

draft-tsou-softwire-port-set-algorithms-analysis-02

Tina Tsou <tina.tsou.zouting@huawei.com>
Tetsuya Murakami <tetsuya@ipinfusion.com>
Simon Perreault <simon.perreault@viagenie.ca>

IETF 84, Vancouver
SOFTWARE meeting

2012-08-02

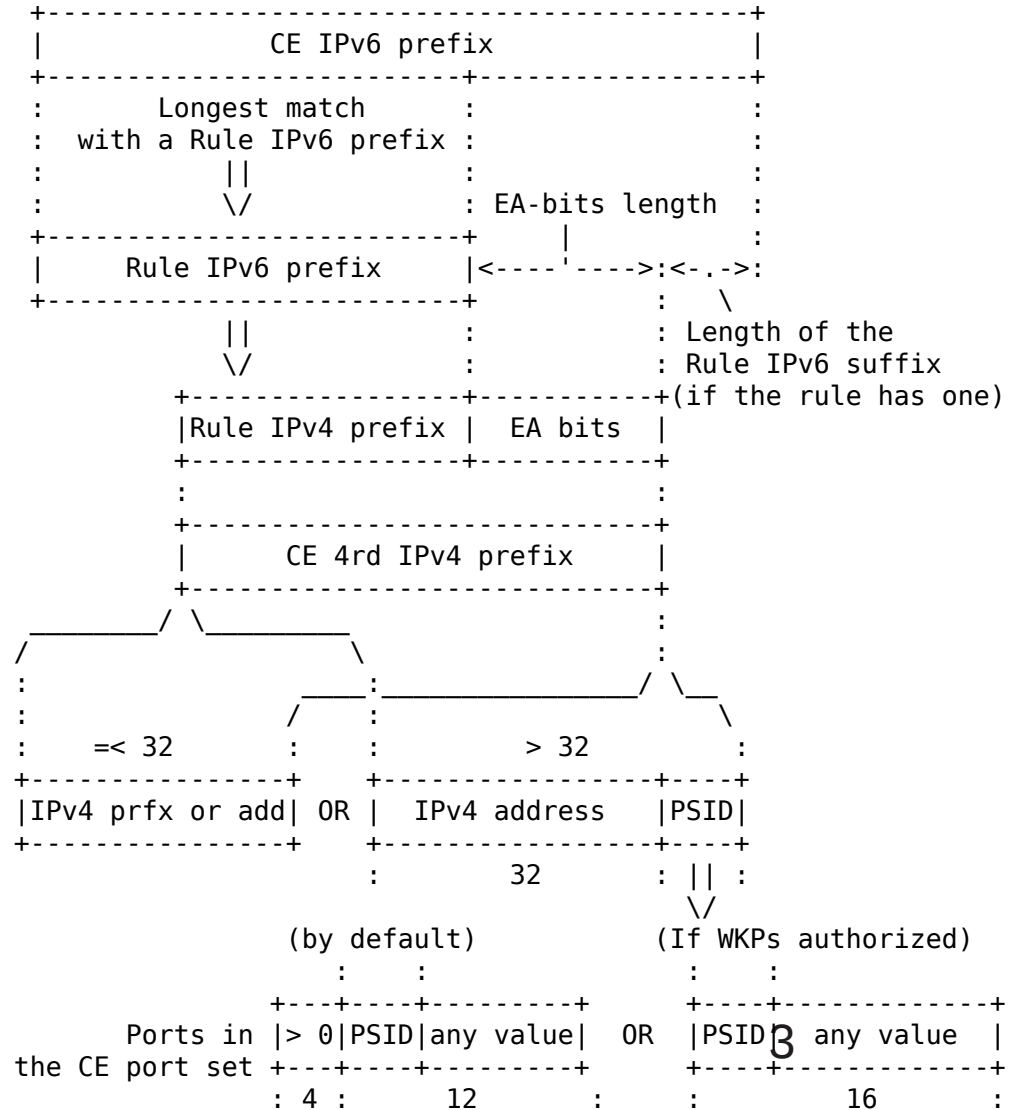
Table of Contents

- Types of port set definition methods
 - GMA style
 - [draft-ietf-softwire-4rd-02](#)
 - [draft-ietf-softwire-map-01](#)
 - Mask / Value style
 - [RFC6431](#)
 - Cryptographical style
 - [RFC6431](#)

