Service Description: Validation and Test Optimization Services

This document describes the Validation and Test 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 Validation and Test 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 Validation and Test 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 Validation and Test 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.

Validation and Test Optimization Services

Services Summary

Validation and Test Service provides specific help for your network support staff in the form of Test Assessment and Plan, Setup and Test Execution, Test Results Report and Final Consultation delivery.

Validation and Test Optimization Service includes service areas of Borderless NOS, Data Center, Collaboration, Mobile Internet, Enterprise Security, Enterprise Wireless LAN, NGN, SP Video, Mobility, and SP Security Architectures. Validation and Test Optimization Services provide annual, ongoing support for Customer environment addressing the following:

Validation and Test Services for NGN

Validation-Test Cycle and Review - Standard
Validation-Test Cycle and Review - Dedicated
Validation-Test Issue Management Support
Validation-Test Onsite Support
Validation-Testing and Lab Strategy Review
Validation-Test Persistent Lab Testing
Validation-Test Project Management
Validation-Test Staging

Validation and Test for Borderless NOS

Validation-Test Cycle and Review Standard
Validation-Test Cycle and Review Dedicated
Validation-Test Issue Management Support
Validation-Test Onsite Support
Validation-Testing and Lab Strategy Review
Validation-Test Persistent Lab Testing
Validation-Test Project Management
Validation-Test Staging

Validation and Test Services for Data Center

Validation-Test Cycle and Review Standard
Validation-Test Cycle and Review Dedicated
Validation-Test Issue Management Support
Validation-Test Onsite Support
Validation-Testing and Lab Strategy Review
Validation-Test Persistent Lab Testing
Validation-Test Project Management
Validation-Test Staging

Validation and Test Services for Collaboration

Validation-Test Cycle and Review
Validation-Test Issue Management Support
Validation-Test Onsite Support
Validation-Testing and Lab Strategy Review
Validation-Test Persistent Lab Testing
Validation-Test Project Management
Validation-Test Staging
Validation and Test Services for Mobile Internet

Validation and Test Cycle and Review Standard
Validation and Test Cycle and Review Dedicated
Validation and Test Issue Management Support
Validation and Test Onsite Support
Validation and Testing and Lab Strategy Review
Validation and Test Persistent Lab Testing
Validation and Test Project Management
Validation and Test Staging

Validation and Test Services for Enterprise Security

Validation and Test Cycle and Review Standard
Validation and Test Cycle and Review Dedicated
Validation and Test Issue Management Support
Validation and Test Onsite Support
Validation and Testing and Lab Strategy Review
Validation and Test Persistent Lab Testing
Validation and Test Project Management
Validation and Test Staging

Validation and Test Services for SP Video

Validation and Test Cycle and Review Standard
Validation and Test Cycle and Review Dedicated
Validation and Test Issue Management Support
Validation and Test Onsite Support
Validation and Testing and Lab Strategy Review
Validation and Test Persistent Lab Testing
Validation and Test Project Management
Validation and Test Staging

Validation and Test Services for Mobility

Validation and Test Cycle and Review Standard
Validation and Test Cycle and Review Dedicated
Validation and Test Issue Management Support
Validation and Test Onsite Support
Validation and Testing and Lab Strategy Review
Validation and Test Persistent Lab Testing
Validation and Test Project Management
Validation and Test Staging

Validation and Test Services for Enterprise Wireless LAN

Validation and Test Cycle and Review Standard
Validation and Test Cycle and Review Dedicated

Validation and Test Issue Management Support
Validation and Test Onsite Support
Validation and Testing and Lab Strategy Review
Validation and Test Persistent Lab Testing
Validation and Test Project Management
Validation and Test Staging

Validation and Test Services for SP Security

Validation and Test Cycle and Review - Standard
Validation and Test Cycle and Review Dedicated
Validation and Test Issue Management Support
Validation and Test Onsite Support
Validation and Testing and Lab Strategy Review
Validation and Test Persistent Lab Testing
Validation and Test Project Management
Validation and Test Staging

Cisco Responsibilities

Cisco shall provide services for the Customer during Standard Business Hours (unless stated otherwise). Cisco shall provide the following General Support provisions for all Services selected by Customer:

General Support

Designate an engineer ("Advanced Services Engineer") to act as the primary technical interface with Customer for their Network.

