Service Description: Cisco AON Solution Operate Services

This document describes Cisco's AON Solution Operate Services.

Direct Sale from Cisco. If you have purchased these Services directly from Cisco, this document is incorporated into your Master Services Agreement (MSA) with Cisco. All capitalized terms not defined in the Supplemental Glossary of Terms for AON Solution Operate Services at the end of this document have the meaning ascribed in the MSA. If not already covered in your MSA, this document should be read in conjunction with the Glossary of Terms, the Severity and Escalation Guidelines and the List of Services Not Covered documents posted at www.cisco.com/go/servicedescriptions/. In the event of a conflict between this Service Description and your MSA, 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; it is not a contract and does not create any rights or obligations for you or Cisco. The contract, if any, governing the provision of these Services 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 descriptions Cisco service at www.cisco.com/go/servicedescriptions/. All capitalized terms not defined in the Supplemental Glossary of Terms for AON Solution Operate Services at the end of this document have the meaning ascribed in the Glossary of Terms at the above URL. The Severity and Escalation Guidelines and List of Services Not Covered documents, also posted at the above URL, apply to this Service.

Pre-requisite Cisco Services. All Products in Customer's network must be supported by Cisco's Smartnet maintenance service, at a minimum.

GENERAL RESPONSIBILITIES

Cisco Responsibilities: Cisco will provide the Services described below, as selected by Customer and detailed on a Purchase Order for which Customer has paid the appropriate fee. Cisco shall provide the following Services during Standard Business Hours (unless otherwise stated).

Customer Responsibilities: Customer will meet the obligations described below for the applicable Services ordered.

 Designate at least two (2), but not more than three (3), technical representatives, who must be Customer's employees in a centralized Network support center (Customer's technical assistance center), to act as the primary technical interface with the Advanced Services Engineer.

- Designate senior engineers with the authority to make any necessary changes to the Network configuration and AON Flows. Designate one of these individuals, who must be a senior member of management or technical staff, as Customer's primary point of contact to manage the implementation of the Services described herein (e.g., chair the required conference calls, assist with prioritization of projects and activities).
- Within one (1) year from the commencement of this Service, 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 will maintain centralized network management for its AON Solution supported by these Services, and capable of providing Level 1 and Level 2 support.
- Secure any Cisco-provided Data Collection Tools or scripts located at Customer's site within a Network environment that is protected within a firewall and on a secure LAN, 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 the Data Collection Tools. In the event the Data Collection Tool provided by Cisco is Software, Customer agrees to make appropriate computers available and download Software as needed. Customer will remain responsible for any damage to or loss or theft of the Data Collection Tools while in Customer's custody.
- Provide a Network topology map, configuration information, Flows and information of new features being implemented as needed.
- Notify Advanced Services Engineer of any major Network changes (e.g., Flows, topology, configuration, new IOS releases.).
- In the event the AON Solution or Network composition is altered after this Exhibit is in effect, notify Cisco in writing within ten days (10) of the change. Cisco may require modifications to the fee if the AON Solution or Network composition has increased beyond the original pricing quote for Services.
- Create and manage an internal email alias for communication with Advances Services Engineer.
- Retain overall responsibility for any business process impact and any process change implementations.

AON SOLUTION OPERATIONS MANAGEMENT

Cisco Responsibilities:

- Facilitate AON Solution problem resolution case management on a reactive basis for technical issues reported to Cisco by Customer and help Customer determine if appropriate resources are being applied to technical issues reported.
- Perform operational data analysis, not to exceed sixteen (16) per year, on critical issues by identifying Customer knowledge gaps and operational abnormalities/gaps. Cisco will provide recommendations and identify possible solutions that Customer may elect to implement to help close knowledge and system quality gaps.
- Conduct conference calls with Customer to discuss operational TAC issues, track open cases and report progress on resolution of open cases.
- Review quarterly operational data analysis reports prepared by Cisco to address Customer cases submitted to TAC and that cover, among other things, reactive support contract usage, case statistics, quality issues, and overall case analysis (e.g., by product type and/or case priority).
- Provide informal instructional sessions on troubleshooting tools and processes during Cisco's case handling.
- At Customer's request notify TAC, and the Cisco engineer familiar with Customer's Network, if an AON Solution Engineering has been ordered, of any planned Event by pre-opening a case and alerting TAC of the relevant information related to the scheduled Event, not to exceed one (1) Event per month.

