

IPv6 deployment status in Israel

Amos Rosenboim

CTO

Oasis communication technologies

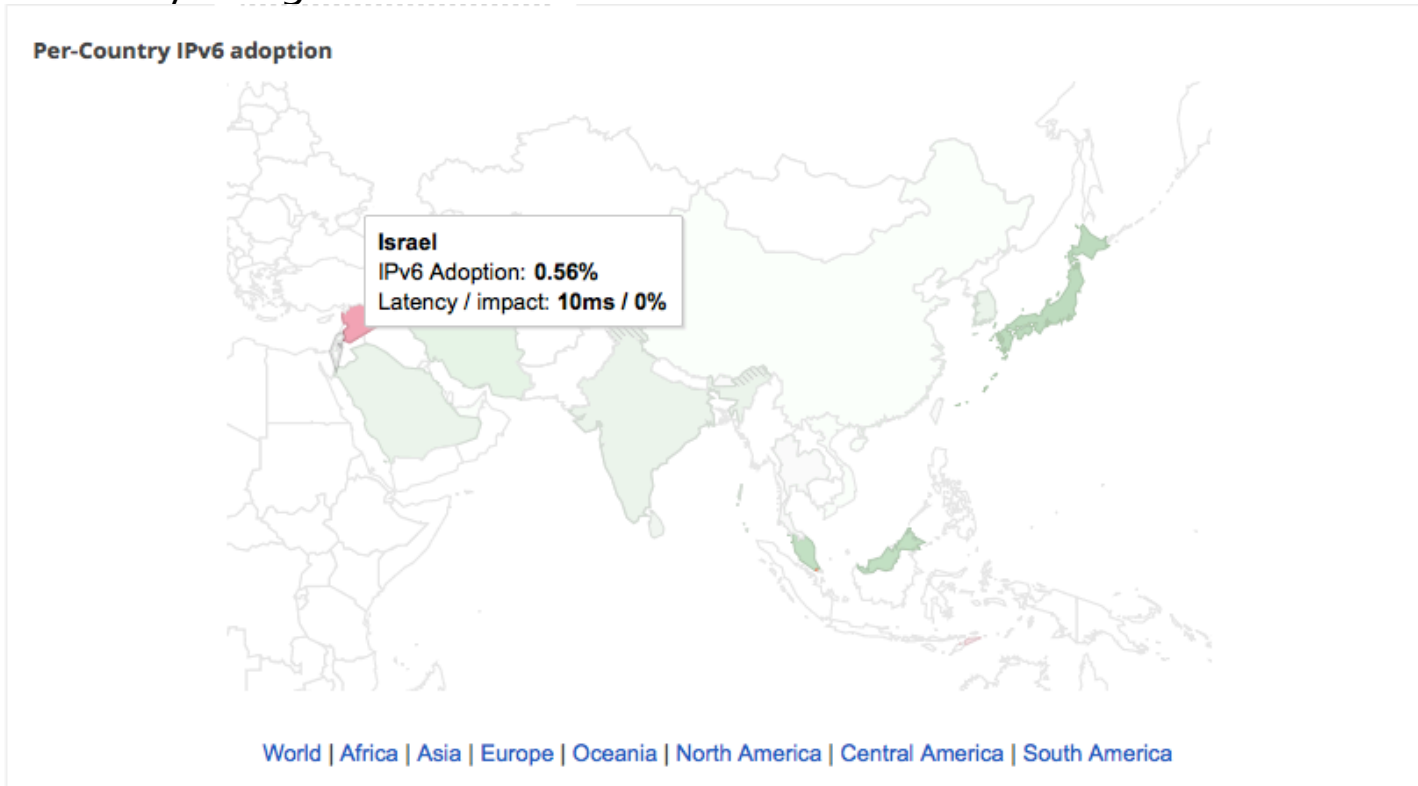


Agenda

- Overall numbers.
- Users and operators
- Content
- Summary

Overall numbers

The way Google sees it:



Overall Numbers

Code	Region	IPv6 Capable	IPv6 Preferred	Samples	Weight	Weighted Samples
XA	World	6.54%	5.81%	650,753,355	1	650,753,355
XD	Asia	2.33%	1.65%	346,441,294	1	345,787,556

Code	SubRegion	IPv6 Capable	IPv6 Preferred	Samples	Weight	Weighted Samples
XV	Western Asia, Asia	2.35%	0.82%	23,782,181	1	23,768,831

