CISCO BUSINESS CRITICAL SERVICES

TRANSFORMATION THEME

This document contains the detailed description of capabilities and Deliverables aligned to Cisco Business Critical Services Transformation theme.

Note: This document must be read in conjunction with the [Cisco Business Critical Services General Terms](#).

CISCO BUSINESS CRITICAL SERVICES GENERAL TERMS

https://www.cisco.com/c/dam/en_us/about/doing_business/legal/service_descriptions/docs/Cisco_Business_Critical_Services_General_Terms.pdf

Detailed descriptions of capabilities and Deliverables aligned to all Cisco Business Critical Services themes are located at:

CISCO BUSINESS CRITICAL SERVICES FOUNDATION THEME

https://www.cisco.com/c/dam/en_us/about/doing_business/legal/service_descriptions/docs/Cisco_Business_Critical_Services_Foundation_Theme.pdf

CISCO BUSINESS CRITICAL SERVICES ACCELERATION THEME

https://www.cisco.com/c/dam/en_us/about/doing_business/legal/service_descriptions/docs/Cisco_Business_Critical_Services_Acceleration_Theme.pdf

CISCO BUSINESS CRITICAL SERVICES TRANSFORMATION THEME

https://www.cisco.com/c/dam/en_us/about/doing_business/legal/service_descriptions/docs/Cisco_Business_Critical_Services_Transformation_Theme.pdf

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TRANSFORMATION THEME OVERVIEW

The **Transformation theme** of Business Critical Services provides capabilities and Deliverables in support of strategy, architecture alignment, design, deployment strategy, and adoption strategy for scaling of Cisco infrastructure and application environment. Deliverables described in Cisco Business Critical Services Transformation theme are aligned by capabilities, and supported technologies, solutions or architectures.

Note: The diagram below is for illustrative purposes only.

CISCO BUSINESS CRITICAL SERVICES

THEME

TRANSFORMATION

CAPABILITIES

ARCHITECTURE STRATEGY AND PLANNING

Architecture Definition

DELIVERABLES

ARCHITECTURE STRATEGY ALIGNMENT

SUPPORTED

TECHNOLOGIES
- Routing and Switching
- Wireless Networking
- Computing Systems
- Storage Area Networking
- Data Center Switching

SOLUTIONS
- Software Defined WAN
  - Routing and Switching

ARCHITECTURE
- Collaboration
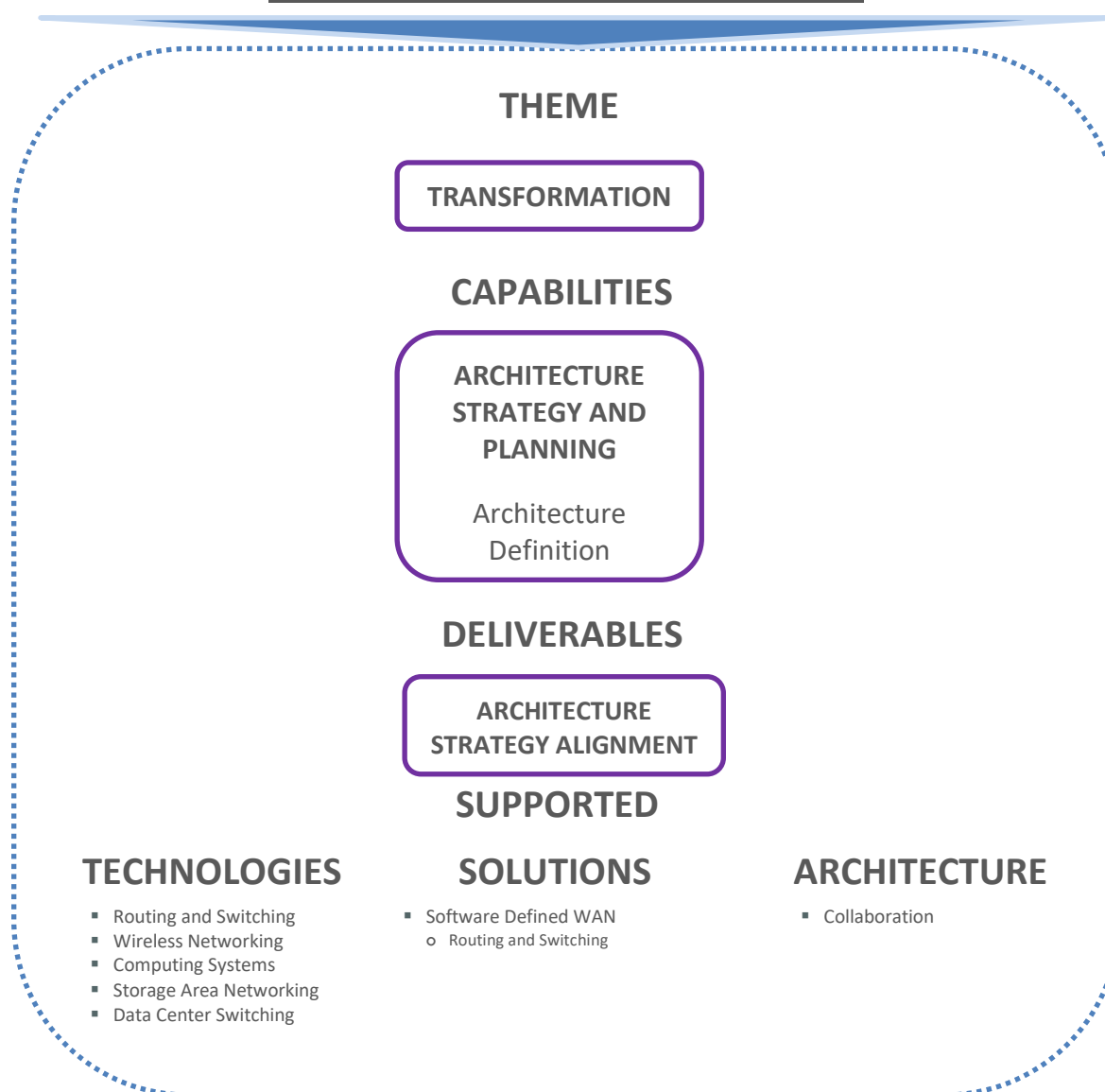
TRANSFORMATION THEME CAPABILITIES AND DELIVERABLES

Transformation capabilities and Deliverables assist organizations in transforming traditional infrastructure Solutions, methodologies, and capabilities to drive business innovation. Available Remote and On Site, expert proof-of-concept to transformation management, Services help define, assess, plan, deploy, and adopt strategies based on unique Customer challenges.