Customer Responsibilities:

- Designate a representative to act as the primary interface with Cisco.
- Coordinate onsite visits by Cisco and provide thirty (30) days notice of the scheduled visit. In the event the date for the scheduled visit is changed, Customer may be subject to additional charges.
- Attend scheduled conference calls for open case reviews.

AON SOLUTION TECHNICAL OPERATE SERVICES

Cisco Responsibilities:

- Provide direct access to the AON Solution Technical Operate Services team via a Cisco provided phone number.
- Provide response to Customer within fifteen (15) minutes on Severity 1 or Severity 2 calls. For Severity 3 and Severity 4 calls, response shall be within sixty (60) minutes.

- Provide problem resolution of critical cases at the Solution level.
- Perform root cause analysis, not to exceed eight (8) per year, on technical issues on the AON Solution.
 Performance of root cause analysis by Cisco is dependent upon Cisco having all necessary available information with which to perform a root cause analysis.
- Provide Software referrals to address Customeridentified critical issues, taking into consideration the Customer's documented and communicated Solution functionality requirements. The referrals (focused on recommending appropriate Updates) shall apply to critical reactive cases with respect to an affected area of the AON Solution.
- Provide certain Data Collection Tools that Cisco identifies as appropriate for collecting data on the AON Solution during the Term of the Services, provided that all fees due and owing to Cisco under this Exhibit have been paid. Data Collection Tools may or may not include Hardware or Software. Customer acknowledges and agrees that Cisco will retain full right, title and interest to the Data Collection Tools.

Customer Responsibilities:

- Report Severity 1 & 2 problems directly by telephone using the Cisco provided phone number. Response times do not include problems reported via CCO or other electronic means.
- Advise Cisco of its standard operating procedures related to Customer's business practices, internal operational nomenclature and Network to allow Cisco to effectively communicate and discuss cases with Customer in the context of Customer's business environment.
- Provide reasonable electronic access to Customer's Network to assist Cisco in providing support.
- Designate person(s) from within its technical support organization to serve as a liaison to the Advanced Services Engineer.
- Provide its designated person(s) with instructions on process and procedure to initiate cases and access the Advanced Services Engineer.
- Provide all necessary information to enable Cisco to perform root cause analysis.
- Provide a Network topology map, configuration information, and information of existing Flows that are implemented as needed.
- Provide all necessary device, platform, feature, and release train requirements that exist in the Customer environment.

- Customer acknowledges that Cisco will only support generally available Products and Software releases/versions unless otherwise mutually agreed.
- Ensure that Data Collection Tools provided by Cisco and located at Customer's site are located in a secure area, within a Network environment protected within a firewall and on a secure LAN, 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 output of the 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.

AON SOLUTION REMOTE DEPLOYMENT OPERATE SERVICES

Cisco Responsibilities:

Provide Customer with remote resource to help address problems with AON Solution during a major deployment into a live Network. Upon receipt of not less than twentyone (21) days prior written request by Customer to Cisco, Cisco will make available a designated support contact that can accept trouble calls on a 24-hour, 7-day standby basis to remotely assist Customer in major Network service changes (e.g., major Hardware upgrade(s), major site installation(s) and major configuration changes). Customer agrees to submit a detailed request and schedule to Cisco prior to any such activity. The number of Events and total aggregate standby time will vary depending on the size of Customer AON Solution and Network activity and will be limited in any one-month period for all Hardware, configuration, Flows and Software Events combined as shown below. (Note: Software Events are covered under AON Solution Remote Software Upgrade Operate Services)

AON Solution Size	Total Number of H/W, S/W and Config. Events Combined	Total Aggregate Standby Time (Hourly)
<\$10M	Up to 6/year	Up to 8
\$10M-\$40M	Up to 2/month	Up to 16
\$40M-\$80M	Up to 3/month	Up to 20
>\$80M	Up to 4/month	Up to 24

Customer Responsibilities:

In addition to the General Responsibilities, Customer will provide the following:

- Information on architecture (which may include remote sites and size of remote sites).
- Information on low risk and high risk areas of the Network based on their AON Solution traffic.

