Chrome Browser Update

CA/Browser Forum F2F 52 (Virtual)
March 3, 2021
Certificate Transparency

- Shared 2021 plans on the ct-policy@chromium.org mailing list
- Key Points for 2021
  - Hope to remove the “one Google Log” policy soon
  - Planning another CT Days virtual event
  - SCT Auditing early implementation is rolling out with Chrome 90, continuing to refine and improve the design and implementation
  - Improving and enhancing Log Compliance Monitoring
  - Shifting to a dynamically-updatable CT Log List
  - Technically enforcing the Sharded CT Logs Expiry Range
  - CT Enforcement in Chrome for Android
Chrome Root Program

- As mentioned in previous CA/Browser Forum meetings, we’re working on aligning how our Chrome platforms verify certificates and the set of certificates they trust (Root Program)
  - For CAs, this will ensure more consistent and predictable behaviour
- Goal continues to be zero user-visible disruption and zero CA-visible disruption
- Continuing to work through edge-cases from end user reports to ensure that goal is met
- We’ll reach out to individual CAs if we anticipate or are aware of negative impact
Chrome Root Policy

- [https://g.co/chrome/root-policy](https://g.co/chrome/root-policy)
- Most common area of question: “CAs whose certificates and certificate hierarchy are only used to issue TLS server certificates, and do not issue other forms of certificates”
  - What does this mean?
  - What if my root is already in other root programs?
  - What about my existing roots?
Chrome Root Policy

- TLS
  - self-signed
  - EV
    - EE 1
  - OV
    - EE 2
  - DV
    - EE 3

TLS-only
Chrome Root Policy

Diagram:
- Multi-purpose Root
  - Self-signed
  - Cross-signs
  - Cross-signs
  - Self-signed
- TLS
  - EV
    - EE 1
  - OV
    - EE 2
  - DV
    - EE 3
- S/MIME
  - Self-signed
  - Level 2
  - Level 3

Hybrid
Chrome Root Policy

Legacy Root

Level 2
- TLS 1
  - OV
  - DV
- S/MIME 1
- TLS 2
  - EV

Level 3

S/MIME 2

New TLS Root

Level 2
- TLS 1
  - OV
  - DV
- SMIME 1
- TLS 2
  - EV
- SMIME 2

Level 3

New EV
- EE 1
- EE 2
- EE 3

New OV

New DV

Legacy (Before)

Legacy (After)
Chrome Root Policy

“When a CA becomes aware of or suspects an incident, they should notify chrome-root-authority-program@google.com with a description of the incident. If the CA has publicly disclosed this incident, this notification should include a link to the disclosure. If the CA has not yet disclosed this incident, this notification should include an initial timeline for public disclosure. Chrome uses the information on the public disclosure as the basis for evaluating incidents.”
Contact us at:

chrome-root-authority-program@google.com