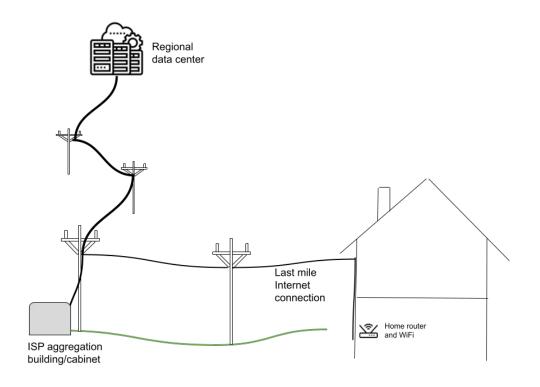


Importance of latency on the Internet

State of the Net February 12, 2024

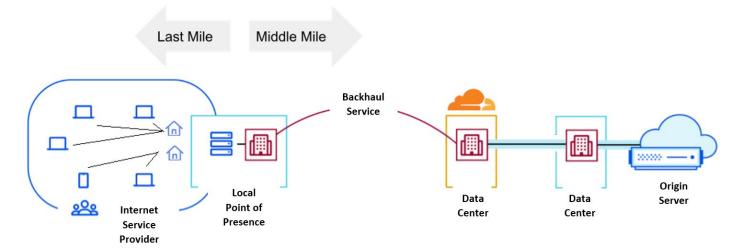


- When you visit a website, your "Request" travels out from your home searching for the content or service you requested.
- It might pass through a few networks and data centers before it finds it.
- Then the content or services networks sends data back.





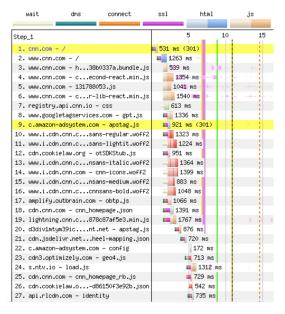
Cloudflare (and other CDNs) sit in between a website and consumers to (1) protect the website, and (2) speed delivery by being closer geographically

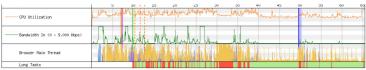


 CDNs "sit in the middle" between ISPs and website origin servers CDNs protect origin servers, and accelerate content by being close to the end-user



What happens when we load a web page

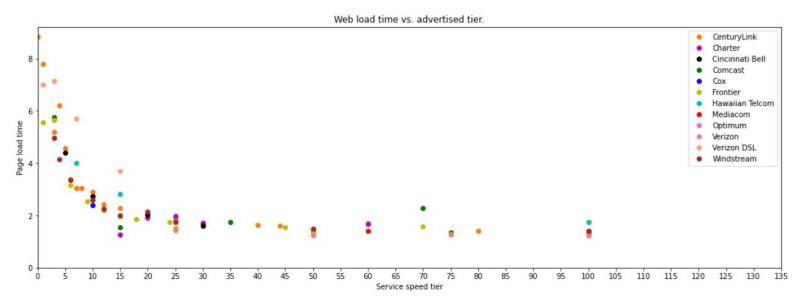




- Some files block other files from loading.
 The faster we load those files, the faster the page loads.
- The browser rarely uses all the bandwidth it has available



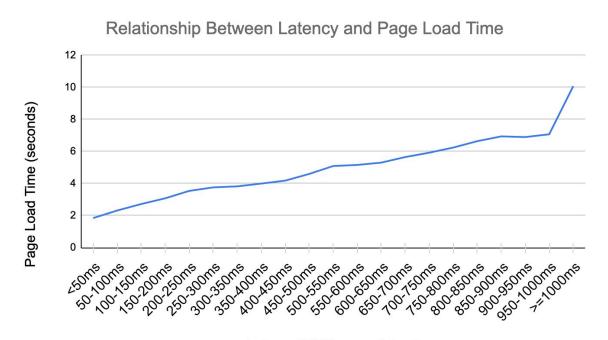
The result is that web pages don't load faster once the connection is above ~25 Mbps



Source: Clark, David D. and Wedeman, Sara, Understanding the Metrics of Internet Broadband Access: How Much Is Enough? (August 1, 2022). Available at SSRN: https://ssrn.com/abstract=4178804 or https://dx.doi.org/10.2139/ssrn.4178804



However, lower latency = better page load times



Latency (TCP connect time)

Source: Cloudflare analytics data.



Thank you





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