

GLOSSARY

Α

ACLM Access Control List Manager. ACL Manager dramatically reduces the time needed to develop new

filters and maintain existing traffic filters in large-scale deployments of Cisco devices.

aggregate table See discovery.

ANI Asynchronous Network Interface (ANI) is a mediation layer between the network devices and client

applications that provides for the discovery, inventory, and topological computations of networks and

their devices.

A collection of SMFContainers—a global data structure that stores the contents of SMFContainers and AniAggregateTable

their names. See also discovery.

Asynchronous Network Interface Server. A Java application that performs multiple tasks, including **ANI Server**

performing network discovery using Cisco Discovery Protocol (CDP) and Integrated Local

Management Interface (ILMI), processing SNMP requests, and serving as a middle-tier server for the

client applications that need to query and set the state of the network or network devices

API Application Programming Interface. A language and message format used by an application to

communicate with the operating system and other services (such as a database management system or

communications protocol).

ASA60 Adaptive Server Anywhere 6.0. The new name for SqlAnywhere.

ATM Asynchronous Transfer Mode. International standard for cell relay in which multiple service types

> (such as voice, video, or data) are conveyed in fixed-length (53-byte) cells. Fixed-length cells allow cell processing to occur in hardware, thereby reducing transit delays. ATM is designed to take

advantage of high-speed transmission media such as E3, SONET, and T3.

A set of ATM switches interconnected by ATM links such that any switch in the fabric can be reached **ATM fabric**

> from any other switch in the fabric by traversing one or more ATM links and optionally one or more ATM switches in the fabric. The fabric contains both ATM switches and all ATM links that are

> connected to those ATM switches, including links to edge devices, but not the edge devices themselves.

C

CCO Cisco Connection Online Web site. Used to access customer service and support.

CDP Cisco Discovery Protocol. Media- and protocol-independent device-discovery protocol that runs on all

Cisco-manufactured equipment: routers, access servers, bridges, and switches. Using CDP, a device can advertise its existence to other devices and receive information about other devices on the same LAN or on the remote side of a WAN. Runs on all media that support SNAP, including LANs, Frame

Relay, and ATM media.

client Node or software program (front-end device) that requests services from a server.

client/server Term that describes distributed computing (processing) network systems in which transaction

responsibilities are divided into two parts: client (front end) and server (back end). Both terms (client

and server) can be applied to software programs or actual computing devices.

CMF Common Management Foundation. Predecessor system of CWCS.

community strings Text strings that act as a password to authenticate messages sent between the network management

station and devices containing an SNMP agent. Community strings allow you to limit access to network

devices.

CORBA The Common Object Request Broker Architecture (CORBA) is an industry standard middleware

architecture developed and maintained by the Object Management Group (http://www.omg.org). CORBA services act as communication mechanisms for developing distributed applications. CORBA is platform and language neutral, which means that a C application running on a PC can communicate

with a Java application running on Solaris.

CSV Comma Separated Values. An interchange file format typically used for exporting and importing

spreadsheets or other tables. Each line in the ASCII file represents a row of data from a table. Each line contains the data elements from a row of the table, with individual table values separated by comma

characters.

CWCS A collection of subsystems, execution environments, engines, and shared code libraries, representing a

software platform that provides services to web-based network management applications. The end user

documentation refers to CWCS as the CiscoWorks Server.

CWCS Base Services First tier, entry-level CWCS components necessary to support a web-based application. These

components include the web server, CWCS security, the servlet engine, and JRE.

CWCS Network

Services

Third-tier CWCS components that add discovery and other network services.

CWCS System

Services

Second-tier CWCS components that add services such as EDS, JRM, and the database engine.

D

daemon A process that runs unattended to perform a standard service.

Daemon Manager A CWCS component that initiates, monitors, and controls application processes. Also known as

Process Manager.

daemon process A process that is started by the root user or the root shell and can be stopped only by the root user.

Daemon processes generally provide services that must be available at all times, such as sending data

to a printer.

DBD Database Driver. A Perl interface module that implements DBI functions for a vendor-specific

database.

