

# TINY URL

2019年10月10日 木曜日 13:40

## - Scenario

Anyone can register URL  
return shorter URL

Anyone can go to URL web  
via shorter URL  
(redirect)

## - Estimation

500M users register URL / month

50B users go to access shorter URL

①  $500M / 2.5M \approx 200 \text{ req/s}$

②  $50B / 2.5M \approx 2K \text{ redirect/s}$   
URL shorter

$\underbrace{500B + 8 \text{ Bytes}}_{0.5KB} \times 500M = 250GB / \text{month}$

a-z, A-Z, 0-9  $\Rightarrow 62$   
26 26 10

62, 3.6k, 180k, 10M, 600M, 3.6G, 180G

1日  $\Rightarrow 86400s \approx 85K \text{ sec}$

1月  $\Rightarrow 30 \cdot 85K \Rightarrow 2.5M \text{ sec.}$

