



# A MAGYARORSZÁGI **DIGITALIZÁCIÓ** SZOLGÁLATÁBAN

# Bgp compressed updates

<https://tools.ietf.org/html/draft-przygienda-idr-compressed-updates-04>

**Thanks tony @ jnpr for the idea!**  
It interworks....

```
kaputt.debrecen3#
kaputt.debrecen3#
kaputt.debrecen3#show ipv4 bgp 1955 unicast summary
2018-08-01 08:29:32
```

as	learn	accept	will	done	neighbor	uptime
1955	0	0	1	0	195.111.97.91	4d10h
1955	1964	1964	1	1	195.111.97.92	4d9h
1955	704888	704888	1	1	195.111.97.93	4d10h
1955	704888	704888	1	1	195.111.97.179	4d20h

```
kaputt.debrecen3#show ipv4 bgp 1955 vpnuni summary
2018-08-01 08:29:35
```

as	learn	accept	will	done	neighbor	uptime
1955	13654	13654	1	1	195.111.97.91	4d10h
1955	0	0	1	0	195.111.97.92	4d9h
1955	13654	13654	1	1	195.111.97.93	4d10h
1955	13654	13654	1	1	195.111.97.179	4d20h

```
kaputt.debrecen3#show ipv4 bgp 1955 ovpnuni summary
2018-08-01 08:29:37
```

as	learn	accept	will	done	neighbor	uptime
1955	9365	9365	1	1	195.111.97.91	4d10h
1955	0	0	1	0	195.111.97.92	4d9h
1955	9365	9365	1	1	195.111.97.93	4d10h
1955	9365	9365	1	1	195.111.97.179	4d20h

```
kaputt.debrecen3#show ipv4 bgp 1955 vpls summary
```

kaputt.debrecen3#show ipv4 bgp 1955 ovpnuni summary  
2018-08-01 08:29:37

as	learn	accept	will	done	neighbor	uptime
1955	9365	9365	1	1	195.111.97.91	4d10h
1955	0	0	1	0	195.111.97.92	4d9h
1955	9365	9365	1	1	195.111.97.93	4d10h
1955	9365	9365	1	1	195.111.97.179	4d20h

kaputt.debrecen3#show ipv4 bgp 1955 vpls summary  
2018-08-01 08:29:45

as	learn	accept	will	done	neighbor	uptime
1955	0	0	0	0	195.111.97.91	4d10h
1955	57	57	0	0	195.111.97.92	4d9h
1955	57	57	0	0	195.111.97.93	4d10h
1955	57	57	0	0	195.111.97.179	4d20h

kaputt.debrecen3#show ipv4 bgp 1955 evpn summary  
2018-08-01 08:29:49

as	learn	accept	will	done	neighbor	uptime
1955	0	0	0	0	195.111.97.91	4d10h
1955	14	14	0	0	195.111.97.92	4d9h
1955	14	14	0	0	195.111.97.93	4d10h
1955	14	14	0	0	195.111.97.179	4d20h

kaputt.debrecen3#

kaputt.debrecen3#show ipv4 bgp 1955 vpls summary

2018-08-01 08:29:45

as	learn	accept	will	done	neighbor	uptime
1955	0	0	0	0	195.111.97.91	4d10h
1955	57	57	0	0	195.111.97.92	4d9h
1955	57	57	0	0	195.111.97.93	4d10h
1955	57	57	0	0	195.111.97.179	4d20h

kaputt.debrecen3#show ipv4 bgp 1955 evpn summary

2018-08-01 08:29:49

as	learn	accept	will	done	neighbor	uptime
1955	0	0	0	0	195.111.97.91	4d10h
1955	14	14	0	0	195.111.97.92	4d9h
1955	14	14	0	0	195.111.97.93	4d10h
1955	14	14	0	0	195.111.97.179	4d20h

kaputt.debrecen3#show ipv4 bgp 1955 compression

2018-08-01 08:29:58

as	rx	tx	rx	tx	neighbor
1955	true	true	19.0%	123.0%	195.111.97.91
1955	true	true	22.1%	200.0%	195.111.97.92
1955	true	true	15.2%	110.3%	195.111.97.93
1955	true	false	??%	??%	195.111.97.179

