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# What problem are we trying to solve?

- Not enough encryption on the Internet
- Current estimates for HTTPS:
  - ~32% of page loads\*
  - ~65% of HTTP transactions\*\*
- These numbers should be 100%
- OBTW: <a href="https://https.cio.gov">https://https.cio.gov</a>

### Getting a certificate is no fun

"I can't f'ing figure out how to get a cert from [redacted] - kid you not ... god help people that don't know what a CSR is

I am like 45 minutes in "

Cullen Jennings, PhDCisco FellowFormer IETF Area Director

### A new certificate authority

- Free
- Automatic
- Secure
- Transparent
- Open
- Cooperative

### **Sponsors**

# mozilla









**AUTOMATTIC** 

THIS SPACE **FOR SALE** 

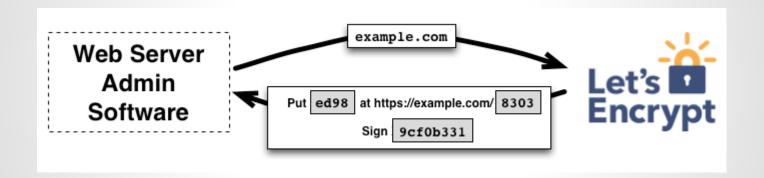
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# **Initial offering**

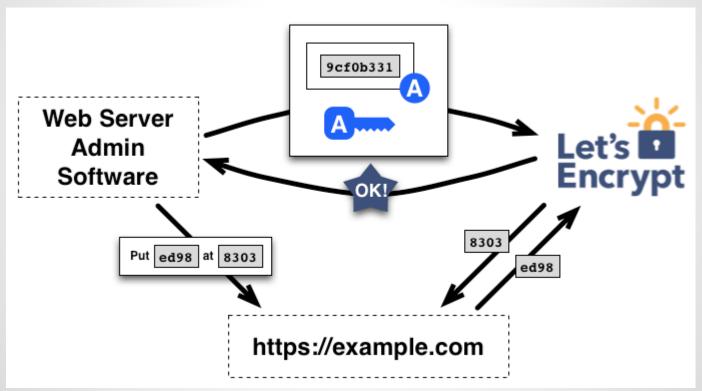
- Domain Validated certificates only
- Automated issuance
- Published APIs/protocols
- Expect to issue first certificate Q2 2015

### **Domain Registration**



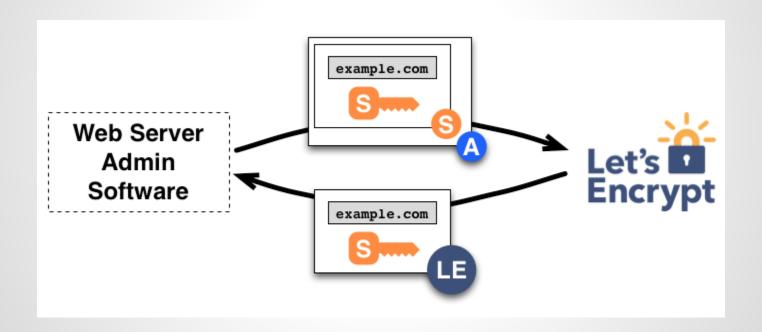
From: https://letsencrypt.org/howitworks/technology/

#### **Domain Validation**



From: https://letsencrypt.org/howitworks/technology/

#### **Certificate Issuance**



From: https://letsencrypt.org/howitworks/technology/

### **FAQs**

- Will these certificates be globally verifiable?
- Are you applying for root program membership?
- What about EV/OV?
- What about non-Web?
- How does this interact with DANE?
- Will you do OCSP stapling/short-lived certs?
- Are you standardizing this?
- Who is doing the client software?
- How can I help?

### **FAQs**

- Will these certificates be globally verifiable? Yes
- Are you applying for root program membership? Yes
- What about EV/OV? No
- What about non-Web? Probably
- How does this interact with DANE? Well, we hope
- Will you do OCSP stapling/short-lived certs? Probably
- Are you standardizing this? See ACME BoF
- Who is doing the client software? [your name here]
- How can I help? https://github.com/letsencrypt/

#### **Learn more**

Main site: <a href="https://letsencrypt.org">https://letsencrypt.org</a>

Specs & Code: <a href="https://github.com/letsencrypt/">https://github.com/letsencrypt/</a>

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