1—ARCHITECTURE STRATEGY AND PLANNING

Architecture Strategy and Planning helps organizations productively develop a strategy or plan to adopt and support innovative Solutions while minimizing and mitigating business risk. Cisco facilitates a methodical approach for understanding how to define, consolidate, and align strategy or plan with line-of-business drivers to help achieve business goals.

SECTION NAVIGATION

Transformation Theme – Architecture Strategy and Planning includes the following Service components, each bookmarked for easier navigation:

- 1.1 – Architecture Definition
    - 1.1.1a – Strategy and Analysis – Routing and Switching
    - 1.1.1b – Strategy and Analysis – Application Centric Infrastructure
    - 1.1.2 – Architecture Strategy Alignment
    - 1.1.3 – Cloud Security Strategy
    - 1.1.4 – Mobile Security Strategy
    - 1.1.5 – Security Program Assessment and Strategy Roadmap
    - 1.1.6 – Security Segmentation Architecture Design
- 1.2 – Readiness Planning
    - 1.2.1 – Architecture Readiness Assessment
    - 1.2.2 – Application Security Architecture Assessment
    - 1.2.3 – Network Security Architecture Assessment
    - 1.2.4 – Security Software Development Lifecycle Review
    - 1.2.5 – Site Readiness Assessment

1.1 – Architecture Definition

Architecture Definition helps Customer effectively support future business requirements by creating technology adoption roadmaps for transforming architecture and operations management. Cisco Solution expertise facilitates architecture analysis and alignment to support Customer business goals and requirements.

1.1.1a – Strategy and Analysis—Routing and Switching

Strategy and Analysis helps define strategy for a Cisco technology solution by identifying Customer business and technical drivers, defining and aligning future infrastructure state vision to business objectives, capturing associated costs and dependencies to transition infrastructure from current state to future state, and identifying business and technical key stakeholders and decision makers. It provides building blocks for business and technical use cases aligned with the Architecture Strategy.

Technology Supported

- Routing and Switching

Solution Supported

- Software Defined WAN
  - Routing and Switching

Cisco Responsibilities

- Conduct an architecture strategy session with Customer, which may include one or more of the following:
  - Analyze current infrastructure strategy state and capabilities.
  - Define future strategy state.
  - Identify use cases applicable to future service and architecture vision
  - Use-case dependency and alignment mapping.
  - Gap analysis and business alignment.

Deliverable

- Strategy and Analysis Report

1.1.1b – Strategy and Analysis—Application Centric Infrastructure

Application Centric Infrastructure (ACI) Strategy and Analysis assists Customer when looking to expand or evolve their current ACI infrastructure to adapt to growing business and technology needs.

Technologies Supported

- Application Centric Infrastructure

Cisco Responsibilities

- Future Data Center Network requirements for expansion and evolution to the ACI architecture that enables a policy based Network Services model.
- Analyze compute, storage, application, and shared services inventory, performance data, and Operating System (OS) data to determine next steps for migration to an ACI infrastructure.

Deliverable

- ACI Strategy and Analysis Report

1.1.2 – ARCHITECTURE STRATEGY ALIGNMENT

Architecture Strategy Alignment helps understand how to align and correlate infrastructure and application strategy while addressing line-of-business drivers. The strategy process and Service methodology are highly interactive, bringing line-of-business and infrastructure stakeholders together to plan and make decisions regarding the use of technology.

Architecture Supported

- Collaboration

Technologies Supported

- Routing and Switching
- Wireless Networking
- Computing Systems
- Storage Area Networking
- Data Center Switching

Solution Supported

- Software Defined WAN
  - Routing and Switching

Cisco Responsibilities

- Assess technical requirements, interdependencies, and alignment with strategic goals and objectives of key stakeholders.
- Define use cases, quantitative and/or qualitative financial analysis, and roadmap.
- Assist Customer in developing a technology executive readout report for decisions regarding prioritization and investment.

Deliverable

- Architecture Strategy Alignment Report

Limitations

Specific to Wireless Networking

- Conduct one Personalized Mobility Engagement session (up to one [1] to two [2] days On Site or Remote).

Specific to Video Collaboration

- Define up to five (5) prioritized use cases with five (5) year models.

1.1.3 – CLOUD SECURITY STRATEGY

Cloud Security Strategy helps Customer minimize and mitigate business risk of cloud-based physical and virtualized cloud Data Center deployments by using best practices, security process, and technology in forming the basis for cloud strategy to satisfy industry and regulatory requirements and achieve business goals.

Architecture Supported

- Security

Cisco Responsibilities

- Use the Cisco Cloud Security Framework to:
  - Educate on Cloud Security.
  - Facilitate an assessment of current capability to address all facets of cloud security holistically.
  - Develop a recommended future state based on business priorities.
  - Develop a roadmap of initiatives-over-time to reach target state.

Deliverable

- Cloud Security Strategy Report

1.1.4 – MOBILE SECURITY STRATEGY

Mobile Security Strategy helps coordinate business drivers and tactical approach to assess and manage mobile-related risks, secure mobile environment, and develop a roadmap to address any gaps in a planned and budgeted way.

Architecture Supported

- Security

Cisco Responsibilities

- Use the Cisco Mobile Security Framework to:
  - Identify mobile business opportunities
  - Educate on mobile Security
  - Assess current capability to address all facets of mobile Security.
  - Develop a recommended future state based on business priorities.
  - Develop a roadmap of initiatives-over-time to reach target state.

Deliverable

- Mobile Security Strategy Report

1.1.5 – SECURITY PROGRAM ASSESSMENT AND STRATEGY ROADMAP

Cisco will conduct reviews to understand the Customer's current-state capabilities, assess Customer's security program, and provide recommendations including a strategic roadmap of initiatives to achieve Customer's target state.

Architecture Supported

- Security

Cisco Responsibilities

- Determine current-state capabilities, and identify future-state capabilities based on business requirements.
- Develop a detailed roadmap of initiatives-over-time to achieve target state.
- Provide a Strategic Roadmap of initiatives for Customer's enterprise environment.

Deliverables

- Security Program Assessment Report
- Strategic Program Assessment and Strategic Roadmap Executive Summary

1.1.6 – SECURITY SEGMENTATION ARCHITECTURE DESIGN

Using Cisco's Security Segmentation Architecture methodology, Cisco will develop and provide an enterprise network security architecture and strategy. The architecture and strategy will define a set of segmented security design templates, or security enclaves, including required technical control capabilities and a logical implementation diagram for each segment. Control capabilities defined on a per enclave basis will include identity and trust, policy enforcement, isolation, visibility, and resilience or availability. The architecture and strategy will include segmentation methodology overview and design principles, enclave definition and design templates (including security control assignment), and deployment strategy. Cisco will provide an application placement process that includes the decision-making process and criteria for determining the instantiation and application of developed design patterns. Cisco will also provide a control capability gap analysis and deployment strategy for the implementation of the architecture.

