

Service Description: Advanced Services – Fixed Price

Cisco ONE WAN Foundation Design Services (High) (ASF-C1-WAN-F-H)

This document describes Advanced Services Fixed Price: Cisco ONE WAN Foundation Design Services (High).

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. All capitalized terms in this description have the meaning ascribed to them in the Glossary of Terms.

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Cisco ONE WAN Foundation Design Services (High)

Service Summary

The Cisco ONE WAN Foundation Design Services (High) provides planning and design for the Intelligent WAN (iWAN) network and next generation branch. These Services provide Customer with network architecture discovery, requirements identification, high level and detailed design development, and validation and test plan development to assist in designing next generation Wide Area Network (WAN) solution with advanced application, branch and security features.

The service shall cover the following areas:

- WAN profiling to discover top application usage, identify critical application SLAs and their flow patterns.
- Segregation of business critical apps (CRM, ERP, Citrix, etc)
- Incorporation of existing Voice, Video, Data (Wireless and Wired) requirements for the branch
- High availability / resiliency
- WaaS/Akamai (Content Caching)
- Rationalize WAN transport / existing platforms
- Direct internet access (with or without CWS)
- Firewall, Web Filter, IPS
- Installation and configuration of Cisco Prime Infrastructure (PI)
- Support for UCS-E Series in the branch
 - Host applications locally either bare metal or virtualized
 - Dedicated blade management

Deliverables

- Customer Requirements Document
- App Visibility Analysis and Recommendations Document
- · High Level Design Document,
- Detailed Design Document
- Migration Plan Document
- Validation and Test Plan Document

Location of Services

Services are delivered on-site and remotely to Customer.

Project Management

Cisco Responsibilities

- Provide Customer with a list of designated Cisco personnel roles.
- Define the communication flow with the project sponsor and key stakeholders and document it in the Project Plan.
- Work with Customer to identify and document dependencies, risks and issues associated with the successful completion of the project.
- Provide the following: a). Kick-off Meeting; b).
 Schedule Resources; and c). Project Management Plan.
- Manage the project to the agreed upon Project Management Plan.
- Ensure completion of the deliverable documentation set out in Deliverables.
- Participate in scheduled project review meetings or conference calls, if required.
- Deliver a weekly project status report to the Customer.
- Provide a handover, follow on actions, lessons learned, and exception reports (if necessary) upon project completion.

Customer Responsibilities

- Provide the Cisco PM with a list of designated Customer personnel roles and responsibilities.
- Work with the Cisco Project Manager to ensure the Customer's project sponsor, key stakeholders and all project team members receive project communications and are included in regularly scheduled communications sessions.
- Work with Cisco to schedule the kick off meeting, and communicate the meeting schedule to the Customeridentified stakeholders.
- Review the project schedule, objectives, Services, Deliverables and roles and responsibilities with Cisco.
- Schedule the necessary facilities for On Site meetings (such as: conference rooms, projectors and conference bridges).
- Participate in regularly scheduled project review meetings or conference calls.
- Work with Cisco to identify specific objectives and critical success factors.
- Confirm execution of any third party contract and schedule communications for activities, deliverables or schedules as required for Cisco's completion of the services.
- Notify Cisco of any scheduling changes related to this project at least ten (10) Business Days of the scheduled activity.

App Visibility Analysis and Recommendations Document

Cisco Responsibilities

- Cisco shall provide configuration guidance for the AVC devices.
- Cisco shall access the devices to collect the AVC data using either telnet/SSH or SNMP/Netflow and may use an SNMP MIB walker tool or Netflow Collector onsite to gather detailed data if required.
- Cisco will identify and profile the applications in use on a customer's network, including
 - Identify up to top 5 (five) maximum applications and the network paths
 - Identify the end to end performance requirements of the critical business applications
 - Flag potential security vulnerabilities, acceptable use, or EULA (End User License Agreement) violations
 - Recommend QoS Optimizations and architectural changes based on application analysis
 - Develop Performance Routing Policies that would be deployed in the IWAN design
- Cisco shall analyze the collected data and provide the App Visibility Analysis and Recommendations Document documentation to the customer.

Customer Responsibilities

- Customer shall ensure that the target AVC devices have the right hardware and software to support both NBAR2 and Flexible Netflow features to allow the configuration of these features for the extraction of application flow visibility data.
- The service is primarily focused on Cisco router platforms that support AVC such as ISR G2, ISR 4K and ASR1K. Customer understands that particular hardware platforms require processing power when these features are enabled and agree that this is acceptable extra CPU load for the supported devices.
- Customer shall provide access to the devices via either telnet/SSH for manual data extraction or via SNMP and/or netflow collection for more detailed analysis of the AVC data.
- Customer understands the extra traffic generated by SNMP and Netflow while gathering the AVC data.
- Customer shall be responsible for scheduling and making configuration changes to the AVC target devices as identified for the engagement.
- Customer will provide network access for any suitable SNMP or Netflow collection device for the duration of the engagement.