- Designate an engineer ("Validation and Test Network Consulting Engineer") to act as the primary interface with the Cisco project manager appointed for the Customer.
- Participate in regular visits to the Customer either via phone, email or in-person to review proactive deliverables and activities and to plan for next quarter. In-person visits not to exceed eight (8) days in aggregate. Additional visits will be mutually agreed at Cisco's then-current travel and labor rates.
- Designate engineer(s) to work with the Cisco project management and the primary Validation and Test Network Consulting Engineer.
- Participate in periodic conference calls (usually weekly) to review Customer's project 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 Services project delivery 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.

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.
Following activities are common to all technologies and architectures:

**Validation-Test Onsite Support**
Provide Customer-site lab test execution of an agreed upon, documented Test Plan that may include, amongst other information, the following:
- Setup of Customer lab with test tools and methods of testing for network core routing and switching solution infrastructure, configuration, integration and aggregation points for the Validation and Test deployment including protocols, security and NMS considerations.
- Conducting tests based on the Test Plan described above.
- Provide Customer site support for issues found during Customer testing phase

**Validation-Test Issue Management Support**
- Provide subject matter expertise to support for Customer's resolution of issues identified during testing phase for Customer's solution.
- Work with internal Cisco teams to work towards resolving issues in accordance with issue prioritization.

**Validation-Testing and Lab Strategy Review**
Cisco will consult with Customer via a series of meetings to develop a thorough understanding of Customer’s network core routing and switching solution testing capabilities, lab strategy, practices, and business goals. A Testing and Lab Strategy Review will contain overall strategy recommendations and may include, among other information, the following:
- Review of Customer's test environment, resources, concerns, and challenges
- Analysis of Customer’s current testing practices and lab strategy
- Report describing the analysis comparing Customer’s current practices to Cisco’s recommended best practices and Cisco’s recommendations

**Validation-Test Persistent Lab Testing**
Provide Lab consulting services in Cisco lab that support and align with Customer’s technology roadmaps and may include, among other information, the following:
- Develop test plan strategy to align with technology roadmap
- Execute Test cycles which may include:
  - Review Customer borderless network (covering routing, switching, security and wireless solution) design, if applicable;
  - Review Customer test plans, if applicable;
  - Update Customer test plans, as applicable;
  - Set up lab and test tools;
  - Execute Customer test plans
  - Recommend modifications to the Customer design during test execution, if applicable
  - Document and review test results from Test Plan execution with Customer

**Validation-Test Project Management**
- Designate a single point of contact ("Cisco Project Manager" or "PM") for all issues relating to the Services. Such person shall be identified in Primary Contacts and shall be available during normal business hours.
- Designate a backup when the Cisco Project Manager is not available.
- Provide Customer with a list of designated Cisco personnel roles and responsibilities under this service.
- Provide a mutually agreed upon Project Plan. Project Plan is a document that provides further details on the Services and acts as the baseline document, against which the Project Manager can manage deliverables, assess progress, address change management issues and ongoing viability questions for the Services.
- Work with Customer to identify and document dependencies, risks and issues associated with the successful completion of the service.
- Provide a project schedule approved by Customer, highlighting all deliverables and services outlining the planned events of the project, showing resource, and timescales.
- Coordinating and managing all Cisco responsibilities under this service.
- Participating in regularly scheduled project review meetings or conference calls, if required by Customer.
- Provide Customer the details of personnel requiring access to Customer, at least ten (10) business days prior to the scheduled dated Cisco requires access to Customer premises.
- Delivering a project status report to the Customer every two weeks.
- Review all pertinent Customer site information received from Customer.
- Ensure Cisco employees and any subcontractors conform to Customer’s reasonable workplace policies, conditions, and safety regulations that are consistent with Cisco’s obligations stated here and that are provided to Cisco in writing prior to commencement of the services. This is provided that Cisco’s personnel or subcontractors shall not be required to sign individual agreements with Customer or waive any personal rights.
- Supply Cisco project team personnel with a displayable form of identification to be worn at all times during project activities at Customer site(s).
- Provide the appropriate number of qualified personnel to provide the services as required by this service.
Validation-Test Staging

