



Appendix: Ethernet Type Codes

Table 101 lists known Ethernet type codes. You can use these type codes in transparent bridging and source-route bridging access lists for filtering frames by protocol type. For configuration information on filtering by protocol type, refer to the following two sections of the *Cisco IOS Bridging and IBM Networking Configuration Guide*:

- “Filtering Transparently Bridged Packets” in the “Configuring Transparent Bridging” chapter
- “Securing the SRB Network” in the “Configuring Source-Route Bridging” chapter

Table 101 Ethernet Type Codes

Hexadecimal	Description (Notes)
0000-05DC	IEEE 802.3 Length Field
0101-01FF	Experimental; for development (conflicts with 802.3 length fields)
0200	Xerox PARC Universal Protocol (PUP) (conflicts with IEEE 802.3 length fields)
0201	Xerox PUP Address Translation (conflicts with IEEE 802.3 length fields)
0400	Nixdorf Computers (Germany)
0600	Xerox XNS IDP
0660-0661	DLOG (Germany)
0800	DOD Internet Protocol (IP) * ¹ # ²
0801	X.75 Internet
0802	NBS Internet
0803	ECMA Internet
0804	CHAOSnet
0805	X.25 Level 3
0806	Address Resolution Protocol (for IP and CHAOS)
0807	XNS Compatibility
081C	Symbolics Private
0888-088A	Xyplex
0900	Ungermann-Bass (UB) Network Debugger
0A00	Xerox IEEE 802.3 PUP
0A01	Xerox IEEE 802.3 PUP Address Translation

Table 101 Ethernet Type Codes (continued)

Hexadecimal	Description (Notes)
0BAD	Banyan VINES IP
0BAE	Banyan VINES Loopback
0BAF	Banyan VINES Echo
1000	Berkeley trailer negotiation
1001-100F	Berkeley trailer encapsulation for IP
1600	VALID system protocol
4242	PCS Basic Block Protocol
5208	BBN Simnet Private
6000	DEC unassigned
6001	DEC Maintenance Operation Protocol (MOP) Dump/Load Assistance
6002	DEC MOP Remote Console
6003	DEC DECnet Phase IV Route
6004	DEC Local Area Transport (LAT)
6005	DEC DECnet Diagnostics
6006	DEC Customer Protocol
6007	DEC Local-Area VAX Cluster (LAVC), SCA
6008	DEC unassigned
6009	DEC unassigned
6010-6014	3Com Corporation
7000	Ungermann-Bass (UB) Download
7001	UB diagnostic/loopback
7002	UB diagnostic/loopback
7020-7029	LRT (England)
7030	Proteon
7034	Cabletron
8003	Cronus VLN
8004	Cronus Direct
8005	HP Probe protocol
8006	Nestar
8008	AT&T
8010	Excelan
8013	Silicon Graphics diagnostic (obsolete)
8014	Silicon Graphics network games (obsolete)
8015	Silicon Graphics reserved type (obsolete)
8016	Silicon Graphics XNS NameServer, bounce server (obsolete)

Table 101 Ethernet Type Codes (continued)

Hexadecimal	Description (Notes)
8019	Apollo Computers
802E	Tymshare
802F	Tigan, Inc.
8035	Reverse Address Resolution Protocol (RARP) (Stanford)
8036	Aeonic Systems
8038	DEC LANBridge Management
8039-803C	DEC unassigned
803D	DEC Ethernet CSMA/CD Encryption Protocol
803E	DEC unassigned
803F	DEC LAN Traffic Monitor Protocol
8040-8042	DEC unassigned
8044	Planning Research Corporation
8046-8047	AT&T
8049	ExperData (France)
805B	<i>Versatile Message Translation Protocol</i> , RFC 1045 (Stanford)
805C	Stanford V Kernel, production
805D	Evans & Sutherland
8060	Little Machines
8062	Counterpoint Computers
8065-8066	University of Massachusetts at Amherst
8067	Veeco Integrated Automation
8068	General Dynamics
8069	AT&T
806A	Autophon (Switzerland)
806C	ComDesign
806D	Compugraphic Corporation
806E-8077	Landmark Graphics Corporation
807A	Matra (France)
807B	Dansk Data Elektronik A/S
807C	University of Michigan
807D-807F	Vitalink Communications
8080	Vitalink TransLAN III Management
8081-8083	Counterpoint Computers
809B	Kinetics EtherTalk (AppleTalk over Ethernet)
809C-809E	Datability
809F	Spider Systems, Ltd.

