# HTTP/2 and Proxies

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3. Run over TLS

# In the beginning, SPDY had three options

1. Run on a different port - 86%
2. Run over HTTP with an Upgrade header or other signaling - 67%
3. Run over TLS - 95%

(Tests run for WebSockets deployment, 2009)

Although not the original intent, the cryptography and popularity of HTTPS stopped the rising miasma of firewalls and network middleware from destroying port 443.

The end-to-end principle is *important*, and cryptography is its strongest guardian.

Plaintext is no longer reasonable.

End-to-end security is *important*, and cryptography is its strongest guardian.

We cannot build a sane Internet without end-to-end cryptography.

# User-consent is a failure from 'the 90's

- We are certainly not looking to make our security UI more complex.
- We are still paying off the debts of things like the ability to bypass an SSL interstitial.
- Chrome's SSL interstitials are bypassed ~70% of the time at the moment.

# This means that filtering has to be done at the client.

**Settings**

| | | |
|---|---|---|
| ✈️ | Airplane Mode | ⚪️ |
| 📶 | Wi-Fi | AppleWiFi |
| 🅱️ | Bluetooth | On |

| | |
|---|---|
| 🔲 | Notification Center |
| 🔲 | Control Center |
| 🌙 | Do Not Disturb |

| | |
|---|---|
| ⚙️ | General |
| 🔊 | Sounds |
| 🌼 | Wallpapers & Brightness |
| ✋ | Privacy |

| | |
|---|---|
| ☁️ | iCloud |
| ✉️ | Mail, Contacts, Calendars |
| 📝 | Notes |
| 📋 | Reminders |
| 💬 | Messages |
| 📹 | FaceTime |
| 🗺️ | Maps |
| 🧭 | Safari |

‹ **General**      **Restrictions**

    ( **Enable Restrictions** )

ALLOW:

| | | |
|---|---|---|
| 🧭 | Safari | 🟢 |
| 📷 | Camera | 🟢 |
| 📹 | FaceTime | 🟢 |
| 🎵 | iTunes Store | 🟢 |
| Ⓐ | Installing Apps | 🟢 |
| Ⓐ | Deleting Apps | 🟢 |
| Ⓐ | In-App Purchases | 🟢 |
| 🎙️ | Siri | 🟢 |

ALLOWED CONTENT:

| | |
|---|---|
| Ratings For | United States ❯ |
| Music & Podcasts | Explicit ❯ |
| Movies | All ❯ |
| TV Shows | All ❯ |
| Apps | All ❯ |
| Siri | All ❯ |
| Websites | All ❯ |
| Require Password | 15 minutes ❯ |

Require password for purchases.

PRIVACY: