

SERVICE DESCRIPTION: CISCO SD-ACCESS ADVISE AND IMPLEMENT QUICK START ASF-EN1-G-SDA-QS

Services Summary

Software Defined ("SD") Access Advise and Implement – Quick Start assists with implementation of the Cisco DNA SD-Access solution.

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 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

- Solution Requirements Development
- Implementation Execution
- As-Built Document
- Testing Execution
- Migration Support
- Knowledge Transfer

Location of Services

On-Site & Remote

SERVICE ASSUMPTIONS AND EXCLUSIONS

Services are limited to the following pre-defined scope:

- Up to Eight (8) Fabric-enabled switches
- One (1) Cisco DNA Center Appliance ("DNAC")
- One (1) Identity Services Engine ("ISE")
- One (1) Wireless LAN Controller ("WLC")
- Up to Ten (10) Wireless Access Points ("AP")
- Up to two (2) virtual networks
- Up to four (4) IP address pools
- Up to two (2) VNs (enclaves macro-segmentation)
- Up to two (2) groups/SGTs per VN (micro-segmentation)
- Up to five (5) access control policies per group
- Up to two (2) Wireless LANs / Service Set Identifiers ("SSID"s)
- Support migration of up to fifty (50) users or devices onto the SD-Access fabricDeployment is to be completed either (1) in a lab environment, or (2) on a Customer network segment with limited and defined connectivity to the rest of the existing production network.
- SD-Access Campus Fabric is to built in parallel to existing network infrastructure.
- Users will be migrated to new IP subnets (existing ip subnet can be used but entire subnet will be moved to SD-Access fabric)
- User migration does not include changes to existing access lists (ACLS) or firewall (FW) policies
- User migration does not include converting users/devices to use 802.1x authentication
- If the Customer is not providing network services, the Customer will need to provide (or acquire) one (1) Unified Computing System ("UCS") with vSphere 6 standard licensing onto which Cisco will install virtual machines to provide isolated network services.
- Services support the following target Use Cases:
 - SD-Access Campus Fabric Automation for Wired and Wireless LAN; Design profiles; Network provisioning (underlay & overlay); Policy administration.
 - Network Security / Segmentation; Virtual Networks ("VNID"); Security Group Tagging ("SGT"); Policy administration and enforcement.
 - O Host Onboarding; Assign IP pools; Dynamic device authentication (802.1x, MAB); Device static pool assignment.

GENERAL PROJECT MANAGEMENT

Cisco Responsibilities

- Provide a list of designated Cisco personnel roles and responsibilities.
- Participate in scheduled project review meetings or conference calls, if required.
- Provide the identity of Cisco personnel requiring access to Customer premises prior to the scheduled date.
- Provide a Project Management Plan ("PMP"). The PMP is a

Customer Responsibilities

- Designate a single point of contact to act as the primary technical interface to the designated Cisco resource.
- Make available key Customer personnel (such as: architecture design and planning, network engineering, network operations staff and site contacts) are available to participate during the course of the Services (to provide information, participate in review sessions and to make the site(s) available for Services).

baseline document from which the Cisco Project Manager ("PM") can manage deliverables, assess progress, and manage change management issues and any ongoing questions.

- Provide documented Customer requirements (business and technical) and high-level network architecture design specifications.
- Provide documented information on Customer's existing network infrastructure design including such as: features and services, route plans, addressing schema, call/data flow, dial plans, security policies, network management and operational processes, respectively.
- Respond within two (2) Business Days, unless otherwise agreed by the parties, to Cisco's request for documentation or information.
- Coordinate with any Customer third parties, such as the country carrier/Telco activities.
- If applicable, provide an authorized signature for delivery confirmation of Cisco Products at the delivery location.
- Provide test equipment.
- Customer is solely responsible for the determination of its requirements and Customer's decision to implement design, business or other recommendations provided by Cisco.

SOLUTION REQUIREMENTS DEVELOPMENT

Cisco Responsibilities

- Provide Customer with a prequisites questionnaire to capture use case and technical data to aid in the design and configuration of the solution.
- Conduct interviews (the number and frequency of such interviews to be at Cisco's discretion) with key members of Customer's organization, and/or a Technology Workshop.

Customer Responsibilities

- Provide Cisco with input for each technology discipline by: a)
 participating in the requirements workshop; b) participating in
 interviews; and/or c) returning the completed prerequisites
 questionnaire.
- Provide relevant documentation related to the current architectural design(s).

IMPLEMENTATION EXECUTION

Cisco Responsibilities

Perform SD-Access installation and configuration for the following components:

- Identify Services Engine (ISE) (if not using customer instance): a) Configure ISE bootstrapping; b) Configure system administrators and accounts; c) Configure certificates; d) Configure ISE deployment; e) Configure network resources; f) Configure users and identity stores; g) Authentication configuration; h) Authorization configuration; i) Guest configuration; j) integrate with up to one (1) Active Directory domain.
- Identify Services Engine (ISE) (if using Customer instance): a)
 Review and verify ISE minimum requirements b) provide notification of identified deficiencies.
- Cisco DNA Center: a) Set up and install the latest version of Cisco DNA-Center on Customer's Cisco DNA Centerappliance; b) Integrate Cisco DNA Center with ISE instance being leveraged for this infrastructure; c) Discover and inventory the infrastructure as defined in Section 3.3.
- SD-Access Fabric Provisioning (Underlay): a) Manual Setup, including: i) Cisco DNA Center Discovery, Inventory & Topology App, ii) If not using automated underlay, create and deploy manual underlay templates; b) Automated Setup Cisco DNA Center Design App Switching Profile.
- SD-Access Fabric Provisioning (Overlay): a) Assign devices to site;
 b) Create Fabric domain(s); c) Add devices to a Fabric domain i)

Customer Responsibilities

- Provide requirements for Customer's change management approach and strategy, and secure change request approvals in accordance with Customer's internal processes five (5) Business Days prior to commencement of the Implementation Execution Services.
- Ensure completion of racking/stacking, cabling of the hardware, and powering up the Cisco DNA Center, ISE, and SD-Access capable platforms within ten (10) Business Days of receipt of product.
- Provide underlying RF design and access point (AP) placement for required coverage area to be covered by Wireless LAN.
- Manage and execute any necessary activities for utilizing existing network infrastructure components.If utilizing existing inproduction Identity Services Engine (ISE), ensure that ISE meets minimum hardware and software requirements as published in the SD-Access ordering guide and remediate as necessary.
- Provide all necessary hardware and software licenses.
- Ensure availability of network services (DNS, DHCP, Active Directory) if solution will leverage these customer-provided services.
- If leveraging Customer-provided DNS network service, customer is responsible to configure the service to enable infrastructure and management platform name lookup and connectivity.
- If leveraging Customer-provided DHCP network service, customer is responsible to configure the service to serve correct IP

- Set up Control Plane, ii) Set up Border Nodes (internal and/or external).
- SD-Access Address Pools and Host Onboarding: a) Assign IP pools (wired and wireless); b) Dynamic device authentication – i) 802.1X, MAB; c) Static device pool assignment.
- SD-Access Policy Administration: a) Create Virtual Network(s); b)
 Group creation and/or import from ISE; c) Group policy definition.
- SD-Access Fabric Enabled Wireless (FEW): a) IP Pool assignment for APs and clients; b) Add wireless controller to Fabric; c) Configure campus Fabric for wireless integration; d) Configure up to two (2) wireless SSIDs for Fabric (including Guest SSID); e) Network device configurations; and f) Guest SSID is provided by ISE portal.
- Addresses to the infrastructure.
- If leveraging Customer-provided Active Directory (AD) service, ensure that the prerequisites described in the <u>Active Directory</u> <u>Integration with Cisco ISE 2.x Configuration Guide</u> are met.
- If leveraging Customer-provided Active Directory (AD) service, identify the AD groups that will be used for each policy that will be applied.
- Ensure Cisco has access to Customer personnel and/or Customer site (including physical/remote access to solution, devices, and facilities) as necessary for Cisco to perform the Implementation Execution Services.

MIGRATION SUPPORT

Cisco Responsibilities

- Validate user profiles for those users/devices to be migrated
- Validate current user/device configurations.
- Plan user/device migration from existing to SD-Access infrastrcture.
- Execute physical and software configuration changes to infrastructure and policies to enable migration from existing environment to the SD-Access fabric.
- Configure WAN access on the SD-Access Border/Control Node to enable migration from existing environment to the SDA fabric.
- Configure up to twenty (20) access policies using Cisco DNA Center for SD-Access Policy Administration.
- Test connectivity and access of user profiles.
- Assist in troubleshooting of migrated user connectivity and access.

Customer Responsibilities

- Assign single point of contact to manage logistics of change windows and communications to users.
- Customer will make necessary changes to existing core switches required to maintain east-west network traffic flow.
- Customer will make the required changes to existing WAN routers.
- Assign single point of contact to receive and assist Cisco in troubleshooting migrated user connectivity issues.
- Customer will provide the production policies (up to twenty) that will then be implemented by Cisco using Cisco DNA Center.
- Policy definitions are to be granular and specific between two groups (SGT) (e.g. one SGT can or cannot talk to another SGT on specific ports). Groups are to be based on Dot1x, Mac Address Bypass (MAB) authentication based on MAC address or static port.
- If necessary, Customer will convert users/devices to use 802.1x authentication.

