



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 the major changes in the RDU database. This includes the changes to system defaults, technology defaults, and classes of service.
- auto configuration server (ACS)** A server that provisions a device or a collection of devices. In BAC, ACS refers to the BAC server, and in some instances, the DPE.

B

- 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 Access Center (BAC)** An integrated solution for managing and provisioning broadband home networks. BAC is a scalable product capable of supporting millions of devices.
- Business Support Systems(BSS)** Components that service providers use to run business operations. The roles of a BSS in a service provider network include managing products, customers, revenue, and orders.

C

- caching** Form of replication in which information learned during a previous transaction is used to process later transactions.
- cipher suites** A set of cryptographic algorithms that the SSL module requires to perform key exchange, authentication, and Message Authentication Code.
- customer premises equipment (CPE)** Terminating equipments, 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 Broadband Forum. CWMP integrates the capabilities defined in TR-069 to increase operator efficiency and reduce network management problems.

D

device provisioning engine (DPE) Distributed servers that cache device instructions and perform CWMP services. DPEs automatically synchronize with the RDU to obtain the latest instructions, and provide BAC scalability and redundancy.

F

fully qualified domain name (FQDN) 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.

H

HTTPS *See* Secure Sockets Layer and Transport Layer Security.

I

instruction generation service (IGS) The process of generating instructions at the RDU, for devices defined by a search criteria, and distributing these instructions to the DPE, which then caches the instructions. The instructions inform the DPE the actions to be performed on the CPE, which 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 address translation (NAT) 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.

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.

Network Time Protocol (NTP) A protocol designed to synchronize server clocks over a network.

O

Operations Support Systems(OSS) Computer systems used by telecommunication providers, dealing with telecom network, customers and support processes.

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 a defined set of associated DPE servers, based on either network topology or geography.

publishing Publishing provides provisioning information to an external datastore in real time. Publishing plug-ins must be developed to write data to a datastore.

PACE Provisioning API Command Engine.

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) 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. URLs that require an SSL connection start with https: instead of http:. BAC supports SSLv3.

See Transport Layer Security.

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 supports TLSv1.

See Secure Sockets Layer.

TR-069 A standard which defines the CPE WAN Management Protocol (CWMP). TR-069 enables communication between CPE and an autoconfiguration server.

V

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

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, JRun, and SNMP agent.