



Service Description: Cisco EnergyWise Optimization Service (“EOS”)

This document describes the Cisco EnergyWise Optimization 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; 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. 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/.

Cisco shall provide the Cisco EnergyWise 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”) 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.

Service Summary

The Cisco EnergyWise Optimization Service provides for optimization of the use of energy by the information and communication technology infrastructure. This Service leverages Cisco EnergyWise Management as a foundational platform to build or extend the capabilities of an organization’s energy or telemetry management program.

General Service Responsibilities of Cisco

Cisco shall provide the following General Service provisions for

any Cisco EnergyWise Optimization Service specified in the Quote:

- Under this Service, Cisco shall provide the Cisco EnergyWise Optimization Service during Standard Business Hours, unless stated otherwise.
- Provide a single point of contact (“Cisco Project Manager”) for all issues relating to the Services.
- Participate in regularly scheduled meetings with the Customer to discuss the status of the Services.
- Define and execute change management process which includes informing Customer of risks and negotiating changes to the schedule and the budget based upon the agreed upon changes.
- Maintain project plan and risk management and change management processes.
- Manage project cost and resource budget.
- Provide periodic project progress report throughout the performance of service.
- Provide Customer satisfaction surveys to Customer.
- Ensure Cisco employees (including Cisco subcontractors) conform to Customer’s reasonable workplace policies, conditions and safety regulations that are consistent with Cisco’s obligations herein and that are provided to Cisco in writing prior to commencement of the Services; provided, however, 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 services activities at Customer’s facility.
- Cisco reserves the right to determine which of its personnel shall be assigned to a particular project, to replace or reassign such personnel and/or subcontract to qualified third persons part or all of the performance of any Cisco EnergyWise Optimization Service hereunder. Should Customer request the removal or reassignment of any Cisco personnel at any time; however Customer shall be responsible for extra costs relating to such removal or reassignment of Cisco personnel. Cisco shall not have any liability for any costs, which may occur due to project delays due to such removal or reassignment of Cisco personnel.

Specific Services Responsibilities of Cisco

- Conduct a kick-off conference call with Customer to coordinate scheduling, facilities and facility requirements, providing a requirements questionnaire for Customer to complete.

The Cisco EnergyWise Optimization Service is broken down into three phases. A given phase may be contracted individually, or any combination of phases may be contracted with Customer, depending on the contextual requirements of Customer. When contracted as a combination, the phases could be executed in parallel. The specific applicable phases and associated costs are described in the Quote.

- Phase I: Discovery
- Phase II: Analysis, Design, and Implementation
- Phase III: Development, Optimization, and Knowledge Transfer

Phase I: Discovery

The Discovery Phase is comprised of three work streams:

- A. Customer Requirements Document Development
- B. Discovery and Information Gathering Workshop
- C. Limited Tooling Deployment

Customer Requirements Document Development

- Collaborate with the Customer to remotely collect and document Customer's communicated business requirements to be used to frame the goals, objectives, constraints, and stakeholders for the wider work of this Service.
- Provide and maintain a Customer Requirements Document ("CRD")
- Provide and maintain an engagement plan that articulates the goals, objectives, constraints, stakeholders, and other essential detail, aligned with the CRD, and used to guide all parties on the completion of the Services herein.

Deliverables:

- Customer Requirements Document

Discovery and Information Gathering Workshop

Discovery and Information Gathering Workshop entails the collaboration between Cisco and the Customer to obtain the detailed information necessary to complete the wider Service, and/or to provide for the information necessary to justify further Services through the establishment of a Return on Investment (ROI) analysis. This discovery and workshop activity normally

occurs in-person, and at the Customer's location. Core activities and points of concentration include:

