



The Two Webs

The Evolution of the World Wide Web (and what we should do about it)

Outline



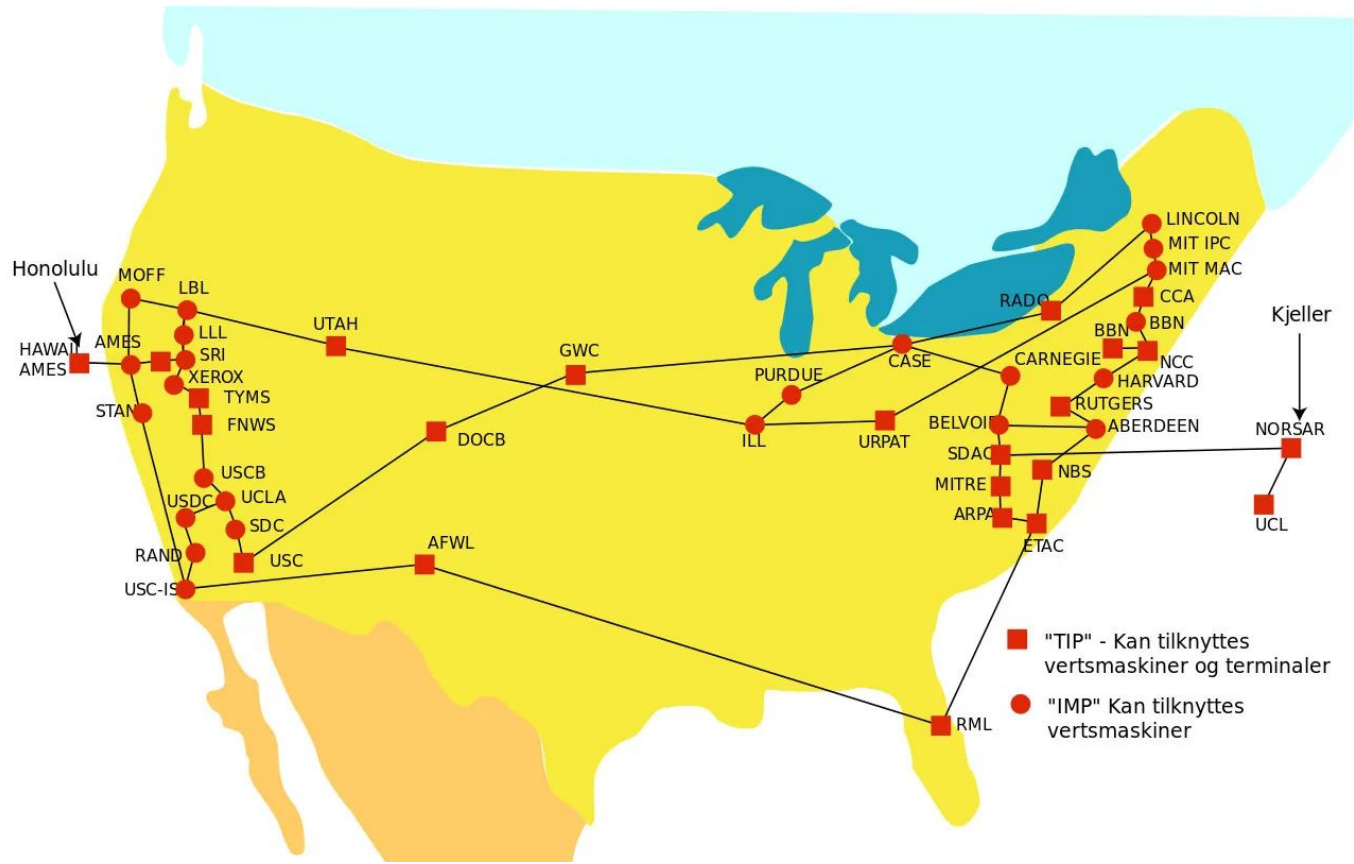


Outline

1. The First World (The Library)
2. The Second World (The Pipe)
3. Where we are today
4. Where *should* we go?

World 1: The Library





The ARPANET



Tim Berners Lee



Tim Berners Lee

who-has-it/what-i-want

HTTP


```
<document>  
  <header>  
    Section 1  
  </header>  
  
  ....  
  <link: who-has-it/what-i-want>  
</document>
```

HTML

```
<document>  
  <header>  
    Section 1  
  </header>
```

....

```
  <link: who-has-it/what-i-want>  
</document>
```

HTML

```
<document>  
  <header>  
    Section 1  
  </header>
```

....

```
  <link: who-has-it/what-i-want>  
</document>
```

HTML

HTTP + HTML



World Wide Web



Location: about: [dropdown arrow]

What's New! What's Cool Handbook Net Search Net Directory Software



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Big Idea: Downloading Documents in Standard Formats



New Ideas

- **Screen Readers: The Web for the Blind!**



New Ideas

- Screen Readers for the Blind
- **RSS: Download from Everywhere!**



Tim Berners Lee

Power Grabs

- Accidental Incompatibilities
- “Embrace, Extend, Extinguish”



World 2: The Pipe





Beyond HTML

- Goal: Make cool things on the web
- Problem: “Sharing only” limits what we can do
- Solution: Enable 2 way communication

Date: Sun, 3 Apr 2022 13:51:01 -0700
From: Yash Lala <yashlala@gmail.com>
To: Yash Lala <yashlala@gmail.com>
Subject: Yee
Message-ID: <20220403205101.3ja7ajkoias7eege@graphite>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

Hello. This is an email.