kaputt.debrecen3#

```

router id = 195.111.97.93
uptime = 4d10h
hold time = 00:03:00
keepalive time = 00:01:00
32bit as = true
refresh = true, rx=0, tx=0
description = rr
hostname = null
compression = rx=true, tx=true
graceful =
addpath rx =
addpath tx =
unicast advertised = 1 of 1, list = 0, accepted = 704893 of 704893
multicast advertised = 1 of 1, list = 0, accepted = 2596 of 2596
other advertised = 0 of 0, list = 0, accepted = 0 of 0
flowspec advertised = 0 of 0, list = 0, accepted = 0 of 0
vpnuni advertised = 1 of 1, list = 0, accepted = 13662 of 13662
vpnmlt advertised = 0 of 1, list = 0, accepted = 0 of 0
vpnflw advertised = 0 of 0, list = 0, accepted = 0 of 0
ovpnuni advertised = 1 of 1, list = 0, accepted = 9373 of 9373
ovpnmlt advertised = 0 of 1, list = 0, accepted = 0 of 0
ovpnflw advertised = 0 of 0, list = 0, accepted = 0 of 0
vpls advertised = 0 of 0, list = 0, accepted = 57 of 57
mstp advertised = 0 of 0, list = 0, accepted = 0 of 0
evpn advertised = 0 of 0, list = 0, accepted = 14 of 14
mdt advertised = 0 of 0, list = 0, accepted = 0 of 0
mvpn advertised = 0 of 0, list = 0, accepted = 0 of 0
omvpn advertised = 0 of 0, list = 0, accepted = 0 of 0
version = 1403754 of 1403754, needfull=0, buffull=1
full = 87, 2018-08-01 08:08:47, 00:21:22 ago, 0 ms
incr = 1403536, 2018-08-01 08:30:10, 00:00:00 ago, 1 ms
connection = tx=266(6355) rx=63143181(4073644) drp=0(0)
uncompressed = tx=241(4) rx=412826827(4067282) drp=0(0)
buffer = max=2048000 rx=0 tx=2048000

```

kaputt.debrecen3#



```
kaputt.debrecen3#terminal tablemode fancy
kaputt.debrecen3#terminal timestamps
kaputt.debrecen3#
kaputt.debrecen3#show ipv4 bgp 1955 unicast summary
2018-08-01 09:24:35
```

as	learn	accept	will	done	neighbor	uptime
1955	0	0	1	0	195.111.97.91	00:03:22
1955	1966	1966	1	1	195.111.97.92	00:02:54
1955	704917	704917	1	1	195.111.97.93	00:02:41
1955	704917	704917	1	1	195.111.97.179	00:03:27

```
kaputt.debrecen3#show ipv4 bgp 1955 compression
2018-08-01 09:24:40
```

as	rx	tx	rx	tx	neighbor
1955	true	true	15.1%	123.0%	195.111.97.91
1955	true	true	25.4%	200.0%	195.111.97.92
1955	true	true	20.4%	110.3%	195.111.97.93
1955	true	false	??%	??%	195.111.97.179

```
kaputt.debrecen3#show ipv4 bgp 1955 neighbor 195.111.97.93 status | begin connect
2018-08-01 09:24:59
connection = tx=266(9) rx=8056318(375739) drp=0(0)
uncompressed = tx=241(4) rx=39344758(375734) drp=0(0)
buffer = max=2048000 rx=0 tx=2048000
```

```
kaputt.debrecen3#
kaputt.debrecen3#
kaputt.debrecen3#
kaputt.debrecen3#
```

- That is, our pe router got only 20% of the bytes
- Path signing will ruin those numbers in some cases
- But vpn afis will survive
- And communities are still well compressible





**Köszönöm a figyelmet!**

[www.kifu.gov.hu](http://www.kifu.gov.hu)



# A MAGYARORSZÁGI DIGITALIZÁCIÓ SZOLGÁLATÁBAN