- Cisco will consult with Customer via a series of meetings to develop a thorough understanding of Customer’s solution testing goals, implementation objectives and requirements, and generate a proposed Test Plan, testing acceptance criteria, and Staging timeline.
- Once agreed, Cisco will receive Customer’s equipment, configure, and execute the tests documented in the Test Plan and report findings to Customer.
- After notification of completion of testing, Customer would be notified by Cisco to arrange for the shipment back to the Customer.

Validation and Test Services for NGN
Cisco will provide validation and testing support for the Customer’s Next Generation Network (‘NGN’) core routing and switching environment. Service may include Dedicated or Standard Test Cycle(s) and Review of test plans for thoroughness and effectiveness of planned testing. Test Plans will be reviewed with the Customer, prior to Test Execution. Service may also include Onsite Test support at Customer-site lab, and/or support for Issue Management activities.

Validation-Test Cycle and Review Standard
Cisco will consult with Customer via a series of meetings to develop a thorough understanding of Customer’s network core routing and switching solution-oriented testing goals and requirements, and generate a proposed Test Plan. Once agreed, Cisco will execute the networking tests documented in the Test Plan and report findings to Customer. Validation and Testing Support may include, among other information, the following:
- Review of Customer’s testing goals and business objectives for network core routing and switching;
- Analysis of requirements such as software strategy, platforms, topology, protocols, and configurations
- Test Plan development or review/refine existing test plan;
- Schedule facilities, equipment and resources;
- Test Set Up – Perform the Physical Lab Setup;
- Test Execution – Execute the Test Plan; and,
- Test Results Analysis – Document the results in a Test Report.
- Validation-Test Cycle and Review - Standard Support is estimated to last between 8 to 12 weeks.
- Validation and Testing Support is only available to certain geographic locations and will be specified in the Quote for Services.

Validation-Test Cycle and Review Dedicated
Cisco will consult with Customer via a series of meetings to develop a thorough understanding of Customer’s network core routing and switching solution-oriented testing goals and requirements, and generate a proposed Test Plan. Once agreed, Cisco will execute the networking tests documented in the Test Plan and report findings to Customer. Validation and Testing Support may include, among other information, the following:
- Review of Customer’s testing goals and business objectives for network core routing and switching;
- Analysis of requirements such as software strategy, platforms, topology, protocols, and configurations
- Test Plan development or review/refine existing test plan;
- Schedule facilities, equipment and resources;
- Test Set Up – Perform the Physical Lab Setup;
- Test Execution – Execute the Test Plan; and,
- Test Results Analysis – Document the results in a Test Report.
- Validation-Test Cycle and Review Standard Support is estimated to last between 8 to 12 weeks.
- Validation and Testing Support is only available to certain geographic locations and will be specified in the Quote for Services.

Validation and Test Services for Borderless NOS
Cisco will provide validation and testing support for the Customer’s borderless network (covering routing, switching, security and wireless solution) environment. Service may include Dedicated or Standard Test Cycle(s) and Review of test plans for thoroughness and effectiveness of planned testing. Test Plans will be reviewed with the Customer, prior to Test Execution. Service may also include Onsite Test support at Customer-site lab, and/or support for Issue Management activities.

Validation-Test Cycle and Review Standard
Cisco will consult with Customer via a series of meetings to develop a thorough understanding of Customer’s borderless network (covering routing, switching, security and wireless solution) solution-oriented testing goals and requirements, and generate a proposed Test Plan. Once agreed, Cisco will execute the networking tests documented in the Test Plan and report findings to Customer. Validation and Testing Support may include, among other information, the following:
- Review of Customer’s testing goals and business objectives for borderless network;
- Analysis of requirements such as software strategy, platforms, topology, protocols, and configurations
- Test Plan development or review/refine existing test plan;
- Schedule facilities, equipment and resources;
- Test Set Up – Perform the Physical Lab Setup;
- Test Execution – Execute the Test Plan; and,
- Test Results Analysis – Document the results in a Test Report.
- Validation-Test Cycle and Review Standard Support is estimated to last between 8 to 12 weeks.
network (covering routing, switching, security and wireless solution) solution-oriented testing goals and requirements, and generate a proposed Test Plan. Once agreed, Cisco will execute the networking tests documented in the Test Plan and report findings to Customer. Validation and Testing Support may include, among other information, the following:

