Vasilis Georgiou

November 2024

1 Datasets

Datasets are split in REAL or SYNTHETIC and are based on the the source of the routing table:

- REAL-Tier-1-A: real core backbone router in a global tier-1 ISP
- REAL-Tier-1-B: national backbone router in research and educational network of WIDE Project.
- \bullet SYN1: each procedure that is no longer than /24 and /16 is split into two and four prefixes
- SYN2: Each prefix that is no longer than /24, /20 and /16 is split into two, four and eight prefixes

Notation:

• binary radix depth: longest prefix matching

2 Traffic Patterns

Take the following traffic patterns into consideration:

- random: 2³2 random traffic patterns (generated by xorshift).
 - overhead for generating the data is included in the measurements, but it is small.
- sequential:
 - Generates in the range 0.0.0.0 to 255.255.255.255
- repeated
 - Similar to random but each random lookup is repeated 16 times
- real-trace
 - real traffic trace