Cisco® Unified Border Element QuickStart Implementation

Why Skyline Advanced Technology Services?

Skyline Advanced Technology Services (ATS) offers Professional Services for a variety of Cisco® centric solutions. From inception to realization, our senior staff of engineers are available for any size project or duration for the following services:

- Consulting Services
- Installation Services
- Network Design
- Staff Augmentation

For an in-depth discussion regarding your technical and staffing needs, our team is with you every step of the way.

Description

The Cisco Unified Border Element (CUBE) QuickStart Implementation is a unique Skyline-ATS offering designed to assist Cisco partners/customers with first time deployments of their CUBE router(s). The engagement is focused on the initial design, implementation, and deployment of the CUBE as a pilot and includes hands-on training to meet the partner’s/customer’s specific needs.

Overall Objectives

- Configuration of the CUBE router(s) including centralized or distributed deployment models, and High Availability.
- Implementation of the CUBE router(s) and integration with the partner’s/customer’s telephony environment.
- Interactive training sessions addressing the partner’s/customer’s specific pilot scenario and design.
- Interactive training sessions on CUBE deployment and integration.
- Work with partner/customer personnel to design and address specific needs and objectives for the deployment of their pilot system.

Prerequisites

To fully benefit from this QuickStart, partners/customers should have the following prerequisite skills and knowledge:

- Ability to configure and operate Cisco IOS® routers in an IP environment.
- Basic knowledge of traditional voice, converged voice, and data networks.
- Working knowledge of fundamental terms and concepts of voice networking, including LANs, WANs, IP routing, SIP, H323, and traditional telephony connections.

Are you deploying a Cisco® Unified Border Element (CUBE) solution?

Contact your Skyline-ATS Account Manager today for more information on how we can help.

800-375-9546
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Who is the Target Audience?

- Anyone who holds a Cisco Certified Networking Associate® (CCNA®) certification and wants a better understanding of CUBE voice feature capabilities.
- Network Administrators, Network Engineers, and Systems Engineers.
- Professionals who need to deploy a CUBE solution.
- Telecom system administrators.

Customer Responsibilities

- Participate in a Bill of Material (BOM)/Infrastructure design review pre-installation.
- Provide supporting infrastructure (e.g., rack space, power, HVAC, etc.).
- Provide personnel resources to perform the implementation alongside Skyline-ATS personnel.

Note: All relevant information regarding connecting to carrier equipment including ports, protocols, IP addresses, etc. test and turn up of carrier SIP services is not included in the QuickStart and should be performed prior to engagement. Skyline-ATS can also provide optional services to assist with this process.

Statement of Work

After a Skyline-ATS UC Engineer thoroughly qualifies the partner’s/customer’s CUBE requirements, a detailed Statement of Work (SOW) will be submitted for partner/customer approval prior to the QuickStart engagement.

Baseline CUBE QuickStart Deployment

- High level design (HLD) workshop pre-installation and Bill of Materials (BOM) review.
- Implementation of one (1) CUBE router with integration to an existing Cisco Unified Communications centralized CUBE environment.
- Provide:
  - Essential training for understanding and using SIP and H323 protocols and their means of interaction to traditional telephony.
  - Interactive training and assistance with implementation and design of a detailed dial plan to integrate with PSTN/SIP providers and internally to local IP-PBX/PBX systems (restrictions apply - see below).
  - Interactive training and assistance with:
    - Documentation for the partner’s/customer’s specific need and environment as it relates to CUBE.
    - Leveraging DSP resources for media manipulation on the platform.
    - Guidance and example methodologies for testing and troubleshooting CUBE deployment scenarios.

What is Included

- Configuration of:
  - One (1) CUBE router.
  - Up to 12 WAN Dial Peers for directing and accepting calls to or from external services (i.e., service providers or remote CUBEs).
  - Up to 12 LAN Dial Peers for directing and accepting calls to or from Internal services (i.e., IP PBX).
  - Up to 6 Translation Rules to be applied to the created dial peers.
  - Rack and physical connectivity of one (1) CUBE router.
  - Recommended settings for the enablement of CUBE services to support the selected deployment model.
Optional Cisco CUBE QuickStart Deployment Add-Ons*

Add any of the optional services below to customize your experience and gain the maximum benefit possible from your QuickStart experience (Add ½ day):

- Provide:
  - Interactive training and assistance with implementing call routing solutions within the advertised capabilities of the Cisco CUBE system (e.g., Multi-tenant, SRST integrations and restrictions, transcoding requirements and interactions, and SIP header modifications).
  - Interactive training and assistance with Security capabilities of the Cisco CUBE, such as admission controls and toll fraud management.
  - Assistance and training in:
    - Configuring the Cisco CUBE to support new or in-place QoS configurations and interactions.
    - Troubleshooting of SIP, H323, traditional telephony, and dial plan. Includes detailed review of debug output and associated logs.
  - Implementation of
    - Two (2) CUBE routers with integration to an existing Cisco Unified Communications distributed CUBE environment.
    - Two (2) CUBE routers with integration to an existing Cisco Unified Communications CUBE High Availability (HA) environment.
- Test and turn up of partner’s/customer’s carrier-based SIP connections may be added.

Schedule

**Day 1**
1. BOM review and verification.
2. Rack and Stack of CUBE, including placement recommendations based on selected deployment model.
3. Review of CUBE capabilities and limitations.
4. Review of SIP and H323 protocols.
5. High Level Design (HDL) workshop for customer dial plan.

**Day 2**
1. Baseline services configurations.
2. SIP/H323 associated configurations.
3. Deployment Model specific configurations.
4. Centralized configurations.
5. Translation configurations.

**Day 3**
1. Turn-up and testing.
2. Troubleshooting methodologies.

**Day 3-5**
1. Scheduled based on selected additional option packages.

*Services are performed as time and material permit and should be discussed prior to an engagement.*