Architecture Supported

- Security

Additional Information to be Collected

- High-level architecture of Data Center, internal servers, user host connectivity, and Internet connectivity.
- Business and technology drivers and decision parameters for Security Segmentation.
- Relevant and recent security assessments or strategy documentation completed by third parties.
- Current- and target-state architecture

Cisco Responsibilities

Create the Segmentation Architecture Design Strategy Document which comprises the following:

- Preliminary Architecture Document
  - Recommended enclave definitions, including recommended security controls and high level diagrams.
- Template Use Logic Diagram
  - Develop enclave creation, asset placement guidelines and template use logic (e.g., logic for determining which template to use for a given application and when to create a new template or add an instantiation of a current template).
- Security Segmentation Master Overview Drawing
  - Develop Master Overview Drawing that provides a logical view of the entire design.
- Primary Data Path and Trusts Overview Document
  - Document primary data paths and trusts between enclaves.
- Enclave Gap Analysis Document
  - Enclave Gap Analysis against control capabilities assigned per enclave.
  - Recommendations concerning enclave prioritization, security control implementation, intra-enclave trusts, and high level data flow between enclaves.
- Deployment Strategy Roadmap
  - Deployment Strategy Roadmap for the implementation of enclaves and control capabilities.

Deliverable

- Segmentation Architecture Design Strategy Document

1.2 – Readiness Planning

Readiness Planning assesses application and infrastructure plan to support high-availability, optimal performance and strengthen security. Cisco will analyze and recommend changes required to support operationalization of the target application and or infrastructure architecture.

1.2.1 – ARCHITECTURE READINESS ASSESSMENT

Architecture Readiness Assessment provides insight into the current infrastructure plan to support additional infrastructure, including Hardware, Software, design, links, and power. Cisco will analyze the current infrastructure deployment and report on the readiness of the solution to implement these changes.

1.2.1a Architecture Readiness Assessment - ACI

Technology Supported

- Application Centric Infrastructure

Additional Information to be Collected

- For workloads considered for deployment to ACI in Network-centric mode (not in application-centric mode)
  - Migration of VLANs to ACI.
  - Endpoint grouping into Endpoint Groups.
  - Level 4 to Level 7 (L4-L7) requirements and policy requirements.

Cisco Responsibilities

- Analyze the current ACI deployment to support additional deployments in Network-centric mode, and report on readiness of the integration to implement these changes; the assessment will analyze and report on changes required in the fabric infrastructure, tenant logical structure, L4-7 Services, and policies to support the additional deployments.
- Document the readiness of the solution to implement changes to support application policy requirements.

Deliverable

- ACI Readiness Report

1.2.1b Architecture Readiness Assessment – Network Management and Orchestration

Technology Supported

- Network Management and Orchestration

Solution Supported

- SP Analytics and Assurance
  - Network Management and Orchestration

Cisco Responsibilities

- Analyze the current deployment to support management solution, and report on readiness of the integration to implement these changes; the assessment will analyze and report on changes required to support the management solution.

Deliverable

- Management Solution Readiness Report

1.2.2 – APPLICATION SECURITY ARCHITECTURE ASSESSMENT

Cisco will assist Customer to identify new ways to help strengthen Customer's security for a single application and its infrastructure.

Architecture Supported

- Security

Additional Information to be Collected

- Application and infrastructure design.
- Data flows and transaction processing.
- Data storage, access, and sensitivity.

Cisco Responsibilities

- Evaluate the design for specific areas, such as data-flow analysis and threat modeling.
- Identify areas of potential weakness in the application's external interfaces, internal component communication, data storage, and transaction processing.
- Identify security vulnerabilities and the impact associated with the most-likely and worst-case exploitation scenarios.
- Analyze existing application security architecture components, including:
  - Administration.
  - Auditing and Monitoring.
  - Authentication and Authorization.
  - Configuration Management.
  - Information Integrity and Confidentiality (Cryptography, Data Validation, Data-at-Rest Protection, Data-in-Transit Protection).
  - Logging and Error Handling.
  - Session Management.
  - Third-Party Dependencies.
- Determine the best approach to assess individual application components with minimal disruption to the production environment, including:
  - Penetration Testing.
  - Source Code Analysis.
  - System or Application Configuration Review.

Deliverable

- Application Security Architecture Assessment Report

Limitations

- A single application will be evaluated by performing up to twenty (20) interviews, twenty (20) configuration file reviews, and forty (40) Documentation reviews.

1.2.3 – NETWORK SECURITY ARCHITECTURE ASSESSMENT

Cisco will conduct a Network Security Architecture Assessment to identify deviations from Cisco's security best practices. The service will assess the Network within the context of Customer's business and technical requirements. Cisco will propose solutions to help eliminate security weaknesses in Network's design and implementation.

Architecture Supported

- Security

Cisco Responsibilities

- Perform analysis of a small set of representative configuration files.
- Perform a gap analysis of key secure Network components, such as:
  - Identity and Access Management (IAM)
  - Key Management System (KMS)
  - Multi-Factor Authentication (MFA)
  - Secure Remote Access (e.g., VPN)
  - Network Access Control (NAC)
  - Wireless Security Configuration and Appliances (e.g., WIPS)
  - Network Intrusion and Prevention Systems (NIDS / NIPS)
  - Mobile Device Management (MDM)
  - Data Leakage Prevention (DLP)
  - Application Layer Gateways (ALG; e.g., web and email gateways)
  - End-point Protection
  - Security and Information Event Management (SIEM)
  - File Integrity Monitoring (FIM)
  - Availability Monitoring
  - Load Balancing, High-Availability (HA), and Virtualization
  - DDoS Protection
  - DNS and NTP Architecture
  - Network Segmentation
  - System Backup
  - Incident Response
  - System Inventory
  - System Provisioning
  - Patch Management
  - Configuration Management
  - Change Management
  - Vulnerability Management
- Assess Security measures currently in place compared with industry standard practices.
- Perform analysis of the Network security architecture and potential vulnerabilities.
- Perform analysis of security issues identified, estimated business impact (if possible), and recommendation for remediation.

Deliverable

- Network Security Architecture Assessment Report

Limitations

- A single Network will be evaluated by performing up to twenty (20) interviews, forty (40) Documentation reviews, and twenty (20) configuration file reviews.

1.2.4 – SECURITY SOFTWARE DEVELOPMENT LIFECYCLE (SDLC) REVIEW

Software Development Life Cycle (SDLC) Review works to assist Customer to identify Security deficiencies in the development process. The Security SDLC Review provides recommendations for developing more secure Software and quality assurance policies, processes, and standards.

