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### Service Description: Subject Matter Consulting Services

This document describes Subject Matter Consulting Services.

**Related Documents**: This document should be read in conjunction with the following documents also posted at www.cisco.com/go/servicedescriptions/: (1) Glossary of Terms; (2) List of Services Not Covered; and (3) Severity and Escalation Guidelines. All capitalized terms in this description have the meaning ascribed to them in the Glossary of Terms.

**Direct Sale from Cisco.** If you have purchased these Services directly from Cisco, this document is incorporated into your Master Services Agreement (MSA), Advanced Services Agreement (ASA), or equivalent services agreement executed between you and Cisco. In the event of a conflict between this Service Description and your MSA or equivalent services agreement, this Service Description shall govern.

Sale via Cisco Authorized Reseller. If you have purchased these Services through a Cisco Authorized Reseller, this document is for description purposes only; is not a contract between you and Cisco. The contract, if any, governing the provision of this Service will be the one between you and your Cisco Authorized Reseller. Your Cisco Authorized Reseller should provide this document to you, or you can obtain a copy of this and other Cisco service descriptions at www.cisco.com/go/servicedescriptions/.

Cisco shall provide the Subject Matter Consulting Services described below as selected and detailed on the Purchase Order for which Cisco has been paid the appropriate fee.

### **Service Summary**

Subject Matter Consulting Services provide general advice and guidance.

### Subject Matter Consulting Services

Technical Services for Routing and Switching (AS-RS-SME)

General technical assistance to aid Customer with Cisco's Routing and Switching products and technology. The typical skill set or capabilities of the Cisco personnel providing assistance to Customer under this service is as follows:

- Cisco Certified Internet Expert (CCIE) 
   ® or equivalent skills
- · Ability to analyze networking services requirements

- In-depth knowledge of designing complex routing and switching networks
- · Expertise with Cisco software features and functionality
- Experienced with configuring routing and switching devices
- · Comprehensive understanding of all IP protocols
- Ability to conduct training and one to one mentoring concerning routing and switching technology

### Technical Services for IP Telephony (AS-IPC-SME)

General technical assistance to aid Customer with Cisco's IP Communications products and technology. The typical skill set or capabilities of the Cisco personnel providing assistance to Customer under this service is as follows:

- In-depth knowledge concerning two or more of the following topics: IP inter networking; LAN/WAN switching; including Layer 3 and Layer 4 routing protocols; ATM; and voice technology
- Expert-level Internetworking experience with troubleshooting in a large-scale network environment
- Large-scale network design experience.
- Basic understanding of telephony dial plan design and call routing and control protocols such as H.323, Q.signaling, Receive and Transmit (E&M), ISDN Primary Rate Interface (PRI), Foreign Exchange Office (FXO), Foreign Exchange Station (FXS), Private Line Automatic Ringdown (PLAR), basic telephone service, Channel-associated signaling (CAS), Content services switch (CSS), Session Initiation Protocol (SIP), G.711/G.723/G.726/G.729, caller ID, direct inward dialing (DID), and so on.
- Ability to plan, implement, and troubleshoot voice quality issues such as echo, jitter, delay, and level loss.
- In-depth knowledge of network management, network availability, and capacity planning

• Strong understanding of all current pervasive technologies and good understanding of advanced technologies.

#### Technical Services for IP Contact Center (AS-IPCC-SME)

General technical assistance to aid Customer with Cisco's Unified Contact Center products, service and technology focused on, amongst other things, plan and design expertise in call flows, configuration and scripting changes or modifications and technical mentoring. The typical skill set or capabilities and the type of Cisco personnel providing remote and/or onsite assistance to Customer under this service are as follows:

Application Consultant.

Provide plan and design technical expertise around business rule development, call flow design, configuration and scripting of the following:

Assist Customer on addressing plan and design issues arising with these products: Unified Contact Center ICM Edition, Unified Contact Center Enterprise Edition, IP Interactive Voice Response, and Customer Voice Portal.

Participate in extended team status calls and planning meetings.

Assist in escalation of Unified Contact Center Solution products (listed above) issues. Customers are responsible for opening all Cisco TAC cases.

Serve as an advisor role to Customer in regards to overall business rule development, call flow design, configuration and scripting, comparing to other Cisco Contact Center deployments.

