



Service Description: Advanced Services – Fixed Price

Cisco QuickStart Implementation Service for Tetration Analytics – Medium (ASF-DCV1-TA-QS-M)

This document describes Advanced Services Fixed Price: Cisco QuickStart Implementation Service for Tetration Analytics – Medium.

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

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Cisco QuickStart Implementation Service for Tetration Analytics - Medium

Service Summary

This service covers the following areas:

- Project Management
- Tetration Analytics Solution:
 - Cluster Bring up
 - Sensor Install
 - Application Dependency Mapping
 - Custom Dashboard Creation
 - Knowledge Transfer

Deliverables

- 1) Project Management Plan ("PMP")
- 2) Tetration Analytic As-Built document
- 3) Pre-requisite checklist and templates as described below.

Location of Services

Services shall be performed as a combination of remote from Cisco Site(s) and onsite at Customer premises. This is limited to a single Customer site or stretched fabric deployment.

Project Management

Project management will be provided in conjunction with, and is limited to the management of, the Services and Deliverables as described herein.

Cisco Responsibilities

- Provide the Customer with a list of designated Cisco personnel roles and responsibilities under this Service.
- Provide a Project Management Plan ("PMP"). PMP is a baseline document from which the Cisco PM can manage deliverables, assess progress, and manage change management issues and any on-going questions.
- Work with Customer to identify and document dependencies, risks and issues associated with the successful completion of the project.
- Provide Customer with the Integration Pre-Requisite Checklist. The Integration Pre-Requisite Checklist is a Cisco provided document that provides a detailed specification of the physical, electrical and environmental requirements that have to be met at the

installation Site(s) to enable the Cisco Products to be installed.

- Participate in scheduled project review meetings or conference calls, if required.
- Provide Customer with the identity of personnel requiring access to Customer premises, at least five (5) Business Days prior to the scheduled date such personnel requires access.
- Deliver a weekly project status to the Customer.
- Identify and manage project team members.
- Define the communication flow with the project sponsor and key stakeholders and document it in the Project Plan.
- Work with Customer to identify and document dependencies, risks and issues associated with the successful completion of the project.
- Provide the following:
 - Kick-off Meeting
 - Scheduling of Cisco Resources
 - Project Plan
 - Change Management
 - Manage the project to the agreed upon Project Plan.

Customer Responsibilities

- Provide Cisco with completed responses to the Pre-Installation Checklist within ten (10) Business Days of receipt.
- Identify Customer's project sponsor and key stakeholders and define their role in supporting this project.
- Work with the Cisco Project Manager to ensure the Customer's project sponsor, key stakeholders and all project team members receive project communications and are included in regularly scheduled communications sessions.
- Work with Cisco to schedule the kick off meeting, and communicate the meeting schedule to the Customer-identified stakeholders.
- Review the project schedule, objectives, Services, Deliverables and roles and responsibilities with Cisco.
- Schedule the necessary facilities for On Site meetings (such as: conference rooms, projectors and conference bridges).
- Participate in regularly scheduled project review meetings or conference calls.
- On site meetings. When Cisco consultants travel on site, all required Customer responsible parties will attend in person, as necessary whenever possible.
- Work with Cisco to identify specific objectives and critical success factors for the project.
- Coordinate any third party activities (such as in country carrier/telco activities), deliverables or schedules as required for Cisco's completion of the services.
- Notify Cisco of any scheduling changes related to this project at least five (5) Business Days ahead of the scheduled activity.

Tetration Cluster Bring-Up

Cisco Responsibilities:

- Conduct one (1) on site workshop for a maximum of ten (10) Customer stakeholders to review business requirements and set expectations.
- Cisco to provide the Customer with a Pre-Requisite Site Preparation Document, ten (10) days prior to Cisco arriving on site.
- Cisco to provide the Customer with a Cluster Parameter Definition Document – document to be completed by Customer and returned to Cisco five (5) days prior to Cisco arriving on site.
- Cisco to perform Hardware and software validations on one Tetration cluster, after the Customer has powered it on.
- Cisco to set up the Tetration Analytics software using the workstation provided by Customer, using the site-info information provided by the Customer
- Cisco will create an As-Built report containing the following:
 - Site information with Tetration Cluster.