Architecture Supported

- Security

Additional Information to be Collected

The following information related to SDLC may be collected as part of the Service:

- Security coding standards, testing procedures, and training standards.
- Security standards enforced, and metrics used to measures security practices and compliance within the organization.
- Development policies and procedures.
- Security awareness and training Documentation.
- Testing procedures and standards.
- Example application-specific documents (e.g. UML documents, data flows, schema).
- Access to application code repository.

Cisco Responsibilities

- Assess current SDLC process for gaps, and recommend remediation in such areas as governance, operational practices, and technical controls.

Deliverable

- Security SDLC Review Report

1.2.5 – SITE READINESS ASSESSMENT

Site Readiness Assessment evaluates business and technical requirements of required infrastructure at one (1) planned installation location to determine whether the location is physically ready to support proper installation and configuration of the system. Specific recommendations are provided to address gaps identified in Customer's infrastructure, physical site, and operations.

Technologies Supported

- Network Management and Orchestration
- Data Center Orchestration and Automation

Solution Supported

- Network Service Orchestration
    o Network Management and Orchestration
    o Data Center Orchestration and Automation

Exclusion

Specific to Data Center Orchestration and Automation

- Cisco CloudCenter (CCC) is not supported.

Additional Information to be Collected

- Readiness goals, process, and requirements.
- Proposed Network diagram topologies, device configuration, and installation procedures.

Cisco Responsibilities

- Assess architecture, performance, operational status, and existing infrastructure and site.
- Review infrastructure device configurations based on Cisco leading-practice recommendations.

▪ Determine whether the Customer site location is ready and prepared to receive the planned system(s).

Deliverable

▪ Site Readiness Assessment Report

2—DESIGN AND DEPLOYMENT STRATEGY

Design and Deployment Strategy provides architecture validation, management strategy, transition planning, and deployment support for helping Customer adopt and scale Cisco technologies. Cisco technology experts provide advice, guidance, and recommendations to deliver real value to the business.

SECTION NAVIGATION

Transformation Theme – Design and Deployment Strategy includes the following Service components, each bookmarked for easier navigation:

- 2.1 – Architecture Validation
  - 2.1.1 – Architecture Development
- 2.2 – Management Strategy
  - 2.2.1 –Management Solution Architecture Review
- 2.3 – Transition Planning
  - 2.3.1 – Operations Support Planning
  - 2.3.2 – Validation-Test Cycle Dedicated
- 2.4 – Deployment Support
  - 2.4.1 – Implementation Support

2.1 – Architecture Validation

Architecture Validation helps organizations develop architecture in an agile manner based on business, organization, and system requirements. Cisco Solution architecture experts facilitate architecture validation process to provide architecture guidance and recommendations.

2.1.1 – ARCHITECTURE DEVELOPMENT

Architecture Development recommends a process for developing an architecture development approach in which business, organizational, and system requirements are defined, analyzed, synthesized, implemented, and evolved while applying an agile manner through its full lifecycle.

Technology Supported

- Routing and Switching

Solution Supported

- Software Defined WAN
  - Routing and Switching

<u>Additional Information to be Collected</u>

- Business goals, strategic plans, business drivers, and related architecture strategy and requirements.
- Challenges, issues, concerns, constraints, and time limits.

<u>Cisco Responsibilities</u>

- Architecture Development is a collaborative and iterative process that includes, but is not limited to:
  - Create, refine, and update the architecture.
  - Document desired characteristics and support principles of the system architecture.
  - Validate the architecture will satisfy Customer requirements and meet expectations.
  - Define roles for team members to guide and coordinate their efforts.
  - Create estimates and schedules based on the architectural blueprint.
  - Define management of the evolution of the system architecture.
  - Provide insight into project performance using repeatable process framework.

<u>Deliverable</u>

- Architecture Solution Document

2.2 – Management Strategy

Management Strategy helps Customer define or develop a high-level strategy for management solutions aligned with Customer's core goals and strategic direction.

2.2.1 – MANAGEMENT SOLUTION ARCHITECTURE REVIEW

Management Solution Architecture Review helps Customer develop a high-level strategy of key areas of management solution architecture necessary to achieve infrastructure operational goals. Cisco uses the functional Fault, Configuration, Accounting, Performance, and Security (FCAPS) model as defined by ITU standards and ITIL framework to develop viable management solution areas appropriate for Customer's infrastructure.

<u>Technologies Supported</u>

- Network Management and Orchestration   Data Center Orchestration and Automation

<u>Solutions Supported</u>

- Network Service Orchestration
  - Network Management and Orchestration
  - Data Center Orchestration and Automation
- Software Defined WAN
  - Network Management and Orchestration

<u>Cisco Responsibilities</u>

- Analyze and recommend custom management solution architecture for Customer's organization.

- Assist Customer in developing a technology executive readout report for decisions regarding prioritization and investment.

Deliverable

- Management Solution Architecture Report

2.3 – Transition Planning

Transition Planning helps Customer prepare to operate new technologies through assessments of their adoption and support plans.

2.3.1 – OPERATIONS SUPPORT PLANNING

Operations Support Planning is intended to assess and help Customer determine how best to prepare to operate new Cisco technologies being deployed.

Technologies Supported

- Routing and Switching
- Computing Systems
- Storage Area Networking
- Data Center Switching

- Application Centric Infrastructure
- Customer Care
- Video Collaboration

Additional Information to be Collected

- Proposed high-level architecture.
- Management strategy.
- Management systems and instrumentation capabilities.
- Operational and Solution requirements.
- Operations support structure, defined roles and responsibilities, and skills inventory.
- Process workflow diagrams.

Cisco Responsibilities

- Assess operational readiness and capabilities to support new technology, and recommend steps to execute as part of an Operations Support Plan; based on the assessment, the report may contain recommendations to one or more of the following:
  - Roles and responsibilities matrix
  - Skills requirements
  - Workflows and process Documentation
  - Organization considerations.

Deliverable

- Operations Support Planning Report

2.3.2 – VALIDATION-TEST CYCLE DEDICATED

Validation Test Cycle Dedicated helps Customer plan and execute a test cycle that is estimated to last between thirty (30) to forty-five (45) weeks. Testing may be performed at the Customer's Lab or a Cisco Lab, as will be indicated in the Quote.

Architectures Supported

- Core Networking
- Data Center and Cloud
- Collaboration
- Security
- SP Mobility
- SP Video

Cisco Responsibilities

- Analyze requirements such as Software strategy, platforms, topology, protocols, and configurations.
- Work with Customer to develop a Test Plan, or review / refine Customer's existing test plan.
- Execute the tests documented in the Test Plan, once agreed, and report findings to Customer.
- Provide Services that may include, among other activities, the following:
  - Schedule Testing – Schedule facilities, equipment, and resources.
  - Test Setup – Perform the physical lab setup.
  - Test Automation – Develop and/or extend the automated test cases (or) scripts.
  - Test Execution – Execute the Test Plan.
  - Test Results Analysis – Document testing results in a Test Report.

