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Service Description: Tetration Optimization Services

This document describes the Tetration Optimization Services.

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

Direct Sale from Cisco. If you have purchased these Services directly from Cisco, this document is incorporated into your Master Services Agreement (MSA), Advanced Services Agreement (ASA), or equivalent services agreement executed between you and Cisco. All capitalized terms not defined in the Supplemental Glossary of Terms for Tetration Optimization Services at the end of this document have the meaning ascribed in the MSA or equivalent services agreement executed between you and Cisco. If not already covered in your MSA or equivalent services agreement, this document should be read in conjunction with the Related Documents identified above. In the event of a conflict between this Service Description and your MSA or equivalent services agreement, this Service Description shall govern.

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

This Tetration Optimization Service is intended to supplement a current support agreement for Cisco products and is only available where all Product(s) in Customer's Network is supported through a minimum of core services such as Cisco's SMARTnet and Software Application Services, as applicable. Cisco shall provide the Tetration Optimization Service described below as selected and detailed on the Purchase Order for which Cisco has been paid the appropriate fee. Cisco shall provide a Quote for Services ("Quote"), identifying the various service elements with the corresponding SKU as shown in Appendix A, setting out the extent of the Services and duration that Cisco shall provide such Services. Cisco shall receive a Purchase Order that references the Quote agreed between the parties and that, additionally, acknowledges and agrees to the terms contained therein.

Tetration Optimization Services

Services Summary

Tetration Optimization Services provide annual, ongoing support for Customer's Tetration production environment:

- o Upgrade Assessment and Support
- o Site and Systems Administration Support
- o Policy and Analytics Support
- o Ongoing Operation Support
- o Ongoing Project Management Support
- o Scheduled Change Support
- o Prepare and Present Quarterly Business Review
- o Remote Knowledge Transfer Sessions
- o Application Dependency Mapping (ADM) Run and Compliance
- o Whitelist Policy and Enforcement Guidance
- o Advanced Configuration Support

Cisco Responsibilities

Cisco shall provide services for the Customer's Tetration environment during Standard Business Hours (unless stated otherwise):

Upgrade Assessment/Support

The Tetration Upgrade Assessment/Support Services will provide assessment and support services to determine the impact and effort associated with upgrading Customer's existing production instance from version XXXX.x to version XXXX.x. Cisco will consult with Customer via a series of meetings to understand and analyze aspects of Customer's current environment.

Upgrade Assessment activities may include:

- Provide assessment and support services to determine the impact and effort associated with upgrading Customer's existing Tetration production instance from version XXXX.x to version XXXX.x Cisco will consult with Customer via a series of meetings to understand and analyze aspects of Customer's current environment
- Review Customer's existing production functionalities, including hardware, operating systems, Tetration software and configurations, security patches, integrations and customizations to determine the actions needed to maintain the existing functionality
- Review current platform and hardware components to ensure accurate sizing

- o Includes platform matrix validation – Horizontal expansion of cluster with nodes with different form factors
  - o Assess program growth and expansion - Scale needs if certain flow/endpoint thresholds are met or exceeded
- Review new features, perform bug scrubs and:
  - o Provide knowledge transfer for new features, their benefits, changes in API and/or UI and any updates needed due to those
  - o Runbook updates
  - o Any contingency and rollback plans for sensor upgrades
- Cisco may provide Customer with following upgrade support service(s) to upgrade production environment(s). Upgrade Support activities may include:
  - o Assist in Tetration cluster upgrades, in line with Tetration software support schedule outlined in release notes
  - o Support for sensor upgrades aligned to customer's change windows
  - o Tetration Dashboard update and customization aligned to new features
  - o Provide guidance by reviewing plan for third party integration and product customization, where the Customer has engaged the third party and the Customer is paying for the third party engagement
  - o Establish best practices for planning and running a Tetration product upgrade
  - o Analyze issues encountered and help categorize them into enhancements, deployment issues, and product defects

Site and Systems Administration Support

The Cisco Tetration Site and Systems Administration Support service is designed for site administrators responsible for the configuration, administration and maintenance of Tetration product implementation. This service provides assistance to help day-to-day operations of Tetration products to run smoothly and efficiently, with stable and scalable operations.