Customer Responsibilities:

- Customer responsible for ensuring that the Tetration rack(s) are powered on and have the right environmental conditions available, as dictated by the environment checklist provided by Cisco.
- Customer responsible for providing connectivity between the Tetration racks as per Cisco specifications (Inter-rack cabling and Tetration-to-customer network infrastructure connectivity).
- Customer responsible for obtaining the Tetration Analytics package installer from CCO and making it available for Cisco.
- Customer to provide an email alias that may be created specifically for admin emails for Tetration Analytics.
- Customer responsible for providing site info, via the template provided during kick-off.
- Customer to provide facilities for needed interviews.
- Customer responsible for ensuring that Tetration rack can connect to the customer network over network ports (TCP/UDP) specified by Cisco.
- Customer to provide Cisco representative physical access to the cluster.
- Customer to provide a workstation with physical access to the cluster. The workstation should:
 - Have physical wired access to the cluster
 - Have access to UI in the cluster over Chrome browser, version **Version 49.0.2623.110 (64-bit)** or higher
 - Host the installer RPM package that will be used for setup

- Customer to allow Cisco set up the Tetration analytics software onto the cluster.
- Customer to provide any assistance, as required by Cisco to troubleshoot any environmental or other issues, to bring up the cluster. The list of issues that Cisco may require assistance may be the following, but not limited to:
 - Cable issues
 - Power issues
 - RMA
 - Workstation issues
 - Corrupted Tetration Analytics software RPM due to improper download mechanisms, etc.
- Customer to provide an email address for Cisco to provide login credentials.
- Customer to provide network access to Cisco personnel to login to the cluster with 'support-role' credentials:
 - For the duration of the service, local to the data center where the cluster is located.
 - Allow access through a site-to-site VPN, as decided between the Customer and Cisco, wherever applicable.
- Customer is responsible for providing a total of two layer 3 connectivity as required by Cisco, from the cluster to the network where the sensors will reside.
- Customer is responsible for providing the routing necessary to for the sensors to reach the cluster.
- Customer is responsible for providing the routing necessary to for the users to reach the cluster.
- Customer understands that only operating systems that are supported by Cisco's software sensors, as per the release notes, will be considered for deployment.

Sensor Support for Installation

Customer Responsibilities:

- Cisco to provide access to sample scripts that Customer may use for internal use only to install supported sensors. The format of the scripts will be decided by Cisco and could include one or more of:
 - Ansible
 - Chef
 - Puppet
 - Bash
 - Python
 - Powershell
- Cisco to use data from sensors for analysis of applications. The sensors will be deployed on hosts and/or switches that will provide flow data for the chosen applications.
- Cisco to assist customers during sensor deployment for up to 16 hours.
- Cisco will include following in As-Built report, if applicable:
 - Number of sensors

- Operating Systems deployed
- Sensor profile information
- Applicable automation scripts

Customer Responsibilities:

- Customer is responsible for requisitioning the change management windows needed for the agreed upon number of sensors to be deployed with Cisco support.
- Customer is responsible for installing the remainder of the total number of sensors on their hosts determined during the kick-off call between customer and Cisco
- Customer understands that Cisco will not assume any support responsibility for Scripts provided to the customer during the course of the deployment.
- Unless required by applicable law or agreed to in writing, the Scripts are provided on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. Cisco and its licensors retain sole and exclusive ownership of the Scripts, including without limitation all intellectual property rights in the Scripts and in all modifications, enhancements and derivative works thereto. Scripts may contain open source software subject to separate open source license terms.