Note: Validation and Testing Support is only available to certain geographic locations, as will be specified in the Quote for Services.

Deliverables

- Test Plan
- Testing Support

2.4 – Deployment Support

Deployment Support assists Customer with efficiently implementing or scaling technology. Cisco provides a Solution design, validates lab tests cases, or provides change support to help mitigate the risk of impact to applications and infrastructure.

2.4.1 – IMPLEMENTATION SUPPORT

Implementation Support focuses on the transition of Customer's planning and design to implementation or expansion of a design Solution. It assists Customer's operations and engineering teams in adopting Cisco Solutions while mitigating risks to infrastructure and service continuity. Customer staff and Cisco Engineers collaborate in assessing solution implementation objectives, verifying solution design changes and dependencies, and updating affected processes and Documentation. Cisco will also develop and qualify test cases in a lab environment, and provide Remote on-call support during scheduled Customer change windows (coverage and duration limits apply).

Technologies Supported

- Routing and Switching
- Network Management and Orchestration
- Data Center Orchestration and Automation

Solution Supported

- Network Service Orchestration
  - Network Management and Orchestration
  - Data Center Orchestration and Automation

Additional Information to be Collected

- Solution architecture, implementation plan, and requirements.
- Dependencies related to application and systems.

Cisco Responsibilities

- Determine application or solution dependency map with input from application owners and system administrators.
- Review Customer's implementation plan and other pertinent documents for potential gaps, risks, or integration issues, and provide Cisco best practices around solution implementation and risk mitigation.
- Perform limited or qualified verification work in a Cisco lab to validate questions and recommendations.
- Develop any remediation changes and test in a Cisco lab.
- Assist Customer with assessing and providing recommendations to Documentation change-control processes.
- Provide consultative support and guidance to Customer to understand required changes for solution implementation.

Deliverable

- Solution Implementation Recommendation Report

3—ADOPTION STRATEGY

Adoption Strategy helps Customer extract benefits from their technology investment by providing assistance to help them be more successful with technology implementation, such as removing the burden from their team by delivering change, communication, and training support to help mitigate risk during adoption.

SECTION NAVIGATION

Transformation Theme – Adoption Strategy includes the following Service components, each bookmarked for easier navigation:

- 3.1 – Strategy Assessment
    - 3.1.1 – User Solution Empowerment
    - 3.1.2 – Privacy Impact Analysis
- 3.2 – Adoption Analytics
    - 3.2.1 – Collaboration Adoption Analytics

3.1 – Strategy Assessment

Strategy Assessment conducts an impact analysis of the readiness to adopt a technology; and provides recommendations to help organizations plan change, and develop and implement a strategy for communication and training to increase adoption and achieve business goals.

3.1.1 – USER SOLUTION EMPOWERMENT

The User Solution Empowerment team are Prosci-certified change management consultants that will work with the Customer to identify key use cases or processes their end-users will use Cisco technology to accomplish. The team will evaluate key end-users impacted by the technology change and create custom marketing and training campaigns tailored to these individuals.

The Service may include three focus areas:

- End-User Adoption Strategy
- End-User Adoption Marketing and Communications
- End-User Adoption Training

Architecture Supported

- Collaboration

Additional Information to be Collected

- Customer branding for customized end-user marketing and training assets (i.e. customer logo, font, brand voice)
- Customer technology-specific features and functions (i.e. recording enabled / not enabled, audio preferences)

– Adoption success metrics according to the Customer's executive sponsor (i.e. business KPIs, utilization, sentiment)

Cisco Responsibilities

- **End-User Adoption Strategy:**
  - Provide the Customer change management recommendations as framework to promote adoption.
  - Work with the Customer to understand project success metrics – including how we will gather, report throughout the project.

- **End-User Adoption Marketing and Communications:**
  - Understand the Customer's key communication and marketing channels and resources to support asset development.
  - Develop the Marketing and Plan with the Customer that includes key messages with a compelling case for the change, technology information, target audience, suggested communications assets, distribution timing, and roles and responsibilities.
  - Develop Customer-specific and branded internal marketing and communications assets (i.e. email communications, articles, posters, digital signage, table tents, videos).
  - Provide consultative support while the Customer execute the Marketing and Communication Plan utilizing the marketing and communications assets developed with Cisco.
  - Help identify ongoing marketing and communication activities to continually reinforce key messages and encourage ongoing adoption of the Cisco technology.

- **End-User Adoption Training:**
  - Understand the Customer's key training channels and resources to support asset development.
  - Develop the Training Plan with the Customer to provide the framework and guiding principles to promote change including key learning objectives, unique training needs for different stakeholder groups, roles and responsibilities of training resources, suggested training assets and training delivery methods.
  - Develop Customer-specific and branded internal training assets (i.e. how-to-videos, tips and tricks, quick start guides, reference guides, training presentations).
  - Deliver interactive training classes (virtual and on-site) and provide white glove support, as agreed upon with Customer.
  - Help identify ongoing training activities to support new behaviors and processes, as well as promote ongoing adoption of the Cisco technology.

Deliverables

- Adoption Strategy (change management recommendations and success metrics)
- Adoption Marketing and Communications Plan
- Adoption Marketing and Communications Assets
- Adoption Training Assets

Customer Responsibilities

- Adoption Assessment:
  - Provide access to key stakeholders for interviews or other assessment activities.
  - Facilitate communications with and access to executive sponsor throughout the project, as required.

3.1.2 – PRIVACY IMPACT ANALYSIS

Cisco will conduct Privacy Impact Analysis with the Customer through workshops, review of current state capabilities and provide recommendations including the roadmap for implementing the information management practices.

Architecture Supported

- Security

Cisco Responsibilities

- Using the Cisco Privacy Framework, understand the business requirements, issues, obligations and possible approaches to compliance for processing Personally Identifiable Information (PII) within a specific business or technology initiative and review current capabilities.
- Help Customer develop a customized set of privacy requirements and maturity goals aligned with the business requirements and relevant privacy obligations in support of the target business initiative.
- Develop a roadmap for implementing the recommended information management practices.
- Provide recommendations for compliance assurance testing.

Deliverable

- Privacy Impact Analysis and Strategy Development Report

3.2 – Adoption Analytics

Adoption Analytics focuses on continually monitoring utilization to help Customer move from data to decision faster with techniques designed to help improve user experience and drive higher adoption.