Cisco will provide remote support for the following activities that are generally performed:

- Once a month, support for installation of new sensors (on VMs and Bare-metal)
- RMA server commissioning / registering
- RMA server imaging, if needed
- Assistance in development / documenting operational runbook(s) or standard operating procedure(s) that addresses a specific operational or technical procedure for a given device / technology / IT service
  - o Define operational function(s) and technology(ies) for which run-book(s) or standard operating procedure(s) will be produced
  - o Document procedure(s) and/or process(es) for use in Customer environment

- o Deliver and review run-book(s) or standard operating procedure(s) with Customer
- Monitor and report on service level metrics and abnormal events or trends that may adversely affect the availability, or performance of Tetration cluster
- Monitoring of system activity
  - o Understanding and monitoring system growth, in terms of flows and sensor scale
  - o Creation of up to 5 dashboards on the Tetration GUI per year
  - o Review existing monitoring and reporting capabilities and provide expert analysis and insights that addresses technical health of Customer's Tetration environment
  - o Track events and provide reports on threshold conditions
  - o Document system configuration and any changes in the configurations
  - o Notify Customer-designated representatives of incidents identified, and escalate notifications as pre-arranged with Customer

Policy and Analytics Support
- o Update new existing policy to incorporate new sensors into existing ADM workspace
- o Update the ADM policy based on the environment needs, up to once a month
  - o Create up to 1 base cluster definition file for ADM runs once every 3 months
  - o Periodic sensor policy update for CPU, Bandwidth, etc
  - o Update route-tag information files in ADM workspaces once a year
  - o Update DNS information files in ADM workspaces
  - o Update load balancing configuration (VIP → Real) files in ADM workspaces once a year
- o Once a month, review of network threat analytics of the customer environment and outliers and provide recommendation for policy update
- o Work with key stakeholders to discuss the impact and mitigation of observed changes in policy
- o Create up to two compliance experiments for up to one published Tetration policy, every month
- o Once a month, analyze current flow of data against deployed whitelist policy
- o Analyze user defined whitelist policies up to once a month

Ongoing Operations Support
- o Ongoing email technical support in the form of a designated engineer ("Advanced Services Engineer") to act as the primary interface with Customer, providing general advice and guidance related to Customer's Tetration environment
- O Liaise with TAC on P1 and P2 support issue escalation

Ongoing Project Management Support

- o Provide ongoing project management support to assist with the overall delivery of the Tetration Optimization Service for incremental changes to the Network or architecture

Scheduled Change Support

o Provide a remote resource for critical scheduled changes. Cisco will make available, upon receipt of not less than twenty-one (21) days prior written request to Cisco by Customer, a designated support contact person who will be available to consult with Customer regarding major Network service changes (i.e. major Hardware upgrade(s), major site installation(s) or major configuration changes). Customer agrees to submit a detailed request and schedule to Cisco prior to any such activity, which may include:
  • Collaboration with Customer to evaluate the potential impact of the proposed changes
  • review the implementation procedures remote assistance for Customer to resolve problems with Network changes during a major activity to the production Network

Prepare and Present Quarterly Business Review

o Schedule with Customer up to four (4) quarterly visits per year (not to exceed eight (8) days in aggregate) to Customer's site to review Deliverables and activities and plan for the next quarter. Additional visits will be mutually agreed upon at Cisco's then-current travel and labor rates

Remote Knowledge Transfer Sessions

o Cisco will consult with Customer to identify requirements and topics for informal training sessions. Remote Knowledge Transfer Sessions are:

  ▪ Delivered in English (other languages subject to availability)
  ▪ Informal technical updates such as a "chalk talk" on a topic that is mutually agreed upon and relevant to the technologies in the data center
  ▪ Service to be provided by an Advanced Services Engineer or another senior Cisco engineer
  ▪ Delivered remotely for up to four (4) hours in length, with no labs and no printed course materials
  ▪ Relevant to the Cisco products and technologies deployed in Customer's production Network

