



A Decade of IPv6 CE Router Development

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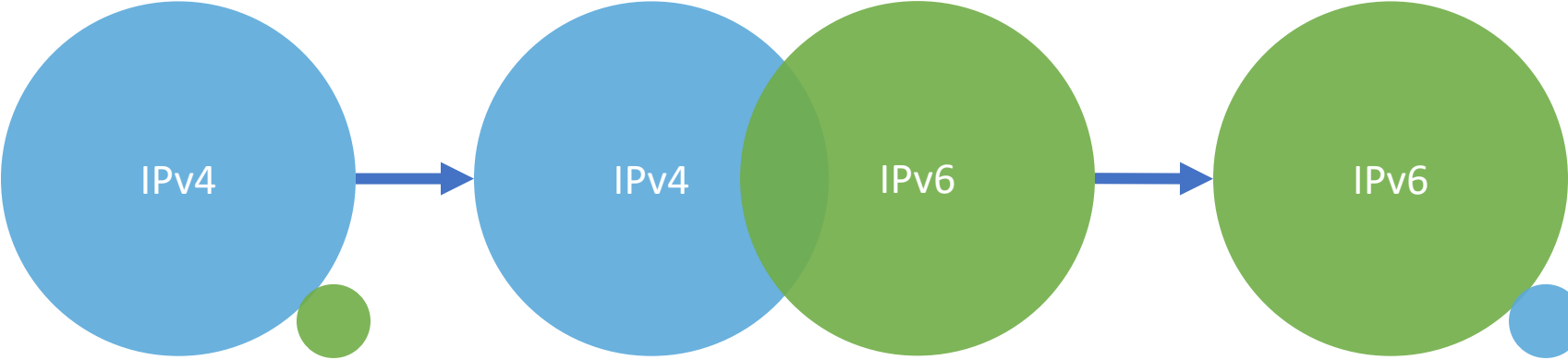
D-Link



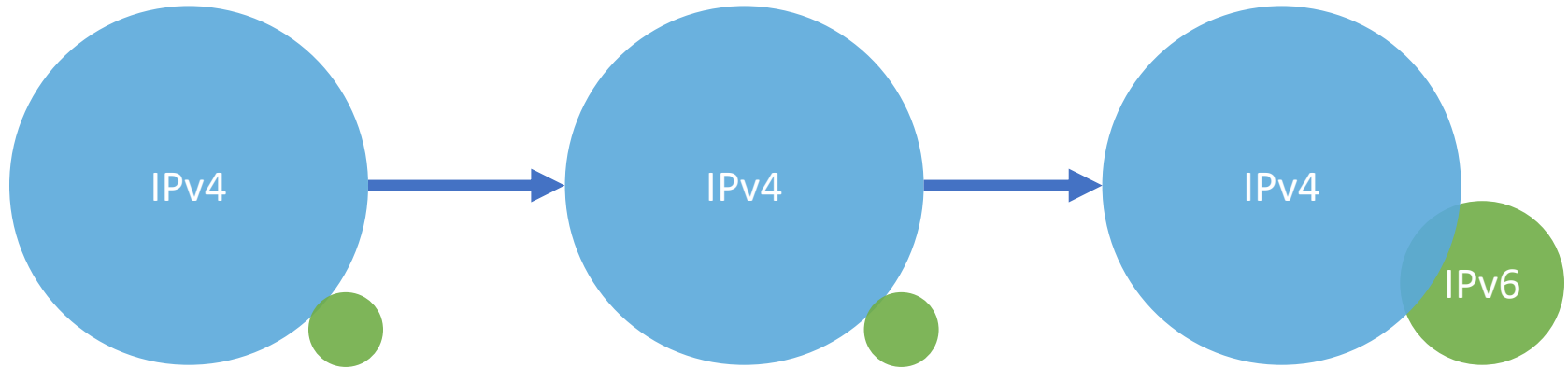
**D-Link CPE
IPv6 Development
Timeline**