Application Dependency Mapping (ADM) Run and Compliance

Cisco Responsibilities:

- Cisco to provide analysis of no more than two applications. Not to exceed 150 endpoints per application discovered with live sensors for example any IPv4/IPv6 address is an end point - as an input to the ADM run.
- Cisco to provide templates in Tetration Analytics canonical formats of SLB configurations, DNS and Route Tag configurations to customer.
- Cisco to provide recommendations pertaining to clusters/groupings for endpoints being analyzed.
- Cisco will conduct up to three (3) application reviews with customer per application.
- Cisco to create no more than two (2) ADM workspaces per application being analyzed.
- Cisco to provide no more than three application views per ADM workspace, total number of views not to exceed six (6) for the two applications.
- Cisco to provide no more than fifty (50) ADM runs/versions in total for the two applications being analyzed.
- Cisco to run no more than three (3) live compliance analyses for published policies, per application.
- Cisco will provide an As-Built report containing the following, if applicable:

- 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

Customer Responsibilities:

- Customer is responsible for providing application stakeholders to participate in up to three (3) checkpoints/reviews per application being analyzed.
- Customer to provide stakeholder to review every ADM run results and 'approve EPGs/clusters' provided in results of every ADM iteration.
- Customer to provide stakeholders to participate in analysis of live and experimental compliance view results, as requested by Cisco.
- Customer to provide stakeholders to participate in any discussions of creation of whitelist policies, as requested by Cisco.
- Customer to use Tetration Analytics templates for DNS/SLB/Route-tags provided by Cisco to generate their configurations for providing them as input to the ADM analysis.

Custom Dashboard Creation

Cisco Responsibilities:

- Custom Dashboard Creation – Cisco to configure one (1) dashboard view per customer requirements.

Customer Responsibilities:

- Discuss Dashboard view requirements with Cisco.
- Customer understands that Cisco creates these dashboard views using existing Cisco Tetration Software and scope of work does not include any custom software development.

Knowledge Transfer

Cisco Responsibilities:

- Provide information to Customer regarding any Knowledge Transfer pre-requisites for Customer personnel nominated to attend the Knowledge Transfer workshop. Cisco will determine an appropriate format and delivery method for the Knowledge Transfer workshop(s).
- Within five (5) Business Days following completion of the ADM Run and Compliance deliverables, reach agreement with the Customer on the commencement date of the Knowledge Transfer workshop.

- Conduct one (1) remote Knowledge Transfer workshop on topics relevant to Tetration solution deployed in Customer's production network. Each workshop will be held for one (1) consecutive Business Day, for up to a maximum of fifteen (15) participants.
- The Knowledge Transfer workshop may include, but is not limited to, one or more following topics: a) GUI walkthrough; b) ADM analysis; c) Compliance analysis; d) Exploring and searching flows; e) Operationalizing Tetration cluster; and f) Dashboard views.
- Provide related knowledge transfer material, if any.
- Discuss and demonstrate no more than three (3) Customer selected use cases from the following list for no more than eight (8) hours per use case:
 - Flow Analysis Use Case, comprising: Create filters and drill down to specific flow(s) of interest based on filter criteria specified by Customer; Guidance for creating and analyzing flows based on filters specified by Customer; Create a library of commonly used flow search queries (Not to exceed 10 commonly used flow searches).
 - Forensics and Visibility Use Case, comprising: Demonstrate the creation and baselining of various metrics such as latency, bandwidth, and flow activity for various applications, network segments; Illustrate how to perform fault isolation for network/app related issues available from within Tetration.
 - Near Real-time Application/Software Inventory and Process Detection Use Case, comprising: Demonstrate on how to baseline the behavior of the processes running on the servers to identify any behavior deviations and compare them with known "bad" patterns exhibited by these processes; Illustrate how to identify operational fault isolation for compute and host process/sub-process related issues; Illustrate the near real-time authoritative updates which can be integrated with customer's CMDB
 - Network Performance Use Case, comprising: Demonstrate on how to detect network and link congestion, hop-by-hop latency issues, packet drops and CoS analysis for ACI fabric; Illustrate how this use case can help optimize ACI fabric deployments and Network fault isolation
 - Neighborhood Graphs Use Case, comprising: Demonstrate how to discover adjacent application servers based on end to end application flows and traffic patterns; Illustrate how to discover asymmetric application flows; Illustrate the detailed per-hop flow information
 - Best Practices Guidance, Upcoming Releases Guidance & Integration in Day 2 Operations Use Case, comprising: Conduct Question and Answer, Roadmap and best practice sharing; Illustrate how to deploy and run Tetration in alignment with Cisco best practices; Provide