Application Dependency Mapping (ADM) Run and Compliance

o Upload inventory to Tetration and derive scopes. Scopes shall be used to group access/end points for the applications.
o Cisco to provide analysis of previous agreed number of workloads. Not to exceed fifty 50 endpoints per application discovered with live sensors for example any IPv4/IPv6 address is an end point - as an input to the ADM run
o Cisco to provide templates in Tetration Analytics canonical formats of SLB configurations
o Cisco to provide user defined annotations for host inventory in .CSV format

o Cisco to provide recommendations pertaining to clusters / groupings for endpoints being analyzed
o Cisco will conduct up to three (3) application reviews with customer per application
o Cisco to create no more than two ADM workspaces per application being analyzed
o Cisco to provide no more than three application views per ADM workspace
o Cisco to provide no more than 25 ADM runs/versions per application being analyzed
o Cisco to run no more than three live compliance analyses for published policies, per application
o Cisco will provide a report containing the following, if applicable:
  o ADM Policy Export Report inclusive of following:
    ▪ Whitelist policies between clusters
    ▪ Microsegmented policies
    ▪ Endpoints within an EPG
    ▪ Compliance analyses and recommendations based on them
    ▪ Application Views

Whitelist Policy and Enforcement Guidance

o Work with customer to understand their current Data Center infrastructure environment and requirements for enforcing the Tetration Whitelist policy in the Data Center Policy Framework.
o Cisco will provide a whitelist policy framework and guidance for policy enforcement that may include:
  o Microsegmenation with End point enforcement (subject to customer purchasing License for enforcement)
  o ACL Review – Cisco will compare Tetration policy to the existing ACLs pertaining to the Applications in scope.
o For existing ACI customer, review the customer provided ADD (ACI Design Document) along with customer provided ARD (ACI Requirements Document) that documents the requirements and data center policy adoption strategy, customer's existing Network Diagrams (Logical, Physical, WAN), and scale requirements, based on the customer's business and technical requirements for deploying a policy-enabled infrastructure, which is supported by Cisco
o For customer with non-ACI data center network, review Design Document along with customer provided Requirements Document and data center policy (compliance requirement and security policy), customer's existing Network Diagrams (Logical, Physical, WAN), based on the customer's business and technical requirements
o Document the Design Review session that includes and is not limited to:
  o For existing ACI customers, comparison of the customer's requirements with Cisco Data Center ACI design, application network and security policy, application grouping; and provide high level design recommendations options to resolve gaps, as needed:
    ▪ Fabric Design
    ▪ Tenant/ Application Profile/ End-Point Group Constructs

- Eco-System integration (Firewall and Load Balancer)
- DCI strategy to support Active-Active or Active-Standby applications
- This Design Review is not a low level design activity.
  - For Non-ACI customers, comparison of the customer's requirements with Cisco Data Center design application network and security policy, application grouping; and recommend design options to resolve gaps, as required;
    - Data Center L2/L3 architecture
    - Eco-System integration (Firewall and Load Balancer)
    - DCI strategy to support Active-Active or Active-Standby applications
  - Any key risks of the design and design recommendations if customer is implementing the policy purposed by Tetration
- Review aspects of design and deployment model including device placement, physical and logical connectivity, as well as network management based on Cisco leading practice
- Participate in up to three (3), two (2) hour remote review session(s) over a period of two (2) weeks to the Design Document with customer
- Document all of the Design Review findings in a report with any recommendations and/or changes and provide to customer for review

Advanced Configuration Support

- Provide consultative support for evolving Tetration capabilities including guidance on deploying advanced Tetration features beyond the work items listed above.
- Consult with Customer staff to develop an understanding of the requirements for the advanced features and enable Tetration to support these requirement based on the availability of appropriate features with the Tetration platform.
- All Cisco support for enabling advanced configurations is subject to product scale limitations and customer licensing, as applicable, for the requisite feature(s).
- Certain feature implementations may require additional scoping and may incur additional costs to customer.

General Support

- Establish a Customer-specific Cisco email alias to facilitate communication with Cisco engineers such as Advanced Services Engineers, Solution Engineers and Architects
- Designate an engineer ("Advanced Services Engineer") to act as the primary interface with Customer for its Tetration environment
- Participate regularly with Customer either via phone, email or in-person to review proactive deliverables and activities and to plan for next quarter

- Participate in periodic conference calls (usually weekly) to review Customer's data center status, planning and the Services being provided
- Monitor a Customer-specific Cisco email alias to facilitate communication with primary Advanced Services Engineer as well as the engineers on the Cisco's Data Center team
- Make collaboration tools available for the purposes of (including but not limited to): hosting meetings, managing documentation, instant messaging, desktop sharing, and collaborative spaces
- Setup a joint collaboration file-sharing location with Customer to facilitate collaboration and knowledge exchange related to Service herein
- Cisco may use an email alias, surveys or interviews to obtain Feedback on the Service

The quantity of any reporting and efforts for ongoing activities described herein will vary depending on Customer requirements and what Customer and Cisco mutually agree upon when Services are purchased as identified in the Quote provided by Cisco.