Provide Cisco and industry best practices to Customer regarding Contact Center business rule development, call flow design, configuration and scripting.

Customer Application Engineer.

Provide plan and design technical expertise surrounding custom development for Cisco products using the products Application Programming interfaces (API)'s. This includes: CTI development, CTIOS, Third Party CRM, and Custom developed applications, Custom reporting and Customer Voice Portal.

Participate in extended team status calls and planning meetings.

Assist in escalation of products (listed above) issues. Customers are responsible for opening all TAC cases.

Network Consultant Engineer.

Provide plan and design technical expertise around the following Cisco Unified Contact Center Enterprise products and assist Customer on addressing any issues that arise with these products: Unified Contact Center ICM Edition, Unified Contact Center Enterprise Edition and Customer Voice Portal.

Participate in extended team status calls and planning meetings.

Assist in escalation of Unified Contact Center Enterprise products (listed above) issues. Customers are responsible for opening all TAC cases.

Serve as an advisor role to Customer in regards to overall deployment process, comparing to other Cisco Contact Center deployments.

Provide Cisco and industry best practices to Customer in regards to Contact Center deployment.

Solution Architect.

Provide Customer with Unified Contact Center architectural engineering consulting targeted at developing recommendations on standardization, virtualization, and fault tolerance of existing or new contact center technologies across Customer centers.

Assistance in identifying contact center overall design that will satisfy Customer business requirements.

Provide Cisco and industry best practices to Customer in regards to Contact Center deployments.

Assistance in contact center sizing process.

Assistance in identifying required deliverables.

Participate in extended team status calls and planning meetings.

Serve as an advisor role to Customer in regards to overall deployment process, comparing to other Cisco Contact Center deployments.

Provide technical expertise around the following Cisco Unified Contact Center Enterprise products and assist Customer on addressing any issues that arise with these products: Unified Contact Center ICM Edition, Unified Contact Center Enterprise Edition and Customer Voice Portal.

Assist in escalation of Unified Contact Center Enterprise products (listed above) issues. Customers are responsible for opening all TAC cases.

### Technical Services for Wireless LAN (AS-WLAN-SME)

General technical assistance to aid Customer with Cisco's Wireless LAN products, service and technology. The typical skill set or capabilities of the Cisco personnel providing assistance to Customer under this service are as follows:

 Cisco Certified Wireless Network Administrator (CWNA), Cisco Certified Internet Expert (CCIE) 
 <sup>®</sup> or equivalent skills

- Experienced with Wireless and IP Network Planning, Design, Implementation, Operation and Optimization
- Ability to define and/or analyze networking services requirements
- Experienced in Radio Frequency (RF) Network Design and RF Survey and site planning
- Skilled in Wireless Security
- Extensive experience with Guest Access, Location and Voice over WLAN Solutions
- Knowledgeable with SS7 over IP (IP Transfer Point)
- Skilled in Converged Wireless (Voice + Data) Network
   Design & Optimization
- · Expertise with Cisco software features and functionality
- Experienced with configuring Wireline and Wireless routing and switching device
- Ability to conduct training and one to one mentoring concerning Wireless LAN technology

### **Advisory Services (TS-Services)**

General advice and guidance to Customer involving: Business value justification, Enterprise architecture, Network management strategy, Solution Integration, and or Program design and management.

#### Technical Services for Application Networking (ANS) (AS-ANS-SME) or Technical Services for Application Oriented Networking Services (AONS) (AS-AONS-SME)

General technical assistance to aid Customers with products and technologies covered under Cisco application networking services. Typical skill set or expertise of Cisco personnel providing assistance to Customer under this service is as follows:

- Cisco Certified Internetworking Expert (CCIE) or equivalent skills
- Ability to analyze application networking services requirements
- In-depth knowledge of integrating all products covered under Application Networking Services (ANS) or Unified Networking Services

- Knowledge to assist Customers in migrating from existing gear to next generation products
- In-depth knowledge of configuring performance parameters inside the network layer
- Large scale L4/7 and caching design experience
- Ability to deliver knowledge transfer on the various technologies and products under ANS
- End-to-end networking experience
- Provide technical assessments
- Provide assistance with solutions in the data center including network consolidation, branch consolidation, and network virtualization