GMA style

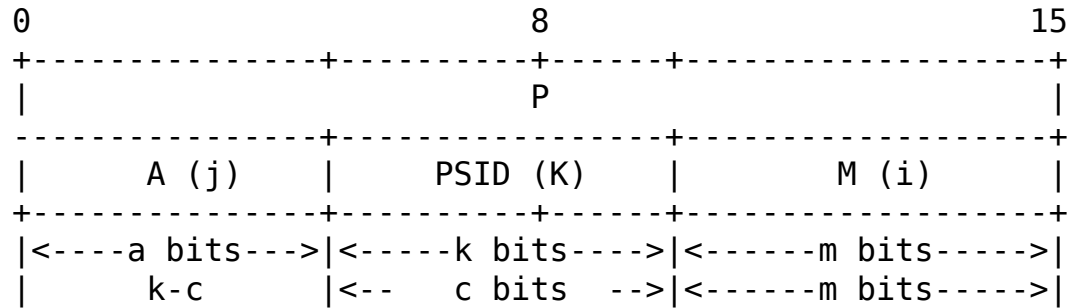
- [draft-ietf-softwire-4rd-02](#)

1. Port set ID encoded in IPv6 address, support non-continuous port sets
2. BR is stateless
3. Draft exclude ports 0~4095

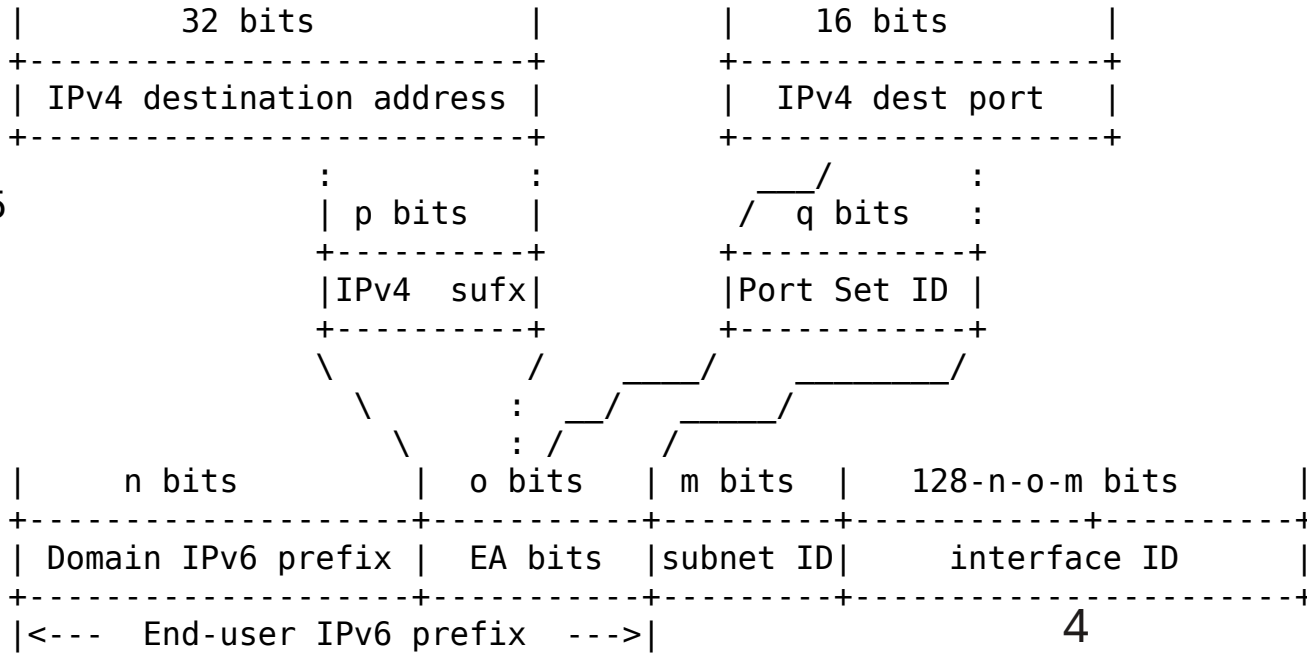


GMA style

– [draft-ietf-softwire-map-01](#)

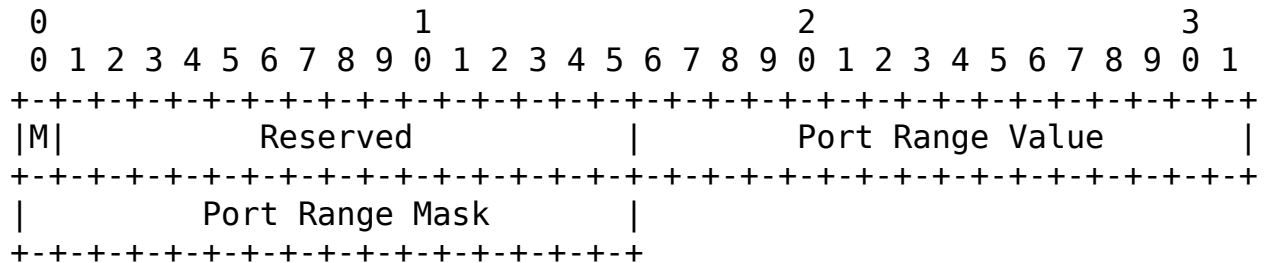


1. Port set ID encoded in IPv6 address, support non-continuous port sets
2. BR is stateless
3. Draft exclude ports 0~4095

