Human Readable Validate ROA Payload Notation
draft-timbru-sidrops-vrp-notation-00
IETF 117
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VRP Notation - Intention

• Define an information human readable notation for Validated ROA Payload (VRP)
• Allow to create a consistency between RPKI Relying Party software output.
• Make it easy for operators to compare results
• Can be used for command line interfaces (CLI) and/or configurations
• Will be useful for documentation

• This is informational only and implementations can choose their own notation styles instead.
VRP Notation - ABNF

notation = vrp-prefix separator origin-asn
vrp-prefix = v4-vrp-prefix / v6-vrp-prefix

v4-vrp-prefix = v4-cidr ["-" max-length-v4]
v4-cidr = v4-address "/" v4-pfx-length
v4-address = v4-byte "." v4-byte "." v4-byte "." v4-byte
v4-byte = %d0-255
v4-pfx-length = %d0-32
v4-max-length = %d0-32

v6-vrp-prefix = v6-cidr ["-" v6-max-length]
v6-cidr = v6-address "/" v6-pfx-length
v6-address = (v6-un / v6-no-0 / v6-l-0 / v6-m-0 / v6-t-0)
v6-un = "::"
v6-no-0 = v6-bytes 7*7("": v6-bytes) v6-l-0 = ":" 1*7("": v6-bytes)
v6-m-0 = 1*6(v6-bytes ":") ":" 1*6("": v6-bytes)
v6-t-0 = 1*7(v6-bytes ":") ":"
v6-bytes = %x0-FFFF
v6-pfx-length = %d0-128
v6-max-length = %d0-128

separator = " => "

origin-asn = ["AS"] uint32
uint32 = %d0-4294967295

Example Notation IPv4
192.0.2.0/24 => AS65000
192.0.2.0/24-24 => AS65000
192.0.2.0/24-32 => 65000
192.0.2.0/32 => 65000

Example Notation IPv6
2001:db8::/32 => AS65000
2001:db8::/32-32 => AS65000
2001:db8::/128 => 65000
2001:db8::/128 => 65000