

A Vocabulary of Path Properties

draft-irtf-panrg-path-properties-03

Theresa Enghardt
Cyrill Krähenbühl

IETF 111

Revise Transparency Path Property

- A **node** performs an **action** on a **flow** transparently with respect to some **(meta-)information** if it performs the action independently of the (meta-)information.
- Action: block, modify, or forward packet(s) in flow
- (Meta-)information: Existence or Content of protocol headers, payloads, ...

Transparency Examples

Node	is transparent to:	
	TCP/UDP Headers	IP Headers
IP Router	Yes	No (action = forwarding)
TCP SYN blocking firewall	No (action = blocking)	Yes
NAT	No (action = blocking, forwarding, modifying)	No (action = blocking, forwarding, modifying)

Both a transparent HTTP proxy (RFC2616) and a node reacting to Transport Protocol Path Signals (RFC8558) are **not** considered transparent given this definition

Add Formal Entity Definition

- Entity is the most basic term:
 - Can be a physical device or virtual device/function
 - Can be on- or off-path
 - Can be in the data- or control-plane
 - Can process packets
 - Can measure path properties
 - Can access information about paths
 - ...
- Every node is an entity
- Not every entity is a node (e.g., entity may be off-path)

Questions & Next steps

- Thoughts on Transparency and entity definition?
- Ready for Last Call?