### Technical Services for Storage Area Networking (SAN) (AS-SAN-SME)

General technical assistance to aid Customers with products and technologies covered under Cisco Storage Area Networking. Typical skill set or expertise of Cisco personnel providing assistance to Customer under this service is as follows:

- Cisco Certified Internetworking Expert (CCIE) or equivalent skills
- Ability to analyze Storage Area Networking services requirements
- · Assist Customers in migrating from existing SAN or DAS
- · environments to Cisco MDS 9000 family based SAN
- Ability to assist Customers in planning, design, and implementation of Storage Area Networking environments
- Provide support in consolidating a Customer's SAN environment
- Provide assistance with implementing all MDS 9000 family based
- intelligent features like SANTap, VSANs, RBAC, etc.
- Assist Customers in planning their SAN management infrastructure
- Assist Customers in testing a pilot network to confirm that
   expected performance is attained
- Expertise in various protocols like FC, TCP/IP, FCIP, and iSCSI

- Assist Customers with planning their SAN Extension
   environments
- Provide SAN infrastructure assessments

### Technical Services for Data Center Networking (DCN) (AS-DCN-SME)

General technical assistance to aid Customer with products and technologies covered under Cisco Data Center Networking. Typical skill set or expertise of Cisco personnel providing assistance to Customer under this service is as follows:

- End-to-end expertise in Cisco products and technologies in the data centers to include SAN, ANS, Unified Fabric
- Ability to bridge across multiple technologies and help Customer plan, design, and implement across these products in the data center
- One or multiple Cisco Certified Internetworking Expert (CCIE) certifications or equivalent skills
- Assist Customers in architecting their data center network
   environments
- Assist Customers in planning, designing, and implementing with Cisco products in the data center
- · Provide technical assessments
- Includes the type of assistance covered under SAN and ANS SME

#### Technical Services for Security (AS-SEC-SME)

General technical assistance to aid Customers with security products and technologies. Typical skill set or expertise of Cisco personnel providing assistance to Customer under this service is as follows:

- Cisco Certified Internetworking Expert (CCIE) or equivalent skills
- In-depth knowledge of all Cisco security solutions and technologies with proficiency in the following security solutions: IOS security, intrusion detection, network admission control, remote access, host protection, perimeter control, and VPNs
- Expertise in integrating Cisco advanced security solutions with the core network infrastructure providing end-to-end security experience

- Ability to analyze security requirements and specify hardware and software requirements, including security management tools
- Ability to understand, identify and mitigate security risks that affect compliance requirements
- Knowledge in migrating from existing products to next generation security solutions
- Knowledge in analyzing security requirements for storage area networks, unified communications solutions, and wireless environments
- Expertise in performing technical security and vulnerability assessments of the security architecture and individual network devices, systems, and applications
- Experience in developing an in-depth security architecture
- Assessment of the network's readiness to deploy a new security solution, including the existing IT infrastructure, security devices, software operations, and security management procedures
- Ability to assist Customers in the planning, design, and implementation of security solutions
- Proficiency in the development of detailed security designs, including network diagrams, system rules and reports, and sample software configurations for protocols, policies, and features
- Assistance in testing a pilot security solution to confirm that expected performance is attained
- Development of an implementation strategy and plan detailing the requirements for solution deployment, integration, and management
- Expertise in support of custom installation, configuration, testing, tuning, and integration of a security solution

#### Technical Services for Operational Support Systems (AS-OSS-SME)

General technical assistance to aid Customer with Operations and network management systems. The typical skill set or capabilities of the Cisco personnel providing assistance to Customer under this service is as follows:

- Ability to analyze operations support systems and network management services requirements.
- In-Depth understanding in Operations Support System and Network Management Systems Architectures.

- In-depth knowledge in planning, designing, implementing and operating Operations Support Systems and Network Management Systems.
- Expertise with Cisco Operations and Network Management applications.
- Experience in implementation, configuration, and provisioning of Cisco operations and network management tools.
- Comprehensive understanding of industry standard operations and network management frameworks, FCAPS, eTOM and ITIL.
- Ability to conduct TOI and one-on-one mentoring pertaining to operations and network management systems.
- Extensive internet networking experience may include Cisco Certified Internet Expert (CCIE) or equivalent skills.