- Conduct interviews with Customer's key personnel
- Scoping activities, including the determination of the population of sites, devices, systems, applications, and other bounding measures to be included in the wider Service
- Codification of the goals, objectives, required outcomes, and success criteria that will be applied against the wider Service
- The attainment of Customer stakeholder agreement and alignment on the methods, scoping, and other essential aspects of the wider Service
- Review business context, current state, and related factors
- Defining of the deployment and operations roadmap, and a review of early-stage, known gaps to outcomes attainment
- Execution of technical breakouts to delve into core subject areas as necessary for addressing the wider Service
- Identification of integration and aggregation points for energy domains across Building Management Systems, Network, Compute, Storage, and other relevant in-scope device points and classifications.
- Review the following Customer provided information:
 1. business, technical and operational requirements documents;
 2. technology plan documentation;
 3. network design/topology documents.
- Review Customer designs for IT System application environment, access requirements, efficiency metrics, reporting capabilities, hardware tiering, and hardware compliance and configuration requirements.

The workshop activities are limited to two (2) days onsite with the Customer. Outcomes include:

- Provide a high-level architecture document (HLD) that describes the overall solution architecture, bounding points and limitations, as well as documentation and findings from the workshop and discovery activities.
- Provide high-level financial metrics that describe the overall opportunities for savings under specific scenarios, as well as address metrics requirements that are mutually agreed as relevant and attainable.

Deliverables:

- High-Level Architecture Design

Limited Tooling Deployment

The Limited Tooling Deployment is an initial installation of the Cisco EnergyWise Management platform. This deployment is designed to assess a limited set of the overall targeted population of devices, systems, and applications, helping to provide core insight into the overall opportunity for cost savings

and attainment of non-cost metrics, goals, and objectives of the wider Service.

The scope of devices is limited during this initial Proof of Concept ("POC") to up to up to 80,000 devices that leverage standard Cisco EnergyWise interfaces, such as laptops, desktops, VOIP phones, wireless access points, network switches and routers, and datacenter server hardware. Where non-ICT equipment (such as certain facility equipment) has discrete IP-based interfaces, up to 20 such integration points is included. Software connectivity between Cisco EnergyWise and the devices is limited to the default protocols and methods of Cisco EnergyWise Management. These include device discovery via SCCM, Active Directory, CDP/LLDP, and network discovery. Protocol support includes WMI, SSH, SNMP, and IPMI. Facilities integration (such as through a building management system) is through BACnet and/or Modbus/TCP.

The Right to Use (RTU) duration for the use of Cisco EnergyWise Management as part of Phase I is limited to the duration and terms of the Quote. Core activities and points of concentration include:

- Focus on deep data gathering and time series analysis, device utilization reporting, device energy consumption reporting, and device benchmarking
- Perform an inventory of Customer's IT assets that are to be included for the energy monitoring, measurement and control of energy.
- Complete setup and installation of the Cisco EnergyWise Management application Software POC.
- Provide Bi-weekly Energy Discovery Report to the Customer with energy consumption details and what-if simulations for possible energy savings scenarios.
- Prepare an executive summary slide deck in Microsoft PowerPoint (.ppt) file format for presentation to the Customer's key stakeholders.
- Present the Executive Summary to Customer key stakeholders in an onsite meeting conducted by Cisco.

Deliverables:

- Software Proof of Concept ("POC")
- Bi-weekly Energy Discovery Report
- Executive Summary

Phase II: Analysis, Design, and Implementation

The Analysis, Design, and Implementation phase of this Service is intended to build upon the outcomes from Phase I of this Service, or from similar starting baselines.

Analysis, Design, and Implementation entails:

- the creation of the Low Level Design ("LLD")
- the widening of the scope of the tooling deployment to include the entire production scope
- implementation of all energy domains, groups, and the control-policy architecture

- creation and implementation of capacity and control policies

Core activities include:

- Data Aggregation, Domain Building, Reporting Templates
- Planning (Requirements, Assessment, Architecture)
- Design and Build (Solution Design, Integration, Implementation)
- Expense Assessment (Operational & Architectural Assessment)
- Run and Optimize (Deployment Planning, Operational Assessment, Optimization)
- ICT assets utilization mapping
- Efficiency Metrics Calculations
- Energy Management Strategy
- Energy Management Report Compilation
- Provide Customer Report - Executive Presentation

Deliverables:

- LLD Document
- Implementation of the LLD

The Right to Use (RTU) duration for the use of Cisco EnergyWise Management as part of Phase II is limited to the duration and terms of the Quote.

