Broadband Access Center for Cable Overview

Broadband Access Center for Cable (BACC) automates the configuration and provisioning of network devices supported by a broadband service provider. It is a flexible product that can be scaled to suit virtually any size network. BACC is designed to handle rapid growth of service providers. It targets broadband service providers (including multiple service operators), Internet, and voice service providers who want to deploy IP data, voice, and video on hybrid fiber and coaxial cable networks. BACC also provides such critical features as redundancy and failover protection, and can be integrated into new or existing environments through the use of a provisioning application programming interface (API) that lets you control how BACC operates. You can use the provisioning API to enable BACC to register devices, device configurations, and configure the entire BACC provisioning system.

Features and Benefits

BACC lets multiple service operators (MSOs) meet the rapidly changing demands for data over cable services. Using BACC, you can realize these features and benefits of its architecture:

- Increased scalability
- Distributed architecture
- Redundancy
- Extensibility

Supported Technologies

This BACC release supports these technologies:

- DOCSIS high-speed data
- PacketCable voice services
- Non-secure PacketCable voice services
- Euro-PacketCable voice services
- Non-secure CableHome provisioning
DOCSIS High-Speed Data

The Data Over Cable Service Interface Specification defines functionality in cable modems involved in high-speed data distribution over cable television system networks. This allows MSOs to provide a variety of services through an “always-on” Internet connection. These services include broadband Internet connectivity, telephony, real-time interactive gaming, and video conferencing.

Note
Broadband Access Center for Cable supports DOCSIS 1.0, 1.1, and 2.0 devices.

PacketCable Voice Services

PacketCable voice technology enables the delivery of advanced, real-time multimedia services over a two-way cable network. PacketCable is built on top of the infrastructure supported by cable modems to enable a wide range of multimedia services such as IP telephony, multimedia conferencing, interactive gaming, and general multimedia applications.

The PacketCable voice technology enables additional services, for example, basic and extended telephony services, to be delivered more efficiently and cost-effectively, over the broadband cable access network.

Note
BACC currently supports versions 1.0 and 1.1 of the PacketCable specifications.

Non-Secure PacketCable Voice Services

Non-secure PacketCable voice services are the same as the standard PacketCable voice services except for the lack of security found in the non-secure variant.

Euro-PacketCable Voice Services

Euro-PacketCable services are the European equivalent to the North American PacketCable standard. The only significant difference between the two is that Euro-PacketCable uses different MIBs. See the “Configuring Euro-PacketCable MIBs” section on page 5-6 for additional information.

Non-Secure CableHome Provisioning

Non-secure CableHome 1.0 provisioning, hereafter referred to as home networking technology, is built on top of the existing DOCSIS standard and supports a ‘plug and play’ environment for home connectivity of residential broadband services. This form of home networking technology encompasses a DOCSIS home access device with support for CableHome functionality. This device is known as Portal Services and is considered to be the home’s entry point.