guidance on integration of Tetration in Customer's day 2 processes; Illustrate how to leverage new features for faster time to value.

- Application and Enforcement Use Case, comprising: Provide holistic strategy for policy enforcement across on-premise and cloud workloads based on whitelist policies generated as part of ADM analysis

Customer Responsibilities:

- Provide further information about their requirements to enable Cisco to deliver a more focused and tailored Knowledge Transfer.
- Provide Cisco with the names and basic profiles of personnel attending the Knowledge Transfer workshop at least five (5) Business Days before commencement of the workshop(s).
- Within five (5) Business Days following completion of the ADM Run and Compliance deliverables, reach agreement with Cisco on the actual location and the commencement date of the Knowledge Transfer workshop(s).
- Ensure that Customer's personnel attending the Knowledge Transfer workshop(s) meet all course pre-requisites identified by Cisco.

Project Assumptions and Exclusions

- Cisco to assist Customer in upgrading the cluster, assuming an upgrade is available to the Customer during the delivery of the Service.
- Cisco to assist Customer in operational activities limited to:
 - Creation of no more than ten (10) user accounts on the cluster.
 - Validate condition of cluster before and after upgrade through snapshots.
 - Validate that sensors that have been marked for auto-upgrade have been upgraded.
- No work can start on cluster initiation until Customer has returned all site information to Cisco project manager.
- Cisco will make commercially reasonable efforts to create a design capable of being automated by a third party or Cisco orchestration systems. However, Cisco cannot be responsible for any current or future third party software or implementations.
- Cisco will make every effort to align to Customer's third party hardware product vendors however Cisco Services will not be responsible for schedule impacts due to third party deliverables or dependencies.
- Customer is responsible for determination and implementation of Customer design requirements and implementation of any recommendations provided by Cisco. Cisco recommendations are

based upon information provided to Cisco at the time of the services. In no event shall Cisco be liable for the accuracy or completeness of the information contained in the Cisco recommendations.

- Customer is responsible for system level and application end to end solution testing, acceptance and certification. Cisco to collaborate and provide architectural design and sub-system level testing for components in the data center.
- Customer will be responsible for migrating and testing all server-based applications.
- Implementation/Migration Plan Execution Support does not include physical installation, racking and stacking of equipment, or physical cable installation.
- Customer shall supply the workplace policies, conditions and environment in effect at Customer Site(s). All data (designs, topologies, and requirements) provided by Customer are assumed to be current and valid.
- Customer shall integrate and validate any network monitoring solutions.
- IPv6 is excluded from this Service.
- Multicast configuration is excluded from this Service.
- All method of procedures (MOP) / detail migration plans regarding servers and applications are excluded from this Service. The MoP mentioned above is related to network elements only.
- This Service does not include any tool-based discovery and recording of network communication.
- Developing server, network devices and application inventories are not part of this Service

Invoicing and Completion

Invoicing

Services will be invoiced upon completion of the Services.

Completion of Services

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

Customer expressly understands and agrees that the Services shall take place and complete within ninety (90) calendar days from issuing a Purchase Order to Cisco for the Services herein.