- **2008/07** **Ship the first IPv6 Ready CPE to the retail**
- 2010-2011 Pass interop (Cablelabs, UNH-IOL, ...etc.)
- 2011/4 Support RFC 6204 and RFC 6092
- 2011/6 Initiate member of World IPv6 Day
- 2012/6 Initiate member of World IPv6 Launch
- 2012/6 Pass BBF.069 Certification with IPv6 support
- **2013/12** **Support RFC 7084 and enable IPv6 by default**
- 2014-2017 Monitor the growth of IPv6 transition
- 2018/3 Support major IPv4aaS technologies
- **2021/4** **Support RFC 8585**
- 2021/9 Support RFC7217 and RFC 9096

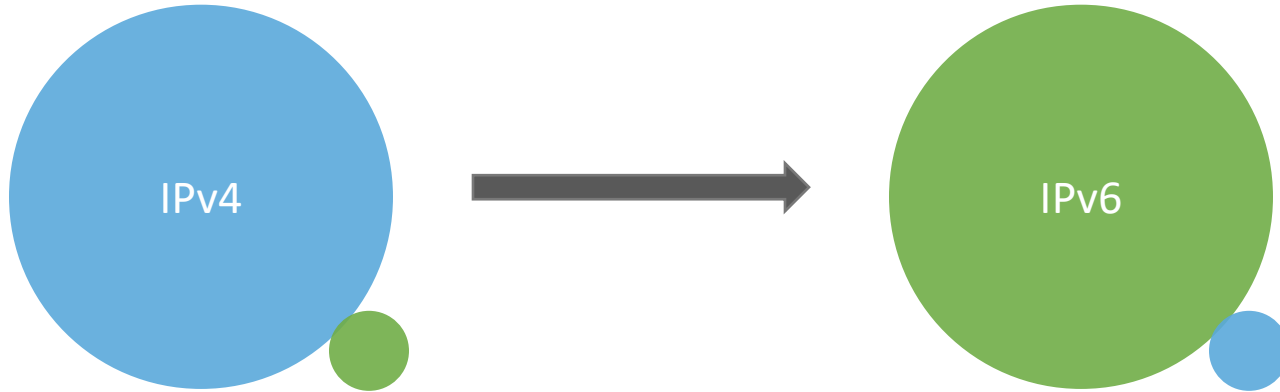
The transition we expected 10 years ago.



10 years later...