Customer Responsibilities

- Designate at least two (2) but not more than six (6) technical representatives in each area covered under DC including UCS, Nexus, SAN, L4/7, caching, server, Operations and automation(tools) who must be Customer's employees in a centralized Network support center (Customer's technical assistance center), to act as the primary technical interface to the Advanced Services Engineer(s) covering Data Center technologies. Customer will designate as contacts senior engineers with the authority to make any necessary changes to the data center device configuration. One individual, who is a senior member of management or technical staff, will be designated as Customer's primary point of contact to manage the implementation of services selected under this Service Description (e.g., chair the weekly conference calls, assist with prioritization of projects and activities)
- Work with Cisco to identify and define fault and threshold conditions
- Provide incident escalation matrix
- Within one (1) year from the commencement of this Services, Customer will have at least one (1) Cisco Certified Internetworking Expert ("CCIE") trained employee or one (1) employee that have achieved, in Cisco's sole determination, an equal standard through training and experience as designated contacts
- Customer's technical assistance center shall maintain centralized network management for its Network supported under this Service Description, capable of providing Level 1 and Level 2 support
- Provide reasonable electronic access (onsite and remote) to Customer's Network to allow the Advanced Services Engineer to provide support
- The necessary tools provided by Cisco for the service are only available during the service period. Upon the completion of the service, the tools must be uninstalled and/or returned to Cisco.

- o Utilize communication and collaboration tool(s) provided by Cisco. If Customer uses non-Cisco provided collaboration tools for hosting meetings, managing documentation, instant messaging, desktop sharing, and collaborative spaces, provide Cisco with access
  - Customer will provide names of users who will have authorization to access these tools
  - Customer will support the implementation of software required to use tools in their environment
    - o Data Collection Tools. Customer shall ensure that such Data Collection Tools or scripts are under lock and key and with access restricted to those Customer employee(s) or contractor(s) who have a need to access the Data Collection Tools and/or a need to know the contents of the output of Data Collection Tools. In the event Data Collection Tool provided by Cisco is Software, Customer agrees to make appropriate computers available and download Software as needed. Customer shall remain responsible for any damage to or loss or theft of the Data Collection Tools while in Customer's custody
    - o Initial Set-up. If Cisco provides Data Collection Tools or scripts located at Customer's site, an initial set-up is required and the following must be performed:
      - Complete the Data Collection Tools installation and system configuration questionnaire(s) (i.e. IP address, netmask, hostname, etc.) and return to the Advanced Services Engineer
      - Install the Data Collection Tools hardware in a secure area with controlled physical access
      - Connect the Data Collection Tools hardware to the Network
      - Secure the Data Collection Tools behind Customer's corporate firewall
      - Provide access to Data Collection Tools for use by Cisco to install, troubleshoot, and maintain; for remote access, SSH, Telnet, and/or dial are options, but virtual private network (VPN) access to the Graphical User Interface (GUI) is preferred and recommended
      - When applicable, provide Data Collection Tools with HTTPS (SSL) access back to Cisco CCO/CCX servers located at nettools-upload.cisco.com; HTTP/FTP/PFTP may be used but Cisco strongly recommends HTTPS (SSL)
      - When applicable, provide Data Collection Tools with SSH to the nettools-upload.cisco.com server to support the transfer of Data Collection Tools patches, security patches, and Rules Based Markup Language (RBML) update packages; FTP may be used but Cisco strongly recommends SSH
      - Provide Data Collection Tools with SNMP and Command Line Interface (CLI) access to all Product(s) in the Network (necessary to facilitate collection of inventory and configuration information)
      - Provide Data Collection Tools with the Network Product list in seedfile format containing SNMP Read Only (RO) community string and CLI (vty/enable or TACACS user-id / password) for access to all Product(s) in the Network (necessary to create the Data Collection Tools seedfile)
      - Provide Syslog server and upload information
    - o Data Collection Tools Management (Ongoing). In the event Data Collection Tools are installed on Customer's Network, the following items must be performed on a regular or as needed basis to support the operation of Data Collection Tools in the Network:
      - Notify Cisco about changes made to the Network such as Product(s) added/deleted and changes made to Product credentials
      - Fix access problems (Access Control List, firewall, etc.) which may periodically occur between Data Collection Tools and the Product(s) in the Network
      - When applicable, fix data communication problems that prevent Data Collection Tools from uploading data to Cisco or prevent the remote maintenance of the Data Collection Tools
      - Notify the Advanced Services Engineer when changes are made to Syslog, DNS, proxy and gateway servers IP address (es)
  - o Provide a Network topology map, configuration information, and information of new features being implemented as needed
  - o Notify Advanced Services Engineer of any major Network changes (e.g., topology, configuration, new IOS releases)
  - o In the event the Network composition is altered, after the Services selected under this Service Description have commenced, Customer is responsible to notify Cisco in writing within ten days (10) of the change Cisco may require modifications to the fee if the Network composition has increased beyond the original pricing quote for Services
  - o Create and manage an internal email alias for communication with Advanced Services Engineer
  - o Retain overall responsibility for any business process impact and any process change implementations
  - o Designate a program manager to act as the single point of contact to which all Cisco communications may be addressed, having an appropriate level of applications and Network experience. Such person shall act as Customer's host for onsite assessment activity to coordinate facility access, conference rooms, phone access and staff scheduling
  - o Ensure key engineering, networking and operational personnel are available to participate in interview sessions as required by Cisco in support of an assessment. Review assessment report and suggestions provided by Cisco
  - o Assessment data collection support

