



Internet Services Unit
King Abdulaziz City for Science & Technology

DEP:LOY:ING::IPv6

in ISU/KACST



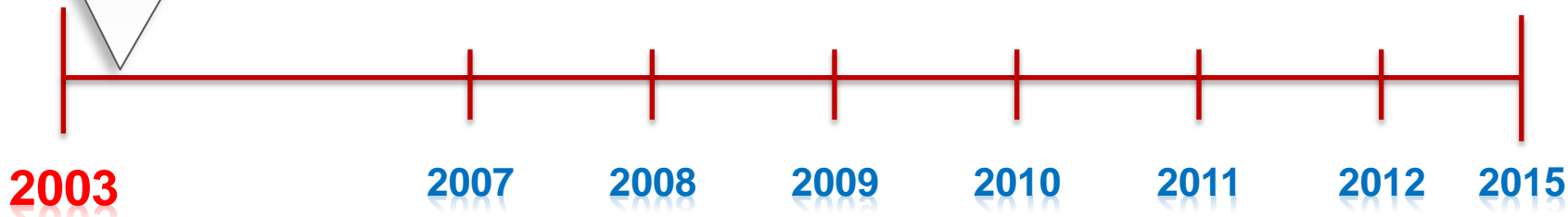
- ✓ 2003 – 2015 Timeline
- ✓ Network & System
- ✓ Clients
- ✓ Guidelines



Timeline

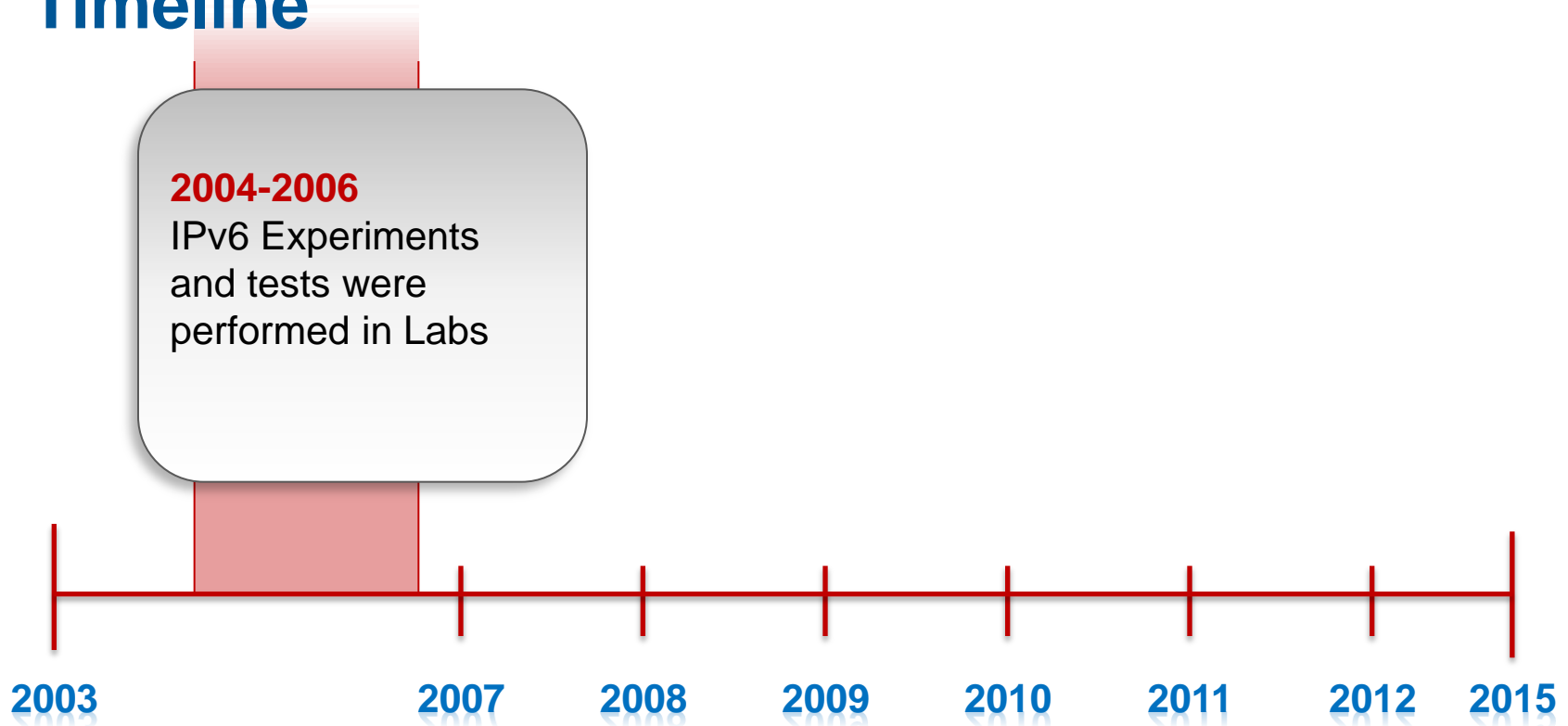
2003
ISU was Allocated its first IPv6 block from RIPE