An Email

Date: Sun, 3 Apr 2022 13:51:01 -0700
From: Yash Lala <yashlala@gmail.com>
To: Yash Lala <yashlala@gmail.com>
Subject: Yee
Message-ID: <20220403205101.3ja7ajkoias7eege@graphite>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

Hello. This is an email.
<1 pixel image>

Read Receipts with Emails



Beyond HTML

- Goal: Make cool things on the web
- Problem: “Sharing only” limits what we can do
- Solution: Enable 2 way communication



Beyond HTML

- ~~— Goal: Make cool thing~~
- ~~— Problem: ...~~

ADS ADS ADS ADS!!!

<document>

...

<ad>

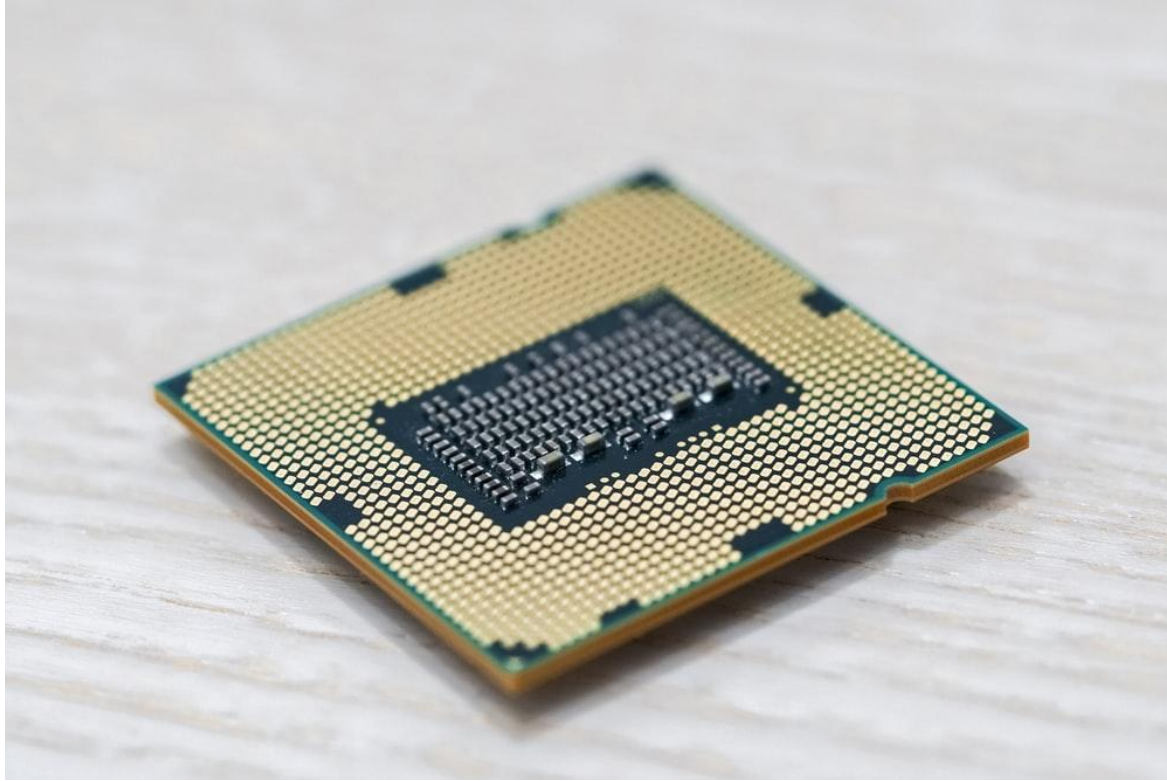
HOT IPHONES IN YOUR AREA

</ad>

....

</document>

Transparency becomes the Enemy



Netflix: CPU Cooperation

Big Idea:
Portable Way to Run Applications

Where Are We Today?



Our World Today

- Corporate Push for the “Opaque Pipe”:
 - Fall of RSS + Downloads
 - Decreasing Transparency
- Public Push for the “Library”:
 - Podcasting + RSS Renaissance
 - Ad blockers

Where Should We Go?



A Pivotal Moment

- Supreme court on both sides of the issue
- What do you think?