



## GLOSSARY

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### A

- alert** A syslog or SNMP 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.

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### B

- BAC** An integrated solution for data-over-cable service providers to configure and manage broadband modems, and enable and administer subscriber self-registration and activation. BAC is a scalable product capable of supporting millions of devices.
- bandwidth** The difference between the highest and lowest frequencies available for network signals. Also used to describe the rated throughput capacity of a given network medium or protocol.
- broadband** A 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 coaxial cable on which analog signaling is used.
- Broadband Access Center** *See* BAC.
- Broadband Access Center for Cable** *See* BAC.

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### C

- cable modem termination system** *See* CMTS.
- CableHome** A CableLabs initiative to develop a standardized infrastructure to let cable operators extend high-quality, value-added services to the home local-area network.
- caching** A form of replication in which information learned during a previous transaction is used to process later transactions.
- CMTS** Cable modem termination system. A component that exchanges digital signals with cable modems on a cable network. The CMTS is usually located in the local office of the cable provider.
- CMTS shared secret** *See* shared secret.

- configuration file** A file containing configuration parameters for the device to be provisioned.
- CPE** Customer premises equipment. Terminating equipment, such as telephones, computers, and modems, that are supplied and installed at a customer location.

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**D**

- DOCSIS** Data Over Cable Service Interface Specification. Defines functionality in cable modems involved in high-speed data distribution over cable television system networks.
- DPE** Device Provisioning Engine. Distributed servers that cache device information and that automatically synchronize with the RDU to obtain the latest configurations and provide BAC scalability.

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**F**

- FQDN** Fully qualified domain name. The full name of a system, rather than just its hostname; for example, cisco is a hostname and www.cisco.com is an FQDN.

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**I**

- Internet Protocol (IP, IPv4)** Network layer for the TCP/IP protocol suite. Internet Protocol (version 4) is a connectionless, best-effort packet switching protocol. Defined in RFC 791.
- IP address** A 32-bit number assigned to hosts using TCP/IP that identifies each sender or receiver of information that is sent in packets across the Internet.
- IPv6** IP version 6. Replacement for the current version of IP (version 4). IPv6 includes support for flow ID in the packet header, which can be used to identify flows. Formerly called IPng (next generation).

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**K**

- KDC** Key Distribution Center. Implements limited Kerberos functionality and is used in the provisioning of PacketCable MTAs.

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**M**

- 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.
- Media Terminal Adapter** *See* MTA.

<b>MSO</b>	Multiple system operator. A company that operates more than one cable TV or broadband system.
<b>MTA</b>	Equipment at the customer end of a broadband (PacketCable) network.
<b>multiple service operator</b>	<i>See</i> MSO.

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## N

<b>NAT</b>	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 routable address space. Also known as Network Address Translation.
<b>network administrator</b>	Person responsible for operation, maintenance, and management of a network. <i>See also</i> network operator.
<b>network operator</b>	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. <i>See also</i> network administrator.
<b>Network Time Protocol</b>	<i>See</i> NTP.
<b>NR</b>	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.
<b>NTP</b>	Network Time Protocol. A protocol designed to synchronize server clocks over a network.

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## P

<b>PacketCable</b>	A CableLabs initiative for interoperable interface specifications to deliver advanced, real-time multimedia services over a two-way cable network. Built on top of cable modem infrastructure to enable a wide range of multimedia services, such as IP telephony, multimedia conferencing, interactive gaming, and general multimedia applications.
<b>provisioning API</b>	A series of BAC functions that programs can use to make the operating system perform various functions.
<b>provisioning groups</b>	Groupings of devices with a defined set of associated DPE and DHCP servers, based on either network topology or geography.

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## R

<b>RDU</b>	Regional Distribution Unit. The primary server in the BAC provisioning system, manages generation of device configurations, processes all API requests, and manages the BAC system.
<b>realm</b>	Logical network served by a single Kerberos database and a set of Key Distribution Centers.

- realm names** By convention, realm names are all uppercase letters to differentiate the realm from the Internet domain. *See* realm.
- 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.

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**S**

- selection tags** Selection tags associated with Network Registrar scopes. Define the clients and client classes associated with a scope.
- shared secret** A character string used to provide secure communication between two servers or devices.

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**T**

- 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.

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**W**

- watchdog** A daemon process used to monitor, stop, start, and restart BAC component processes such as the RDU, Tomcat, and the SNMP agent.