A

active logs These log files contain data that has not yet written into the database. It is important to keep active log files until they become redundant. *See also* redundant logs and removable logs.

administrator user interface The administrative application used to manage and configure broadband network devices.

agent A process that resides in all managed devices and reports the values of specified variables to management stations.

alert Message notifying an operator or administrator of a network problem.

API Application programming interface. Specification of function-call conventions that defines an interface to a service.

B

bandwidth Difference between the highest and lowest frequencies available for network signals. The term is also used to describe the rated throughput capacity of a given network medium or protocol.

BPR An integrated solution for data-over-cable service providers to configure and manage broadband modems, and enable and administer subscriber self-registration and activation. BPR is a scalable product capable of supporting millions of devices.

broadband Transmission system that multiplexes multiple independent signals onto one cable. In Telecommunications terminology; any channel having a bandwidth greater than a voice-grade channel (4 kHz). In LAN terminology; a co-axial cable on which analog signaling is used.

Broadband Provisioning Registrar *See* BPR.

browser GUI-based hypertext client application, such as Internet Explorer and Netscape Navigator, used to access hypertext documents and other services located on innumerable remote servers throughout the WWW and internet. *See also* Internet and WWW.

C

cable Transmission medium of copper wire or optical fiber wrapped in a protective cover.

cable modem termination system	*See* CMTS.
caching	Form of replication in which information learned during a previous transaction is used to process later transactions.
CMTS	Cable modem termination system. A CMTS is a component that exchanges digital signals with cable modems on a cable network. The CMTS is usually located in the cable provider's local office.
CMTS shared secret	*See* shared secret.
configuration file	A file containing configuration parameters for the DOCSIS cable modem.
CPE	Customer premises equipment. Terminating equipment, such as telephones and modems, supplied and installed at a customer location.
customer premises equipment	*See* CPE.

D

Data-Over-Cable Systems Interface Specifications	*See* DOCSIS.
DAVIC	Digital Audio-Visual Council. The European Telecommunication Standard (ETS) used as a baseline specification for the provision of the interactive channel for CATV networks.
device provisioning engine	*See* DPE.
DHCP	Dynamic Host Configuration Protocol (RFC 2131). DHCP clients obtain their IP address assignments and other configuration information from DHCP servers.
Digital Audio-VIsual Council	*See* DAVIC.
digital set top box	*See* DSTB.
digital video broadcast	*See* DVB.
DOCSIS	Data-Over-Cable Systems Interface Specifications. Defines technical specifications for equipment at both subscriber locations and cable operators' headends. Adoption of this specification will accelerate deployment of data-over-cable services and ensure interoperability of equipment throughout system operators' infrastructures.
DPE	Device provisioning engine. A device communicating with the DHCP and is the first point of BPR contact for a device to receive its configuration. The DPE caches device information to ensure BPR scalability and handles configuration requests including downloading configuration files to devices.

DSTB	Digital set-top box. A device that enables a television to become a user interface to the Internet and to receive and decode digital television signals.
Dynamic Host Configuration Protocol	*See* DHCP.

F

FQDN	Fully qualified domain name. FQDN is the full name of a system, rather than just its hostname. For example, cisco is a hostname and www.cisco.com is an FQDN.
fully qualified domain name	*See* FQDN.

I

Internet	Largest global internetwork, connecting tens of thousands of networks worldwide and having a "culture" that focuses on research and standardization based on real-life use. Many leading-edge network technologies come from the Internet community. The Internet evolved in part from ARPANET.
IOS images	These are images stored in firmware for a Cisco device. The Cisco device can upload the image to upgrade its functionality. BPR treats this file type like any other binary file.
IP address	An IP address is a 32-bit number that identifies each sender or receiver of information that is sent in packets across the Internet.

M

MAC	Media access control. Lower of the two sublayers of the data link layer defined by the IEEE. The MAC sublayer handles access to shared media, such as whether token passing or contention will be used.
MAC address	Standardized data link layer address that is required for every port or device that connects to a LAN. Other devices in the network use these addresses to locate specific ports in the network and to create and update routing tables and data structures. MAC addresses are 6 bytes long and are controlled by IEEE, Also known as hardware address, MAC-layer address, or physical address. Compare with *network address*.
Media Access Control	*See* MAC.
Media Terminal Adapter	*See* MTA.
modem	Modulator-demodulator. Device that converts digital and analog signals. At the source, a modem converts digital signals to a form suitable for transmission over analog communication facilities. At the destination, the analog signals are returned to their digital form. Modems allow data to be transmitted over voice-grade telephone lines.

MSO	Multiple system operator. A company that operates more than one cable TV or broadband system.
MTA	Equipment at the customer end of a broadband network.
multiple service operator	*See* MSO.