Phase III: Development, Optimization, and Knowledge Transfer

The Development, Optimization, and Knowledge Transfer phase of this Service is intended to build upon the outcomes from Phase I and Phase II of this Service, or from similar starting baselines.

This phase concentrates on:

- Development of advanced asset connectors to complete inclusion of the scoped device population, where such integration is viable
- Optimization of the tooling to help ensure optimum capabilities, scalability, and reportability
- Alignment between the platform and the establishment of a formal energy management platform
- High-level transition plan from energy and device management toward operations management (establishment of a roadmap and maturity objectives)

The formal energy management program focuses on providing Energy as a Service (EaaS) for energy managers and ICT operators. This program and training that is provided by Cisco have the following attributes:

- User training workshop (Remote)
- Recommendations of organizational structure
- Recommendations on programmatic structure

- Reporting templates for compute, network and storage assets
- Data feeds for digital signage
- Report showing projections on energy savings over 3 year period for single data center
- Report showing projected savings for additional sites as provided by client

Deliverables:

- Asset Connectors
- High-Level Transition Plan
- "Year Two" Plan

General Responsibilities of Customer

Customer shall comply with the following obligations for General Services for the Cisco EnergyWise Optimization Service specified in the Quote:

- Designate at least two (2) but not more than six (6) technical representatives, who must be Customer's employees in a senior information communication technology (ICT) technical role, to act as the primary technical interface to the Cisco designated engineer(s). Customer will designate as contacts senior engineers with the authority to make any necessary changes to the ICT 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 under this Service Description (e.g., chair the weekly conference calls, assist with prioritization of projects and activities).
- Ensure key engineering, networking and operational personnel are available to participate in interview sessions and review reports as required by Cisco in support of Service.
- Customer's technical assistance center shall maintain centralized ICT management for its ICT supported under this Service Description, capable of providing Level 1 and Level 2 support.
- Provide reasonable electronic access to Customer's ICT environment to allow the Cisco designated engineer to provide support.
- Customer agrees to make its production, and if applicable, test ICT environment available for installation of included tooling. Customer shall ensure that Cisco has all relevant Product information needed for an assessment.
- If Cisco provides tooling or scripts located at Customer's site, Customer shall ensure that such tooling 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 tooling and/or a need to know the contents of the output of tooling. In the event tooling 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 tooling while in Customer's custody.

- Provide all documentation requested as outlined and expected for each phase of this Service.
- Notify Cisco immediately of any major Network changes (e.g.; topology; configuration; new IOS releases; moves, adds, changes and deletes of devices.).
- In the event the ICT composition is materially altered, after this Service Description is in effect, Customer is responsible to notify Cisco in writing within ten days (10) of the change. Cisco may require modifications to the fee if the ICT composition has increased beyond the original pricing quote for Services.
- Create and manage an internal email alias for communication with Cisco.
- Retain overall responsibility for any business process impact and any process change implementations.
- Supply the workplace policies, conditions and environment in effect at the Customer's facility.
- Provide proper security clearances and/or escorts as required to access the Customer's facility.
- Customer agrees that it will not hire a current or former employee of Cisco, who is involved in the Services under this Service Description, during the term of the Service and for a period of one (1) year after the termination of the Service. As liquidated damages, and not as a penalty, should Customer hire a current or former Cisco employee who is involved in the Services under this Service Description, Customer shall pay to Cisco three (3) times the annual compensation of such employee on the date the employee is hired. If payment is not made on such date, the liquidated damage payment shall be six (6) times the annual compensation of such employee.