3.2.1 – COLLABORATION ADOPTION ANALYTICS

Collaboration Adoption Analytics provides Customer with data and recommendations around utilization and provisioning of the Hosted Collaboration Solution (HCS) platform based on data gathered using proprietary scripting and reporting, as well as lessons learned and leading best practices from other global deployments.

Technology Supported

- Hosted Collaboration Solution

Cisco Responsibilities

- Provide Cisco Data Collection Tools (Software only) to perform the following:
  - Deploy Cisco Services Utilization Reporting Package into the HCS environment along with log-parsing scripts necessary to support report generation.
  - Configure report generation, and email reports out at an agreed-upon frequency.
  - Maintain reporting Software elements.

- Host a Quarterly Platform Utilization Review, in a format and schedule agreed upon by Cisco and Customer at the kickoff of Services; the review shall be limited to:
    - Review and provide recommendations on Customer's HCS solution elements that should be scaled to support predicted demand.
    - Provide advice and guidance to review and offer design recommendations on the HCS Platform (if any) when significant changes such as new functionality / features become available that could attract new Customers.
- Recommend additional Cisco Hardware and/or Software for the HCS Platform to meet current and mutually agreed-upon forecasted Customer end-user demand; such additional Cisco Hardware and/or Software shall be purchased by Customer separately under terms outside this contract.

Deliverable

- Utilization Report

4—TRANSFORMATION ENGINEERING

Transformation Engineering capabilities and Deliverables help Customer translate business vision and strategy into an effective approach with continuous guidance to enable innovation, drive technology strategy, improve business performance, manage change, and help mitigate risk by establishing an end-to-end methodology to help align and prioritize projects for maximum ROI.

SECTION NAVIGATION

Transformation Theme – Transformation Engineering includes the following Service components, each bookmarked for easier navigation:

- 4.1 – Transformation Trusted Advisor
  - 4.1.1 – Transformation Onsite Consulting
  - 4.1.2 – Digital Network Architecture Advisory
  - 4.1.3 – Cloud Advisory
  - 4.1.4 – Enterprise Security Advisor
- 4.2 – Transformation Management Office
  - 4.2.1 – Transformation Governance
  - 4.2.2 – Alignment and Roadmap Management
  - 4.2.3 – Financial Management
  - 4.2.4 – Resource Management
  - 4.2.5 – Change Management
  - 4.2.6 – Process Management
  - 4.2.7 – Architecture Management Office
  - 4.2.8 – Onsite Transformation Management Office

4.1 – Transformation Trusted Advisor

Transformation Trusted Advisor provides strategic thinking and advice to help Customer's efforts to solve complex technology challenges, gain technology advantage, capitalize on opportunities to innovate and grow, and make best long-term strategic decisions to transform the organization.

4.1.1 – TRANSFORMATION ONSITE CONSULTING

Transformation Onsite Consulting focuses on helping Customer's leaders in their efforts to enable innovation and effective change of their entire infrastructure or element of their infrastructure and operations by providing advice and guidance on investment and divestment strategy, technology development, readiness planning, adoption, training support, and transformation management in order to align with business goals.

This Service addresses Cisco Solutions including third-party Products manufactured or distributed by Cisco Systems. Cisco may provide Remote support to Onsite Consultant as deemed necessary.

Customer-directed tasks to be performed by the Cisco Network Consulting Engineer are subject to Cisco approval, which shall not be unreasonably withheld.

Transformation Onsite Consulting is provided at Customer's designated location up to five (5) days per week (pending local work restrictions) during Standard Business Hours, not to exceed forty (40) hours per week, excluding Cisco holidays, locally recognized country holidays, vacation, and training days.

Transformation Onsite Consulting is only available in certain geographic locations and will be specified in the Quote for Services. Quote for Services will specify the primary location, period, frequency and technologies required for Onsite Consulting.

Technologies Supported

- Routing and Switching
- Network Management and Orchestration
- Data Center Orchestration and Automation
- Customer Care

- Cloud Meetings and Messaging
- Unified Communications
- Video Collaboration
- Hosted Collaboration Solution

Solution Supported

- Network Service Orchestration
  - Network Management and Orchestration
  - Data Center Orchestration and Automation

Cisco Responsibilities

- Develop an understanding of Customer's technology initiatives and requirements, and provide advice and guidance in support of Customer's objectives.
- Align Customer's objectives with the Services and Deliverables ordered by the Customer.
- Gather information and requirements through meetings with the Customer in support of planning, sequencing, and executing Deliverables.

Note:

- Cisco may deem it necessary to provide specific Deliverables through a combination of On Site consulting and Remote support.
- Customer-directed tasks to be performed by the Cisco Network Consulting Engineer shall be governed by the Service and Deliverables ordered by the Customer and are subject to Cisco approval, which shall not be unreasonably withheld.

Deliverables

- Deliverables supported by Onsite Consulting are based on the Transformation Deliverables specified in the Quote for Services ordered by the Customer which may include the following:

Architecture Definition	- Strategy and Analysis - Architecture Strategy Alignment
Readiness Planning	- Architecture Readiness Assessment
Architecture Validation	- Architecture Development
Management Strategy	- Management Solution Architecture Review
Transition Planning	- Operations Support Planning
Deployment Support	- Implementation Support
Strategy Assessment	- Adoption Support

Customer Responsibilities

- Provide Cisco with direction of activities, projects, and priorities on which Customer needs the Cisco Engineer to engage.

Limitations

Specific to Routing and Switching, Network Orchestration and Automation, Data Center Orchestration and Automation, Network Service Orchestration

- Any Service or Deliverable not specifically mentioned in the Customer-approved Purchased Order is not included in the Transformation Onsite Consulting Service.

4.1.2 – DIGITAL NETWORK ARCHITECTURE ADVISORY

Digital Network Architecture (DNA) Advisory helps Customer align strategies based on corporate visions, with each business objective further decomposed into IT objectives to complete assessment and alignment for activation of required capabilities.

Architectures Supported

- Core Networking
- Security

Additional Information to be Collected

- Application and enterprise system requirements.
- Infrastructure, virtualization, and abstraction components and challenges.
- Business drivers, desired business outcomes, business and technology use cases proposed to be implemented, and priority.

Cisco Responsibilities

- Establish maturity level of the following DNA8 domains:
  - Network Infrastructure
  - Enterprise Controller (automation, analytics, assurance)
  - Orchestration / Service Management
  - Cloud Enabled
  - Security / Compliance
  - Operations / Governance / Organization
- Assess Customer's DNA readiness, strategy, use cases, and roadmap.
- Create DNA Advisory Report including DNA8 maturity analysis, capability gap analysis, infrastructure current state, upgrade requirements, digital roadmap, dependencies, risks, and provide recommendations to achieve desired operational outcomes.
- Update the Advisory Report on a quarterly basis.
- Assist Customer in developing an architecture executive readout report for decisions regarding prioritization and investment.