DBI Database Interface. A public domain Perl module on UNIX platforms that provides a

vendor-independent API for accessing relational databases. A subset of DBI is implemented by Cisco

on NT platforms using WIN32::ODBC for compatibility with UNIX.

device adaptor Subclass that allows network management applications to access new devices and new functionality in

existing devices without a complete code rewrite. The device adaptor model is based on an inheritance

tree that extends base class functionalities.

device class A group of SNMP-based device types that support the same MIB information.

device conflict The relationship between an unmanaged device and a managed device when their definitions share the

> same device access information (either the same DNS domain name and network hostname combination or the same IP address) but differ in one or more of the access information elements.

Process performed by the ANI Server to locate and identify the devices and topology of the network. discovery

DLL Dynamically Linked Library. A library linked to application programs when they are loaded or run

rather than as the final phase of compilation. DLLs allow several tasks to share the same block of

library code.

DNS Domain Name System. System used in the Internet for translating names of network nodes into

addresses.

DSN Data Source Name. A definition file or NT registry key used by the ODBC to obtain database

connection parameters such as port numbers, engine and database name, database file, start line

parameters, and so on.

DTD Document Type Definition. Contains a formal definition of a particular document type. Although it is

not mandatory, specifying a DTD allows parsers to validate an XML file.

Ε

EDS Event Distribution System. Event management software that provides the means for sending messages

from one process to another in a networked and distributed environment.

ELAN Emulated LAN. ATM network in which an Ethernet or Token Ring LAN is emulated using a

client-server model. ELANs are composed of an LEC, an LES, a BUS, and an LECS. Multiple ELANs

can exist simultaneously on a single ATM network. ELANs are defined by the LANE specification.

Essentials Resource Manager Essentials (Essentials), one of the major components of CiscoWorks, enables the

> deployment, monitoring, and configuration of devices across a network. Resource Manager Essentials includes the following applications: Inventory Manager, Change Audit, Device Configuration Manager, Software Image Manager, Availability Manager, Syslog Analyzer, and Cisco Management

Connection.

EvalGroup A pool of threads that ANI uses for the parallel evaluation of tasks.

fabric See discovery.

framework A set of tools that provide for installation and uninstallation of Cisco product and allow you to build

installable CD images.

G

GUI Graphical User Interface. User environment that uses pictorial as well as textual representations of the

input and output of applications and the hierarchical or other data structure in which information is stored. Conventions such as buttons, icons, and windows are typical, and many actions are performed

using a pointing device (such as a mouse).

Н

HTTP Hypertext Transfer Protocol. The protocol used by Web browsers and Web servers to transfer files, such

as text and graphic files.

I

IDL Interface Definition Language. An Open Software Foundation standard used to define discovery

interfaces.

ILMI Integrated Local Management Interface. Standard discovery protocol used on ATM networks.

installable unit A package or group of packages which are installed or uninstalled at once.

IP address 32-bit address assigned to hosts using TCP/IP. An IP address consists of a network number, an optional

subnetwork number, and a host number. The network and subnetwork numbers together are used for routing, while the host number is used to address an individual host within the network or subnetwork.

Also called an Internet address.

Integration Utility See NMIM.

J

Jconnect Sybase implementation of JDBC

JDBC Java Database Connectivity. Java API for accessing relational databases.

JNI Java Native Interface. A native Java API that allows Java code running inside a Java Virtual Machine

to interact with applications written in other programming languages such as C and C++.

JRE Java Runtime Environment.

JRM Job and Resource Manager. A CWCS component that allows applications to schedule jobs and lock

resources.

L

LAN emulation. Technology that allows an ATM network to function as a LAN backbone. The ATM

network must provide multicast and broadcast support, address mapping (MAC-to-ATM), SVC management, and a usable packet format. LANE also defines Ethernet and Token Ring ELANs.

LAN Emulation Configuration Server. Entity that assigns individual LANE clients to particular ELANs

by directing them to the LES that corresponds to the ELAN. There is logically one LECS per

administrative domain, and this serves all ELANs within that domain. See also ELAN.

LES LAN Emulation Server. Entity that implements the control function for a particular ELAN. There is

only one logical LES per ELAN, and it is identified by a unique ATM address. See also ELAN.

