

Network Working Group
Request for Comments: 755
IEN: 93

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Obsoletes: [750](#),
[739](#), [604](#), [503](#), [433](#), [349](#)

ASSIGNED NUMBERS

This Network Working Group Request for Comments documents the currently assigned values from several series of numbers used in network protocol implementations. This RFC will be updated periodically, and in any case current information can be obtained from Jon Postel. The assignment of numbers is also handled by Jon. If you are developing a protocol or application that will require the use of a link, socket, etc. please contact Jon to receive a number assignment.

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Most of the protocols mentioned here are documented in the RFC series of notes. The more prominent and more generally used are documented in the Protocol Handbook [[1](#)] prepared by the Network Information Center (NIC). In the lists that follow a bracketed number, e.g. [[1](#)], off to the right of the page indicates a reference for the listed protocol.

ASSIGNED LINK NUMBERS

The word "link" here refers to a field in the original ARPANET Host/IMP interface leader. The link was originally defined as an 8 bit field. Some time after the ARPANET Host-to-Host (AHHP) protocol was defined and, by now, some time ago the definition of this field was changed to "Message-ID" and the length to 12 bits. The name link now refers to the high order 8 bits of this 12 bit message-id field. The low order 4 bits of the message-id field are to be zero unless specifically specified otherwise for the particular protocol used on that link. The Host/IMP interface is defined in BBN report 1822 [2].

Link Assignments:

| Decimal | Octal | Description | References |
|---------|---------|----------------------------|------------------|
| ----- | ----- | ----- | ----- |
| 0 | 0 | AHHP Control Messages | [1,3] |
| 1 | 1 | Reserved | |
| 2-71 | 2-107 | AHHP Regular Messages | [1,3] |
| 72-151 | 110-227 | Reserved | |
| 152 | 230 | PARC Universal Protocol | |
| 153 | 231 | TIP Status Reporting | |
| 154 | 232 | TIP Accounting | |
| 155-158 | 233-236 | Internet Protocol | [35,36,42,43,44] |
| 159-191 | 237-277 | Measurements | [28] |
| 192-195 | 300-303 | Message Switching Protocol | [4,5] |
| 196-255 | 304-377 | Experimental Protocols | |
| 224-255 | 340-377 | NVP | [1,39] |

ASSIGNED SOCKET NUMBERS

Sockets are used in the AHHP [1,3] to name the ends of logical connections which carry long term conversations. For the purpose of providing services to all callers an Initial Connection Procedure ICP [1,34] is used between the user process and the server process. This list specifies the socket used by the server process as its contact socket.

Socket Assignments:

General Assignments:

| Decimal | Octal | Description |
|---------|---------|--------------------------------|
| ----- | ----- | ----- |
| 0-63 | 0-77 | Network Wide Standard Function |
| 64-127 | 100-177 | Hosts Specific Functions |
| 128-223 | 200-337 | Reserved for Future Use |
| 224-255 | 340-377 | Any Experimental Function |

Specific Assignments:

Network Standard Functions

| Decimal | Octal | Description | References |
|---------|-------|--------------------------------|-------------|
| ----- | ----- | ----- | ----- |
| 1 | 1 | Old Telnet | [6] |
| 3 | 3 | Old File Transfer | [7, 8, 9] |
| 5 | 5 | Remote Job Entry | [1, 10] |
| 7 | 7 | Echo | [11] |
| 9 | 11 | Discard | [12] |
| 11 | 13 | Who is on or SYSTAT | |
| 13 | 15 | Date and Time | |
| 15 | 17 | Who is up or NETSTAT | |
| 17 | 21 | Short Text Message | |
| 19 | 23 | Character generator or TTYTST | [13] |
| 21 | 25 | New File Transfer | [1, 14, 15] |
| 23 | 27 | New Telnet | [1, 16, 17] |
| 25 | 31 | Distributed Programming System | [18, 19] |
| 27 | 33 | NSW User System w/COMPASS FE | [20] |
| 29 | 35 | MSG-3 ICP | [21] |
| 31 | 37 | MSG-3 Authentication | [21] |
| 33 | 41 | DPS ICP | [18, 19] |
| 35 | 43 | IO Station Spooler | |
| 37 | 45 | Time Server | [1, 22] |
| 39 | 47 | NSW User System w/SRI FE | [20] |

| | | | |
|-------|-------|------------|--|
| 41 | 51 | Graphics | [1 , 26] |
| 42-63 | 52-77 | unassigned | |

Host Specific Functions

| Decimal | Octal | Description | References |
|---------|---------|-------------------------------|--|
| ----- | ----- | ----- | ----- |
| 65 | 101 | Speech Data Base at LL-TX-2 | [23] |
| 67 | 103 | Datacomputer at CCA | [24] |
| 69 | 105 | CPYNET | |
| 71 | 107 | NETRJS (EBCDIC) at UCLA-CCN | [1 , 25] |
| 73 | 111 | NETRJS (ASCII-68) at UCLA-CCN | [1 , 25] |
| 75 | 113 | NETRJS (ASCII-63) at UCLA-CCN | [1 , 25] |
| 77 | 115 | any private RJE server | |
| 79 | 117 | Name or Finger | [1 , 40] |
| 81 | 121 | Network BSYS | |
| 83 | 123 | MIT ML Device | |
| 85 | 125 | MIT ML Device | |
| 86-94 | 126-136 | unassigned | |
| 95 | 137 | SUPDUP | [33] |
| 97 | 141 | Datacomputer Status | |
| 98-127 | 142-136 | unassigned | |

Reserved for Future Use

| Decimal | Octal | Description | References |
|---------|---------|-------------|------------|
| ----- | ----- | ----- | ----- |
| 128-223 | 200-337 | reserved | |

Experimental Functions

| Decimal | Octal | Description | References |
|---------|---------|--------------------------|--|
| ----- | ----- | ----- | ----- |
| 224-231 | 340-347 | unassigned | |
| 232-237 | 350-355 | Authorized Mailer at BBN | |
| 239 | 357 | unassigned | |
| 241 | 361 | NCP Measurement | [27 , 28] |
| 243 | 363 | Survey Measurement | [28 , 29 , 30] |
| 245 | 365 | LINK | [31] |
| 247 | 367 | TIPSRV | |
| 249-255 | 371-377 | RSEXEC | [31 , 32] |

ASSIGNED NETWORK NUMBERS

This list of network numbers is used in the internetwork protocols now under development, the field is 8 bits in size.