Table 101 Ethernet Type Codes (continued)

Hexadecimal	Description (Notes)
80A3	Nixdorf Computers (Germany)
80A4-80B3	Siemens Gammasonics, Inc.
80C0-80C3	Digital Communications Association (DCA), Inc.
80C1	DCA Data Exchange Cluster
80C4	Banyan VINES IP
80C5	Banyan VINES Echo
80C6	Pacer Software
80C7	Applitek Corporation
80C8-80CC	Intergraph Corporation
80CD-80CE	Harris Corporation
80CF-80D2	Taylor Instrument
80D3-80D4	Rosemount Corporation
80D5	IBM SNA Services over Ethernet
80DD	Varian Associates
80DE	Integrated Solutions Transparent Remote File System (TRFS)
80DF	Integrated Solutions
80E0-80E3	Allen-Bradley
80E4-80F0	Datability
80F2	Retix
80F3	Kinetics AppleTalk Address Resolution Protocol (AARP)
80F4-80F5	Kinetics
80F7	Apollo Computer
80FF-8103	Wellfleet Communications
8107-8109	Symbolics Private
8130	Hayes Microcomputer Products, Ltd. (formerly Waterloo Microsystems, Inc.)
8131	VG Laboratory Systems
8132-8136	Bridge Communications, Inc.
8137	Novell NetWare IPX (old)
8137-8138	Novell, Inc.
8139-813D	KTI
8148	Logicraft, Inc.
8149	Network Computing Devices
814A	Alpha Micro
814C	SNMP
814D-814E	BIIN
814F	Technically Elite Concepts, Inc.

Table 101 *Ethernet Type Codes (continued)*

Hexadecimal	Description (Notes)
8150	Rational Corporation
8151-8153	Qualcomm, Inc.
815C-815E	Computer Protocol Pty, Ltd.
8164-8166	Charles River Data Systems, Inc.
817D-818C	Protocol Engines, Inc.
818D	Motorola Computer X
819A-81A3	Qualcomm, Inc.
81A4	ARAI Bunkichi
81A5-81AE	RAD Network Devices
81B7-81B9	Xyplex
81CC-81D5	Apricot Computers
81D6-81DD	Artisoft, Inc.
81DE-81E0	Hewlett Packard
81E6-81EF	Polygon, Inc.
81F0-81F2	Comsat Laboratories
81F3-81F5	Science Applications International Corporation (SAIC)
81F6-81F8	VG Analytical, Ltd.
8203-8205	Quantum Software Systems, Ltd.
8221-8222	Ascom Banking Systems, Ltd.
823E-8240	Advanced Encryption Systems, Inc.
827F-8282	Athena Programming, Inc.
8263-826A	Charles River Data Systems
829A-829B	Institute for Industrial Information Technology, Ltd.
829C-82AB	Taurus Controls, Inc.
82AC-838F	Walker Richer & Quinn, Inc.
8390	LANSOft, Inc.
8391-8693	Walker Richer & Quinn, Inc.
8694-869D	Idea Courier
869E-86A1	Computer Network Technology Corporation
86A3-86AC	Gateway Communications, Inc.
86DB	SECTRA - Secure Transmission AB
86DE	Delta Controls, Inc.
86DF	USC-ISI
86E0-86EF	Landis & Gyr Powers, Inc.
8700-8710	Motorola, Inc.
8711-8720	Cray Communications

Table 101 *Ethernet Type Codes (continued)*

Hexadecimal	Description (Notes)
8725-8728	Phoenix Microsystems
8739-873C	Control Technology, Inc.
8755-8759	LANSOft, Inc.
875A-875C	Norland
875D-8766	University of Utah Dept./Computer Science
8780-8785	Symbol Technologies, Inc.
8A96-8A97	Invisible Software
9000	Loopback (Configuration Test Protocol)
9001	3Com (Bridge) XNS Systems Management
9002	3Com (Bridge) TCP/IP Systems Management
9003	3Com (Bridge) loop detect
FF00	BBN VITAL LANBridge cache wakeups
FF00-FF0F	ISC-Bunker Ramo

1. An asterisk (*) indicates the current connection in various informational displays.
2. A pound sign (#) is a delimiting character for configuration commands that contain arbitrary text strings.