

Glossary

NOTE

This document is an addendum to Appendix I, “Glossary,” in the *Building Scalable Cisco Networks* book from Cisco Press. The following definitions supplement the online chapter, “Configuring IS-IS Protocol,” which has been made available to you on the Cisco Press website in accordance with the latest Building Scalable Cisco Internetworks (BSCI) objectives.

AFI Authority and format ID. In OSI NSAP address, specifies the format of the address and the authority that assigned that address. The AFI is 1 byte.

CLNP Connectionless Network Protocol. CLNP is the OSI equivalent of IP.

CLNS Connectionless Network Service. One of two types of OSI network layer services that are available to the OSI transport layer.

CMNS Connection-Mode Network Service. One of two types of OSI network layer services that are available to the OSI transport layer.

CONP Connection-Oriented Network Protocol.

CSNP Complete sequence number PDU. In IS-IS, used to distribute a router’s complete link-state database. CSNPs are a list of the LSPs held by a router.

DDR Dial-on-demand routing.

DIS Designated intermediate system for IS-IS. The DIS is elected (by configurable priority and then by highest MAC address) to generate an LSP representing a virtual router connecting all attached routers to a star-shape topology.

DSP Domain-specific part of OSI NSAP address. The HODSP, system ID, and NSEL together make up the DSP of the NSAP address.

DTR Delay, throughput, and reliability bits in the IP ToS field.

ES End system.

ES-IS End System-to-Intermediate System.

ESH End system hello. Used in IS-IS. ESs send ESHs.

hello PDU In IS-IS, one of ESH, ISH, or IS-IS hello. Used to establish and maintain adjacencies.

HODSP High-order domain-specific part of OSI NSAP address. Used for subdividing the domain into areas. This can be considered loosely as the OSI equivalent of a subnet in IP.

IDI Interdomain identifier. In OSI NSAP address, identifies this domain. The IDI can be up to 10 bytes.

IDP Interdomain part of OSI NSAP address. The IDP is made up of the AFI and IDI together. This can loosely be equated to an IP classful major network.

IDRP Interdomain Routing Protocol. A standard OSI routing protocol for pure CLNS environments. IDRP is not supported by the Cisco IOS.

IIH IS-IS hello. Used between two ISs.

Integrated IS-IS Routing protocol based on the OSI routing protocol IS-IS, but with support for IP and other protocols.

IS Intermediate system.

IS-IS Intermediate System-to-Intermediate System.

ISH Intermediate system hello. Used in IS-IS. ESs discover the nearest IS by listening to ISHs.

ISO International Organization for Standardization.

ISO-IGRP A Cisco proprietary protocol used in a pure OSI (CLNS) environment.

ITU-T International Telecommunication Union Telecommunication Standardization Sector.

Level 1 IS In IS-IS, the equivalent of an OSPF internal nonbackbone router. These routers are responsible for routing to ESs inside an area.

Level 1–2 IS In IS-IS, the equivalent of an Area Border Routers in OSPF. These routers route between areas and the backbone. They participate in the Level 1 intra-area routing and the Level 2 interarea routing.

Level 2 IS In IS-IS, the equivalent of a backbone router in OSPF. These routers route only between areas.

NET Network-entity titles.

NSAP Network service access point.

NSEL NSAP-selector part of OSI NSAP address.

OSI Open System Interconnection.

PLP Packet-Layer Protocol. For X.25.

PRC Partial route calculation. Used in IS-IS to calculate ES reachability.

pseudonode For IS-IS, a virtual router required by Dijkstra's algorithm for broadcast media to build a directed graph.

PSNP Partial sequence number PDU. In IS-IS, used to acknowledge and request link-state information. PSNPs usually contain only one LSP descriptor block.

PVC Permanent virtual circuit.

QoS Quality of service.

SNP Sequence number PDUs in IS-IS. SNPs ensure that LSPs are sent reliably. SNPs contain LSP descriptors—not the actual, detailed LSP information, but headers describing the LSPs.

SNPA Subnetwork point of attachment for IS-IS. An SNPA is the point at which subnetwork services are provided. This is the equivalent of the Layer 2 address corresponding to the Layer 3 (NET or NSAP) address.

SPF Shortest Path First algorithm. Used in IS-IS and OSPF.

TLV Type Length Value. Variable-length field in an IS-IS LSP.

ToS Type of service.

VC Virtual circuit.