

# DLSw+ Support Matrix

Tables B-1 to B-5 in this appendix provide a description of the DLSw+ features, in what releases they are supported, and for what encapsulation types they are supported. In general, TCP/IP encapsulation provides the maximum functionality, but many features are still available if using other encapsulation types.

TCP encapsulation works with all the types of media combinations listed in Table B-1. Direct Encapsulation does not work with any of the media combinations except over:

- Serial HDLC in Cisco IOS Release 10.3 and above
- Frame Relay (with and without local acknowledgement) in Cisco IOS Release 11.0 and above
- RSP support in Cisco IOS Release 11.1 and above

Table B-1 refers to the media in which the DLSw+ router is directly connected.

Table B-1 SSP (Router-to-Router) Transport Options

Media	FST (Requires Release 11.1 for RSP Support)
Serial HDLC	Release 10.3
Frame	Release 10.3(13), 11.0(9), and 11.1(4)
ATM	Release 11.1(5)
ATM/1490	Release 11.1(5)
Token Ring LANE	No
Ethernet LANE	No
FDDI	Release 10.3(12), 11.0(9), and 11.1(4)
Token Ring	Release 10.3(12), 11.0(9), and 11.1(4)
Ethernet	Release 10.3
SMDS	Release 11.0(12) and 11.1(7) <sup>1</sup>
X.25	No
PPP	Release 11.2(2)

1. Cisco 7500, 4500, 4000, and 2500 Series routers only

Table B-2 Media Conversion Options

Media/PU Type	TCP/IP	TCP/IP with RIF Passthru	FST <sup>1</sup>	Direct / Passthru <sup>1</sup>	DLSw Lite (Direct/Lack)
Token Ring-to-Token Ring	Release 10.3 <sup>2</sup>	Release 12.0	Release 10.3 <sup>2</sup>	Release 10.3 <sup>2</sup>	Release 11.0 <sup>2</sup>
Ethernet-to-Ethernet	Release 10.3	No	Release 12.0	Release 12.0	Release 11.0
SDLC-to-SDLC: PU 4/5-to-PU 2.x/1 PU 2.1-to-PU 2.1	Release 10.3	No	No	No	Release 11.0
Multidrop SDLC 2.1	Release 11.0	No	No	No	Release 11.0
Token Ring-to-Ethernet	Release 10.3	No	Release 12.0	Release 12.0	Release 11.0
Token Ring-to-SDLC PU 4/5-to-PU 4/5	Release 12.0	No	No	No	Release 12.0
Token Ring-to-SDLC PU 4/5-to-PU 2.X PU 2.1-to-PU 2.1	Release 10.3	No	No	No	Release 11.0
Token Ring-to-QLLC <sup>3</sup>	Release 11.0	No	No	No	Release 11.0
Ethernet -to-QLLC <sup>3</sup>	Release 11.0	No	No	No	Release 11.0
Ethernet-to-SDLC PU4/5-to-PU4/5	Release 12.0	No	No	No	Release 12.0
Ethernet-to-SDLC PU 4/5-to-PU 2.X PU 2.1-to-PU 2.1	Release 10.3	No	No	No	Release 11.0
SDLC-to-QLLC	Release 11.0	No	No	No	Release 11.0
SRB/FDDI-to-Token Ring/Ethernet/FDDI (Cisco 7x00 only)	Release 11.2	No	No	No	Release 11.2
TB FDDI	Release 11.1	No	No	No	Release 11.2
CIP/CSNA	Release 11.0	Release 12.0	Release 11.0	Release 11.0	Release 11.0

1. Requires Release 11.1 for RSP support

2. TCP Passthru peer type is required for PU 4-to-PU 4 connectivity if more than one data path is available

3. Media conversion support is for PU 4/5-to-PU 2.x or PU 2.1-to-PU 2.1 only

Table B-3 Features and Their Supported Transports

Features	TCP/IP	TCP/IP with RIF Passthru	FST <sup>1</sup>	Direct/ Passthru <sup>1</sup>	DLSw Lite (Direct/Lack)
Dynamic Peers <sup>2</sup>	Release 11.1	No	No	No	No
SNA DDR	Release 11.1	No	No	No	No
DLSw Version 2 Support (RFC 2166)	Release 11.3	No	No	No	No
DLSw+ Group Cache	Release 11.3	No	Release 11.3	No	No
Peer Group Clusters	Release 12.0(3)T	No	Release 12.0(3)T	No	No
Border Peers	Release 10.3	No	Release 10.3	No	No
On-Demand Peers <sup>3</sup>	Release 10.3	No	Release 10.3	No	No
Backup Peers	Release 10.3 / 11.3 enhanced <sup>4</sup>	No	Release 10.3 / 11.3 enhanced <sup>4</sup>	Release 11.3	Release 11.3
Enhanced Load Balancing	Release 12.0(3)T	No	No	No	Release 12.0(3)T
Circuit History	Release 12.0(3)T	No	No	No	Release 12.0(3)T