### Technical Services for Optical (AS-OPT-SME)

General technical assistance to aid Customers with products and technologies covered under Cisco Optical. The work is to be contiguous and a minimum of 40 hours. Customer is to provide any required test equipment and/or instrumentation for the duration of the engagement. Typical skill set or expertise of Cisco personnel providing assistance to Customer under this service is as follows:

- End to-end expertise in Cisco optical products and technologies to include SONET and DWDM.
- Experience configuring and testing Cisco optical products.
- Assist Customers in architecting their optical networks environments.
- Assist Customers in planning, designing, and implementing with Cisco optical products.
- Provide technical assessments.
- Ability to conduct knowledge transfer sessions and one to one mentoring concerning optical technology

## Technical Services for Emerging Technologies (AS-EMTG-SME)

General technical assistance to aid Customer with Cisco's Emerging Technology products and technology. The typical skill set or capabilities of the Cisco personnel providing assistance to Customer under this service is as follows:

• Extensive internet networking experience may include Cisco Certified Internet Expert (CCIE) or equivalent

- In-depth knowledge in planning, designing, implementing and operating Emerging Technology systems and solutions
- Experience in implementation, configuration, and provisioning of Cisco infrastructure to support the Emerging Technologies
- Ability to conduct TOI and one-on-one mentoring pertaining to Emerging Technologies.
- Provide technical assessments for the Emerging Technology Solutions
- Provide technical assistance to partners during their deployment of Emerging Technology Solutions
- Ability to deliver knowledge transfer for the Emerging Technology Solutions

### Technical Services for Unified Computing Systems (AS-UCS-SME)

General technical assistance to aid Customers with UCS product and technologies covered under Cisco Unified Computing System. Typical skill set or expertise of Cisco personnel providing assistance to Customer under this service is as follows:

- Ability to assist Customer in planning, architecting, designing or implementing its compute and virtualization environments.
- Ability to understand, identify, analyze and migrate existing products to UCS platform by analyzing compute requirements.
- Proficiency in the development of detailed UCS design.
- Ability to serve in a consulting role to Customer in regards to UCS design and implementation.
- Support of custom installation, configuration, testing, tuning and integration of a server solution.
- Assistance in testing a pilot UCS solution to confirm that expected operational characteristics of UCS platform is attained.
- Provide Cisco and industry best practices to Customer regarding UCS design and implementation.
- Ability to conduct knowledge transfer sessions and one to one mentoring concerning UCS technology.
- Certifications such as VCP, CCIE or equivalent skills

Technical Services for Safety & Security (AS-PSS-SME)

General technical assistance to aid Customers with Cisco's safety & security products and technologies. Typical skill set or expertise of Cisco personnel providing assistance to Customer under this service is as follows:

- Cisco Certified Internetworking Expert (CCIE) or equivalent skills
- In-depth knowledge of all Cisco safety & security solutions and technologies with proficiency in the following safety & security solutions: VSMS-Video Surveillance Media Server, VSOM-Video Surveillance Operations Manager, VSVM-Video Surveillance Virtual Matrix, IPICS – Interoperability & Collaboration System & CPAM-Cisco Physical Access Manager.
- Expertise in integrating Cisco advanced safety & security solutions with the core network infrastructure providing end-to-end safety & security experience
- Ability to analyze safety & security requirements and specify hardware and software requirements, including safety & security management tools
- Ability to understand, identify and mitigate safety & security risks that affect compliance requirements
- Knowledge in migrating from existing products to next generation safety & security solutions
- Knowledge in analyzing safety & security requirements for storage area networks, unified communications solutions, and wireless environments
- Expertise in performing technical safety & security and vulnerability assessments of the safety & security architecture and individual network devices, systems, and applications
- Experience in developing an in-depth safety & security architecture
- Assessment of the network's readiness to deploy a new safety & security solution, including the existing IT infrastructure, safety & security devices, software operations, and safety & security management procedures
- Ability to assist Customers in the planning, design, and implementation of safety & security solutions
- Proficiency in the development of detailed safety & security designs, including network diagrams, system rules and reports, and sample software configurations for protocols, policies, and features
- Assistance in testing a pilot safety & security solution to confirm that expected performance is attained

- Development of an implementation strategy and plan detailing the requirements for solution deployment, integration, and management
- Expertise in support of custom installation, configuration, testing, tuning, and integration of a safety & security solution

### Best Practices Advisory Services (AS-CONS-MO)

General advice and guidance to Customer involving: Sharing of best practices, know-how and technical mentoring related to the use of Products within a test or production Network.

