means quotation for services.

**Service Description** means Cisco will provide the Services and perform Cisco responsibilities described in the standard Cisco Service Description.

**Service Delivery** means the phase after Transition Management when Cisco begins to deliver Services.

**Services** mean Cisco Managed Services which consist of the activities and the processes used by Cisco to monitor manage and make changes to Network, voice and application services.

**Service Activation Kit (SAK)** means the document that is completed by the Customer and/or Partner that details the specifics of the UC and UCC elements that will be serviced.

**SIP URI** means Session Initiated Protocol – Uniform Resource Identifier.
**SLO** means Service Level Objective.

**Standard Business Hours** means 0800 – 1800 local time.

**Standard Change** means a Cisco Managed Service recommended change that is often as a result of Incident Management and Problem Management processes or Cisco Field Notice.

**TTS** means Text to Speech

**UC** means Unified Communications, a technology solution offered from Cisco providing voice and related features for the use of communicating via voice across a data network.

**UCC** mean Unified Contact Center, a technology solution offered from Cisco providing call center and related features for the purpose of inbound or outbound call center functions.