- o Customer agrees to make its production, and if applicable, test Network environment available for installation of Data Collection Tools. Customer shall ensure that Cisco has all relevant Product information needed for an assessment
- o Customer shall advise Cisco immediately of all adds, moves and changes of the Product within Customer's Network
- o Assemble all necessary Network availability data to enable Cisco to calculate quarterly Network availability. The type of data required to perform the calculations includes the following:
  - Outage Start Time (date/time)
  - Service Restore Time (date/time)
  - Problem Description
  - Root Cause
  - Resolution
  - Number of end users impacted
  - Equipment Model
  - Component/Part
  - Planned maintenance activity/unplanned activity
  - Total end user/ports on Network

- o Provide the low-level design document describing how Customer's Network is or is planned to be built and engineered to meet Customer's specific set of technical requirements and design goals. The low level design must provide a sufficient level of detail to be used as input to an implementation plan
- o Ensure key detailed design stakeholders and decision-makers are available to participate during the course of the service
- o Provide or extract additional information required in the design effort (e.g., current and planned traffic characteristics):
  - Any documentation of business requirements and technical requirements for the new design
  - Any information on current and planned traffic characteristics or constraints. Documented information on all non-Cisco applications integrated through the Automation Software Tools including interface specifications as required
  - Information on current releases running in the Network and current configuration templates
  - Information on Customer business and technical requirements for new Software releases
  - Information on planned changes, new technology applications or major design changes (short term and long term), and contact information and Customer escalation process
  - Information on Customer certification process and lab testing process
  - Information on Customer change control process.
  - Information on any service level agreements or Network performance requirements
  - Information on critical applications supported by the Network
  - Information on which applications are mission-critical and their priority schemes