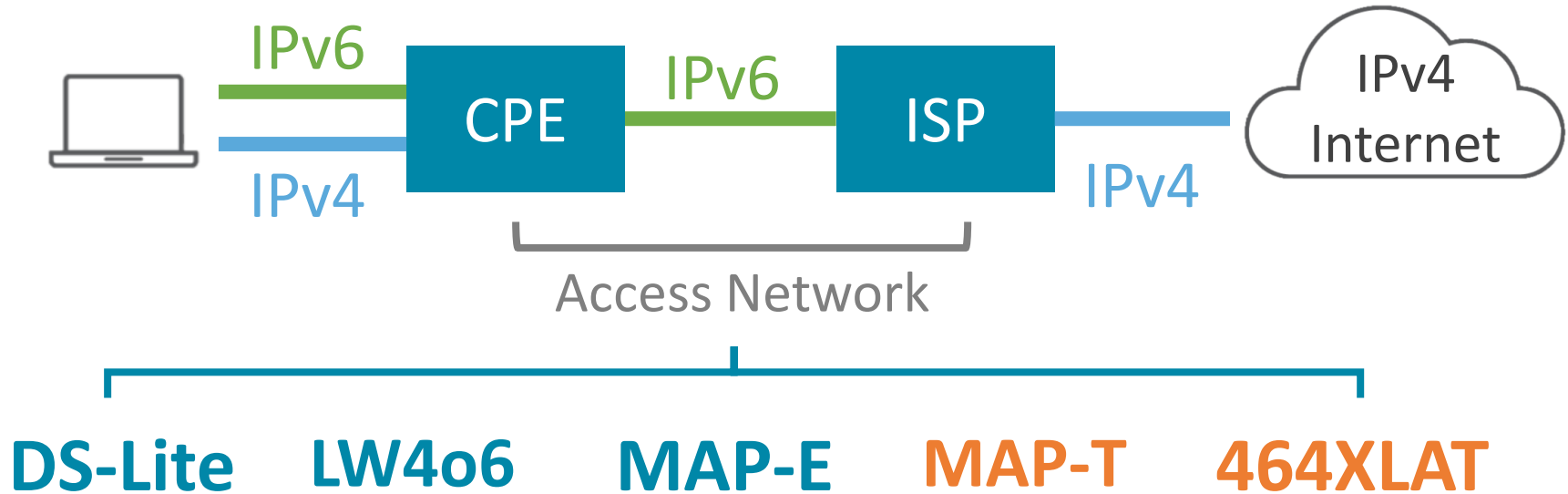


Again, IPv6 Transition.



RFC 8585

IPv4 as a Service



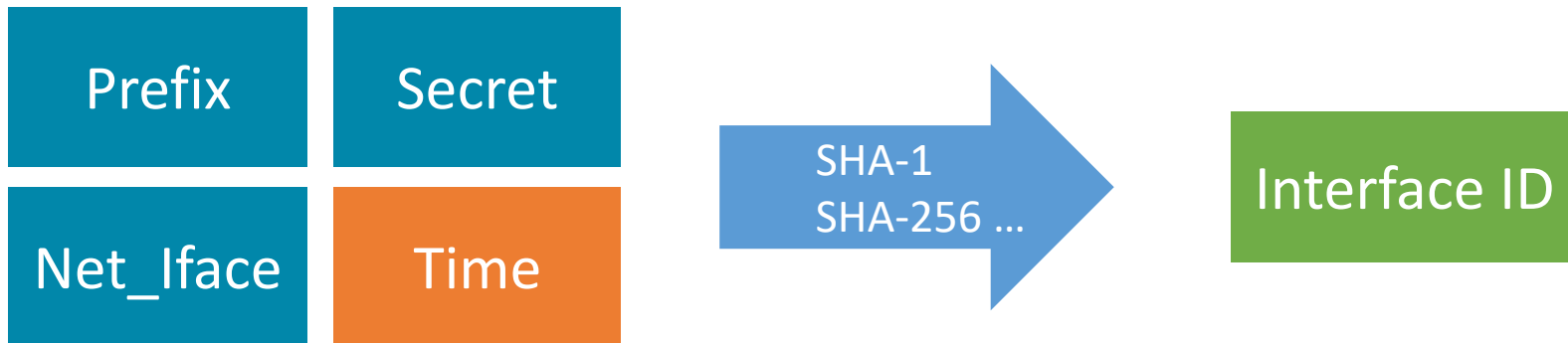
A group of five business professionals (three men and two women) are seated around a table in a meeting room. They are engaged in a discussion, with some looking at documents and others looking towards each other. The image is overlaid with a semi-transparent blue filter. The text "What's Next?" is centered in white, bold font.

What's Next ?

RFC 7217 + RFC 8981

Interface Identifiers with SLAAC

- RFC 7217 - Stable and Opaque IIDs with SLAAC
- RFC 8981 obsoletes **RFC 4941** - Temporary Address Extensions



RFC 9096

Improving the Reaction of IPv6 Renumbering

- This document updates **RFC 7084**
- Improved Customer Edge Router Behavior
- LAN-Side Option Lifetimes
- Take care about RFC 7772 - Reducing Energy Consumption of RA

Recommended Reading

- Basic Requirements for IPv6 Customer Edge Routers
<https://datatracker.ietf.org/doc/html/rfc7084>
- Requirements for IPv6 Customer Edge Routers to Support IPv4-as-a-Service
<https://datatracker.ietf.org/doc/html/rfc8585>
- Improving the Reaction of Customer Edge Routers to IPv6 Renumbering Events
<https://datatracker.ietf.org/doc/html/rfc9096>
- Temporary Address Extensions for Stateless Address Autoconfiguration in IPv6
<https://datatracker.ietf.org/doc/html/rfc8981>



— THANK YOU —

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