Introduction

This chapter provides an overview of the Cisco Prime Cable Provisioning Application Programming Interface (API) and Provisioning Web Services (PWS). This chapter also describes the PWS and API functions that you can use to perform the Regional Distribution Unit (RDU) tasks.

Overview

Prime Cable Provisioning automates the tasks of provisioning and managing Customer Premises Equipment (CPE) in a broadband service-provider network. It can be integrated into a new or existing environment through a provisioning application programming interface (API) that lets you control how Prime Cable Provisioning operates. You can use the provisioning API to register devices in Prime Cable Provisioning, assign device configurations, and configure the entire Prime Cable Provisioning provisioning system.

You can also perform the provisioning operations using the Provisioning Web Services (PWS). For information on PWS operations, see Chapter 8, “Provisioning Web Services (PWS).”

Prime Cable Provisioning supports provisioning and managing of CPE that is compliant with the DOCSIS 3.0 specification. It also supports other devices like Computer, PacketCable Multimedia Terminal Adaptor (Packetcable MTA), Set Top Box (STB), CableHomeWanData, and CableHomeWanMan.

Using the Java API, you can integrate various Business Support Systems (BSS) and Operational Support Systems (OSS) with Prime Cable Provisioning. The PWS and Java API are the programmatic interfaces through which the various BSS and OSS clients connect to the RDU, which is the central server in a Prime Cable Provisioning deployment.

You can use the Prime Cable Provisioning API to:

- Register devices in the RDU database.
- Assign configuration policies for devices.
- Execute set operations on the CPE.
- Configure the Prime Cable Provisioning provisioning system.
- Manage CRS requests

Note Use this guide along with the following resources that are integrated with the Prime Cable Provisioning software:

- API Javadocs,
- Sample API client code

These resources are located in the home directory. The default home directory is */opt/CSCObac*.

API Functions

Using the Prime Cable Provisioning API, you can perform the following operations:

- Provisioning operations.

  You can:

  - Add, modify, and search device records in the RDU database.
  - Associate device records with Classes of Service in the RDU database.
  - Associate device records with the groups in the RDU database.
  - Retrieve discovered device data stored in the RDU database.
  - Retrieve device operation history from the RDU database.
  - Retrieve device faults from the Prime Cable Provisioning servers.

- Device management operations.

  You can:

  - Retrieve live data, such as statistics, from a device.
  - Execute diagnostics on a device.
  - Reset the device.
  - Reset the device settings to default configuration.
  - Perform individual sets on a device.

- System configuration and management operations.

  You can:

  - Configure Class of Service objects in the RDU.
  - Manage firmware rules, configuration templates, and other files.
  - Configure device grouping objects in the RDU.
  - Configure licenses.
  - Configure users.
  - Configure system settings for Prime Cable Provisioning.
  - Retrieve Prime Cable Provisioning server status and statistics.
  - Configure user groups, roles, domains, and privileges.
  - Configure CRS

Note You can also perform all system configuration and management operations from the Prime Cable Provisioning administrator user interface. For details on how to perform these operations, see the *Cisco Prime Cable Provisioning 7.0 User Guide*.
For more details on how to perform provisioning and device management operations using Java API, see Chapter 7, "Java API Client Use Cases."

PWS Functions

For provisioning operations, you can also use PWS which is a SOAP/REST based web service. For information on supported provisioning operations using PWS, see Chapter 8, "Provisioning Web Services (PWS)".