Customer Requirements Document

Cisco Responsibilities

 Conduct some or all of the following to gather and review customer network architecture requirements for each technology discipline: a). one (1) requirements workshop; b). conduct interviews with

- Customer key personnel; and c). provide a requirements questionnaire for Customer to complete.
- Gather from Customer and review the following information: a). business, technical and operational requirements; b). future technology plans; and c). network design/topology documents.
- Create the Customer Requirements Document (CRD).
- Review with Customer the CRD for comments and approval before it is formally completed and released.

Customer Responsibilities

- Provide input for each technology discipline to Cisco through some/all of the following methods: a). one (1) requirements workshop; b). interviews of key personnel conducted with Cisco; and c). completing requirements questionnaire provided by Cisco.
- Provide and review with Cisco the following information: a). business, technical and operational requirements; b). future technology plans; and c). network design/topology documents.
- Review with Cisco the CRD, providing comments and approval before it is formally completed and released.

High Level Design Document

Cisco Responsibilities

- Review the CRD and re-validate the requirements with Customer.
- Review Customers existing network architecture strategy and designs, and planned designs (if exist) including some or all of the following: a). core network infrastructure design; b) security infrastructure design.
- Create and provide the High Level Design Document which shall be limited to the following: a) new technical objectives and requirements fulfilment; b). definition of design recommendations; c). network topology; d). switching protocols; e). routed and routing protocols; f). high availability platform features/protocols; g). quality of service; h). security infrastructure; i). required data rates, target throughput, desired availability.
- Review the first draft High Level Design with Customer for comment and approval.
- Update the High Level Design in accordance with Customer comments and provide for final review before it is formally completed and released.
- Provide final High Level Design incorporating feedback from Customer following their final review.
- Present summary of High Level Design Document to the Customer key stakeholders and project sponsor.
- The scope of the service design will be limited to the technologies specified within the Cisco IWAN Deployment
 Guide http://www.cisco.com/c/dam/en/us/solutions/collateral/enterprise-networks/intelligent-wan/guide-c07-731952.pdf

Customer Responsibilities

- Designate and ensure key Customer networking contacts are available for on-going information gathering and feedback with Cisco.
- Review CRD with Cisco to re-validate business and technical requirements.
- Provide information for some or all of the following, as requested: a). existing and planned core network infrastructure design; b). existing and planned data center infrastructure design; c). existing and planned security infrastructure design; d). existing and planned branch infrastructure design; e). existing and planned host/endpoint design; f). existing and planned network management design; and g). future growth requirements and network build out time frames.
- Review the first draft High Level Design with Cisco and providing comments within five (5) Business Days immediately after review with Cisco.
- Review the updated High Level Design within five (5)
 Business Days immediately after review with Cisco,
 before it is formally completed and released.
- The Customer must sign-off on the High Level Design within five (5) Business Days upon receipt of the final High Level Design, giving their approval to the proposed design, before the project can proceed.
- Ensure that key Customer stakeholders and project sponsors are available to attend

Migration Plan Document

Cisco Responsibilities

Provide migration-consulting services that support network refresh and product migration activities:

- Develop a requisite list of high level events, phased changes and activities in order to introduce new hardware and protocols into the network.
- Identify network dependencies and impact and provide risk mitigation steps for the migration.
- Align plan to organizational implementation policies and change management goals.
- Gather information from Customer for organizational change management processes and recurring time periods that prohibit implementation activities.
- Create method of procedure for cut-over and post cutover connectivity planning and testing.
- Create master configuration templates for representative device or site types.
- Provide reusable templates and standardized methods of procedures for maximum 10 representative sites.
- Site specific configurations based on master template for up to 5 hardware platform types.
- Create Site specific test procedures for the networkready-for-use (NRFU)

Customer Responsibilities

- Designate and ensure key Customer networking contacts are available for on-going information gathering and feedback with Cisco.
- Review Migration Plan Document with Cisco to validate the documented approach and steps.
- Provide any additional detailed information pertaining to the legacy/brownfield environment that Cisco may need in the process of developing the migration plan.

Detailed Design Document

Cisco Responsibilities

- Gather information from Customer containing Hardware, Software levels, topologies, and as-built configurations.
- Review the High Level Design document and Migration Plan Document as inputs to be used in the detailed design.
- Create Detailed Design Document including detailed design specifications, using information from the High Level Design and any additional input provided by Customer. The Detailed Design Document may include some or all of the following: a). network logical and physical topology; b). Internet Protocol (IP) addressing scheme; c). switching and routing; d). Quality of Services; e). Multicast; f). Platform high availability protocols/features; g). infrastructure: h). hardware platform recommendations; i). Cisco platform configuration templates for the aforementioned protocols and features; and j). Software release recommendations based on features and/or functionality.
- Review with Customer the Detailed Design Document for comment and approval before it is formally completed and released.
- Present summary of the Detailed Design Document to the Customer key stakeholders and project sponsor.