Table B-3 Features and Their Supported Transports (Continued)

Features	TCP/IP	TCP/IP with RIF Passthru	FST <sup>1</sup>	Direct/Passthru <sup>1</sup>	DLSw Lite (Direct/Lack)
Ethernet Redundancy	Release 12.0(5)T	No	No	No	No
NetBIOS DDR	Release 11.3	No	No	No	No
UDP Unicast	Release 11.3	No	No	No	No
LNM, DSPU, or NSP over DLSw+ (both running in same router)	Release 11.1(5)	No	No	No	Release 11.1(5)
APPN over DLSw+ (both running in same router)	Release 11.2	No	No	No	Release 11.2
Maps Support (MIB)	Release 11.1(5)	No	Release 11.1(5)	No	No
SNA View PU Correlation	Release 11.1(5)	No	No	No	Release 11.1(5), name to MAC/SAP pair only
80D5 Encapsulation (global only)	Release 11.0	No	No	No	Release 11.0
Switching of IP/IPX	Release 11.3	No	No	No	Release 11.3
ToS/COS Mapping	Release 11.3	No	No	No	No
RSVP Reservations	Release 12.0(3)T	No	No	No	No
HPR Support	Release 11.3	Release 12.0	Release 11.3	Release 11.3	Release 11.3
802.1q	Release 12.2(6) <sup>5</sup>	No	No	No	No

1. Requires Release 11.1 for RSP support
2. Configured remote peers that are only connected when required
3. Remote peers that are dynamically learned via border peers and only connected when required
4. Allows TCP and FST peers to backup each other
5. Does not support FST.

Table B-4 Features Independent of Encapsulation Type

Features	Release Level Required
Fault Tolerance across Multiple Active Peers	Release 10.3
Cost	Release 10.3
Promiscuous and Passive Peers <sup>1, 2</sup>	Release 10.3
Load Balancing across Multiple RIFs per Interface	Release 11.3(5)

1. Peering to routers that are not preconfigured
2. Configured remote peers for which this local peer does not initiate a peer connection

Table B-5 Local DLSw+ Media Conversion Support (For Single Router Configurations)

Media Type	Token Ring	Ethernet	FDDI	CIP LANE	LANE	Token Ring LANE	ISL	Token Ring ISL	SDLC	QLLC
Token Ring	No	No	No	No	No	No	No	No	Release 11.1	Release 11.1
Ethernet	No	No	No	No	No	No	No	No	Release 11.1	Release 11.1
FDDI	No	No	No	No	No	No	No	No	Release 11.1	Release 11.1
CIP LAN	No	No	No	No	No	No	No	No	Release 11.1	Release 11.1

Table B-5 Local DLSw+ Media Conversion Support (For Single Router Configurations) (Continued)

<b>Media Type</b>	<b>Token Ring</b>	<b>Ethernet</b>	<b>FDDI</b>	<b>CIP LANE</b>	<b>LANE</b>	<b>Token Ring LANE</b>	<b>ISL</b>	<b>Token Ring ISL</b>	<b>SDLC</b>	<b>QLLC</b>
<b>LANE</b>	No	No	No	No	No	No	No	No	Release 11.2	Release 11.2
<b>Token Ring LANE</b>	No	No	No	No	No	No	No	No	Release 11.3	Release 11.3
<b>ISL</b>	No	No	No	No	No	No	No	No	Release 11.2	Release 11.2
<b>Token Ring ISL</b>	No	No	No	No	No	No	No	No	Release 12.0	Release 12.0
<b>SDLC</b>	Release 11.1	Release 11.1	Release 11.1	Release 11.1	Release 11.2	Release 11.3	Release 11.2	Release 12.0	Release 11.1	Release 11.1
<b>QLLC</b>	Release 11.1	Release 11.1	Release 11.1	Release 11.1	Release 11.2	Release 11.3	Release 11.2	Release 12.0	Release 11.1	Release 11.1