- Review of Customer’s testing goals and business objectives for borderless network;
- Analysis of requirements such as software strategy, platforms, topology, protocols, and configurations;
- Test Plan development or review/refine existing test plan;
- Schedule facilities, equipment and resources;
- Test Set Up – Perform the Physical Lab Setup;
- Test Execution – Execute the Test Plan; and,
- Test Results Analysis – Document the results in a Test Report.

Validation-Test Cycle and Review Dedicated Support is estimated to last between 30 to 45 weeks.

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

Validation-Test Onsite Support

Provide Customer-site lab test execution of an agreed upon, documented Test Plan that may include, amongst other information, the following:

- Setup of Customer lab with test tools and methods of testing for borderless network (covering routing, switching, security and wireless solution) solution infrastructure, configuration, integration and aggregation points for the Validation and Test deployment including protocols, security and NMS considerations.
- Conducting tests based on the Test Plan described above.
- Provide Customer site support for issues found during Customer testing phase.

Validation and Test Services for Data Center

Cisco will provide validation and testing support for the Customer’s Data Center environment. Service may include Standard Test Cycle(s) and Review of test plans for thoroughness and effectiveness of planned testing. Test Plans will be reviewed with the Customer, prior to Test Execution. Service may also include Onsite Test support at Customer-site lab, and/or support for Issue Management activities.

Validation-Test Cycle and Review Standard

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

- Review of Customer’s testing goals and business objectives for Data Center;
- Analysis of requirements such as software strategy, platforms, topology, protocols, and configurations.
- Test Plan development or review/refine existing test plan;
- Schedule facilities, equipment and resources;
- Test Set Up – Perform the Physical Lab Setup;
- Test Execution – Execute the Test Plan; and,
- Test Results Analysis – Document the results in a Test Report.

Validation-Test Cycle and Review Standard

Cisco will consult with Customer via a series of meetings to develop a thorough understanding of Customer’s Collaboration Solution environment. Service may include Standard Test Cycle(s) and Review of test plans for thoroughness and effectiveness of planned testing. Test Plans will be reviewed with the Customer, prior to Test Execution. Service may also include Onsite Test support at Customer-site lab, and/or support for Issue Management activities.

Validation and Test Services for Collaboration

Cisco will provide validation and testing support for the Customer’s Collaboration Solution environment. Service may include Standard Test Cycle(s) and Review of test plans for thoroughness and effectiveness of planned testing. Test Plans will be reviewed with the Customer, prior to Test Execution. Service may also include Onsite Test support at Customer-site lab, and/or support for Issue Management activities.

Validation-Test Cycle and Review Standard

Cisco will consult with Customer via a series of meetings to develop a thorough understanding of Customer’s Collaboration Solution environment. Service may include Standard Test Cycle(s) and Review of test plans for thoroughness and effectiveness of planned testing. Test Plans will be reviewed with the Customer, prior to Test Execution. Service may also include Onsite Test support at Customer-site lab, and/or support for Issue Management activities.

Validation and Test Services for Collaboration

Cisco will provide validation and testing support for the Customer’s Collaboration Solution environment. Service may include Standard Test Cycle(s) and Review of test plans for thoroughness and effectiveness of planned testing. Test Plans will be reviewed with the Customer, prior to Test Execution. Service may also include Onsite Test support at Customer-site lab, and/or support for Issue Management activities.
• Analysis of requirements such as software strategy, platforms, topology, protocols, and configurations
• Test Plan development or review/refine existing test plan;
• Schedule facilities, equipment and resources;
• Test Set Up – Perform the Physical Lab Setup;
• Test Execution – Execute the Test Plan; and,
• Test Results Analysis – Document the results in a Test Report.
• Validation-Test Cycle and Review Standard Support is estimated to last between 8 to 12 weeks.
• Validation and Testing Support is only available to certain geographic locations and will be specified in the Quote for Services.