M

MIB Management Information Base. Database of network management information that is used and

maintained by a network management protocol such as SNMP or CMIP. The value of a MIB object can be changed or retrieved with SNMP or CMIP commands. MIB objects are organized in a tree structure

that includes public (standard) and private (proprietary) branches.

Ν

navigation tree Access to all CiscoWorks tasks and operations takes place through the navigation tree. Located in the

left frame of the CiscoWorks window below the button bar, the navigation tree consists of multiple folders, each of which contains a group of associated or similar tasks, tools, or other options. The

buttons in the button bar determine the contents of this tree.

Network Management Integration Module. Depending on the specific NMS, this utility can launch

Cisco network management applications, browse Cisco MIBs, integrate traps, and add Cisco device icons to NMS topology maps. This utility also allows remote integration between CiscoWorks applications residing on one server and an SNMP management platform residing on another server.

Also known as the Integration Utility.

0

observable persistent object

Persistent objects that can be observed on an instance-by-instance basis. ObservablePO is a base class for observable persistent objects. See also discovery.

ODBC Open Database Connectivity. A generic vendor independent API for accessing relational databases.

ORB Object Request Broker. Part of the Object Management Group (OMG) standard.

P

persistent object PersistentObject is the base class for all objects that should be mirrored to the relational database in

ANI. The value of a persistent object is isolated from other transactions, so results of bind() or isPersistent() calls do not become visible to queries or other transactions until the modifying transaction commits. When ANI is restarted, the persistent objects are read from the database. See also

discovery.

polling Access method in which a primary network device inquires, in an orderly fashion, whether secondaries

have data to transmit. The inquiry occurs in the form of a message to each secondary that gives the

secondary the right to transmit.

precondition A function that must complete before another function can start. See also discovery.

Process Manager See Daemon Manager.

protocol Formal description of a set of rules and conventions that govern how devices on a network exchange

information.

protopackage A tar file that contains a component of the product. This component has a name, version, and other

properties.

R

router Network layer device that uses one or more metrics to determine the optimal path along which network

traffic should be forwarded. Occasionally called a gateway (although this definition of gateway is

becoming increasingly outdated).

S

seed device A Cisco network device, such as a switch, that ANI uses to initiate discovery.

service bundle A collection of CWCS services. See also CWCS Base Services, CWCS Network Services, and CWCS

System Services.

service module Backend process components of the ANI Server that perform specific tasks to retrieve detailed

information about network devices and topology.

SMFContainer Service module function container. Stores anything you want to do things to or collect things about.

For example, an SMFContainer stores the instances of functions for each device in memory for the

current run of ANI. One SMFContainer is created for each evaluation thread.

SMFFactory Defines which functions are overridden by subclasses for each device type, overriding the default

SMFunction with the new subclass. An SMFFactory instance is instantiated and configured for each

device family type. See also discovery.

SMFunction Service module functions define the evaluation steps of a task. The sequence in which these functions

are run is determined by the timebase. See also discovery.

SNMP Simple Network Management Protocol. Network management protocol used almost exclusively in

TCP/IP networks. SNMP provides a means to monitor and control network devices and to manage

configurations, statistics collection, performance, and security.

SNMP community

strings

See community strings.

SQL Structured Query Language. International standard language for defining and accessing relational

databases.

SWIM Software Management, a CiscoWorks application used to automate many steps associated with upgrade

planning, scheduling, downloading, and monitoring software for managed devices on a network.

T

TCP/IP Transmission Control Protocol/Internet Protocol. Common name for the suite of protocols developed

by the U.S. DOD in the 1970s to support the construction of worldwide internetworks. TCP and IP are

the two best-known protocols in the suite.

timebase A named sequence of SMFunctions. See also discovery.

timeline A timeline determines how often and when a timebase will be run. See also discovery.

timestamp A field that records the time an event occurs.

topology Physical arrangement of network nodes and media within an enterprise networking structure.

V

VLAN virtual LAN. Group of devices on one or more LANs that are configured (using management software)

so that they can communicate as if they were attached to the same wire, when in fact they are located on a number of different LAN segments. Because VLANs are based on logical instead of physical

connections, they are extremely flexible.

VTP Virtual Terminal Protocol. ISO application for establishing a virtual terminal connection across a

network.

W

web server A computer that delivers web pages to your browser.