#### Mobile Internet SME Services (AS-SP-MI-SME)

General technical assistance to aid Customer with Cisco's ASR5000 product and related technology. The typical skill set or capabilities of the Cisco Network Consulting Engineer (NCE) providing assistance to Customer under this service are as follows:

- Experience with Mobile Internet technologies and expertise in Mobile Network Planning, Design, Implementation, Operation and Optimization
- Serve as an advisor role to Customer in regards to mobile call flow design, solution and systems integration, and migration activities to meet the Customer business and technical needs
- Provide Cisco and industry best practices to Customer regarding ASR5000 and the related environment, including detailed design, configuration, testing, and troubleshooting
- Experience with integration and validation of one or more of the following services enabled on ASR5000: PDSN, HA, GGSN, PDIF, PDG, P-CSCF, I-CSCF, PGW, SGW, ASNGW, TTG, SGSN, MME, and HNBGW
- Experience with enabling ASR5K Inline value-add services such as Gx interface, Prepaid, QoS, Firewall, Parental Control etc
- Experience with Cisco ASR5000 software features and functionality
- Ability to define and/or analyze mobile network requirements and design solutions to meet those requirements
- Ability to prepare the engineering and migration plans, Method Of Procedures (MOP) and support the MOP execution

- Knowledgeable in network management to support the operations team with ASR5000 management and collecting KPIs
- Ability to conduct training and one to one mentoring for the Mobile Internet technology topics

### Technical Services for Cisco Intelligent Automation for newScale and Tidal (AS-AOS-SME)

General technical assistance to aid Customers with product and technologies covered under Cisco Intelligent Automation Solutions. Typical skill set or expertise of Cisco personnel providing assistance to Customer under this service is as follows:

- Ability to assist Customer in planning, architecting, designing or implementing automation for their data center Intelligent Automation Solutions.
- Ability to understand, identify, analyze and migrate existing products to Cisco Intelligent Automation Solutions platform by analyzing Customer requirements.
- Proficiency in the development of detailed Cisco Intelligent Automation Solutions design.
- Ability to serve in a consulting role to Customer in regards to Cisco Intelligent Automation design and implementation.
- Provide expertise in support of custom installation, configuration, testing, tuning and integration of Cisco Intelligent Automation Solutions.
- Ability to understand, identify and analyze existing workflow and adapters.
- Proficiency in the development of detailed automation concepts and workflows
- Ability to serve in a consulting role to Customer in regards to Cisco Cloud Portal (newScale) design and workflows.
- Assistance in validating Customer business processes during to confirm that expected operational characteristics of Cisco Intelligent Automation solution are attained.
- Provide Cisco and industry best practices to Customer regarding Cisco Intelligent Automation solution design and implementation.
- Ability to conduct knowledge transfer sessions and one to one monitoring concerning Cisco Intelligent Automation solution technology.
- Assistance in testing a pilot Cisco Intelligent Automation solution to confirm that expected operational characteristics of Cisco Intelligent Automation platform is attained.

- Provide Cisco and industry best practices to Customer regarding Cisco Intelligent Automation design and implementation.
- Ability to conduct knowledge transfer sessions and one to one mentoring concerning Cisco Intelligent Automation technology.
- Certifications such as VCP, CCIE or equivalent skills.

### Technical Services for Social Collaboration (AS-SC-SME)

General technical assistance to aid Customer with supported Enterprise Social Software ("ESS"). The typical skill set or capabilities and the type of Cisco personnel providing remote and/or onsite assistance to Customer under this service are as follows:

Cisco Custom Developer

- Provide technical expertise to assist Customer with the planning and design of future custom development on top of the ESS.
- Provide technical expertise to assist Customer with technical questions / debugging of existing custom development on top of the ESS.
- Provide product expertise around ESS APIs and the different options available for developing on top of and extending the ESS.