ASN	AS Name	IPv6 Capable	IPv6 Preferred	Samples
AS47956	XFONE XFone 018 Ltd	19.90%	18.77%	70,993
AS44435	SAP-LABS-ISRAEL-LTD SAP Labs Israel Ltd.	13.83%	0.00%	311
AS61102	INTERHOST Interhost Communication Solutions Ltd.	12.15%	0.25%	1,588
AS109	CISCOYSTEMS - Cisco Systems, Inc.	3.90%	3.46%	231
AS25003	INTERNETBINAT Internet Binat Ltd	0.12%	0.00%	857
AS199267	NET-STYLE-DEVELOPMENT-LTD NET-STYLE ATARIM LTD	0.07%	0.07%	1,469
AS12400	PARTNER-AS Partner Communications Ltd.	0.01%	0.01%	92,273
AS16116	Pelephone Communications Ltd.	0.00%	0.00%	41,989
AS8551	BEZEQ-INTERNATIONAL-AS Bezeq International-Ltd	0.00%	0.00%	693,055
AS12849	HOTNET-IL Hot-Net internet services Ltd.	0.00%	0.00%	215,805
AS9116	GOLDENLINES-ASN 012 Smile Communications Ltd.	0.00%	0.00%	270,492
AS1680	NV-ASN 013 NetVision Ltd.	0.00%	0.00%	327,912
AS198484	IL-GOLANTELECOM Golan Telecom Ltd.	0.00%	0.00%	18,643
AS197350	ZAYTONA AL Zaytona Company For Communication Ltd.	0.00%	0.00%	3,347
AS4983	INTEL-SC-AS - Intel Corporation	0.00%	0.00%	700
AS34380	AMDOCS AMDOCS (ISRAEL) LTD	0.00%	0.00%	264
AS21145	IBC-AS IBC Israel Broadband Compny Ltd	0.00%	0.00%	1,348
AS15975	HADARA-AS Hadara Technoloaies Private Shareholdina Companv	0.00%	0.00%	4,187

Overall numbers

It's like election polls – depends how you count:

- Some counts AS with IPv6 prefix.
- Some count domains with IPv6 records.
- Some count we server hits coming from IPv6 source address.

Users and operators

- Network Media/Infrastructure:
 - The DSL implementation in Israel is based on the PPP model so the ISPs has direct layer 2 link to the subscriber.
So the network infrastructure supports IPv6 and it's up to the ISP to implement it.
 - The cable/DOCSIS implementation is based on a layer 3 network between the ISP and the users.
Currently this network does not support IPv6.
 - FTTH infrastructure (IBC) - the network supports IPv6, it was tested, but no IPv6 capable CPE is being offered (maybe some CPEs support it but it's not configured).
 - No Mobile network offers IPv6 connectivity yet.
I'm aware of some early efforts to start testing at one Mobile operator.

Users and operators

- Most ISPs has IPv6 prefixes.
- Many of them announce their prefix/prefixes to the Internet
- Few ISPs offer IPv6 connectivity to business customers over leased lines/MetroE etc'
- Few ISPs has enabled IPv6 on their DNS.
- The #1 factor delaying the implementation is residential CPE support.
 - But things are getting better (more on this later).
- First users were R&D companies (AT&T labs, Allot and more).

Content

- Google, Facebook, Yahoo, Linkedin and many more support IPv6.

None of the major local content providers support IPv6:

```
> set q=aaaa
```

```
> google.com
```

```
Server: 10.8.20.10
```

```
Address: 10.8.20.10#53
```

Non-authoritative answer:

google.com has AAAA address 2a00:1450:4001:800::200e

Authoritative answers can be found from:

```
> ynet.co.il
```

```
Server: 10.8.20.10
```

```
Address: 10.8.20.10#53
```

Non-authoritative answer:

*** Can't find ynet.co.il: No answer

*** Can't find mako.co.il: No answer

Content

Non-authoritative answer:

*** Can't find walla.co.il: No answer

> mako.co.il

Server: 10.8.20.10

Address: 10.8.20.10#53

> panet.co.il

Server: 10.8.20.10

Address: 10.8.20.10#53

Non-authoritative answer:

*** Can't find panet.co.il: No answer

Summary

- We are really behind the world
- So we have a lot of potential to grow...
- Growth can happen really quickly.
- Residential CPEs are the #1 factor delaying uptake.. but this is changing.
- Israeli content is so behind...but we use a lot of international content.
- The overnment/regulator is not involved at all.
- Much more details on case studies.