Validation-Test Cycle and Review Dedicated
Cisco will consult with Customer via a series of meetings to develop a thorough understanding of Customer’s Collaboration solution-oriented testing goals and requirements, and generate a proposed Test Plan. Once agreed, Cisco will execute the networking tests documented in the Test Plan and report findings to Customer. Validation and Testing Support may include, among other information, the following:
• Review of Customer’s testing goals and business objectives for borderless network;
• Analysis of requirements such as software strategy, platforms, topology, protocols, and configurations
• Test Plan development or review/refine existing test plan;
• Schedule facilities, equipment and resources;
• Test Set Up – Perform the Physical Lab Setup;
• Test Execution – Execute the Test Plan; and,
• Test Results Analysis – Document the results in a Test Report.
• Validation-Test Cycle and Review Dedicated Support is estimated to last between 30 to 45 weeks.
• Validation and Testing Support is only available to certain geographic locations and will be specified in the Quote for Services.

Validation and Test Services for Mobile Internet
Cisco will provide validation and testing support for the Customer’s Mobile Internet solution environment. Service may include Dedicated or Standard Test Cycle(s) and Review of test plans for thoroughness and effectiveness of planned testing. Test Plans will be reviewed with the Customer, prior to Test Execution. Service may also include Onsite Test support at Customer-site lab, and/or support for Issue Management activities.

Validation-Test Cycle and Review Standard
Cisco will consult with Customer via a series of meetings to develop a thorough understanding of Customer’s Mobile Internet solution-oriented testing goals and requirements, and generate a proposed Test Plan. Once agreed, Cisco will execute the networking tests documented in the Test Plan and report findings to Customer. Validation and Testing Support may include, among other information, the following:
• Review of Customer’s testing goals and business objectives for Mobile Internet solution;
• Analysis of requirements such as software strategy, platforms, topology, protocols, and configurations
• Test Plan development or review/refine existing test plan;
• Schedule facilities, equipment and resources;
• Test Set Up – Perform the Physical Lab Setup;
• Test Execution – Execute the Test Plan; and,
• Test Results Analysis – Document the results in a Test Report.
• Validation-Test Cycle and Review Standard Support is estimated to last between 8 to 12 weeks.
• Validation and Testing Support is only available to certain geographic locations and will be specified in the Quote for Services.

Validation-Test Cycle and Review Dedicated
Cisco will consult with Customer via a series of meetings to develop a thorough understanding of Customer’s Mobile Internet solution-oriented testing goals and requirements, and generate a proposed Test Plan. Once agreed, Cisco will execute the networking tests documented in the Test Plan and report findings to Customer. Validation and Testing Support may include, among other information, the following:
• Review of Customer’s testing goals and business objectives for Mobile Internet solution;
• Analysis of requirements such as software strategy, platforms, topology, protocols, and configurations
• Test Plan development or review/refine existing test plan;
• Schedule facilities, equipment and resources;
• Test Set Up – Perform the Physical Lab Setup;
• Test Execution – Execute the Test Plan; and,
• Test Results Analysis – Document the results in a Test Report.
• Validation-Test Cycle and Review Dedicated Support is estimated to last between 30 to 45 weeks.
• Validation and Testing Support is only available to certain geographic locations and will be specified in the Quote for Services.

Validation and Test Services for Enterprise Security
Cisco will provide validation and testing support for the Customer’s Enterprise Security solution environment. Service may include Standard Test Cycle(s) and Review of test plans for thoroughness and effectiveness of planned testing. Test Plans will be reviewed with the Customer, prior to Test Execution. Service may also include Onsite Test support at Customer-site lab, and/or support for Issue Management activities.

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

- Review of Customer’s testing goals and business objectives for Enterprise Security solution;
- Analysis of requirements such as software strategy, platforms, topology, protocols, and configurations;
- Test Plan development or review/refine existing test plan;
- Schedule facilities, equipment and resources;
- Test Set Up – Perform the Physical Lab Setup;
- Test Execution – Execute the Test Plan; and,
- Test Results Analysis – Document the results in a Test Report.