Cisco Project Manager

Provide subject matter expertise around project plan development to assist Customer with identifying the necessary steps, dependencies, and timeframes.

Provide advisory support to Customer regarding overall deployment process from a PM perspective (user group coordination, user readiness and timing).

Cisco Engineer

- Provide technical expertise to assist Customer with the planning and design of future ESS deployments and integrations from an engineering perspective.
- Provide technical expertise to assist Customer with questions / debugging of an existing ESS deployment and integrations from an engineering perspective.
- Provide advisory support to Customer regarding overall deployment process from a technical perspective (hardware, software and network).
- Provide advisory support to Customer regarding operations from an engineering perspective (proactive monitoring, backups, etc.).

**Cisco Solution Architect** 

- Provide technical expertise to assist Customer with the planning and design of future ESS deployments and integrations from an architectural perspective.
- Provide technical expertise to assist Customer with questions / debugging of an existing ESS deployment and integrations from an architectural perspective.
- Provide advisory support to Customer regarding planning & program enablement activities including use cases, training, community management, success criteria, etc.
- Provide advisory support to Customer regarding overall deployment process from an architectural perspective (overall solution, technical architecture, integrations, user deployment, etc.).
- Provide advisory support to Customer in regards to ongoing user rollouts, roadmap maintenance, reactively collecting and prioritizing requirements.

### Technical Services for Mobile Wireless (AS-MW-SME)

General advice and guidance to Customer involving: business value justification, enterprise architecture, network management strategy, solution integration, and/or program design and management. The typical skill set or capabilities of the Cisco personnel providing assistance to Customer under this service are as follows:

- Cisco Certified Wireless Network Administrator (CWNA), Cisco Certified Internet Expert (CCIE) 
   <sup>®</sup> or equivalent skills.
- Experienced with wireless and IP network planning, design, implementation, operation and optimization.
- Ability to define and/or analyze networking services requirements.
- Experienced in radio frequency (RF) network design and RF survey, site planning, and wireless security.
- Extensive experience with guest access, location and voice over wireless local area network (WLAN) solutions.
- Knowledgeable with SS7 over IP (IP Transfer Point).
- Skilled in converged wireless (voice and data) network design and optimization.
- · Expertise with Cisco software features and functionality.
- Experienced with configuring Wireline and Wireless routing and switching devices.

• Ability to conduct training and one to one mentoring concerning WLAN technology.

#### Technical Services for Conferencing and Instant Messaging (AS-CSG-SME)

General technical assistance to aid Customer with Cisco WebEx, Cisco Unified MeetingPlace, Cisco Jabber and any other Cisco Conferencing and Instant Messaging related application(s). The typical skill set or capabilities and the type of Cisco personnel providing remote and/or on-site assistance to Customer include one or more of the following resources:

Cisco Project Manager

- Subject matter expertise around Cisco Conferencing and Instant Messaging project plan development to assist Customer with identifying the necessary steps, dependencies, and timeframes.
- Advisory support to Customer regarding overall deployment process from a project management perspective

Cisco Engineer

- Technical expertise to assist Customer with the planning and design of future deployments and integrations from an engineering perspective.
- Technical expertise to assist Customer with questions / debugging of an existing deployment and integrations from an engineering perspective.
- Advisory support to Customer regarding overall deployment process from a technical perspective (Hardware, Software and Network).
- Advisory support to Customer regarding operations from an engineering perspective (pro-active monitoring, backups, etc.).
- Assist in escalation of Product issues. Customers are responsible for opening all Cisco TAC cases.

**Cisco Solution Architect** 

- Provide technical expertise to assist Customer with the planning and design of future deployments and integrations from an architectural perspective.
- Provide technical expertise to assist Customer with questions and debugging of an existing deployment and integrations from an architectural perspective.
- Provide advisory support to Customer regarding planning and program enablement activities including

use cases, training, user management, success criteria, etc.

