## Monitoring 101

Netwerk-Latenzen mit ping\_exporter und Prometheus





NEIN..?!





NEIN..?!

Ja...?!





NEIN..?!

Ja...?!

Ääh, wir melden uns!

"Es gibt ja keine gesunden Menschen - nur solche die bisher zu wenig untersucht wurden."

-Manfred Lütz, Lebenslust



https://github.com/czerwonk/ping\_exporter

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**Prometheus** 







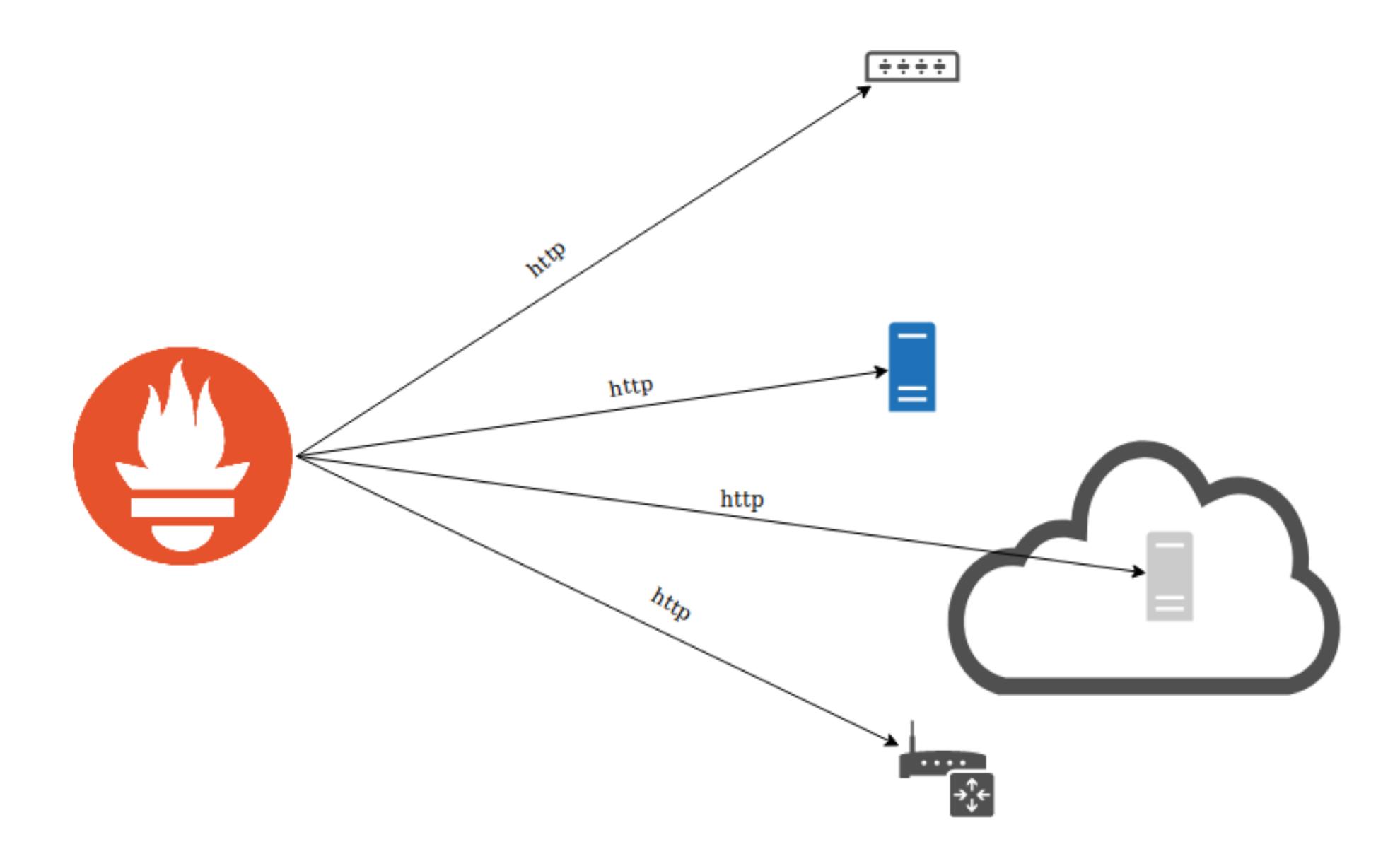
- Golang -> Binary für jeweilige ARCH -> Deploy
- Config als YAML
- •