N

NAT	Network address translation. Mechanism for reducing the need for globally unique IP addresses. NAT allows an organization with addresses that are not globally unique to connect to the internet by translating those addresses into globally routeable address space. This is also known as Network Address Translator.
network address	Network layer address referring to a logical, rather than physical, network device. Compare with *MAC address*.
network address translation	*See* NAT.
network administrator	Person responsible for operation, maintenance, and management of a network. *See also* network operator.
network operator	Person who routinely monitors and controls a network, performing such tasks as reviewing and responding to alarms, monitoring throughput, configuring new circuits, and resolving problems. *See also* network administrator.
NR	Cisco Network Registrar. A software product that provides IP addresses, configuration parameters, and DNS names to DOCSIS cable modems and PCs, based on network and service policies.

O

open system interconnection	*See* OSI.
operations support system	*See* OSS.
OSI	Open system interconnection. Network architectural model developed by ISO and ITU-T. The model consists of seven layers, each of which specifies particular network functions such as addressing, flow control, error control, encapsulation, and reliable message transfer. The lowest layer (the physical layer) is closest to the media technology. The lower two layers are implemented in the hardware and software, while the upper five layers are implemented only in software. The highest layer (the application layer) is closest to the user. The OSI reference model is used universally as a method for teaching and understanding network functionality.
OSS	Operations support system. Network management system supporting a specific management function, such as alarm surveillance and provisioning, in a carrier network. Many OSSs are large centralized systems running on mainframes or minicomputers.

P

packet internet groper	*See* ping.
ping	Packet internet groper. ICMP echo message and its reply. Often used in IP networks to test the reachability of a network device.
port	An IP terminology, and upper-layer process that receives information from lower layers. Ports are numbered, and each numbered port is associated with a specific process. For example, SMTP is associated with port 25. A port number is also called a well-known address.
provisioning API	A series of functions that programs can use to make the operating system perform various functions.
provisioning groups	Groupings of DPE and Network Registrar, based on either network topology or geography, to improve network performance.
publishing	Copying provisioning information to an external datastore in real time. Publishing plug-ins must be developed to write data to a datastore.

Q

QoS	Quality of Service. Measure of performance for a transmission system that reflects its transmission quality and service availability.
Quality of Service	*See* QoS.

R

RDU	Regional distribution unit. The RDU is the primary server in the BPR provisioning system. It manages generation of device configurations, forwards all API requests, and manages the BPR system.
redundancy	In internetworking, the duplication of devices, services, or connections so that, in the event of a failure, the redundant devices, services, or connections can perform the work of those that failed.
redundant logs	Log files become redundant once its data has been written into the database. *See also* active logs and removable logs.
reload	The event of a Cisco router or piece of software rebooting, or the command that causes the router or software to reboot.
removable logs	Log files become removable after either being backed up, or when the complete database that contains data for this log file has been backed up. *See also* active logs and redundant logs.
response file	A file that contains the values for parameters required to install the BPR packages. The installer uses the values in the response file instead of prompting for the information.

S

selection tags Selection tags associated with Network Registrar scopes. These define the clients and client classes associated with a scope.

shared secret A character string used to authenticate communication between two servers or devices.

static configuration files These files are used as a configuration file for a device. For example, a static configuration file called gold.cm would identify the gold DOCSIS class of service. BPR treats this file type like any other binary file.

T

Telnet Standard terminal emulation protocol in the TCP/IP protocol stack. Telnet is used for remote terminal connection, enabling users to log in to remote systems and use resources as if they were connected to a local system. Telnet is defined in RFC 854.

template files Text files that contain DOCSIS options and values that, when used in conjunction with a DOCSIS class of service, provide dynamic DOCSIS file generation

TFTP Trivial File Transfer Protocol. Simplified version of file transfer protocol (FTP) that allows files to be transferred from one computer to another over a network.

trivial file transfer protocol *See* TFTP.

U

uBr Universal Broadband Router (also known as the Cisco 7246 or 7223 router), which is the Cisco router implementation of a DOCSIS CMTS.

URL Universal resource locator. Standardized addressing scheme for accessing hypertext documents and other services using a browser. *See also* browser.

V

Voice over IP *See* VoIP.

VoIP Voice over IP. VoIP is the ability to make telephone calls and send faxes over IP-based data networks with a suitable quality of service (QoS) and superior cost/benefit.

W

WWW World Wide Web. Large network of Internet servers providing hypertext and other services to terminals running client applications such as a browser. *See also* browser.

X

XGCP   A Gateway Control Protocol used to pass data between networks. This includes that M (for Media) GCP and S (Simple) GCP.

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