- Validation-Test Cycle and Review Standard Support is estimated to last between 8 to 12 weeks.
- Validation and Testing Support is only available to certain geographic locations and will be specified in the Quote for Services.

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

- Review of Customer’s testing goals and business objectives for Enterprise Security solution;
- Analysis of requirements such as software strategy, platforms, topology, protocols, and configurations;
- Test Plan development or review/refine existing test plan;
- Schedule facilities, equipment and resources;
- Test Set Up – Perform the Physical Lab Setup;
- Test Execution – Execute the Test Plan; and,
- Test Results Analysis – Document the results in a Test Report.

- Validation-Test Cycle and Review Dedicated Support is estimated to last between 30 to 45 weeks.
- Validation and Testing Support is only available to certain geographic locations and will be specified in the Quote for Services.

Validation and Test Services for Services Provider (SP) Video
Cisco will provide validation and testing support for the Customer’s Service Provider Video Solution environment. Service may include Dedicated or Standard Test Cycle(s) and Review of test plans for thoroughness and effectiveness of planned testing. Test Plans will be reviewed with the Customer, prior to Test Execution. Service may also include Onsite Test support at Customer-site lab, and/or support for Issue Management activities.

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

- Review of Customer’s testing goals and business objectives for Service Provider Video solution;
- Analysis of requirements such as software strategy, platforms, topology, protocols, and configurations;
- Test Plan development or review/refine existing test plan;
- Schedule facilities, equipment and resources;
- Test Set Up – Perform the Physical Lab Setup;
- Test Execution – Execute the Test Plan; and,
- Test Results Analysis – Document the results in a Test Report.

- Validation-Test Cycle and Review Standard Support is estimated to last between 8 to 12 weeks.
- Validation and Testing Support is only available to certain geographic locations and will be specified in the Quote for Services.

Validation and Test Services for Mobility
Cisco will provide validation and testing support for the Customer’s Mobility solution environment. Service may include Standard Test Cycle(s) and Review of test plans for thoroughness and effectiveness of planned testing. Test Plans will be reviewed with the Customer, prior to Test Execution. Service may also include Onsite Test support at Customer-site lab, and/or support for Issue Management activities.

Validation Testing Optimization Services.doc
Validation-Test Cycle and Review Standard
Cisco will consult with Customer via a series of meetings to
develop a thorough understanding of Customer's Mobility
solution-oriented testing goals and requirements, and generate
a proposed Test Plan. Once agreed, Cisco will execute the
networking tests documented in the Test Plan and report
findings to Customer. Validation and Testing Support may
include, among other information, the following:
• Review of Customer's testing goals and business
  objectives for Mobility solution;
• Analysis of requirements such as software strategy,
  platforms, topology, protocols, and configurations
• Test Plan development or review/refine existing test plan;
• Schedule facilities, equipment and resources;
• Test Set Up – Perform the Physical Lab Setup;
• Test Execution – Execute the Test Plan; and,
• Test Results Analysis – Document the results in a Test
  Report.
• Validation-Test Cycle and Review Standard Support is
  estimated to last between 8 to 12 weeks.
• Validation and Testing Support is only available to certain
graphic locations and will be specified in the Quote for
Services.

Validation-Test Cycle and Review Dedicated
Cisco will consult with Customer via a series of meetings to
develop a thorough understanding of Customer's Mobility
solution-oriented testing goals and requirements, and generate
a proposed Test Plan. Once agreed, Cisco will execute the
networking tests documented in the Test Plan and report
findings to Customer. Validation and Testing Support may
include, among other information, the following:
• Review of Customer's testing goals and business
  objectives for Mobility solution;
• Analysis of requirements such as software strategy,
  platforms, topology, protocols, and configurations
• Test Plan development or review/refine existing test plan;
• Schedule facilities, equipment and resources;
• Test Set Up – Perform the Physical Lab Setup;
• Test Execution – Execute the Test Plan; and,
• Test Results Analysis – Document the results in a Test
  Report.
• Validation-Test Cycle and Review Dedicated Support is
  estimated to last between 30 to 45 weeks.
• Validation and Testing Support is only available to certain
graphic locations and will be specified in the Quote for
Services.

