Transmission and Processing of IPv6 Options (draft-gont-6man-ipv6-opt-transmit-01)

Fernando Gont Will Liu Ron Bonica

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Introduction

- A number of middle-boxes inspect the contents of IPv6 extension headers
 - this results in packet drops
- Host/router implementations would also benefit from clear validation rules
- Advice in this area (ala RFC7045) is necessary
- We hope this will e.g. help improve the situation wrt the dropping of packets containing EHs in some scenarios

draft-gont-6man-ipv6-opt-transmit

- Clarifies the default processing of IPv6 options
- Think of it as "RFC 7045 for IPv6 options"
 - IPv6 options were considered "out of scope" for RFC7045
- Recommendations in line with RFC 7045
- Additionally, option validation is specified, e.g.:
 - Most IPv6 options have been specified to be employed with specific Extension Headers
 - Some options have additional requirements
 - e.g. whether more than one instance of the option is allowed

Moving forward

• Adopt as wg document?