

Distributed Data & Service Federation

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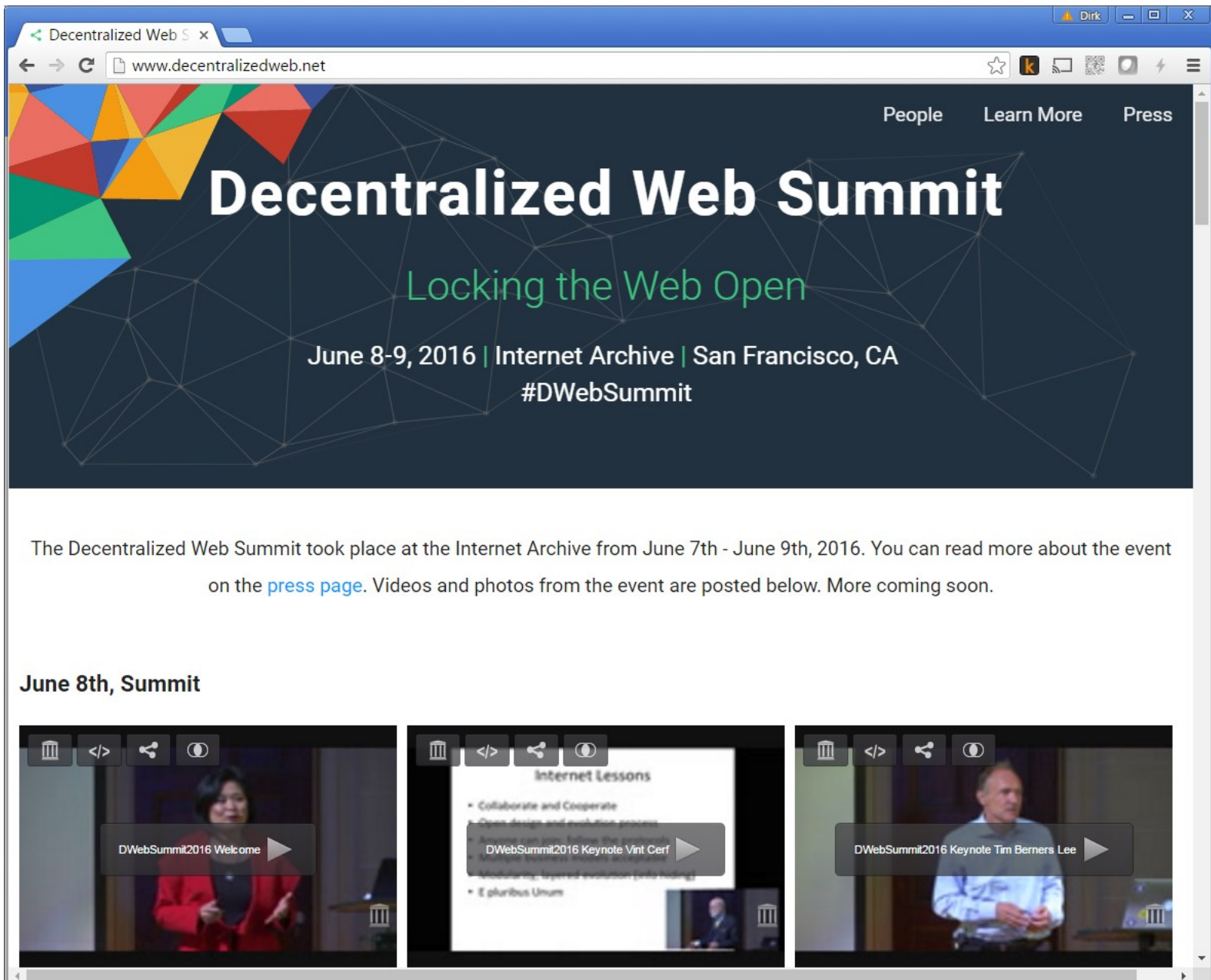
IRTF Side Meeting @ IETF-96