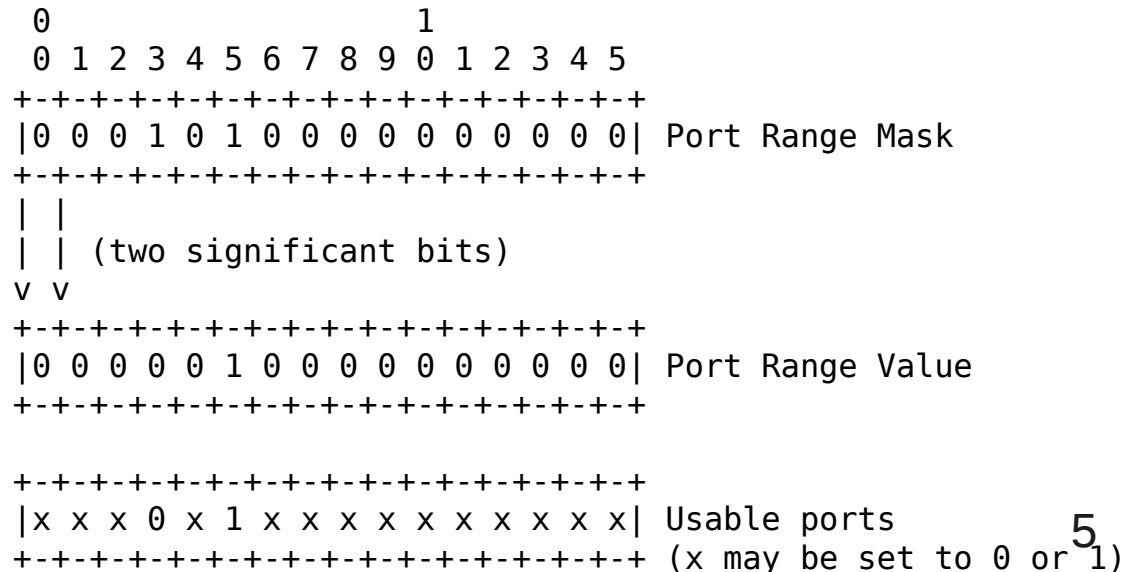


Mask / Value style

- [RFC6431 Huawei Port Range Configuration Options for PPP IPCP](#)

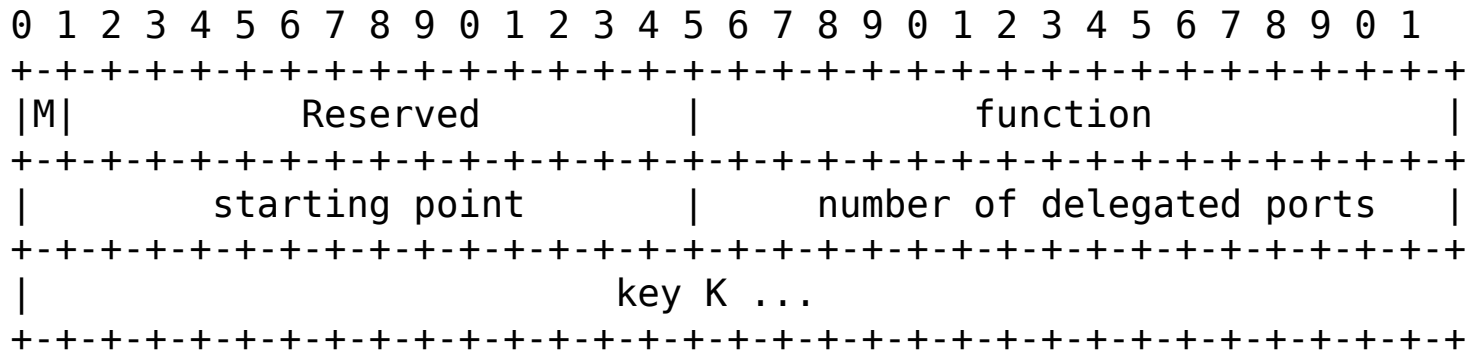


1. Support continuous and non-continuous port sets
2. Port set info can be random per IP, provide good security
3. BR is stateful, need per-usr state, no per session state.



Cryptographical style

- [RFC6431 Huawei Port Range Configuration Options for PPP IPCP](#)



1. Support continuous, non-continuous and random port sets, provide better security
2. Provide best security
3. BR is stateful, need per-user state, no per session state.

Summary

	Port set type	Stateful/stateless	Security
GMA style	Non-continuous	stateless	Normal
Mask / Value style	Continuous and non-continuous	Per-user state, no per session state	Good
Cryptographical style	Continuous, non-continuous and random	Per-user state, no per session state	Best

Next Steps

- Is there value in such an analysis?
- How can it be made more useful?
- Should it be published as an RFC?