Validation and Test Services for Enterprise Wireless LAN
Cisco will provide validation and testing support for the
Customer’s Enterprise Wireless LAN solution environment.
Service may also include Onsite Test support at Customer-site
lab, and/or support for Issue Management activities.

Validation-Test Cycle and Review Standard
Cisco will consult with Customer via a series of meetings to
develop a thorough understanding of Customer’s Enterprise
Wireless LAN solution-oriented testing goals and requirements,
and generate a proposed Test Plan. Once agreed, Cisco will
execute the networking tests documented in the Test Plan and
report findings to Customer. Validation and Testing Support may
include, among other information, the following:
• Review of Customer’s testing goals and business
  objectives for Enterprise Wireless LAN solution;
• Analysis of requirements such as software strategy,
  platforms, topology, protocols, and configurations
• Test Plan development or review/refine existing test plan;
• Schedule facilities, equipment and resources;
• Test Set Up – Perform the Physical Lab Setup;
• Test Execution – Execute the Test Plan; and,
• Test Results Analysis – Document the results in a Test
  Report.
• Validation-Test Cycle and Review Standard Support is
  estimated to last between 8 to 12 weeks.
• Validation and Testing Support is only available to certain
graphic locations and will be specified in the Quote for
Services.

Validation-Test Cycle and Review Dedicated
Cisco will consult with Customer via a series of meetings to
develop a thorough understanding of Customer’s Enterprise
wireless solution-oriented testing goals and requirements, and
generate a proposed Test Plan. Once agreed, Cisco will
execute the networking tests documented in the Test Plan and
report findings to Customer. Validation and Testing Support may
include, among other information, the following:
• Review of Customer’s testing goals and business
  objectives for borderless network;
• Analysis of requirements such as software strategy,
  platforms, topology, protocols, and configurations
• Test Plan development or review/refine existing test plan;
• Schedule facilities, equipment and resources;
• Test Set Up – Perform the Physical Lab Setup;
• Test Execution – Execute the Test Plan; and,
• Test Results Analysis – Document the results in a Test
  Report.
• Validation-Test Cycle and Review Dedicated Support is
  estimated to last between 30 to 45 weeks.
• Validation and Testing Support is only available to certain
graphic locations and will be specified in the Quote for
Services.
Validation-Test Cycle and Review Standard
Cisco will consult with Customer via a series of meetings to develop a thorough understanding of Customer’s Service Provider Security solution-oriented testing goals and requirements, and generate a proposed Test Plan. Once agreed, Cisco will execute the networking tests documented in the Test Plan and report findings to Customer. Validation and Testing Support may include, among other information, the following:

- Review of Customer’s testing goals and business objectives for Service Provider Security solution;
- Analysis of requirements such as software strategy, platforms, topology, protocols, and configurations;
- Test Plan development or review/refine existing test plan;
- Schedule facilities, equipment and resources;
- Test Set Up – Perform the Physical Lab Setup;
- Test Execution – Execute the Test Plan; and,
- Test Results Analysis – Document the results in a Test Report.

Validation-Test Cycle and Review Standard Support is estimated to last between 8 to 12 weeks.

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

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

- Review of Customer’s testing goals and business objectives for borderless network;
- Analysis of requirements such as software strategy, platforms, topology, protocols, and configurations;
- Test Plan development or review/refine existing test plan;
- Schedule facilities, equipment and resources;
- Test Set Up – Perform the Physical Lab Setup;
- Test Execution – Execute the Test Plan; and,
- Test Results Analysis – Document the results in a Test Report.

Validation-Test Cycle and Review Dedicated Support is estimated to last between 30 to 45 weeks.

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

Validation and Test Support
In addition to the General Responsibilities, Customer shall provide the following:

• Provide the low level design document describing how Customer Network needs to be built and engineered to meet a specific set of technical requirements and design goals. The level of details must be sufficient to be used as input to an implementation plan.

• Ensure key detailed design stakeholders and decision-makers are available to participate during the course of the service.

