



Service Description: Broadband Cable Optimization Support Services

This document describes Cisco's Broadband Cable Optimization Support Services.

Related Documents: This document should be read in conjunction with the following documents also posted at www.cisco.com/go/service-descriptions/: (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) or equivalent services agreement executed between you and Cisco. In the event of a conflict between this Service Description and your MSA or equivalent services agreement, this Service Description shall govern.

This Broadband Cable Optimization Support 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 by Cisco's Foundation Technology Service Provider Optimization Service. Cisco shall provide the Broadband Cable Optimization Support Services 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") 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. Availability of Services described herein and service delivery may vary by geographical region.

Broadband Cable Optimization Support

Service Summary

Broadband Cable Optimization Support Services provides Broadband Cable-specific help for your Network support staff in the form of Design Support, Software Support, Software Application Support, Cable Modem Termination System ("CMTS") support and Continuous Learning service modules. The following technologies are supported under this Service Description:

- Cable Modem Termination System
- Broadband Access Control for Cable ("BACC")/ Cisco Network Registrar ("CNR")

Services performed under this Service Description that are comparable to those services performed under Cisco's Foundation Technology Service Provider Optimization Service will build upon the original service support therein and will be

focused on the specific technology described in this Service Description.

Cisco Responsibilities

Cisco's Broadband Cable Optimization Support Service consists of the provision of, at a minimum, Design Support, from the Services described below, which Cisco shall provide for the Customer's Network during Standard Business Hours (unless stated otherwise). Cisco shall provide the following General Support provisions for all Services selected by Customer under the Broadband Cable Optimization Support Service:

General Support

- Designate an engineer ("Broadband Cable Engineer") to act as the primary interface with the Cisco project manager appointed for the Customer.
- Participate in regular visits to the Customer as required by the project manager either via phone 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 Broadband Cable Engineer.
- Participate in periodic conference calls (usually weekly) to review Customer's Network status, planning and the Services being provided.
- Monitor a Customer-specific Cisco email alias to facilitate communication with primary Broadband Cable Engineer as well as the engineers on the Cisco's Broadband Cable team.
- Broadband Cable Engineer may utilize Customer provided data, scripts or internal tools to assist in collecting data from the Network.

Design Support

• Detailed Design Report

- Consult with Customer networking staff in a series of meetings to develop a thorough understanding of Customer's Network design requirements, with a focus on concerns such as

resiliency, self-recovery, scalability, disaster recovery, business continuance, virtualization, application traffic requirements, and ability to handle increased traffic demands and prioritization via quality-of-service ("QoS").

- Provide a detailed design report with recommendations that takes into consideration, among other things, the following:
 - Customer's design requirements, priorities, and goals.
 - Analysis of impact of new requirements on existing Network.
 - Architecture and topology for the Network including the deployment of Cisco's BTS 10200 product.
 - Protocol selection and configuration.
 - Feature selection and configuration.
 - Security considerations.

- **Design Consultation**

- Provide ongoing design consultation that may include, amongst other information, the following:
 - Review of Customer's design requirements, priorities, and goals.
 - Analysis of impact of new requirements on existing Network.
 - Review of Network architecture and topology.
 - Integration and aggregation points for the Broadband Cable deployment including protocols, security and other considerations.
 - Broadband Cable application environment, bandwidth requirements, quality-of-service (QoS) and class of service discussions, guidelines for testing the types of Broadband Cable, configuration recommendations.
 - Broadband Cable deployment scenarios, recommend best practices of Broadband Cable, configuration recommendations,

Software Support

- **Software Recommendation Report**

- Provide proactive Software Recommendation Report (each report covers single Software Track), which may include:

- Review of new Software feature releases (bug scrubs for CMTS and/or BACC/CNR for that specific Network area or endpoint)
- Overall Software recommendation to proceed with testing and Feature Set Upgrade deployment or wait for future Maintenance Release.
- Contingency plan for transitioning Software in Customer networking environment.

- **Software Application Support**

- Provide BACC/CNR related application support:
 - Provide remote upgrade support for Method of Procedure ("MOP") up to an eight (8) hour window, with five (5) days notice.
 - Provide technical consultation in the form of email, instant messaging, or phone support.

- **CMTS Support**

- Provide CMTS related support:
 - Provide technical consultation in the form of email, instant messaging, or phone support

Continuous Learning

- **Knowledge Transfer and Mentoring.**

- Provide informal technical update training such as a "chalk talk" on a topic that is mutually agreed upon and relevant to the Products and Cisco technologies. Such training would be provided by the Broadband Cable Engineer or another senior Cisco engineer.

Customer Responsibilities

- **General Responsibilities**

- Designate at least two (2) but not more than six (6) technical representatives in each area covered under Broadband Cable including VoIP and gateway, who must be Customer's employees in a centralized Network support center (Customer's technical assistance center), to act as the primary technical interface to the Broadband Cable Engineer(s). Customer will designate as contacts senior engineers with the authority to make any necessary changes to the Network configuration. One individual, who is a senior member of management or technical staff, will be designated as Customer's primary point of contact to manage the implementation of services selected under this Service Description

(e.g., chair the weekly conference calls, assist with prioritization of projects and activities).

- Customer's technical assistance center shall maintain centralized network management for its Network supported under this Service Description, capable of providing Level 1 and Level 2 support.
- Provide reasonable electronic access to Customer's Network to allow the Broadband Cable Engineer to provide support.
- If Cisco provides Data Collection Tools or scripts located at Customer's site, Customer shall ensure that such Data Collection Tools or scripts 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 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.
- Provide a Network topology map, configuration information, and information of new features being implemented as needed.
- Notify Wireless Broadband Cable Engineer of any major Network changes (e.g., topology, configuration, new IOS releases.).
- In the event the Network composition is altered, after the Services selected under this Service Description have become effective, Customer is responsible to notify Cisco in writing within ten days (10) of the change. Cisco may require modifications to the fee if the Network composition has increased beyond the original pricing quote for Services.
- Create and manage an internal email alias for communication with Broadband Cable Engineer.
- Retain overall responsibility for any business process impact and any process change implementations.

Design 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).

Software Strategy

- In addition to the General Responsibilities, Customer shall provide the following:
 - Information on current releases running in the Network and current configuration templates.
 - Information on Customer business and technical requirements for new Software releases.
 - Review details of planned changes with Broadband Cable Engineer.
 - Information on Customer certification process and lab testing process.
 - Information on Customer change control process.

Software Application Support

- In addition to the General Responsibilities, Customer shall provide the following:
 - 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.
 - Data collection activities as needed to facilitate a specific Cisco analyses.
 - Information on any future advanced technology implementations.

CMTS Support

- In addition to the General Responsibilities, Customer shall provide the following:
 - 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.
 - Data collection activities as needed to facilitate a specific Cisco analyses.
 - Information on any future advanced technology implementations.

Continuous Learning

- In addition to the General Responsibilities, Customer shall provide:
 - Details of Customer requirements on the topics it wants to see covered through transfer and mentoring together with background information on the skill sets of the audience.
 - Ensure that facilities and equipment are available to host the informal technical update sessions.