Berlin 2016

Background

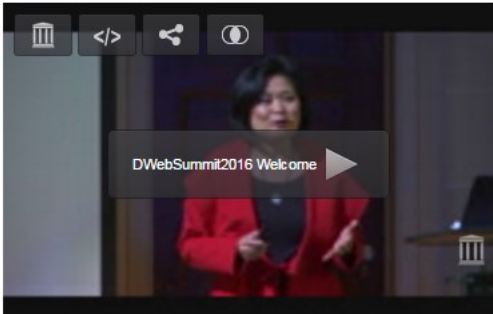
- Discussion on distributed ledger and smart contracts applications at IETF-95
 - Blockchain applications
 - Blockchain-based registries
 - Internet-wide federation
- Trying to gauge interest and find useful scope for discussion
- <https://trac.tools.ietf.org/group/irtf/trac/wiki/blockchain-federation>

http://www.decentralizedweb.net/

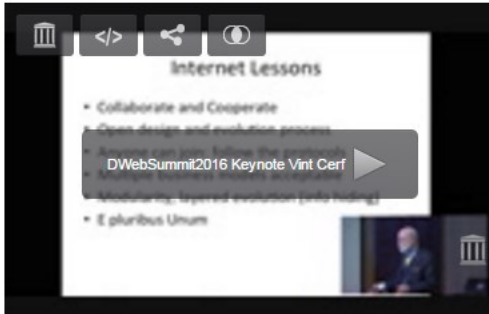


The screenshot shows a web browser window with the URL www.decentralizedweb.net. The page features a dark blue background with a geometric pattern of white lines and a colorful triangular graphic on the left. The main heading is "Decentralized Web Summit" in large white text, followed by the tagline "Locking the Web Open" in green. Below this, the event details are listed: "June 8-9, 2016 | Internet Archive | San Francisco, CA" and the hashtag "#DWebSummit". Navigation links for "People", "Learn More", and "Press" are in the top right. A paragraph of text states: "The Decentralized Web Summit took place at the Internet Archive from June 7th - June 9th, 2016. You can read more about the event on the [press page](#). Videos and photos from the event are posted below. More coming soon."

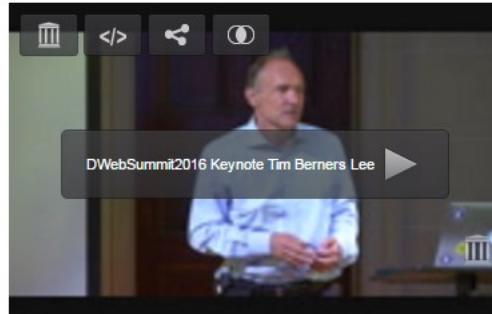
June 8th, Summit



A video thumbnail showing a woman in a red jacket speaking. A play button is overlaid on the video. The text "DWebSummit2016 Welcome" is visible at the bottom.



A video thumbnail showing a presentation slide titled "Internet Lessons". The slide lists several bullet points: "Collaborate and Cooperate", "Open design and evolution process", "Decentralized, layered evolution (protocols)", and "E pluribus Unum". A play button is overlaid on the video. The text "DWebSummit2016 Keynote Vint Cerf" is visible at the bottom.



A video thumbnail showing a man in a blue shirt speaking. A play button is overlaid on the video. The text "DWebSummit2016 Keynote Tim Berners Lee" is visible at the bottom.

Today

- Diego Lopez: **Service Federation in 5G**
- Carsten Bormann: **Service Federation in IoT**
- Thomas Scheffler: **A Privacy Aware Localization Service for Healthcare Environments**
- Jeffrey He: **Architecture Consideration for Data Sharing, and Open Questions**
- **Discussion of Next Steps**

Notes

- Other Frameworks: WebTorrent
- Diego
 - Concrete: distributed registries & directories
 - Lars: decentralizing Internet infrastructure
 - IANA, routing system
 - Can we focus?
- Carsten
 - Diego: reputation needs identification
 - Concept of „reputon“
- Thomas
 - Lars: amazon has a system to stick tags to data
 - Börje: looked into ABE?
 - Thomas: focus is on policy languages
 - Diego: ABE
 - Lars:
- Jeffrey
 - Carsten: authorization is important (can authenticate identity, but not sufficient)
 - Reputation would be important
 - Börje: multi-attribute ABE would do that, in a data-centric way
 - Diego: would like to include authorization
 - Thomas: keeping a trail on what happens to data
- Mat: should be about logical infrastructure
- Lars: limit to improving how the current Internet