2001:1490::/32



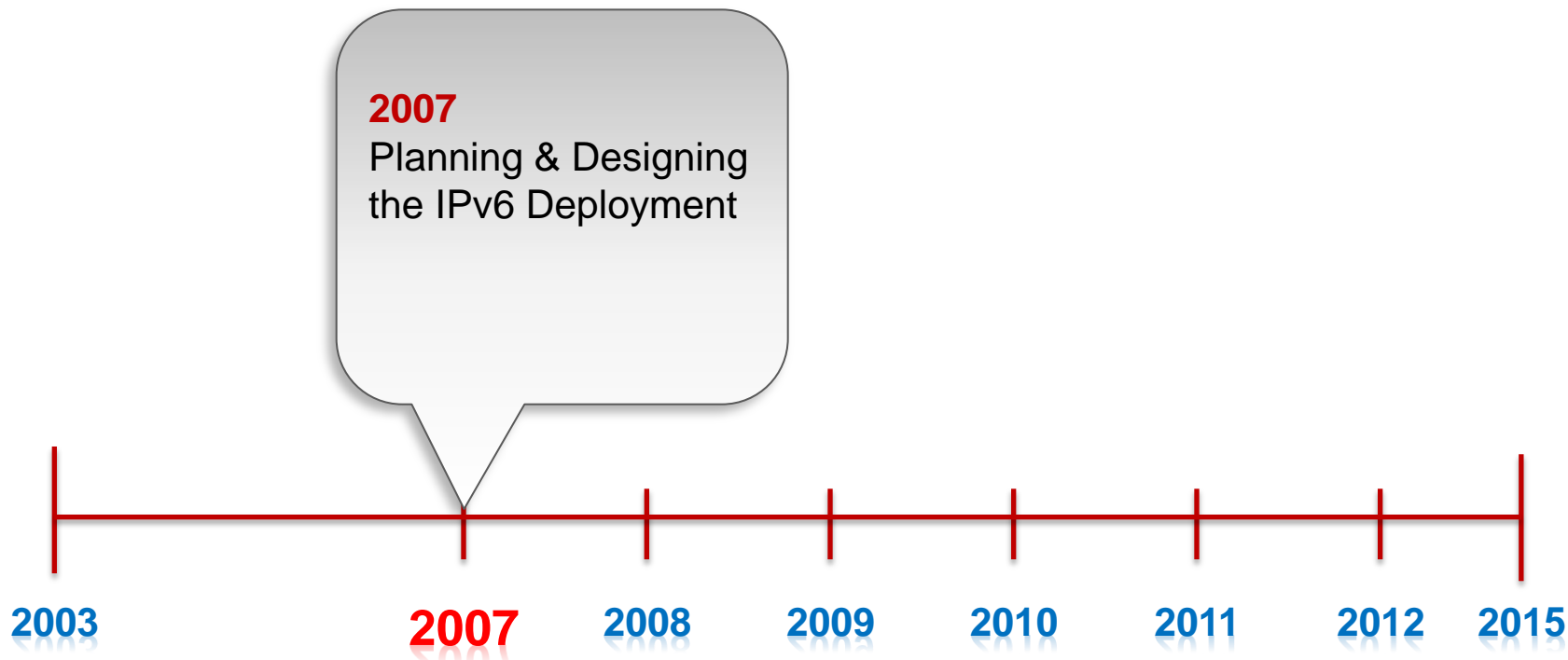


Timeline



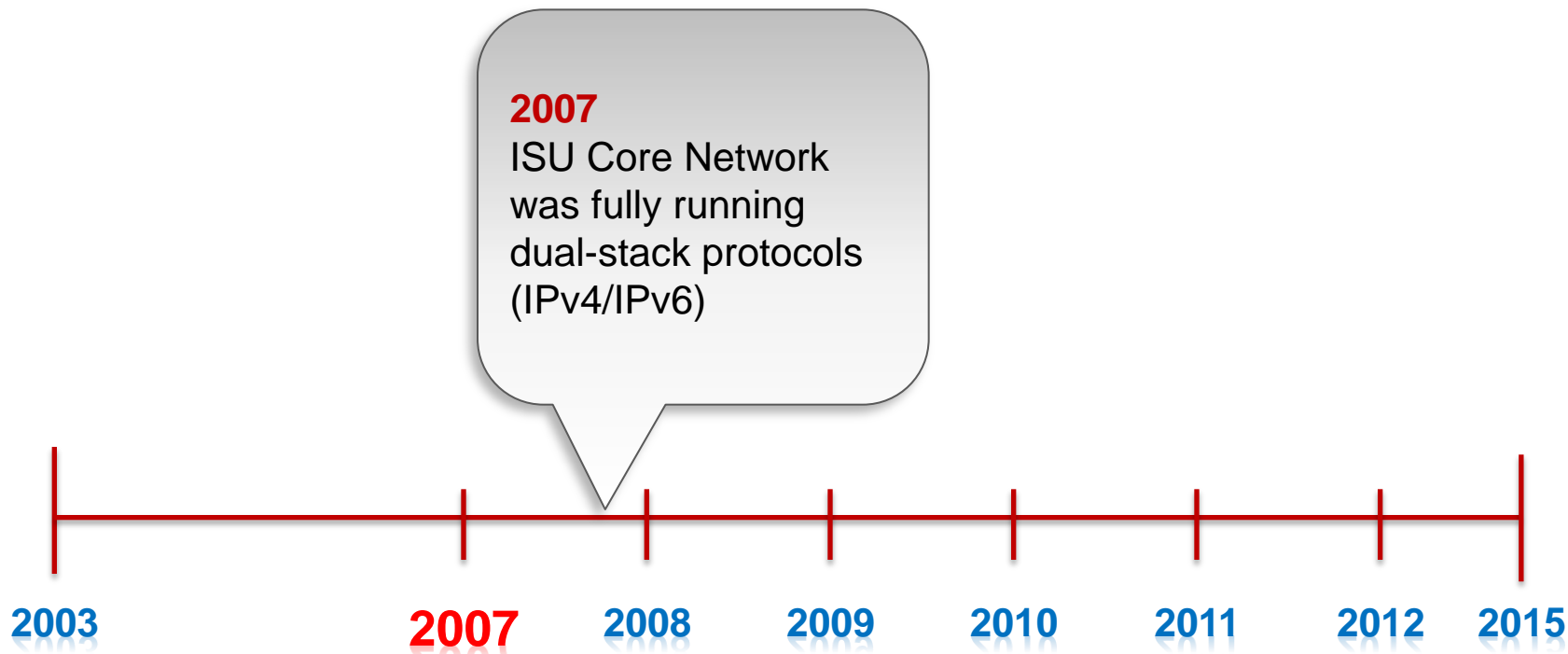


Timeline



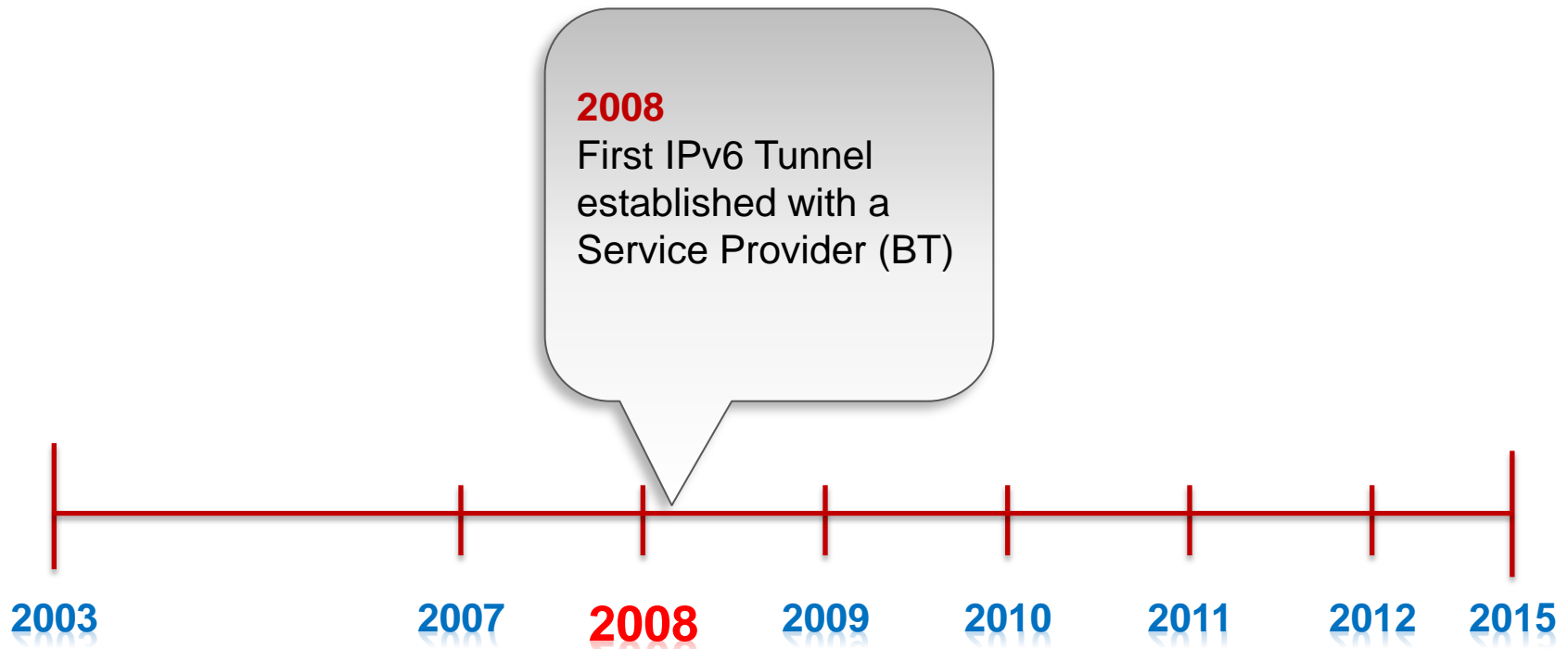


Timeline



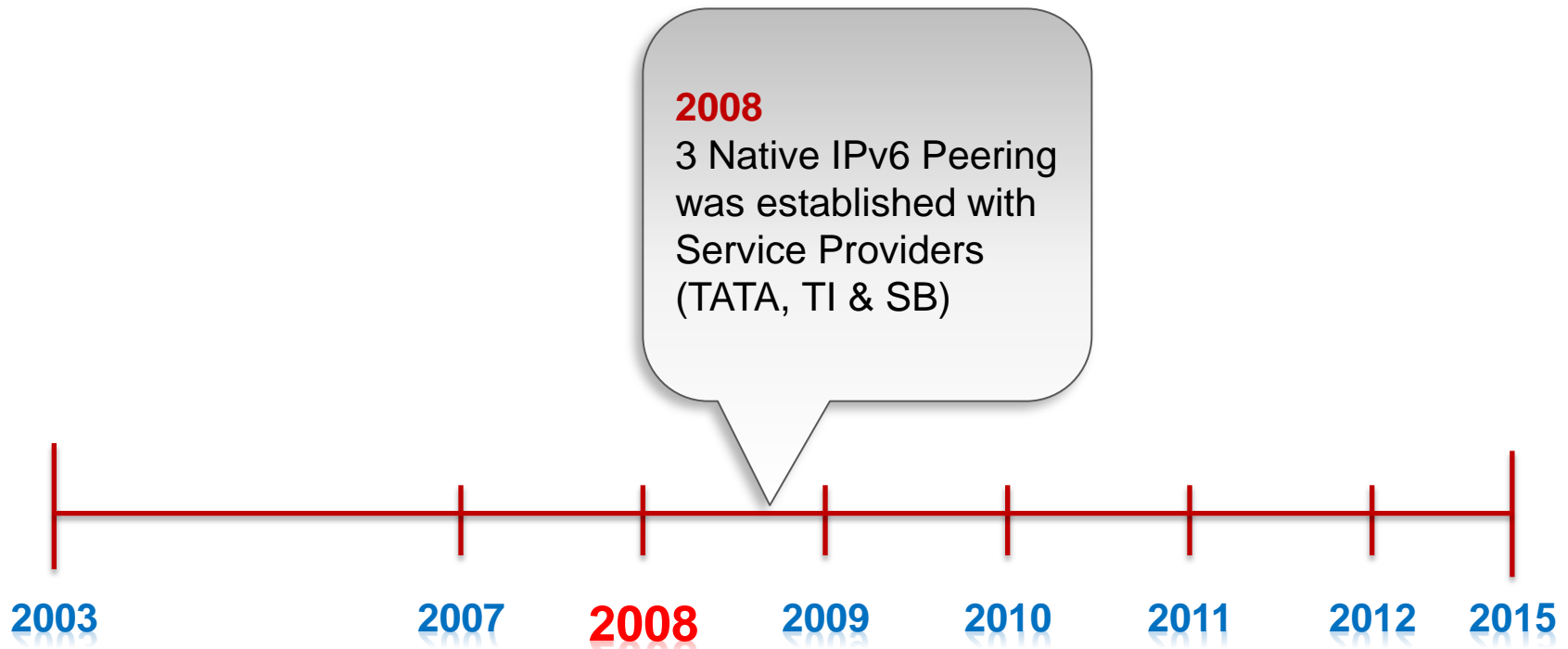


Timeline



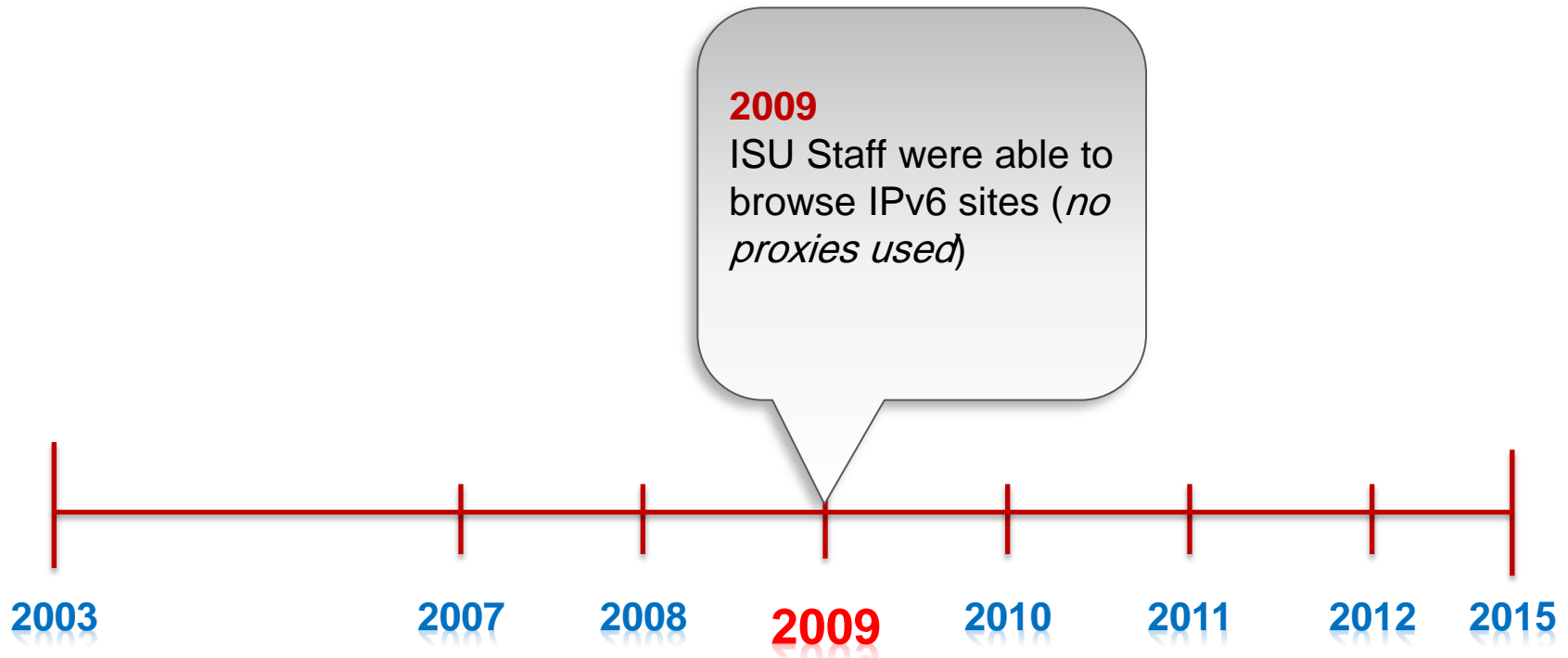


Timeline