- Information on Customer's plans for business continuance, consolidation, and virtualization
- Information on expected Network growth and application mix changes
- Information on any future advanced technology implementations
- Information on architecture (which may include remote sites and size of remote sites.
- Information on Customer implementation plans and/or deployment schedules
- Maintenance window information and any other constraints
- o Support data collection activities as needed to facilitate a specific Cisco analysis
- o Make remote console access available for Cisco staff members
- o Provide an environment for installation and operation of collection, monitoring and conversion tools if required
- o Provide up to four (4) weeks' notice of start of workshop for data gathering
- o Have available one Operating System, either: VMware ESX, RedHat Linux, Microsoft Server, SUSE Linux
- o Designate person(s) from within its technical support organization to serve as a liaison to the Advanced Services Engineer
- o Provide its designated person(s) with instructions on process and procedure to engage the Advanced Services Engineer
- o Identify low risk and high-risk areas of the Network based on their Network traffic
- o Review details of planned changes with Advanced Services Engineer
- o Advise Cisco of its standard operating procedures related to its business practices, its internal operational nomenclature and Network to allow Cisco to effectively communicate and discuss changes with Customer in the context of Customer's business environment
- o Provide all necessary information to enable Cisco to summarize the root causes of issues identified
- o Provide reasonable electronic access (remote and local) to Customer's Network to assist Cisco in providing support
- o Collaborate with Cisco to determine appropriate and relevant topics
- o Provide a single point of contact to be used for all required communication and coordination of requested sessions
- o Ensure participation by Customer resources
- o Provide details in advance about the background and skill sets of each Remote Knowledge Transfer session audience
- o Provide facilities (such as: a room with projector, whiteboard and guest internet access) for Knowledge Transfer sessions
- o Customer is solely responsible for the determination and successful implementation of its Network, design, business or other requirements
- o This service shall be comprised of general technical assistance and shall be performed under Customer's direction and management and such assistance may

not result in some or all of the tasks being completed. Services are provided to the Customer in support of initiatives and activities described herein and Cisco shall not assume any cost or schedule liabilities
- o Provide Customer on-boarding information as follows: contact name, title, address, telephone number, e-mail address of primary and secondary team lead, Email ids and name of the Authorized Viewers who will need access to the "Portal"
- o Install the Digital Rights Management ("DRM") software on as needed basis that allows to view the DRM-protected content on the Portal
- o Participate in training and/or feedback sessions with Cisco team to enable Cisco to understand the needs of the Authorized Viewers for the Portal.

Application Dependency Mapping (ADM) Run and Compliance

- o Customer to provide CMDB information
- o Provide stakeholders to review and approve the Cisco proposed scopes for the applications in scope
- o Customer is responsible for providing application stakeholders to participate in up to two checkpoints/reviews per application being analyzed
- o Customer understands that if the number of endpoints per application exceeds the threshold of 50, as listed above in Cisco Responsibilities, Cisco will reduce the number of Applications mapped by Cisco.
- o Customer to provide stakeholder to review every ADM run results and 'approve EPGs/clusters' provided in results of every ADM iteration
- o Customer to provide stakeholders to participate in analysis of live and experimental compliance view results, as requested by Cisco
- o Customer to provide stakeholders to participate in any discussions of creation of whitelist policies and End point enforcement as requested by Cisco
- o Customer to use Tetration Analytics templates for SLB/Route-tags provided by Cisco to generate their configurations for providing them as input to the ADM analysis
- o Customer to provide Cisco with host information and inputs for annotation

Whitelist Policy and Enforcement Guidance

- o Provide Cisco with the "as-is" Design Document for review
- o Provide all supporting documents which include and but are not limited to;
  - o For existing ACI customer: Approved ACI Requirements Document, Bill of Materials (BOM), existing DC Network and WAN diagrams, Documented IP addressing and VLAN scheme; L2/3 Configurations, WAN/DCI documentation
  - o For Non-ACI customers: Approved Data Center Requirements Document, Bill of Materials (BOM), existing DC Network and WAN diagrams,

Documented IP addressing and VLAN scheme; L2/3 Configurations, WAN/DCI documentation
- o Provide information related to Common Services components such as Active Directory (AD), DNS, and Server IP address information
- o ACL Review of third-party firewalls will need to be facilitated by the customer and the third party vendor.
- o Policy enforcement of third-parties facilitated by customer and the third party vendor
- o Make appropriate Technical resources and Business Stakeholders available for remote discussions, reviews of the existing Design Document, Requirements Document, Bill of Materials (BOM), and end user provided documentation as needed with Cisco Representatives
- o Customer understands that Design Review is not a low level design activity
- o Review the Design Review section in the report
- o In case the customer-provided information is deemed incomplete or inaccurate for the purposes of the design review, customer will require a separate contractual engagement for discovery and review of their existing Data Center design

Supplemental Glossary of Terms for Tetration Optimization Services

- **"Authorized Viewer/s"** means either (i) an employee of Customer or (ii) an independent contractor of Customer performing services for Customer's benefit who is authorized by Customer to use the Services for "Internal Use Purposes".