Assigned Network Numbers

| Decimal | Octal | Name | Network | References |
|---------|--------|--------------|--------------------------------------|------------|
| ----- | ----- | ---- | ----- | ----- |
| 0 | 0 | | Reserved | |
| 1 | 1 | BBN-PR | BBN Packet Radio Network | |
| 2 | 2 | SF-PR-1 | SF Bay Area Packet Radio Network (1) | |
| 3 | 3 | BBN-RCC | BBN RCC Network | |
| 4 | 4 | SATNET | Atlantic Satellite Network | |
| 5 | 5 | SILL-PR | Ft. Sill Packet Radio Network | |
| 6 | 6 | SF-PR-2 | SF Bay Area Packet Radio Network (2) | |
| 7 | 7 | CHAOS | CHAOS Network | |
| 8 | 10 | BBN-SAT-TEST | BBN SATNET Test Network | |
| 9 | 11 | BRAGG-PR | Ft. Bragg Packet Radio Network | |
| 10 | 12 | ARPANET | ARPANET | [1,2] |
| 11 | 13 | UCLNET | University College London Network | |
| 12 | 14 | CYCLADES | CYCLADES | |
| 13 | 15 | NPLNET | National Physical Laboratory | |
| 14 | 16 | TELENET | TELENET | |
| 15 | 17 | EPSS | British Post Office EPSS | |
| 16 | 20 | DATAPAC | DATAPAC | |
| 17 | 21 | TRANSPAC | TRANSPAC | |
| 18 | 22 | LCSNET | LCS Network | [37,38] |
| 19 | 23 | TYMNET | TYMNET | |
| 20 | 24 | DC-PR | Washington D.C. Packet Radio Network | |
| 21 | 25 | EDN | DCEC EDN | |
| 22 | 26 | DIALNET | DIALNET | [47,48] |
| 23 | 27 | MITREK | MITREK Cable Network | |
| 24 | 30 | BBN-LOCAL | BBN Local Network | |
| 25 | 31 | RSRE-PPSN | RSRE / PPSN | |
| 26-254 | 32-376 | | Unassigned | |
| 255 | 377 | | Reserved | |

ASSIGNED INTERNET MESSAGE VERSIONS

In the internetwork protocols there is a field to identify the version of the internetwork general protocol. This field is 4 bits in size.

Assigned Internet Message Versions

| Decimal | Octal | Version | References |
|---------|-------|-------------------------|------------|
| ----- | ----- | ----- | ----- |
| 0 | 0 | March 1977 version | [35] |
| 1 | 1 | January 1978 version | [36] |
| 2 | 2 | February 1978 version A | [42] |
| 3 | 3 | February 1978 version B | [43] |
| 4 | 4 | February 1979 version 4 | [44] |
| 5-14 | 5-16 | Unassigned | |
| 15 | 17 | Reserved | |

ASSIGNED INTERNET PROTOCOL NUMBERS

In the internet protocol (IN) [44] there is a field to identify the the next level protocol. This field is 8 bits in size. This field is called Protocol in the IN header.

Assigned Internet Protocol Numbers

| Decimal | Octal | Protocol Numbers | References |
|---------|--------|----------------------------|------------|
| ----- | ----- | ----- | ----- |
| 0 | 0 | Reserved | |
| 1 | 1 | raw internet datagrams | [44] |
| 2 | 2 | TCP-3 | [36] |
| 3 | 3 | Gateway-to-Gateway | [49] |
| 4 | 4 | Gateway Monitoring Message | [41] |
| 5 | 5 | TCP-3.1 | [45] |
| 6 | 6 | TCP-4 | [46] |
| 7 | 7 | UCL | |
| 8 | 10 | DSP | [37, 38] |
| 9 | 11 | Secure | |
| 10 | 12 | TCP-2 | [35] |
| 11-12 | 13-14 | Unassigned | |
| 13 | 15 | Pluribus | |
| 14 | 16 | Telenet | |
| 15 | 17 | XNET | |
| 16 | 20 | Chaos | |
| 17 | 21 | UDP | [50] |
| 18 | 22 | Multiplexing | [51] |
| 19-254 | 23-376 | Unassigned | |
| 255 | 377 | Reserved | |

ASSIGNED INTERNET MESSAGE TYPES

In the March 1977 internetwork protocol [35] there is a field to identify the type of the message. This field is 4 bits in size.

Assigned Internet Message Types

| Decimal | Octal | Type | References |
|---------|-------|---------------------|------------|
| ----- | ----- | ---- | ----- |
| 0 | 0 | Raw Internet Packet | |
| 1 | 1 | TCP-2 | [35] |
| 2 | 2 | Secure | |
| 3 | 3 | Gateway | |
| 4 | 4 | Measurement | |
| 5 | 5 | DSP | [37, 38] |
| 6 | 6 | UCL | |
| 7-12 | 7-14 | Reserved | |
| 13 | 15 | Pluribus | |
| 14 | 16 | Telenet | |
| 15 | 17 | Xnet | |

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