- Information on Customer Implementation plan and deployment schedule.
- Maintenance window information and any other constraints.
- Information on Customer change control process.
- Contact information and customer escalation process.

Customer will review details of any planned changes with Advanced Services Engineer.

AON SOLUTION REMOTE SOFTWARE UPGRADE OPERATE SERVICES

Cisco Responsibilities:

Provide Customers with remote resource to help address problems with AON Solution during major upgrades on a live Network. Upon receipt of not less than twenty-one (21) days prior written request by Customer to Cisco, Cisco will make available a designated support contact that can accept trouble calls on a 24-hour, 7-day a week standby basis to remotely assist Customer in major Software upgrades. Customer agrees to submit a detailed request and schedule to Cisco prior to any such activity. The number of Events and total aggregate standby time will vary depending on the size of Customer AON Solution and Network activity and will be limited in any one-month period for all Hardware, configuration, Flows and Software Events combined as shown below. (Note: Hardware and configuration Events are covered under AON Solution Remote Deployment Operate Services).

AON Solution Size	Total Number of H/W, S/W and Config. Events Combined	Total Aggregate Standby Time (Hourly)
<\$10M	Up to 6/yr.	Up to 8
\$10M-\$40M	Up to 2/mo.	Up to 16
\$40M-\$80M	Up to 3/mo.	Up to 20
>\$80M	Up to 4/mo.	Up to 24

Customer Responsibilities:

In addition to the General Responsibilities, Customer will provide the following:

- Information on current releases running in the AON Solution and current configuration templates.
- Information on Customer Business and technical requirements for new Software releases.
- Information on Customer certification process and lab testing process.
- Information on Customer change control process.

Customer will review details of any planned changes with Advanced Services Engineer.

AON SOLUTION ONSITE OPERATE SERVICES OPTION

NOTE: This option is not part of this AON Solution Operate Services, but can be purchased separately.

Cisco Responsibilities:

- Provide a locally-based Advanced Services Engineer who will provide the services detailed in this section for five (5) days per week at a single Customer location for the amount of time ordered by Customer. Travel costs, if any, will be charged to Customer per Cisco's then-current travel policy guidelines, available to Customer upon written request to Cisco. The Advanced Services Engineer will not be available to provide the services detailed in this section for a period of one (1) week each Cisco quarter. Under this service, Cisco shall provide the following services during Standard Business Hours, unless stated otherwise.
- Provide Customer with Advanced Services Engineer to help facilitate Customer responsibilities related to -AON Solution Operate Services deliverables that may include:
 - Directing the collection of information for design or implementation reviews; and
 - Driving data collection activities for performance analyses.
- Provide Customer with ongoing, hands-on technical leadership by a Cisco Advanced Services Engineer to help Customer to plan and execute its AON Solution design, Flows, implementation, and performance engineering recommendations.

Customer Responsibilities:

Customer will provide the following:

- Reasonable access to computer equipment, workstation, facilities, workspace and telephone for Cisco Advanced Services Engineer's use in providing these services.
- Contractor badge to Local Cisco Advanced Services Engineer to enable unescorted access into Customer buildings.
- Involve Cisco Advanced Services Engineer in Customer's AON Solution planning and operations meetings, including, but not limited to, meetings involving the execution of Flow design, implementation, or software recommendations.