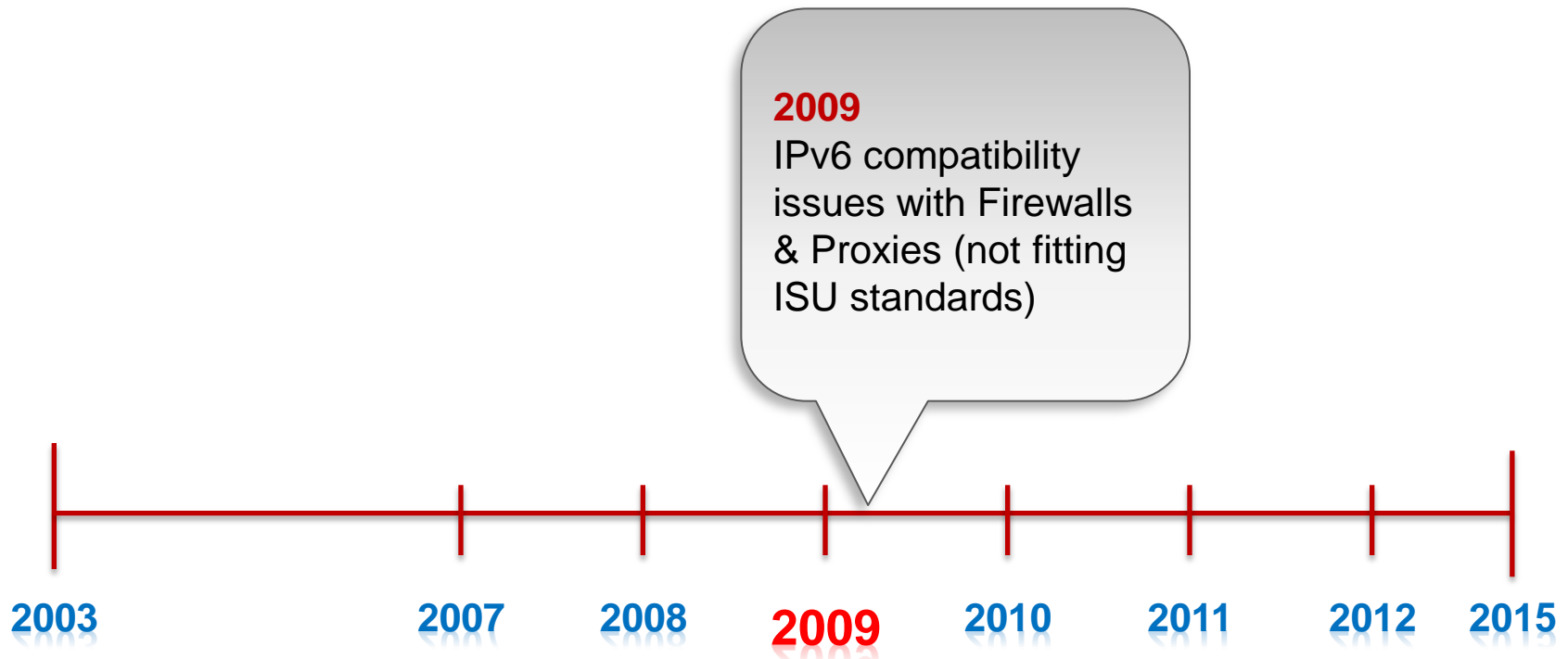


Timeline



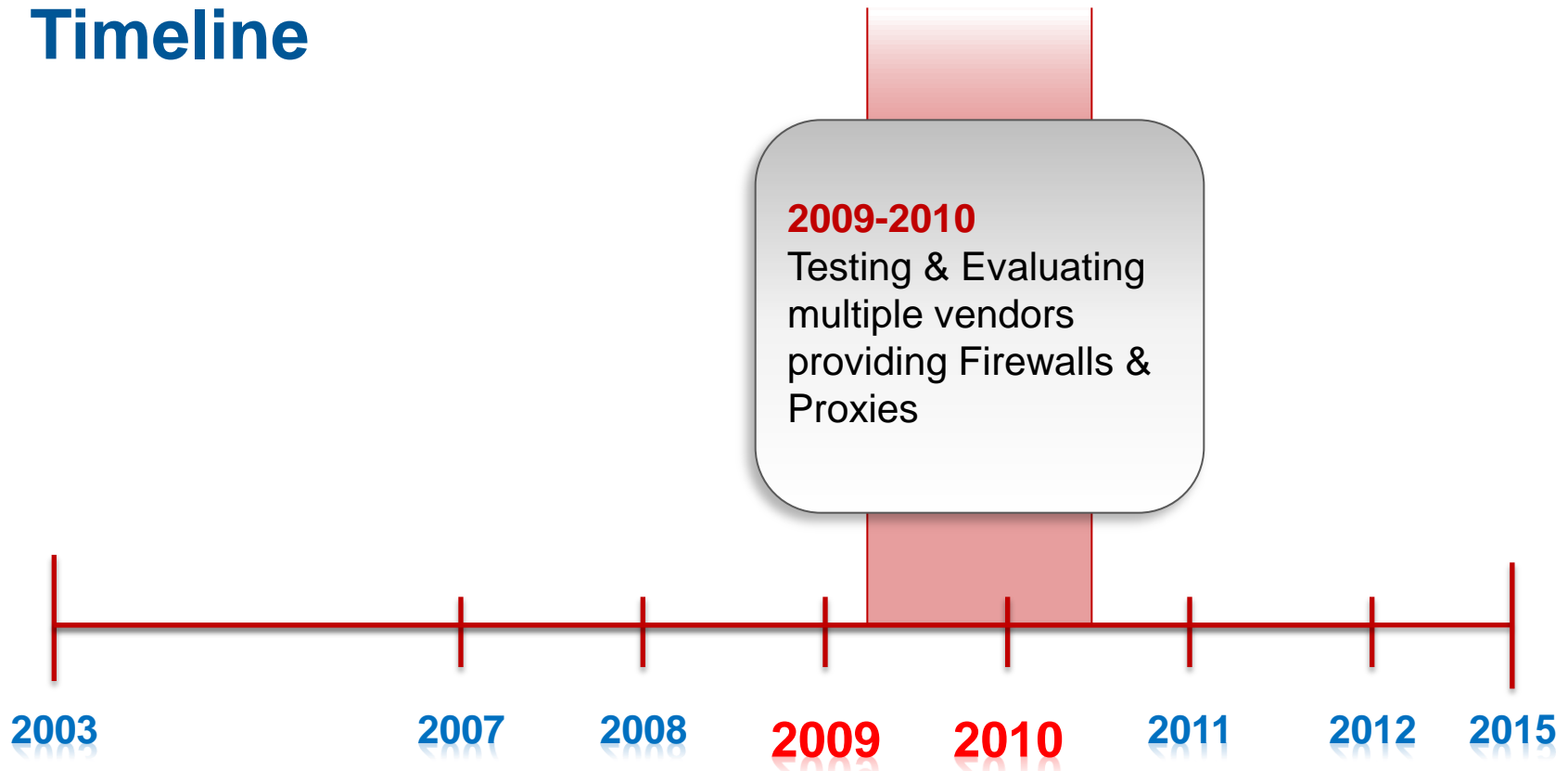


Timeline



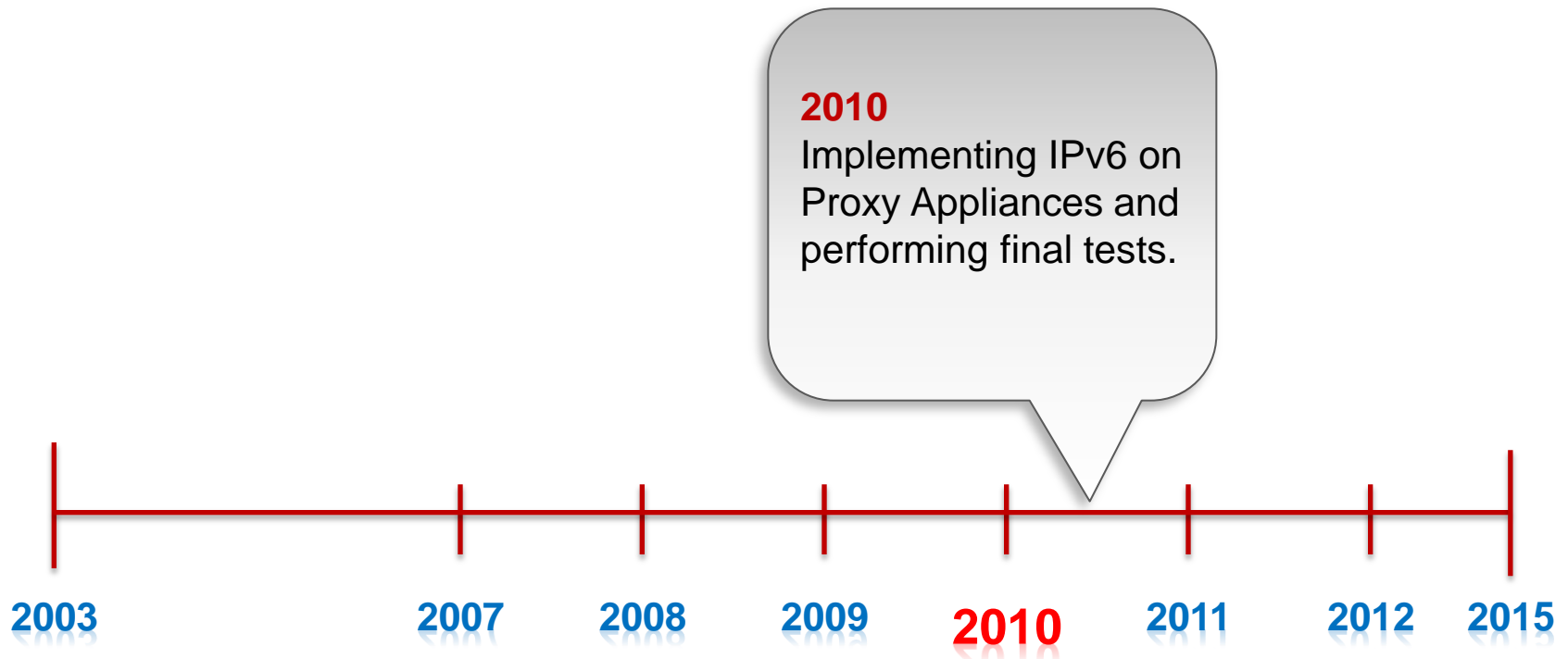


Timeline



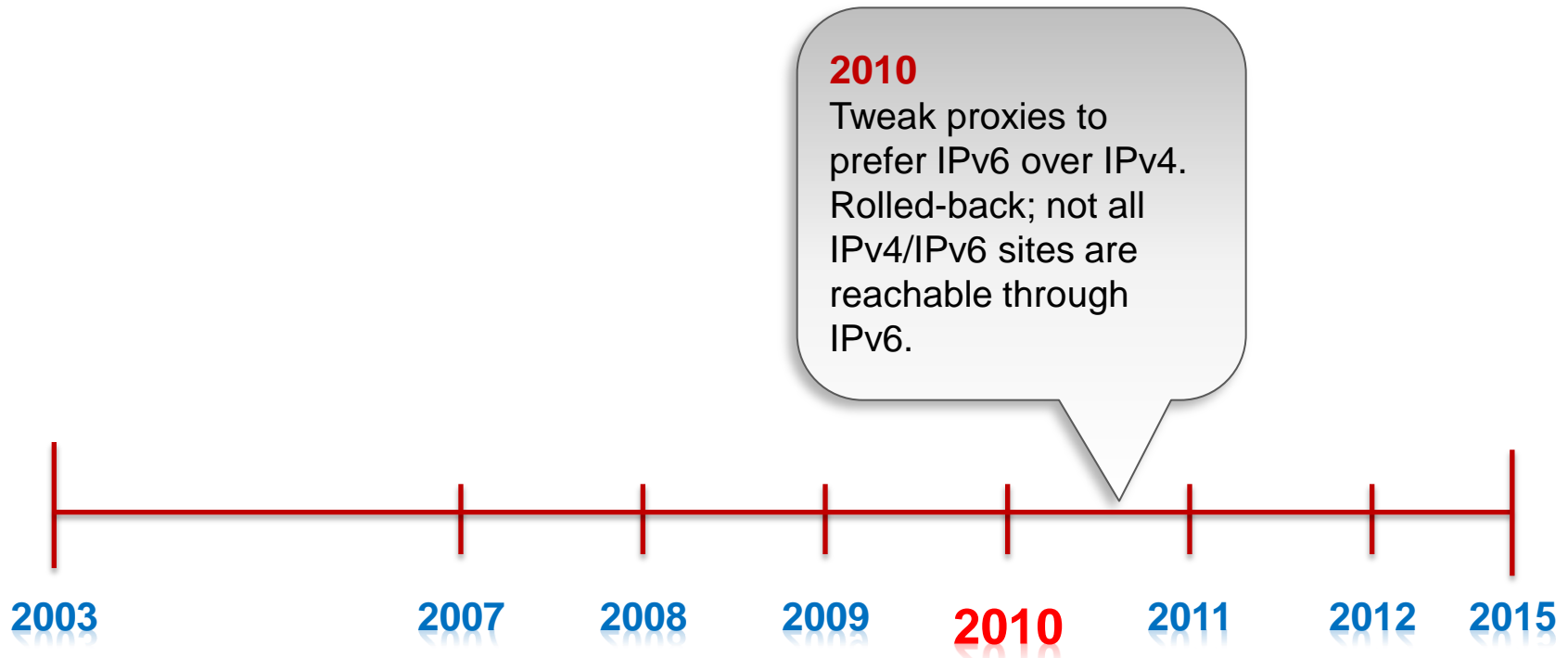


Timeline



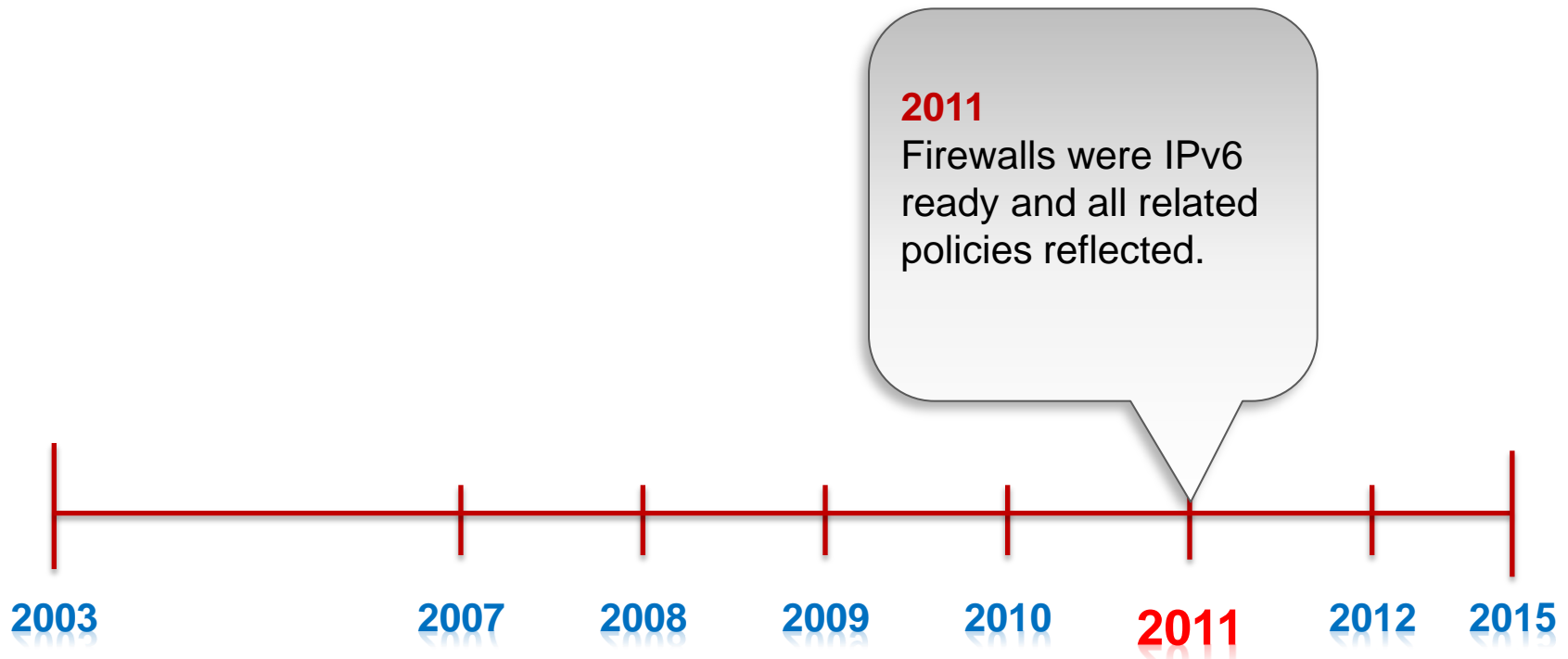


Timeline



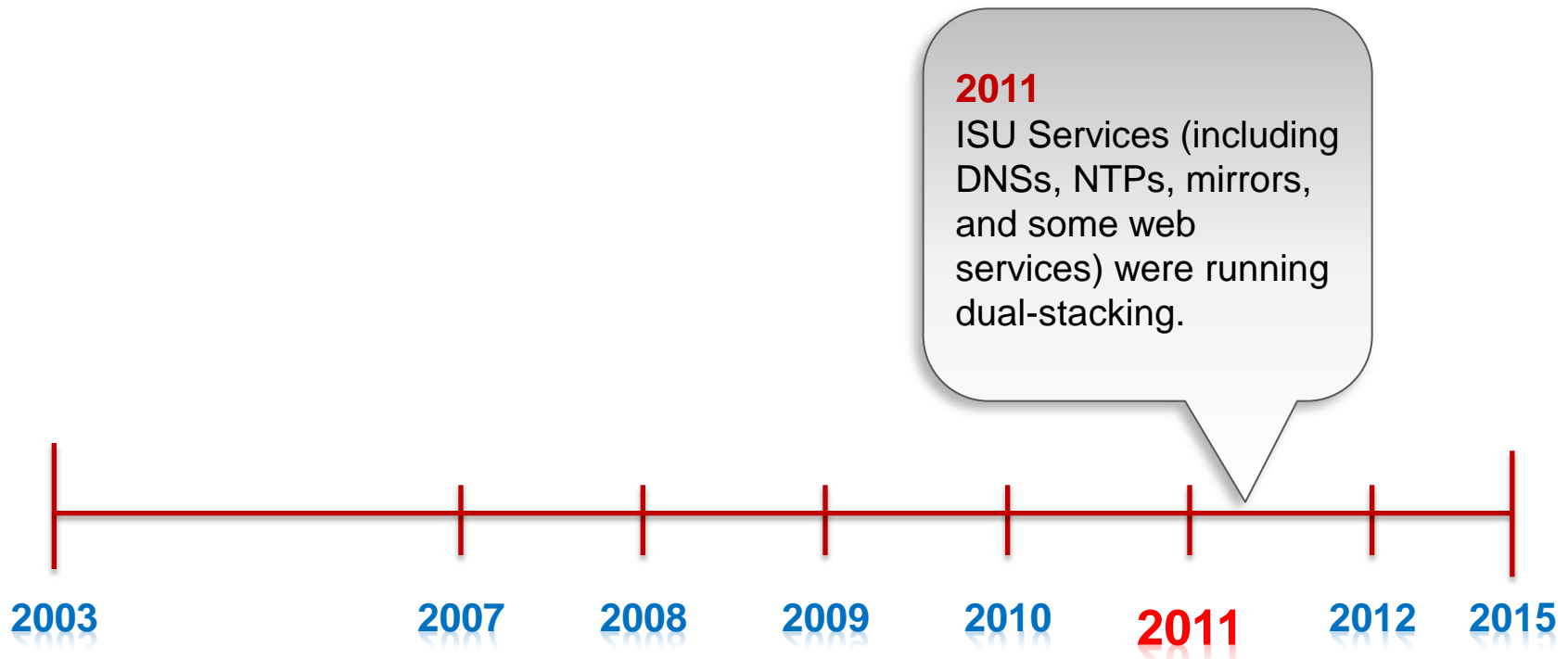