Deliverable

- DNA Advisory Report

4.1.3 – CLOUD ADVISORY

Cloud Advisory helps Customer align strategies based on corporate visions, with each business objective further decomposed into IT objectives to complete assessment and alignment for activation of required cloud capabilities.

Architecture Supported

- Data Center and Cloud

Additional Information to be Collected

- Enterprise architecture and service design blueprint.
- Application and enterprise system requirements.
- Current and or planned cloud-related activities.
- Infrastructure, virtualization, and abstraction components and challenges.
- Business drivers for cloud, desired business outcomes, and business metrics / KPIs.
- Business and architecture use cases proposed to be implemented, along with their priority.

Cisco Responsibilities

- Assess use cases, quantitative and/or qualitative financial analysis, and roadmap, and provide recommendations to achieve desired business outcomes.
- Assist Customer in developing an executive readout report for decisions regarding prioritization of activities required to deliver valuable solutions.
- Use the Cisco Cloud Services Framework to conduct the workshop(s) with Customer to assess current cloud services, workloads, infrastructure, operations, and automation tools.
- Assess current capability, and provide recommendations to address all facets of transformation holistically with regard to launching new Digital Services.
- Develop a recommended future state based on business priorities.
- Develop a roadmap of capabilities that can be implemented based on either a phased or an agile approach to reach target state.

Deliverable

- Cloud Advisory Report

4.1.4 – ENTERPRISE SECURITY ADVISOR

Cisco will provide a part time, technology neutral, Enterprise Security Advisor to support Customer's security strategy and planning to facilitate efficient rollout and alignment of security architecture, processes, Products, and Services with Customer's wider security, risk, and compliance program. The Service is delivered flexibly, as agreed upon the parties, with the intention of enabling the Customer to better achieve business objectives. Initial delivery includes two to four (2-4) weeks to review initiatives, in-flight projects, and security objectives, identify initial Deliverables, and set the cadence of ongoing meetings and communications as agreed upon by the parties.

Architecture Supported

- Security

Cisco Responsibilities

- Provide a Security Advisor as the Customer environment evolves, who will participate and support in the evolution of the corresponding security, risk, and compliance programs, which may include the following main activities:
  - Review and facilitate alignment of business requirements to security objectives, policies, and technology implementations.
  - Participate in active / planned and planned projects meetings to provide recommendations on timing, integration activities, dependencies, policy, processes, and procedure requirements.
  - Work with Customer and other Cisco Subject Matter Experts to support the planning and implementation of target security architecture to achieve security objectives.
  - Provide oversight of high-level design production for Cisco technology in collaboration with Customer and Cisco teams, and facilitate alignment with Customer's enterprise security architecture.
  - Review low-level designs for alignment to agreed high-level designs as well as Customer's architectural and engineering requirements; as required and agreed, assist Customer with production of architectural and engineering requirements.
  - Support the development of policies and standards for security, risk, and compliance programs as necessary to support security operations and technology improvements.
  - Assist Customer in creation of business processes to manage implemented technology appropriately.
- Support and supplement the Customer with best practices, industry trends, reference materials, and expertise available through Cisco.
- Provide Services through a mix of Remote and On Site Collaboration according to a schedule agreed upon the parties.
- Support Customer ad-hoc requests for security architecture support according to a schedule agreed upon by the parties.

Deliverable

- Consultative guidance and support only

Customer Responsibilities

- Communicate ad-hoc requests for activities and Deliverables in a timely manner.
- Understand and acknowledge that the assigned architect is not a dedicated resource.
- Mutually agree with Cisco to ad-hoc activities, timing, and Deliverables.

4.2 – Transformation Management Office

Transformation Management Office (TMO) provides Transformation Management support modules to help align and prioritize project(s) with innovation strategy for maximizing Customer's ROI, through facilitating best practices, processes, tools, and methodologies.

The following support modules under the TMO will be specified in the Quote for Services:

- Transformation Governance
- Alignment and Roadmap Management
- Financial Management
- Resource Management
- Change Management
- Process Management

4.2.1 – TRANSFORMATION GOVERNANCE

Transformation Governance helps establish a framework for organizing oversight functions into structures and policies that define decision-making committees which inform and serve the strategic technology direction.

Technology Supported

- Routing and Switching

Additional Information to be Collected

- Existing transformation governance structure applied to a current program or technology initiative.
- Business strategy, goals, and objectives, and relation to technology initiatives.
- Program and project overview of a technology initiative.
- Communication protocol policy, decision-making hierarchy, and Issue and Change Management process.

Cisco Responsibilities

- Conduct a meeting with the Customer key stakeholders to present the Transformation Governance model consisting of, but not limited to, information about:
  - Program Overview and Statement of Purpose.
  - Communication Plan.
  - Risk Management Plan.
  - Issue Management Plan.
  - Change Management Plan.
  - Monitoring and Control Management Plan.

Note: Planning is based on parameters and information provided by the Customer related to the technology being considered.

Deliverable

- Transformation Governance Framework

Customer Responsibilities

- Complete Cisco Strategy and Analysis Report, which is a prerequisite for this Deliverable.

4.2.2 – ALIGNMENT AND ROADMAP MANAGEMENT

Alignment and Roadmap Management helps Customer align projects and activities to business strategies with the aim of delivering the most effective, sustainable organizational improvements by developing desired future-state projects and activities divided into domains.

Technology Supported

- Routing and Switching

Additional Information to be Collected

- Strategic business goals, business drivers, and current projects underway.

Cisco Responsibilities

- Define project(s) baseline and structure and master schedule.
- Develop a recommended future state based on business drivers and priorities.
- Develop a custom roadmap of initiatives-over-time to reach target state, including:
  - Organized, multi-layered approach.
  - Key performance metrics to track progress.
  - Communicate plans and goals to stakeholders.
  - Identify necessary training.
  - Employment of an ongoing improvement framework to support continued success.

Deliverable

- Consultative guidance and support only

Customer Responsibilities

- Complete Cisco Strategy and Analysis Report, which is prerequisite for this Deliverable.

4.2.3 – FINANCIAL MANAGEMENT

Financial Management provides a process to help Customer estimate and justify business value with the purpose of securing funds, controlling expenditures, and evaluating desired business outcomes.

Technology Supported

- Routing and Switching

Additional Information to be Collected

- Business goals and objectives, technology strategy, and business metrics related to technology initiative.
- Financial structure, cost estimates, and expected benefits for proposed technology project.
- Proposed schedule, resources, dependencies, and risks.