- Provide advisory support to Customer regarding overall deployment process from an architectural perspective (overall solution, technical architecture, integrations, user deployment, etc.).
- Assist in escalation of Product issues. Customers are responsible for opening all Cisco TAC cases.
- Provide advisory support to Customer in regards to ongoing user rollouts, roadmap maintenance

Technical Services for ACI and Nexus 9K (AS-ACI-SME)

General technical assistance to aid Customers with products and technologies covered under Cisco Data Center Nexus 9000 Platform and ACI Fabric solutions. Typical skill set or expertise of Cisco personnel providing assistance to Customer under this service is as follows:

- End-to-end expertise in Cisco Nexus 9000 and ACI Fabric solutions
- Ability to bridge across multiple technologies and help Customer plan, design, and implement across these products in a data center environment
- One or multiple Cisco Certified Internetworking Expert (CCIE) certifications or equivalent skills
- Ability to consult and recommend on L4/L7 technologies interface with ACI solutions
- Ability to consult and recommend on programming aspects of these solutions
- Assist Customer in architecting their data center network
   environments
- Assist Customer in planning, designing, and implementing with Cisco products in the data center

#### Technical Services for SP Video (AS-SPVID-SME)

General technical assistance to aid Customer with Cisco's Video products, services and technology. The work is to be contiguous and a minimum of 40 hours. The typical skill set or capabilities and the type of Cisco personnel providing assistance to Customer under this service are as follows:

- Cisco Certified Network Associate (CCNA) or equivalent skills
- Understanding of day to day operations of the Digital Broadband Delivery System (DBDS)

- In-depth knowledge concerning two or more of the following topics: STB Client SW; VOD; Edge devices; SDV; DBDS Controller
- Experience in configuring, provisioning, implementation and testing basic feature functionality of Cisco DBDS and Video components
- Assist Customer in planning, designing, and implementing Cisco DBDS components
- Ability to troubleshoot complex critical issues, analyze root cause and provide recommendations
- Technical expertise in assisting Customer with readiness assessment, planning and design of next generation video solution deployments and integration
- Assist Customer with readiness for next generation video services in support of Customer roadmap to integrate Cisco Video products
- Knowledge of integrating new video solutions within existing Customer infrastructure and ability to bridge multi-vendor applications or components into the Cisco solution
- Ability to provide Cisco and industry best practices, conduct knowledge transfer and/or one to one mentoring concerning Cisco Video technology

### Technical Services for Cisco Connected Health (AS-CCH-SME)

General technical assistance to aid Customer with Cisco's Medical Grade Network ("MGN") Architecture. The typical skill set or capabilities of the Cisco personnel providing assistance to Customer under this service is as follows:

- Cisco Certified Internetworking Expert (CCIE) or equivalent skills
- In-depth knowledge of specific Cisco solutions and technologies with proficiency in the following solutions: Medical Grade Network Architecture around Security, Datacenter, Virtualization, Mobility, Routing and Switching and Collaboration.
- Expertise in integrating Cisco advanced solutions with specific healthcare applications.
- Comprehensive understanding of healthcare industry compliance (HIPAA, PCI, FISMA) and Clinical Applications.
- Ability to analyze requirements and specify hardware and software requirements, including management tools.
- Ability to understand, identify and mitigate risks that affect business and compliance requirements.
- Knowledge in migrating from existing products to next generation solutions.

- Experience in developing an in-depth Connected Health / MGN architecture.
- Ability to conduct an assessment of the network's readiness to deploy a new solution, including the existing IT infrastructure, devices, software operations, and management procedures.
- Ability to assist Customer in the planning, design, and implementation of MGN Architecture.
- Proficiency in the development of detailed designs, including network diagrams, system rules and reports, and sample software configurations for protocols, policies, and features.
- Ability to provide Customer with assistance in testing a pilot solution to confirm that expected performance is attained.
- Ability to assist Customer in development of an implementation strategy and plan detailing the requirements for solution deployment, integration, and management.
- Expertise in supporting Customer's custom installation, configuration, testing, tuning, and integration of a Cisco solution.
- Experience in assisting Customer with implementation, configuration, and provisioning of Cisco operations and network management tools.
- Ability to conduct TOI pertaining to Cisco MGN Architecture, Products and management systems.

