









# A Decade of IPv6 CE Router Development

Test your network at <http://test-ipv6.com>

Test your IPv6 connectivity. 

Summary Tests Run Share Results / Contact For the Help Desk

-  Your IPv4 address on the public Internet appears to be 61.216.18.45
-  Your Internet Service Provider (ISP) appears to be HINET Data Communication Business Group
-  No IPv6 address detected [\[more info\]](#)
-  You appear to be able to browse the IPv4 Internet only. You will not be able to reach IPv6-only sites.
-  To ensure the best Internet performance and connectivity, ask your ISP about native IPv6. [\[more info\]](#)
-  [HTTPS](#) support is now available on this site. [\[more info\]](#)
-  Your DNS server (possibly run by your ISP) appears to have IPv6 Internet access.

**Your readiness score**

**0/10** for your IPv6 stability and readiness, when publishers are forced to go IPv6 only

Click to see [Test Data](#)

(Updated server side IPv6 readiness stats)

If you don't score 10/10, **call your ISP.**

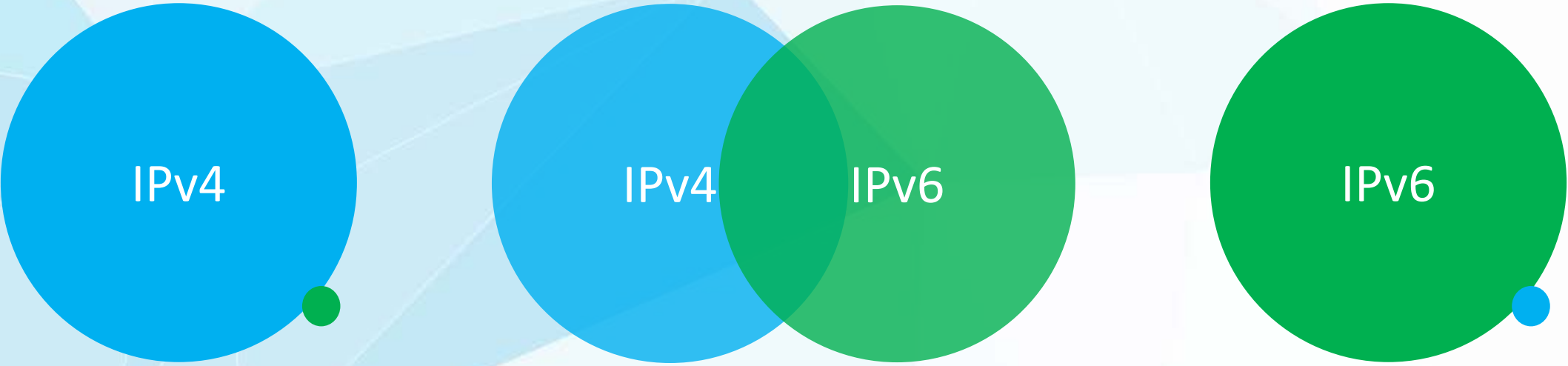
If your ISP already enabled IPv6, **trash your router.**

A blue arrow-shaped graphic pointing to the right, containing the text 'D-Link CPE IPv6 Development Timeline'.

## D-Link CPE IPv6 Development Timeline

- 2003/12 Receive the first IPv6 Ready Logo (Phase-1)
- 2006/5 Receive the first IPv6 Ready Logo (Phase-2)
- **2008/7 Ship the first IPv6 Ready CPE to the retail**
- 2010-2011 Pass interops (Cablelabs, UNH-IOL, ...etc.)
- 2011/4 Support RFC 6204 and 6092
- 2011/6 Initiate member of World IPv6 Day
- 2012/6 Initiate member of World IPv6 Launch
- 2012/6 Passed BBF.069 Certification with IPv6 support
- 2013/12 Support RFC 7084 and enable IPv6 by default
- **2014-2017 Monitor the growth of IPv6 transition**
- **2017/4 Support major IPv4aaS technologies**

# The transition we expected 10 years ago



**10 years later .....**



IPv4



IPv4



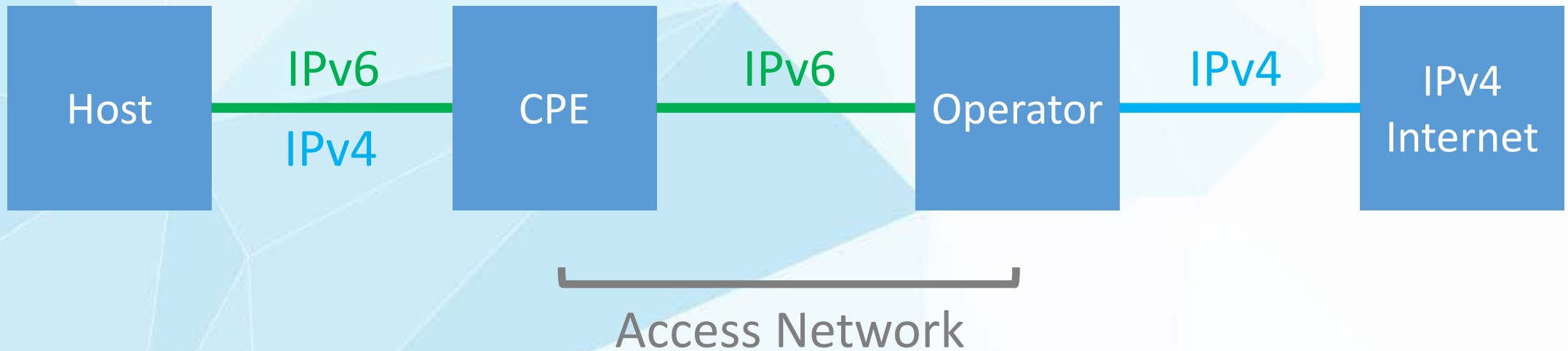
IPv4

IPv6

## Again, IPv6 Transition



# IPv4aaS = IPv4 as a Service



# Major IPv4aaS Technology

	DS-Lite	lw4o6	464XLAT	MAP-T	MAP-E
Tunnel / Translation	Tunnel	Tunnel	Translation	Translation	Tunnel
Dual Stack LAN	Yes	Yes	Yes	Yes	Yes
Access Network	IPv6	IPv6	IPv6	IPv6	IPv6
NAT44/NAPT	CGN	CPE	CPE	CPE	CPE
46/64 Translation	N/A	N/A	ISP+/or CPE	ISP + CPE	N/A
Translation at ISP with or w/o state	N/A	N/A	with	w/o	w/o
Scalability	Medium	High	High	High	High
Performance	Low	High	High	High	High



# Recommended Reading

## 1. Basic Requirements for IPv6 Customer Edge Router

<https://tools.ietf.org/html/rfc7084>

## 2. Requirements for IPv6 Customer Edge Router to Support IPv4 Connectivity as-a-Service

<https://datatracker.ietf.org/doc/draft-ietf-v6ops-transition-ipv4aas/>

**THANK YOU**