AON SOLUTION DEPLOYMENT REVIEW

These activities are for a single detailed deployed AON Solution project with up to two (2) AON Device Types. Actual number of Device Types will vary depending upon what is ordered by Customer:

- Conduct an investigation for the purpose of gathering data and initiating the Services, which may include but shall not be limited to the following:
 - Review Customer Network documentation, and existing Network designs, if available;
 - Complete a detailed deployment checklist, where applicable, to integrate technical requirements and design goals into a Network Design document;
 - o Gather fully documented Flows; and
 - o Gather Network Design document.
- Obtain from Customer a Network Design document, which typically includes:
 - o AON Flows;
 - Details related to all integrations with third party software;
 - Applications supported by the Network;
 - Physical Network topology;
 - Logical Network design;
 - Security considerations (i.e., authentication, VLANs, subnet isolation, etc.)
 - Routing strategy (for example, OSPF, BGP and ERGIP);
 - Definition of the outbound interfaces to Customer network management system; and
 - Addressing Strategy (e.g., IP, IPX, Subnetting, VLSM, Summarization)

Customer Responsibilities:

In addition to the General Responsibilities, Customer will:

- Designate an overall single Customer point of contact to whom all Cisco communications may be addressed and who has authority to act on all aspects of the services for this engagement.
- Designate a Customer project manager who will have overall responsibility for the success of the AON Solution deployment review.

EQUIPMENT LIST

Product(s) covered under this Service are listed in the Equipment List(s), which may be revised by Customer's Purchase Order requesting such revisions and Cisco's acceptance thereof.

SUPPLEMENTAL SERVICES NOT COVERED

In addition to the services set forth in the List of Services Not Covered document posted at www.cisco.com/go/servicedescriptions/, the following services are not covered under this Service. In the event of a conflict between this Service Description and the List of Services Not Covered document, this Service Description shall govern. Note that this is not an exhaustive list and other services may also not be included. Additional Services are provided at the thencurrent time and materials rates.

- Services for Network applications (for example, CDN, Public Voice, IP Packet Telephony, Broadband) (such services can be purchased separately for an additional fee).
- Services for non-Cisco Software installed on any Cisco Product other than the software listed in <u>Appendix A</u> attached hereto, and as set forth in the accompanying Customer Purchase Order.
- Any Hardware or third party product upgrade (other than the software listed in <u>Appendix A</u> attached hereto, and as set forth in the accompanying Customer Purchase Order) required to run new or updated Software.
- Additional onsite visits and standby services beyond the number of visits/Events specified in the applicable Service option, except upon Customer's written request and mutual agreement between Customer and Cisco at Cisco then-current travel and labor rates for such service on a time and material basis.

SUPPLEMENTAL GLOSSARY OF TERMS FOR AON SOLUTION OPERATE SERVICES

The following terms, as defined below, apply solely to this Service Description:

- AON means Cisco's Application Oriented Networking products, as may be renamed by Cisco from time to time.
- AON Solution means a Cisco integrated, supported and configured category of technical functionality using specific AON Third-Party Software Technology Products as listed in <u>Appendix A</u>.
- AON Solution Size means the total value of Products in Network, based on the global list price of purchased Products.
- Flows means the Policy Execution Plans that are implemented for various AON-based Network Devices. Flow definition must include all standard and custom bladelets, all standard and custom adaptors and all forms of applicable data-traffic (e.g., messages, files, and/or events).
- **Network Devices** means all routers, switches, firewalls and hubs involved in transporting and managing Customer's data.

APPENDIX A: AON THIRD-PARTY SOFTWARE TECHNOLOGY PRODUCTS

Cisco Advanced Services is structured to support Customers in solutions created by the AON Product group. These solutions may utilize one or more products from the following supported third-party technology vendors.

A list of approved Third Party Software Technology Products follows:

- a) **Connecterra/BEA** RFTagrware software product as used in AON RFID Solution.
- b) **CXO Systems** CXO software product as used in AON Visibility Solution.

Cisco reserves the right to amend or modify this list from time to time without notice to Customer.