## Technical Services for Cisco Hosted Collaboration Solution (HCS) (AS-HCS-SME)

General technical assistance to aid Customer with Cisco Hosted Collaboration Solution (HCS). The typical skill set or capabilities of the Cisco personnel providing assistance to Customer under this service is as follows:

- Proficiency in the Cisco Hosted Collaboration solution architecture, including required hardware and software, as well as system configurations.
- In depth knowledge of best practices for planning, design, deployment, testing, and operations of a Hosted Collaboration solution deployment.
- Understanding of Cisco TAC and issues escalation
  procedures to support opening cases
- Planning and design for HCS
- Design review of design documents and other HCS project artifacts
- Assist in Escalation of HCS issues, for TAC cases that Customer has opened
- HCS deployment processes and best practices
- Modification /expansion of the configuration and functionality of an HCS deployment, including the addition of redundancy and inclusion of additional application services
- Informal transfer of information
- Certifying HCS design and deployment through Cisco Accelerate to Quality (A2Q).

- Researching solution options for desired platform configurations and deviations from standard documented HCS configurations
- Supporting technical questions from Customer arising during deployment, upgrades, or operations

## Advanced Services for IT Service Management (AS-ITSM-SME)

A Cisco IT Service Management (ITSM) SME consultant will be provided to supplement Customer personnel and to perform tasks, which may include:

- Provides targeted consulting support as directed by Customer during Customer's normal business hours. After hours support available upon mutual agreement within scope of engagement.
- Consult with Customer staff to develop an understanding of Customer's ITSM process and tools design and implementation, with a focus on concerns in focus areas such as change management, release & deployment management, transition planning & support, service & validation testing, knowledge management, incident management, problem management and continual service improvement.
- Participate in meetings and periodic conference calls to review Customer's ITSM status, planning and the IT Services being provided.
- Monitor a Customer-specific Cisco email alias to facilitate communication with Cisco designated Services team.
- Identify deliverables necessary for successful service transition to Operations.
- Participate in extended team status calls and planning meetings.
- Participate in and/or facilitate Agile Scrum activities.
- Consultant may utilize Customer provided data, scripts or internal process and tools documentation to assist in providing consulting support.

The typical skill set and role of the Consultant provided by Cisco to provide ITSM expertise may include:

- Plan, design and/or lead in the development of ITSM processes identified above.
- Facilitate standardization and adoption of ITSM processes within Customer Operations organization.
- Serve as an advisor role to Customer in regards to operations excellence and/or operations transformation.
- Provide Cisco and industry best practices to Customer regarding infrastructure and or IT service operations, including comparison against other industry operations maturity benchmarks.
- Articulate "as a Service" industry practices.
- Understanding of the Networking, Data Center and Cloud technology stack.
- Understanding of multiple ITSM and development methodologies which may include eTOM, COBIT, TOGAF and DevOps as well as ITIL.

### Technical Services for Mobility Experience and Insights (AS-IA-SME)

General technical assistance to aid Customer with intelligent guest Wi-Fi onboarding, customized mobility insights, or cloudbased Connected Mobile Experiences (CMX) products, service and technology. The typical skill set or capabilities of the Cisco personnel providing assistance to Customer under this service is as follows:

- Cisco Certified Network Administrator (CCNA), Cisco Certified Internetwork Expert (CCIE) 
   <sup>®</sup> or equivalent skills.
- Experienced with solution-level planning, design, implementation, operation and optimization.
- Experienced with one or more of the following:
  - Intelligent guest Wi-Fi device onboarding via Cisco Enterprise Mobility Services Platform (EMSP)
  - Customized mobility insights focused KPIs relevant to line-of-business or IT
  - Cloud-based Cisco Connected Mobile Experiences (CMX) design and deployment.
- Ability to conduct relevant knowledge transfer and one-to-one mentoring.
- Expertise with Cisco software features and functionality.
- Expertise with mobile application and enterprise system integration.

### Assumptions

Customer acknowledges and agrees that:

- The Service Description defines exclusively the full scope of the Services that Cisco shall provide to Customer. This Service Description shall not apply to any Product or maintenance purchase(s).
- Cisco is not providing any deliverables. The Services shall be comprised of general technical assistance and shall be performed under Customer's overall direction and management. Customer is solely responsible for the determination and successful implementation of its Network, design, business or other requirements.
- Services may be performed at Cisco's discretion by Cisco or individuals, contractors, agents, suppliers or organizations employed by or hired under contract with Cisco.