• Provide or extract additional information required in the design effort (e.g., current and planned traffic characteristics).

• Information on Customer business and technical requirements for new Software releases.

• Review details of planned changes with Validation and Test Engineer.

• 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.

• For Onsite Test Support, provide Cisco personnel with access during Standard Business Hours to appropriate Customer Lab facilities.

Validation-Test Project Management

• Designate a single point of contact (“Customer Project Manager”) for all issues relating to the Services. Such person shall be identified in Primary Contacts and shall be available during Normal Business Hours.

• Designate a backup when the Customer Project Manager is not available.

• Providing the Cisco PM with a list of designated Customer roles and responsibilities for the Deliverables.

• Ensure that key Customer personnel (such as architecture design and planning, network engineering, network operations personnel) are available to provide information and to participate in review sessions, workshops and other information gathering activities. The Customer PM will also ensure that Cisco is provided with all information, data and documentation as Cisco reasonably requires providing services and complying with Cisco’s responsibilities in this Services offer. This information includes, but is not limited to:

(i) Information relating to Customer’s infrastructure, design, business and other applicable requirements;

(ii) Functional and/or technical documentation relating to such requirements; and

(iii) Topology maps, configuration information and existing and proposed network infrastructure.

• Identify the primary and backup Customer authorized site contacts that shall be accountable for providing necessary information, obtaining access clearances and shall interface as required with other organizations.

• Participate in regularly scheduled project review meetings or conference calls.

• Unless otherwise agreed to by the parties, ensure that Cisco’s request for relevant information or documentation needed for the project under this service is provided to Cisco within five (5) business day of Cisco’s request, or, if 5 business days is not reasonably practicable, then as soon as is reasonably practicable.

• Notify the Cisco Project Manager of any Customer requested schedule changes at least ten (10) business days prior to the scheduled activity, or, if 10 business days is not reasonably practicable, then as soon as is reasonably practicable. Cisco will use reasonable efforts to accommodate schedule changes and/or cancellations made within this ten (10) day window.

• Notify Cisco of any hardware and/or software upgrades or any other changes within the Customer’s environment that might affect the performance of services prior to the commencement of Services.

• Provide Cisco with such access to Customer Site(s) and facilities as required enabling Cisco to comply with its obligations, including where applicable, computers, telecom equipment, facilities, workspace and telephone for Cisco’s use during the project.

• Provide proper security clearances and/or escorts as required to access the Customer Site.

• Provide security and Internet access to routers and/or modems for outbound access, for software and firmware downloads in accordance with Customer’s access guidelines, protocols and regulations.

• Provide VPN access to Customer environment for remote access to Customer’s environment as necessary.

Validation-Test Staging
• Customer is responsible (including any costs) for shipping staged equipment to Cisco location and from Cisco to the Customer location.
• Customer retains title and risk of loss to staged equipment while at Cisco's location/lab for the testing/validation.
## Service SKUs

The following list of validation and test services SKUs and Deliverables with Tags:

<table>
<thead>
<tr>
<th>Architecture</th>
<th>Name of Category / Module</th>
<th>SKU</th>
<th>Deliverables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile Internet</td>
<td>Validation and Test Services for Mobile Internet</td>
<td>CON-AS-TEST-MI</td>
<td>Validation-Test Cycle and Review Standard (OPT-VT-MI TCR) Validation-Test Cycle and Review Dedicated (OPT-VT-MI TCR MA) Validation-Test Issue Management Support (OPT-VT-MI IM) Validation-Test Onsite Support (OPT-VT-MI OS) Validation-Testing and Lab Strategy Review (OPT-VT-MI TLSR) Validation-Test Persistent Lab Testing (OPT-VT-MI TEST) Validation-Test Project Management (OPT-VT-MI PM) Validation-Test Staging (OPT-VT-MI ST)</td>
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<tr>
<td>Validated</td>
<td>Services</td>
<td>Project Management (OPT-VT-SPVID PM)</td>
<td>Staging (OPT-VT-SPVID ST)</td>
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<tr>
<td>Mobility</td>
<td>CON-AS-TEST-MOB</td>
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