Timeline





Timeline





ISU Network:

- Compatibility:
upgrade/replace the incompatible
- Plan & Design
- Core Network Implementation Readiness
- Peering with Providers
- Introduce Major Services
- Testing
- Building-up a Knowledge-Base
- Peering with Clients
 - Extra and add-on services

ISU System:

- Install IPv6 components
- Configure DHCP
- Time and DNS are first to be done
 - One of the roots for : .sa
 - 2nd in NIC
- All services are supporting IPv6



What is Left?

- Finalize proxy setup to include IPv6 Transparent Proxy also..
- Launch of www.ipv6.edu.sa which will contain a lot of useful resources. It will also conclude ISU's experience in IPv6.
- Encourage Universities & other clients to get IPv6 ranges, start deploying and peer.
- Provide workshops & open labs for Universities & clients.
- Tweak Proxies & DNS to prefer IPv6 over IPv4, to increase and support IPv6 traffic (after resolving earlier concerns).



Some IPv6 Guidelines:

- Since 2009, No procurement of any SW/HW not supporting IPv6, OR (at least) have near and clear roadmap of supporting it.
- No Peering with new Service Providers not supporting IPv4/IPv6 native peering.
- **/48** minimum assignment per single entities
- **/56** reserved for each network segments
- **/64** assigned for functional network segments
- **/126** for point-to-point connections



Internet Services Unit
King Abdulaziz City for Science & Technology

DEP:LOY:ING::IPv6

in ISU/KACST

Thank you!