AS-BUILT DOCUMENT DEVELOPMENT

Cisco Responsibilities

- Draft the As-Built Document which includes information necessary to carry out the implementation at the Customer location and to verify basic operation and Ready for Service configuration. "Ready for Service" means that solution is functioning as designed.
- Provide the As-Built Document for review and approval in accordance with Exhibit 2, Section 3 "Document Deliverable Review and Approval Process."

Customer Responsibilities

- Review and approve the As-Built Document in accordance with Exhibit 2, Section 3 "Document Deliverable Review and Approval Process."
- Provide signoff for As-Built Document Development Services in accordance with Exhibit 2, Section 4 "Completion."

TESTING EXECUTION

Cisco Responsibilities

- Perform testing to confirm operation as per the testing described in the As-Built Document.
- Demonstrate Use Case(s) through test execution to key Customer stakeholders and project sponsors.

Customer Responsibilities

- Designate and ensure key Customer networking contacts participate in the testing and Use Case demonstration.
- Work with Cisco to schedule the use of Customer's lab test resources; adhering to the selected dates and times. If Customer must change test scheduling for any reason, then Change Management Procedures will apply.
- Identify, and ensure availability of Customer stakeholders

- responsible for evaluating the deployment testing.
- Provide advance notice of at least ten (10) business days in the event that Customer is unable to participate in testing. If Customer must change test scheduling for any reason, then Change Management Procedures may apply.
- Ensure that key Customer stakeholders and project sponsors attend Cisco's Use Case demonstration.

DESIGN KNOWLEDGE TRANSFER

Cisco Responsibilities

Cisco shall provide transfer of information to Customer regarding the deliverables developed.

- Provide one (1) formal knowledge transfer session either On Site
 or Remote for one (1) Business Days, including informal knowledge
 transfer throughout the project on topics related to the proposed
 network design, configuration, and management concerns.
- Provide information to Customer regarding any course prerequisites for all Customer personnel nominated to attend the Knowledge Transfer Session.
- Cisco will determine an appropriate format and delivery method of the Knowledge Transfer Session.
- Agree with Customer on location and commencement date for the Knowledge Transfer Session.

Customer Responsibilities

- Agree with Cisco on the actual location, the customer participants and the commencement date for the Knowledge Transfer Session.
- Ensure that personnel attending the Knowledge Transfer Session meet any course pre-requisites notified by Cisco to Customer.

GENERAL CUSTOMER RESPONSIBILITIES

- Customer will provide relevant information to Cisco that is up-to-date and valid for the Customer's current environment. Customer acknowledges that Cisco will rely on such information to provide the Services.
- Customer acknowledges that the completion of Services is dependent upon Customer meeting its responsibilities as indicated herein.
- Customer will ensure Customer's personnel are available to participate during the course of the Services to provide information and to participate in scheduled information gathering sessions, interviews, meetings and conference calls.
- Customer must provide the resources and personnel described in the Customer Responsibilities sections of this Service Description to enable Cisco to (a) perform the Services within a period not to exceed three (3) weeks, which, at the discretion of Cisco, may not be consecutive weeks, and (b) complete the Services within (90) calendar days after Cisco receives the Purchase Order for the Services.

GENERAL

General Assumptions and Exclusions:

- SD-Access feature configuration is limited to those features necessary to provide the capabilities described above. Configuration of other features or extentions are out of scope.
- No Cisco Product, including test equipment, is being provided, sold or licensed under this contract.
- All Document Deliverables will be provided to Customer in electronic format and in the English language. If Document Deliverables are
 required to be provided in another language such translation costs will be Customer's responsibility. In the event of a conflict between any
 English and any non-English Document Deliverable, the English version shall prevail.
- If applicable, acceptance tests conducted as part of the Services apply only to those Services and do not constitute acceptance or rejection of any Products purchased or licensed separately by Customer.
 - Cisco's recommendations are based upon Customer information provided to Cisco at the time of Services and Cisco shall not be liable for the accuracy or completeness of Customer information contained in Cisco's recommendations.

Invoicing: Services will be invoiced upon completion of the Services.

Completion of Services: Cisco will provide written notification upon completion of the Services to Customer. The Customer shall within five (5) Business Days of receipt of such notification provide written acknowledgement of Cisco's completion of the Services. Customer's failure to acknowledge completion of the Services or to provide reasons for rejection of the Services within the five (5) Business Day period signifies Customer's acceptance of completion of the Services in accordance with this Service Description.

Incorporation by Reference: The **Glossary of Terms** and **List of Services Not Covered** posted at <u>www.cisco.com/go/servicedescriptions/</u> 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/.