Akamai IPv4/IPv6 experience

How Akamai works with customers / partners to leverage the dual stack

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To see the Internet in a Grain of Sand

	IPv4	IPv6
Number of addresses	2^32	2^128
Example	210.59.230.150	1079:3:6ED4::44:72BE
Per capita	0.6	50 billion billion billion
Per square meter	0.008	6.67 x 10^23

IPv6 can provide IP addresses to every grain of sand on the planet.

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More often than not, I am getting IPv6 on my mobile on beach

Configure IPv6: Automatically

Router: fe80::2643:e2ff:fe0b:5f8f

IPv6 Address	Prefix Length
2001:b011:4003:5fe2:14f8:3a13:4b5b:f45e	64
2001:b011:4003:5fe2:ad6e:2ad8:2662:cb1	64

Test IPv6 | FAQ | Mirrors | stats

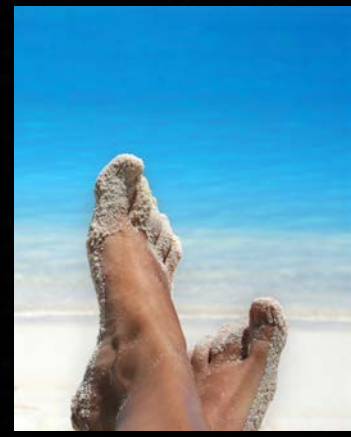
Test your IPv6 connectivity.

Summary | Tests Run | Share Results / Contact | Other IPv6 Sites | For the Help Desk

- Your IPv4 address on the public Internet appears to be 114.136.95.228
- Your IPv6 address on the public Internet appears to be 2001:b400:e206:7ffe:ade7:3595:5f64:7e1e
- Your Internet Service Provider (ISP) appears to be EMOME-NET Mobile Business Group
- Since you have IPv6, we are including a tab that shows how well you can reach other IPv6 sites. [more info]
- HTTPS support on this web site is in *beta*. [more info]
- Your DNS server (possibly run by your ISP) appears to have IPv6 Internet access.

Your readiness score

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



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Akamai Experience the Edge

Outline

- Traffic characteristics during the pandemic
- Dual stacking OTT video streaming for faster throughput and higher availability: the technical reasons behind.
- Don't forget to dual stack your closed caption and DRM license server as well!
- Dual stacking video delivery is possible even when you have the business constraints to keep the origin server in IPv4.
- Expect a future of even wider IPv6 adoption from satellite internet constellation, and how Akamai is preparing for such a trend.

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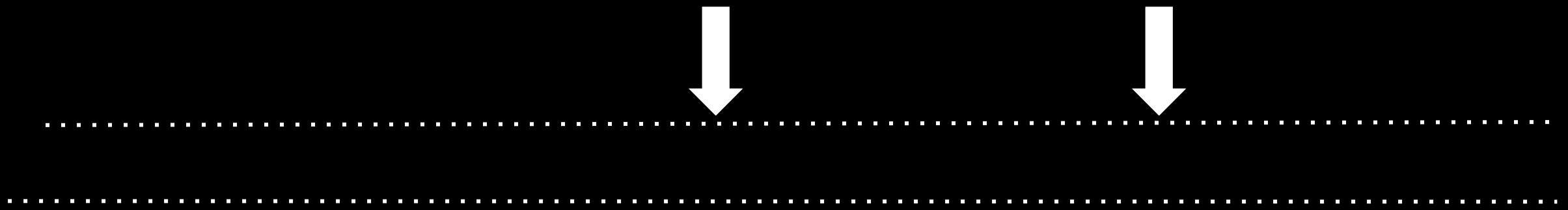

