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Formally Obsoleting some Historic IPv4 Options  
draft-gp-intarea-obsolete-ipv4-options-iana-00

## Abstract

A number of IPv4 options have become obsolete in practice, but have never been formally obsoleted. This document obsoletes such IPv4 options, thus cleaning up the corresponding IANA registry, and serving as a basis for providing advice about the filtering of packets containing these options.

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## [1.](#) Introduction

The Internet Protocol version 4 (IPv4) [[RFC0791](#)] provides for expansion of the protocol by supporting a number of "options" in the variable-length IPv4 header. IPv4 options are identified by an option "type" value, whose registration is managed by IANA [[IANA-IP](#)]. A number of IPv4 options have become obsolete in practice, but have never been formally obsoleted. This document obsoletes such IPv4 options, "cleaning up" the corresponding IANA registry.

## [2.](#) Discussion of Obsoleted Options

### [2.1.](#) Stream ID

The Stream ID option is obsolete. It is specified in [RFC 791](#) [[RFC0791](#)], and obsoleted in [Section 3.2.1.8 of RFC 1122](#) [[RFC1122](#)] and [Section 4.2.2.1 of RFC 1812](#) [[RFC1812](#)].

### [2.2.](#) Extended Internet Protocol

The Extended Internet Protocol option is defined in [[RFC1385](#)], and is superseded by [[RFC2460](#)].

### [2.3.](#) Traceroute

The Traceroute option is defined in [[RFC1393](#)]. The Traceroute option is defined as "experimental" and it was never widely deployed on the public Internet.

### [2.4.](#) Address Extension

The Address Extension option is defined in the Experimental [[RFC1475](#)], and marked as IPv7.

### [2.5.](#) Selective Directed Broadcast

The Selective Directed Broadcast option is originally defined in [\[RFC1770\]](#).

## [2.6.](#) Dynamic Packet State

The Dynamic Packet State option was specified in [\[I-D.stoica-diffserv-dps\]](#). The aforementioned document was meant to be published as "Experimental", but never made it into an RFC.

## [2.7.](#) Upstream Multicast Pkt.

This options was originally specified in [\[draft-farinacci-bidir-pim\]](#). Its use was obsoleted by [\[RFC5015\]](#), which employs a control plane mechanism to solve the problem of doing upstream forwarding of multicast packets on a multi-access LAN.

## [3.](#) IANA Considerations

The "IP OPTION NUMBERS" registry [\[IANA-IP\]](#) contains the list of the currently assigned IP option numbers. This registry also denotes an obsoleted IP Option Number by marking it with a single asterisk ("\*").

This document formally obsoletes the following options, and requests IANA to mark them as such in the corresponding registry [\[IANA-IP\]](#).

Copy	Class	Number	Value	Name	Reference
1	0	8	136	SID - Stream ID	<a href="#">[RFC791]</a> , JBP]*
0	0	11	11	MTUP - MTU Probe	<a href="#">[RFC1191]</a> *]
0	0	12	12	MTUR - MTU Reply	<a href="#">[RFC1191]</a> *]
1	0	17	145	EIP - Extended Internet Protocol	<a href="#">[RFC1385]</a> *]
0	2	18	82	TR - Traceroute	<a href="#">[RFC1393]</a> *]
1	0	19	147	ADDEXT - Address Extension	<a href="#">[Ullmann IPv7]</a> *]
1	0	21	149	SDB - Selective Directed Broadcast	<a href="#">[Graff]</a> *]
1	0	23	151	DPS - Dynamic Packet State	<a href="#">[Malis]</a> *]
1	0	24	152	UMP - Upstream Multicast Pkt.	<a href="#">[Farinacci]</a> *]

## [4.](#) Security Considerations

This document does not modify the security properties of the IPv4 Options being obsoleted. However, formally obsoleting these options serves as a basis for e.g. providing advice about filtering packets containing these options (as in [\[I-D.gont-opsec-ip-options-filtering\]](#)).

## [5.](#) Acknowledgments

The authors would like to thank Ron Bonica for his guidance.

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