CISCO

Service Description: Advanced Services – Fixed Price

Cisco SP Mobility Packet Core Network Visibility and Assessment Service (ASF-SP0-MI-PC-NIR1)

This document describes Advanced Services Fixed Price: Cisco SP Mobility Packet Core Network Visibility and Assessment Service

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 SP Mobility Packet Core Network Visibility and Assessment Service

Service Summary

Cisco will provide one report on network performance assessment, ten weekly Network Intelligence Reports and one report on configuration audit for SP Mobility packet core up to ten (10) gateway service nodes. Network Intelligence reports will provide visibility and analysis of Packet Core key performance indicators (KPI) trends every week after setup for the duration of the project. These reports will be remotely reviewed every week with Customer. Cisco will perform detailed performance and configuration assessment of Mobile Packet Core and provide reports with recommendations to fix issues.

The Services are comprised of the following:

- Network Performance Assessment
- Configuration Audit
- Weekly visibility into Network Intelligence

Deliverables

- Project Plan
- Network Performance Assessment Report
- Network Configuration Best Practice Report
- Network Intelligence Reports (~10)

Location of Services

Services are delivered remotely to Customer.

Project Management

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

Cisco Responsibilities

- Provide Customer with a list of designated Cisco personnel roles.
- Define the communication flow with the project sponsor and key stakeholders and document it in the Project Management Plan.

- Work with Customer to identify and document dependencies, risks and issues associated with the successful completion of the project.
- Provide the following: a) Kick-off Meeting; b) Schedule Resources; and c) Project Management Plan.
- Manage the project to the agreed upon Project Management Plan.
- Participate in scheduled project review meetings or conference calls, if required.
- Provide a handover upon project completion.

Customer Responsibilities

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

Network Performance Assessment Report

Cisco will consult with the Customer to assess Customer's mobility packet core infrastructure across various network elements.

Network Performance Assessment Report will provide findings on the current performance issues and possible target improvements to address with a deeper network audit. Report consists of these areas of KPIs:

- Platform KPIs:
  o System Availability
  o Platform Performance
- Network Element Level KPIs (SGSN, GGSN, MME, SAEGw, VoLTE, VoWiFi)
  o Availability
  o Accessibility
  o Mobility
  o Utilization

Cisco Responsibilities

- Conduct performance assessment kick-off session.
- Assess and capture as-is network performance and desired goals and expectations from Customer.
- Capture Customer desired KPIs to focus on.
- Capture logs and bulkstats from the nodes to determine statistics to arrive at KPIs for platform and network element level.
- The report will consist of following:
  o Defined KPIs per Technology
  o Baseline Performance
  o Identify Target Improvements
- Remotely present and review findings of the report and identify next steps.

Customer Responsibilities

- Work with Cisco to schedule performance assessment kick-off session.
- Provide Cisco Information on any service level agreements or Network performance requirements.
- Information on Customer's plans for business continuance, consolidation, and virtualization.
- Information on expected Network growth and application mix changes.
- Data collection activities as needed to facilitate a specific Cisco analyses.

Configuration Best Practice Report

The Configuration Best Practice Report can assist in adherence to design, configuration, and process guidelines of production Mobility Packet Core Network. The report presents findings, makes recommendations for changes, and identifies potential issues and shortcomings in the Customer's future design plans.

Cisco Responsibilities

- Collect all required system and network element configurations
- Analyze and compare with Cisco best practices
- Remotely review report findings and recommendations from the report
- The Configuration Best Practice report typically includes:
  - Hardware platform Configurations / Misconfigurations
  - Software Configurations / Misconfigurations
  - Potential issues and shortcomings in Customer's future design plans
  - Configuration Optimization recommendation changes

Customer Responsibilities
- Set up session with Cisco to review report and prepare action plan to address issues identified in the report.
- Data collection activities as needed to facilitate a specific Cisco analyses.

Network Intelligence Reports

Cisco will provide Network Intelligence (NI) and Visibility on cloud hosted Cisco NI Dashboard. Cisco will also provide ten (10) weekly, summarized reports with insights and detailed analysis. Cisco will also provide recommendations to mitigate the issues flagged in dashboard and reports.

These reports and dashboard will include a comprehensive list of key network indicators for the SP mobility packet core. The reports will provide consolidated views and thresholds, and may include the following:

- Holistic view of network performance
- Identification of top offending KPIs and Trends
- Identify and provide recommended remediation steps based on detected offending indicators
- Pre-emptive indication of problematic indicators
- Correlation of other data sources such as syslog / configuration / SNMP trap errors.
- Synchronize detected errors based on known issues found within the Cisco knowledgebase.

Cisco Responsibilities

- Provide ten (10) weekly Network Intelligence Reports to Customer.
- Provide access to key and relevant Customer representatives (max up to five (5)) on cloud hosted Cisco Network Intelligence Dashboard.
- Remotely review these report findings and discuss mitigation plans for the offending KPIs and Trends
- Discuss any other possible changes in Customer's environment as a result of report findings.

Customer Responsibilities

- Provide remote secure VPN access to Cisco to fetch the data from data source.
- Discuss and review Network intelligence reports with Cisco.
- Define action plan to mitigate identified offenders
- Review weekly Network Intelligence Reports.

General Customer Responsibilities

- Customer shall assume liability for all Customer-owned equipment for any loss or damage to the equipment during the implementation.
- All information (such as but not limited to: designs, topologies, requirements) provided by Customer is assumed to be up-to-date and valid for the Customer's current environment. Cisco Services are based upon information provided to Cisco by Customer at the time of the Services.
- Identify Customer's personnel and define their roles in the participation of the Services. Such personnel may include but is not limited to: architecture design and planning engineers, and network engineers.
- Ensure Customer's personnel are available to participate during the course of the Services to provide information

and to participate in scheduled information gathering sessions, interviews, meetings and conference calls.
- Customer to provide Customer's existing security guidelines and policies.
- Providing IP addressing and subnet masks, network physical and logical schematics, required security policies and any other necessary data to Cisco prior to, or during the design workshop.
- If requested by Cisco, providing physical and logical network schematics for other network elements not included in the scope of this project.
- Provide Customer internal incident escalation process and contact information.
- Provide information about Customer device and Network lab testing and certification process(es).
- Provide information about any service level agreements or Network performance requirements.
- Provide information about critical applications supported by the Network.
- Provide information about expected Network growth and application mix changes.
- 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.
- Support services provided by Cisco comprise technical advice, assistance and guidance only.
- Customer is solely responsible for implementation of any proposed changes by Cisco under this Service.
- 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.

Invoicing and Completion

Invoicing

Services will be invoiced upon completion of the Services.

Completion of Services

Cisco will provide written notification upon completion of the Services to Customer. The Customer shall provide written acknowledgement of Cisco's completion of the Services within five (5) Business Days of receipt of such notification. 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.