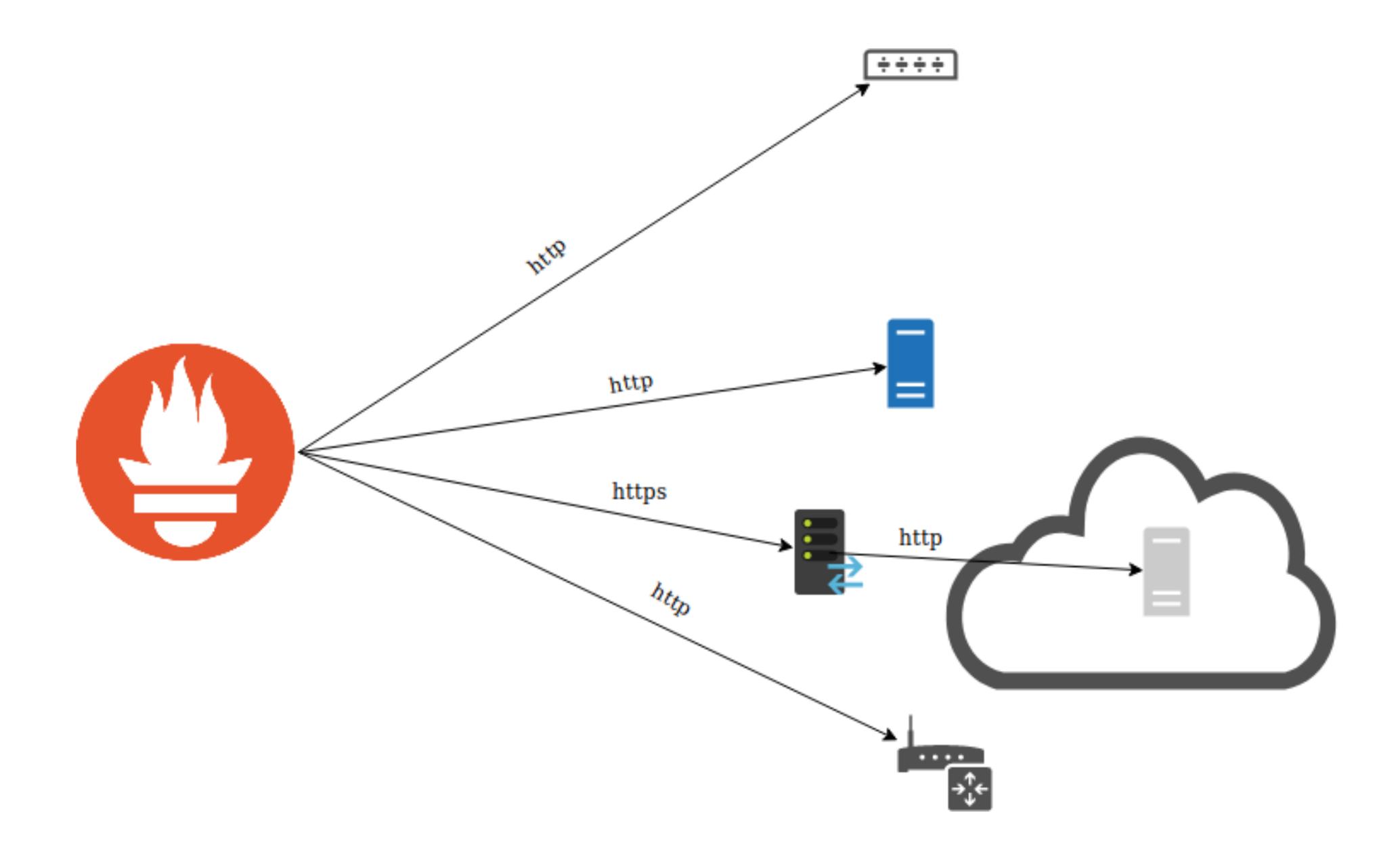


### Deployment

- Ansible:
  - Schicke ping\_exporter Binary
  - Schicke Config
  - Starte ping\_exporter mit config







#### targets:

- 8.8.8.8
- **-** 1.1.1.1
- 2a02:f28:2:5:0:6d69:7272:6f72
- isp.syseleven.net
- facebook.com
- www.carrier-colo.com



#### targets:

- 8.8.8.8

IPv4 Adressen

- 1.1.1.1
- 2a02:f28:2:5:0:6d69:7272:6f72
- isp.syseleven.net
- facebook.com
- www.carrier-colo.com



#### targets:

- 8.8.8.8

- 1.1.1.1

IPv4 Adressen

- 2a02:f28:2:5:0:6d69:7272:6f72

**IPv6 Adressen** 

- isp.syseleven.net
- facebook.com
- www.carrier-colo.com



#### targets:



- 1.1.1.1

- 2a02:f28:2:5:0:6d69:7272:6f72

- isp.syseleven.net

- facebook.com

- www.carrier-colo.com

**IPv4 Adressen** 

IPv6 Adressen

Hostnamen



ping\_rtt\_best\_ms

Best round trip time in milliseconds



ping\_rtt\_worst\_ms

Worst round trip time in milliseconds



ping\_rtt\_mean\_ms

Mean round trip time in milliseconds



ping\_rtt\_std\_deviation\_ms

Standard deviation in milliseconds



ping\_loss\_percent

Packet loss in percent



# Label

- ip
- target
- ip\_version



### Laoe

- ip
- target
- ip\_version

```
ping_rtt_mean_ms{ip="37.44.0.120"}
```



### Laoe

- ip
- target
- ip\_version

```
ping_rtt_mean_ms{target="www.google.com"}
```



### Laoe

- ip
- target
- ip\_version

ping\_rtt\_mean\_ms{target="www.google.com",ip\_version="6"}



Load time: 171 ping\_rtt\_best\_ms{ip\_version="4",target="facebook.com"} Resolution: 3s Total time seri - insert metric at cursor \$ Execute Console Graph + Until 15m **>>** Res. (s) stacked \* 70 60 50 40 25 26 27 29 30 32 33 36 24 28 37 31 35 34 ping\_rtt\_best\_ms{instance="127.0.0.1:9427",ip="31.13.90.36",ip\_version="4",job="ping",target="facebook.com"} ping\_rtt\_best\_ms{instance="127.0.0.1:9427",ip="31.13.64.35",ip\_version="4",job="ping",target="facebook.com"} ping\_rtt\_best\_ms{instance="127.0.0.1:9427",ip="157.240.20.35",ip\_version="4",job="ping",target="facebook.com"}