Customer Responsibilities

- Provide any additional detailed information as requested by Cisco, including: a). Hardware; b).
 Software versions; c). topologies; and d). as-built configurations.
- Work with Cisco to develop detailed design templates providing information and feedback.
- Review with Cisco the Detailed Design Document providing comment and approval before it is formally completed and released.
- Ensure that key Customer stakeholders and project sponsors are available to attend Cisco presentation of the Detailed Design Document.

Validation and Test Plan Document

Cisco Responsibilities

Cisco will consult with Customer via a series of meetings to develop a thorough understanding of Customer's solution testing goals and requirements, and generate a proposed Test Plan. Once agreed, Cisco will execute the tests documented in the Test Plan and report findings to Customer. Validation and Testing Support may include, among other information, the following:

- Review of Customer's testing goals and business objectives for the solution;
- Analysis of requirements such as software strategy, platforms, topology, protocols, and configurations
- Test Plan development or review/refine existing test plan;
- · Schedule facilities, equipment and resources;
- Test Set Up, based on the site -
 - At Cisco Site: Perform the Physical and Logical Lab Setup
 - At Customer Site: Perform the Logical Lab setup only
- Test Execution Execute the Test Plan; and,
- Test Results Analysis Document the results in a Test Report.
- Validation-Test Cycle and Review Standard Support is 8 weeks.
- Validation and Testing Support is only available to certain geographic locations and will be specified in the Quote for Services.
- · Validation of Cisco Prime Infrastructure off-site:
 - Provide the pre-deployment questionnaire to Customer.
 - Review the Customer response to the predeployment questionnaire for any applicable follow-up questions or clarifications.
 - Install one (1) instance of Prime Infrastructure on a single Cisco recommended hardware running ESXi or as Appliance
 - Perform the following configuration tasks :
 - Configure up to 2 devices for Netflow Collection
 - Configure up to 3 provisioning templates
 - o Configure Users & Roles (up to 5 users)
 - Logical Infrastructure Segmentation (up to 1 Virtual Domains, 4 Sites, 4 Device Groups)
 - Email Notifications Setup
 - Data Retention Configuration
 - Device Configuration Archiving
 - Software Image Repository Configuration
 - Provide for Customer stakeholders a transfer of information (TOI) session for up to two (2) hours to include information on device discovery, application usage, management and troubleshooting tips.
 - Provide the TOI Presentation slide deck materials to Customer.

Customer Responsibilities

- If Test setup is performed at
 - \circ Cisco Site: Customer to provide third party application data, tools.

- Customer Site: Customer to perform physical lab setup (racking, cabling etc).
- · Validation of Cisco Prime Infrastructure off-site:
 - Complete the pre-deployment questionnaire and choose the deployment scenario.
 - Provide all information as requested by Cisco to be documented in the pre-deployment questionnaire within five (5) Business Days following receipt of the pre-deployment questionnaire.
 - Designate key contacts and authorized personnel including network architects, system/application administrators and IT engineers who shall be available for on-going information gathering and feedback during the Services.
 - Provide full details of:
 - Current network topology, including access, distribution, and core layers, types of switches and routers;
 - Internet Protocol (IP) addressing and subnetting for each device planned to be managed along with SNMP Read community strings and device credentials; features and services that have been enabled on the network device.
- Rack, stack, power-up, and install operating system, applying any operating system patches and connecting the server to the network.
- If PI is installed on a virtual machine, Customer is responsible for creating the virtual machine as per the specification, installing guest operating system, applying any applicable operating system patches and connecting it to the network.
- Open applicable firewall ports to access PI or DCNM web server and PI application to connect to the devices.
- Configure the devices to allow SNMP communication from/to the PI application.
- Designate up to five (5) Customer stakeholders to participate in the TOI session.
- Work with Cisco to schedule the TOI session, scheduling the necessary facilities for the presentation, including conference rooms, projectors, and network connectivity.

General Customer Responsibilities

- All information (such as but not limited to: designs, topologies, requirements) provided by Customer is assumed to be up-to-date and valid for the Customer's current environment. Cisco Services are based upon information provided to Cisco by Customer at the time of the Services.
- Customer acknowledges that the completion of Services is dependent upon Customer meeting its responsibilities as indicated herein.

- Identify Customer's personnel and define their roles in the participation of the Services. Such personnel may include but is not limited to: architecture design and planning engineers, and network engineers.
- 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.
- Support services provided by Cisco comprise technical advice, assistance and guidance only.
- Customer expressly understands and agrees that the Services shall take place and complete within 210 calendar days from issuing a Purchase Order to Cisco for the Services herein.

Out of scope

- Customer expressly understands that the following are out of scope for the installation and configuration of Prime Infrastructure (PI).
 - Routing and Switching and other network or security changes are excluded from the scope
 - Configuration of the network devices is excluded from the scope
 - Any integration with any 3rd party systems is out of scope
 - Management of any devices not supported by PI or DCNM is out of scope
 - VMWare infrastructure design and implementation is not part of the scope
 - Netflow design is not part of the scope
 - NAM Design and Implementation is not in scope
 - HA/Redundancy is not in scope
 - Any customizations

Invoicing and Completion

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.