# IPv6 - How far we have come..

Gaurab Raj Upadhaya v6 trekker

#### Climbing Everest



#### v6 Allocation Data

#### • IANA - $\sim$ /8 total allocated to RIRs, other



Global IPv6 distribution

http://www.apnic.net/publications/research-and-insights/stats/ipv6-geographic

#### Distribution trend



IPv6 cumulative distribution (number of /32 delegated)

http://www.apnic.net/publications/research-and-insights/stats/ipv6-distribution

## How many Routes ?







http://www.cidr-report.org/v6/as2.0/

#### DNS

- All gTLDs have v6 NS for a while now
  - But not many registrars support inserting your v6 NS glue into the system
- Not many ccTLDs have had support
  - ~50 (~ 25% of the overall), but there are ~200 unique v6 glue on the root zone.
    - Their registry system may still need updating
    - Server Ops ready, TLD ops not yet.

## Applications

- Most mainstream OSes have supported v6 for quite a while
- Applications that are stack agnostics should work anyway
  - Not really always though
- Serverside applications are mostly there
- Userside applications vary..
  - No killer app



Routing, DNS, Infrastructure

#### Applications and development

User space

#### How far really.

- Climbing the summit is still a tough job..
  - But getting there...

#### When we get there



#### Thanks



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