

# Web Packaging

Signed Exchanges and Bundled Exchanges

[draft-yasskin-webpackage-use-cases-01](#)

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# Outline

- Why?
- The story so far
- References
- Standards! How?

# Why?

- Loading websites peer-to-peer instead of via expensive internet.
  - Anti-censorship and anti-surveillance
- Fix AMP: True URLs and non-AMP private prefetch
- Web publications?
- Optimize small and cross-origin resources
- Vouched websites

# The story so far

- Discussions at IETF99 and IETF101
- Split Signed Exchanges (SXG) from Bundled Exchanges
- SXG specification fleshed out
- Investment in SXG from AMP users
- Chrome 73 shipping SXG-b3

# Signed Exchanges

- 1 HTTP request/response pair
- Cross-origin trust via a TLS-like certificate
- O(week)-expiration
- Updateable signatures

# Bundled Exchanges

- Many request/response pairs
- Each optionally signed
- Streamable
- Random-access

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# Investment in Signed Exchanges

- 1800Flowers
- Yahoo! Japan
- Ikyu Corporation
- OYO
- Tencent
- Washington Post
- Digicert
- Cloudflare

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# Documents

- [draft-yasskin-http-origin-signed-responses](#)
  - [draft-yasskin-httpbis-origin-signed-exchanges-impl](#)
- [WICG.github.io/webpackage/loading.html](#)
- [draft-yasskin-wpack-bundled-exchanges](#)
- [draft-yasskin-webpackage-use-cases](#)

# What's next?

- Incorporate SXG feedback from deployment
- Check and improve the security story
- Specify and implement Bundles
- ESCAPE Workshop (see mnot)
- Hand ownership to standards bodies!

# Standards track

- Create an IETF WG?
  - WPACK meeting Wed to prepare for BOF at IETF105
- HTTPWG
- WHATWG/W3C for Fetch integration

# Links

- <https://github.com/WICG/webpackage>
- [wpack@ietf.org](mailto:wpack@ietf.org)
- [webpackage-dev@chromium.org](mailto:webpackage-dev@chromium.org)