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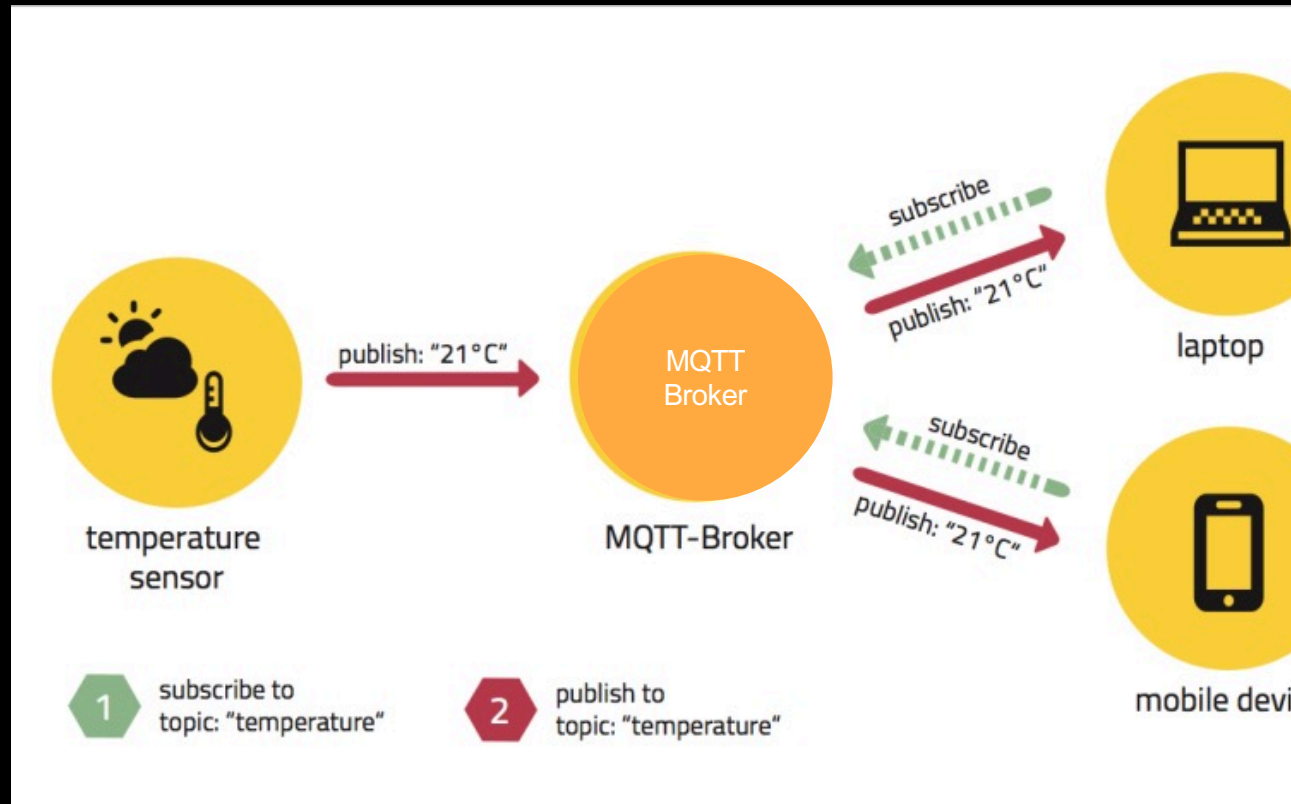
The most popular application protocol in IoT may NOT be HTTP

```
dig +noall +answer hokamoto-iot.fab34.com AAAA
hokamoto-iot.fab34.com.    60      IN      CNAME   hokamoto-iot.fab34.com.edgesuite.net.
hokamoto-iot.fab34.com.edgesuite.net. 21600 IN CNAME a1851.dsco.akamai.net.
a1851.dsco.akamai.net.     20      IN      AAAA    2001:b034:1:700::cb45:5140
a1851.dsco.akamai.net.     20      IN      AAAA    2001:b034:1:700::cb45:5149
```



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Fanning in: collecting metrics from weather sensors

Humidity	Barometer Pressure (Pascal)	Temperature °C	Brightness (Lux)
99 ↓0%	101.3K ↓0%	33 ↓0%	111.0K ↓0%

Likelihood (%) that someone look like Chuck appears in the past 5 second?

80 ↓0%

Summary

- Dual stacking OTT video streaming for faster throughput and higher availability: the technical reasons behind.
- Don't forget to dual stack your closed caption and DRM license server as well!
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- Expect a future of even wider IPv6 adoption from satellite internet constellation, and how Akamai is preparing for such a trend.

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