Cisco Responsibilities

- Review and validate with Customer the scope, data sources, and evaluation criteria for business development. Where financial data is not provided or is of low quality, Cisco will agree with Customer on which calculative assumptions may be used in the analysis.
- Applications of financial methods to assess or forecast the impact of network-related technologies on business / financial outcomes.
- Conduct use-case analysis as determined by Cisco to support the models.
- Analyze costs and benefits using investment appraisal techniques for Customer's business case.
- Assist Customer in developing a Business Value Justification Report for decisions regarding prioritization and investment.

Deliverable

- Business Value Justification Report

Customer Responsibilities

- Complete Cisco Strategy and Analysis Report, which is prerequisite for this Deliverable.

4.2.4 – RESOURCE MANAGEMENT

Resource Management assists Customer with a central resource planning and forecast function to deal with resource risk by running what-if scenarios to predict the impact of new initiatives against resource capacity for enhancing organizational effectiveness, and by identifying resources needed to execute transformational projects.

Technology Supported

- Routing and Switching

Additional Information to be Collected

- Projects in planning, approval, and execution phase.
- Resources assigned and available.

- Risk Management plan.

Cisco Responsibilities

- Allocate resources, optimize resources, and analyze resource utilization.
- Develop resource breakdown structure and a risk management plan for critical activities to optimize resource utilization.
- Monitor planned-to-actual resource performance, and provide feedback to Customer management staff.

Deliverable

- Resource Performance Report

4.2.5 – CHANGE MANAGEMENT

Change Management is an integral part of Transformation Governance, as it allows for changes to be effectively proposed, approved, and implemented through an approved governing process.

Technology Supported

- Routing and Switching

Additional Information to be Collected

- Projects in planning, approval, and execution phase.
- Change Management process for evaluation, prioritization, approval, or denials.
- Change-control board members.
- Release management process.
- Vendor role and participation level.

Cisco Responsibilities

- Assess the impact of change request on business benefits and component projects or multiple projects.
- Collaborate interactively with Customer on the following activities:
  - Develop a Change Management strategy to address the impacts and drive the targeted results.
  - Assess the type and magnitude of change.
  - Advocate for the resources and support necessary to manage the process successfully.
  - Achieve top-level buy-in and alignment around core questions.
  - Value Proposition: Why are we doing this?
  - Business Case: What do we expect to achieve by enhancing Change Management?
  - Drive towards a high-performing workforce that is aware, engaged, skilled, and motivated.

Deliverable

- Consultative guidance and support only

Customer Responsibilities

- Complete Cisco Transformation Governance Framework, which is a prerequisite for this Deliverable.

4.2.6 – PROCESS MANAGEMENT

Process Management helps Customer enhance the process effectiveness to support the development of strategy and / or change. The process analysis and recommendations leverage well-known techniques such as IT Service Management (ITSM), eTOM, Six Sigma, for process improvement or transformation.

It also provides a recommended "how-to" procedure by marking responsibility boundaries through a dynamic RACI to define interactions among different groups. This includes defining a master plan for communication, reporting frameworks, and guidelines. Additionally, the service helps Customer identify frameworks, models, and standards that will support Continuous Service Improvement (CSI) for the efficient and prompt handling of all changes to control information and knowledge collateral including plans, designs, change requests, training materials, system manual, contact information, and meeting minutes.

Technology Supported

- Routing and Switching

Additional Information to be Collected

- Organization's mission statement.
- Strategy and roadmap plan.
- Process flow charts, constraints, and re-engineering plans.
- Performance measures.

Cisco Responsibilities

- Establish performance metrics with the Customer.
- Perform activity management, risk tracking, and alerting.
- Coordinate with Customer task assignment and ownership.
- Analyze the information obtained, and recommend changes and steps to evolve the process to support new Cisco Solution(s) being introduced.
- Analyze required process Documentation, workflow, roles and responsibilities matrix, communication, skills requirements, and/or organization in order to align with business goals.

Deliverable

- Process Evolution Report

4.2.7 – ARCHITECTURE MANAGEMENT OFFICE

Architecture Management Office provides a collaborative approach to assist Customer with the process of translating business vision and strategy into an effective transformation with continuous guidance by establishing a holistic end-to-end ownership and understanding of technology advancements, integrations and features, delivery process, and methodology. The approach analyzes elements of the organization to identify, motivate, and achieve value-based business transformation.

Technology Supported

- Routing and Switching

Cisco Responsibilities

- Establish rules of engagement with Customer's staff on the following activities:
  - Collaborative development approach and continuous development activities.
  - Access to design and architecture artifacts related to integration points and features.
  - Oversight support activities for integration, feature, and end-user Service.
  - Solution development and integration.
  - Escalated architecture and Solution development issue resolution.
  - Liaison with Cisco business unit on technical requirements and issue resolution.
  - Communicate critical Product dependencies to relevant work-stream leads.
- Present a progress summary covering all integration areas.
- Prepare a summary of escalated Architecture Management Office issues per work-work stream published weekly.

Deliverable

- Consultative guidance and support only

4.2.8 – ONSITE TRANSFORMATION MANAGEMENT OFFICE

Onsite TMO helps Customer align and prioritize project(s) and program portfolio with an innovation strategy for maximum return on portfolio investment thru Transformation Governance, Alignment and Roadmap Management, Financial Management, Resource Management, Change Management, and Process Management.

Customer-directed tasks to be performed by the Cisco Network Consulting Engineer shall be governed by the Service and Deliverables ordered by the Customer and are subject to Cisco approval, which shall not be unreasonably withheld. Cisco may provide Remote support to complement Onsite TMO Service as deemed necessary.

Onsite TMO is provided at Customer's designated location up to five (5) days per week (pending local work restrictions) during Standard Business Hours, not to exceed forty (40) hours per week, excluding Cisco holidays, locally recognized country holidays, vacation, and training days.

Onsite TMO is only available in certain geographic locations, and will be specified in the Quote for Services. Quote for Services will specify the primary location, period, frequency, and technologies required for Onsite TMO.

Technology Supported

- ▪ Routing and Switching

Cisco Responsibilities

- ▪ Provide a Cisco Onsite TMO Portfolio Manager to engage and align to support the evolution of the corresponding technology and program, which may include the following activities:
  - – Conduct a kickoff call to introduce teams, discuss logistics, and review expectations.
  - – Lead regular planning and status meetings based on agreed-upon engagement activities and/or Deliverables and timelines.
  - – Provide the following general support for all Service modules selected by Customer under the TMO Service:
    - o Transformation Governance
    - o Alignment and Roadmap Management
    - o Financial Management
    - o Resource Management
    - o Change Management
    - o Process Management

Deliverable

- ▪ Onsite TMO support-related Documentation, as applicable