- **"Content"** means the content hosted on the Portal as part of the services, including the Sidebar content. All Content shall be considered Cisco Confidential Information.

- **"Internal Use Purposes"** means use of the Services for the sole purpose of permitting Authorized Viewers to view the Content, provided that all such viewing is solely intended for furthering the Customer's internal communications, training, education or administrative objectives. Notwithstanding anything to the contrary in this Service Description, "Internal use Purposes" expressly excludes (i) the licensing, copying, transferring, or distributing of any element of the Services; (ii) displaying of any element of the Content to any person other than Authorized Viewers, and Customers will not permit or enable any other persons to view any element of the Content; (iii) modifying, altering, abbreviating, or editing of any element of the Services unless expressly permitted by Cisco or its suppliers or licensors; (iv) the incorporation of any element of the Services into any product or service of Customer or creating a derivative work based upon the Services, and (v) using any element of the Services in a any manner other than as expressly authorized under this Service Description.

Acronyms

- ACE – Application Control Engine
- ACNS- Application and Content Networking System

- ADM – Anomaly Detector Module
- ASA – Advanced Service Agreement
- AXG – Application Exchange Gateway
- CIAC – Cisco Intelligent Automation for Cloud
- CNOAS – Cisco Network Operation Automation Service
- CPO – Cisco Process Orchestrator
- CRD – Customer Requirements Document
- CSS – Content Service Switch
- DB – DataBase
- DC – Data Center
- DCAF – Data Center Analytics Framework
- DCDSA – Data Center Device Security Assessment
- DMM – Data Mobility Manager
- DMZ – DeMilitarized Zone
- DNS Domain Name Server
- DR – Disaster Recovery
- DRM – Digital Rights Management
- DWDM – Dense Wave Division Multiplexing
- EaaS – Energy as a service
- eCDS – Enterprise Content Delivery System
- EOS – Energy Optimization Service
- EOS – Energy Optimization Service
- FCIP – Fiber Channel over IP
- FCoE – Fiber Channel over Ethernet
- FICON – Fiber Connection
- FWSM – Firewall Services Module
- GSS – Global Site Selector
- CSM – Content Switching Module
- GUI – Graphical User Interface

- IA – Intelligent Automation
- IaaS – Infrastructure as a Service
- IOA – I/O Accelerator
- IPL Files Initial Program Load Files
- ISR – Integrated Service Routers
- LVM – Landscape Visualization Management
- MDE – Media Delivery Engine
- MDS – Multilayer Data Switch
- MKS – Modular Knowledge Service
- MSA – Master Services Agreement
- OTV – Overlay Transport Virtualization
- QBR – Quarterly Business Review
- SAN – Storage Area Network
- SCF – Security Control Framework
- SLB – Server Load Balancing
- SSLM - SSL Module
- TCO – Total Cost of Ownership
- TES – Tidal Enterprise scheduler Environment
- UAT – User Acceptance Test
- UCS – Unified Computing System
- UNS – Unified Network Services
- VEM – Virtual Ethernet Modules
- VPC – Virtual Port Channel
- VPN – Virtual Private Network
- VSAN – Virtual Storage Area Network
- vWAAS – Virtualized Wide Area Application Services
- WAAS – Wide Area Application Services
- WAE – Wide Area Application Engine
- WAVE – Wide Area Virtualization Engine

Appendix A

Service SKUs

The following list of service SKUs/Tags is provided for reference:

- Ongoing Project Management Support (OPT-TET-TOS PMO)
- Upgrade Assessment and Support (OPT-TET-TOS UA)
- Site and Systems Administration Support (OPT-TET-TOS SA)
- Ongoing Operation Support (OPT-TET-TOS OS)
- Prepare and Present Quarterly Business Review (OPT-TET-TOS QBR)
- Proactive Software Recommendation Report (OPT-TET-TOS PCBA)
- Remote Knowledge Transfer Sessions (OPT-TET-TOS KT)
- Scheduled Change Support (OPT-TET-TOS SC)
- Policy and Analytics Support (OPT-TET-TOS PA)
  o Application Dependency Mapping (ADM) Run and Compliance (OPT-TET-TOS ADM)
  o Whitelist Policy and Enforcement Guidance (OPT-TET-TOS EDR)
  o Advanced Configuration Support (OPT-TET-TOS ACS)