GLOSSARY

A

alert
A syslog or SNMP message notifying an operator or administrator of a problem.

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

audit logs
A log file containing a summary of major changes in the RDU database. This includes changes to system defaults, technology defaults, and classes of service.

B

broadband
Transmission system that multiplexes multiple independent signals onto one cable. In Telecommunication terminology, any channel having a bandwidth greater than a voice-grade channel (4 kHz). In LAN terminology, a coaxial cable on which to use analog signaling.

Cisco Broadband Access Center (BAC)
An integrated solution for broadband service providers to provision and manage subscriber-edge services by using the DSL Forum's CPE WAN Management Protocol, a standard defined in the TR-069 specification. BAC is a scalable product capable of supporting millions of devices.

C

caching
Form of replication in which information learned during a previous transaction is used to process subsequent transactions.

cipher suites
Provide cryptographic algorithms that the SSL module requires to perform key exchange, authentication, and Message Authentication Code.

customer premises equipment (CPE)
Terminating equipment, such as telephones, computers, and modems, supplied and installed at a customer location.

CPE WAN Management Protocol (CWMP)
A standard defined in the TR-069 specification by the DSL Forum. CWMP integrates the capabilities defined in TR-069 to increase operator efficiency and reduce network management problems.

D

debug

An operation designed to aid in debugging another program by allowing the administrator to step through the program, examine the data, and monitor conditions, such as the values of variables.

device provisioning engine (DPE)

Device Provisioning Engine servers cache device instructions and perform CWMP services. These distributed serves automatically synchronize with the RDU to obtain the latest instructions and provide BAC scalability.

F

fully qualified domain name (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.

I

instruction generation

The process of generating policy instructions at the RDU for devices and distributing these instructions to the DPE. The instructions are cached by the DPE and informed about an action to be performed on the CPE. This action may include configuration, firmware upgrade, or other operations.

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.

N

network administrator

Person responsible for operation, maintenance, and management of a network.

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.

P

provisioning API

A series of BAC functions that programs can use to make the operating system perform various functions.

provisioning groups

Groupings of devices with an defined set of associated DPE servers, based on network topology or geography.

R

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.

regional distribution unit (RDU)   Regional Distribution Unit. The RDU is the primary server in the BAC provisioning system. It manages generation of device instructions, processes all API requests, and manages the BAC system.

S

secure sockets layer (SSL)   A protocol for transmitting private documents via the Internet. SSL uses a cryptographic system that uses two keys to encrypt data: a public key known to everyone and a private or secret key known only to the recipient of the message. By convention, URLs that require an SSL connection start with *https:* instead of *http:*. BAC 3.0 supports SSLv3.
See TLS

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

T

template files   XML files that contain configuration or firmware rules for devices.

Transport Layer Security (TLS)   A protocol that guarantees privacy and data integrity between client/server applications communicating over the Internet. BAC 3.0 supports TLSv1.
See SSL.

TR-069   A standard that defines the CPE WAN Management Protocol (CWMP), which enables communication between CPE and an Auto Configuration Server.

V

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

W

watchdog agent   A watchdog agent is a daemon process that is used to monitor, stop, start, and restart BAC component processes, such as the RDU and the SNMP agent.