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# Shell Tools to Analyze MRT Data and Why Care About Them

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- The DoubleFourteen Code Forge »  
<https://doublefourteen.io>

# Route Collectors

Precious data source for network analysis.

- Tracks routing evolution over time
- Collect data in MRT format (RFC 6396)
- Compressed via gzip, bzip2...

RouteViews, RIPE RIS RCC

# Ever heard of bgpsscanner?

Performance oriented MRT parser from Isolario Project.

- Faster than alternatives at the time
- Simple text-based output
- Powerful filtering

# Ever cared about the Micro BGP Suite?

Evolves upon bgpscanner.

- Legacy-free
- Free and open source
- Better codebase written from scratch

...fixes bugs here and there :)

# Should I care even more?

Still provides a general purpose BGP library.

- Fascinating to developers

...written in C

# Why simplicity matters?

Leads to maintainable code.

- Less bugs
- More hackable and reusable
- Flexible (e.g. scripting, pipes)

# Do one thing, do it well.

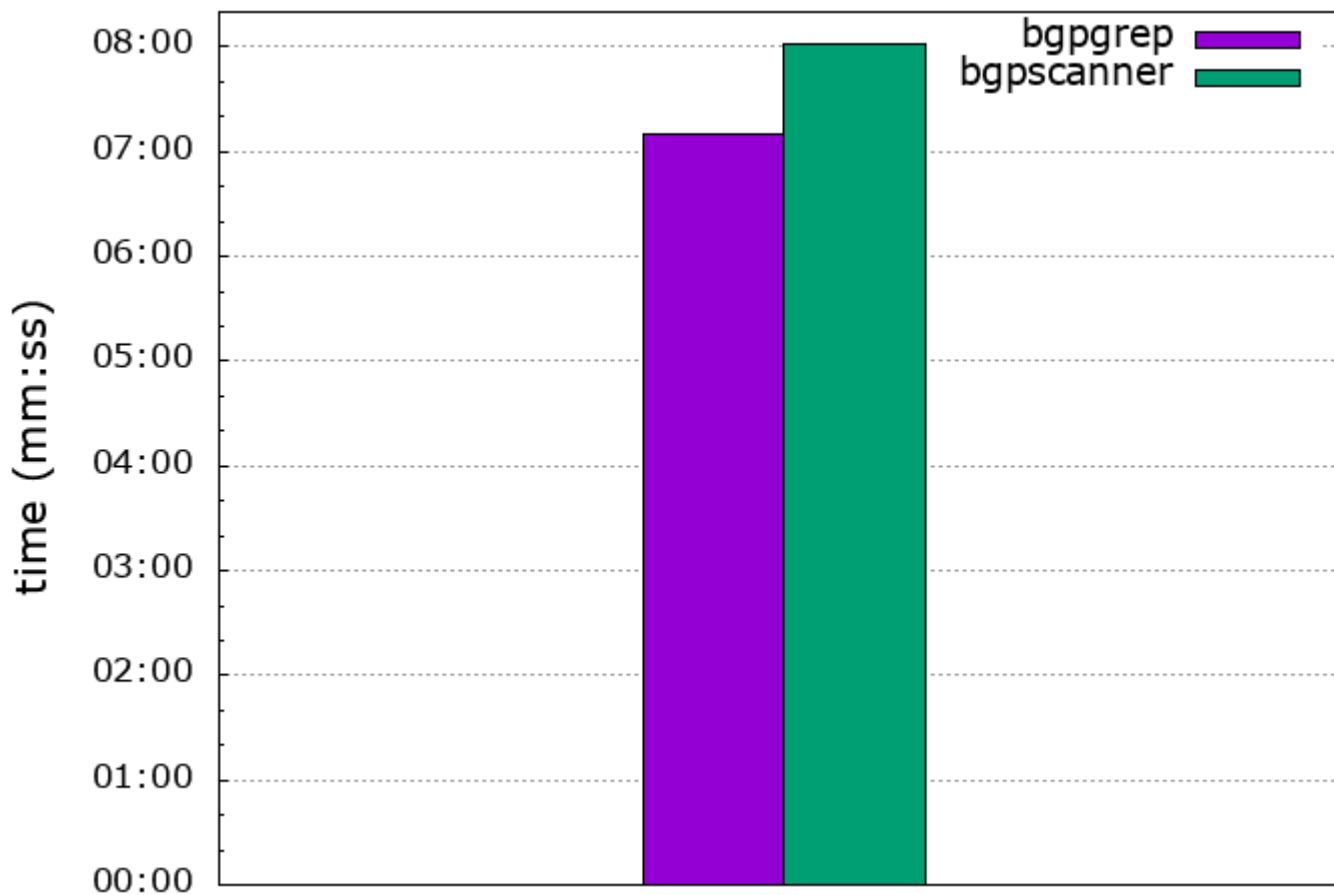
bgpgrep keeps it simple.

- Decode » filter » format
- Easy to understand
- Powerful syntax

```
$ bgpgrep updates.20201201.0000.bz2 -subnet 8.0.0.0/8
+|8.22.36.0/23|58511 3257 2914 6336|45.127.172.149|i|||58511:100
58511:9005|45.127.172.149 58511|1606780985|1
```

# Few performance facts (RIB + updates)

## 2020/11 Sydney Route Collector



Intel Core  
i7 8565U@1.80GHz

NVMe Hard Disk

32 GB  
(uncompressed)



# I say shell tools are obsolete...

Time for action.

Real-time demo

# Thank you for your attention!

– Micro BGP Suite Sources »

<https://git.doublefourteen.io/bgp/ubgpsuite>



Any question?