

# Opera Root Program Update

CA/Browser Forum  
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# whoami: Tomasz Nowak

- Desktop Security leader, a member of Opera Security Team
- Recently working on GDPR compliance, Software Assurance process, Bug Bounty program

# About Opera

“Enable global Internet users to discover and access digital content in a fast, easy and personalized manner”

322m MAU  
for mobile and PC

- PC browser
- Mobile browsers
- AI-powered personalized news

# Corporate update

- ASA -> AS
- Demerge
- Current owners
- Nasdaq: OPRA (listed in July 2018)

# Our current Root CA Program ([certs.opera.com](https://certs.opera.com))

# Overview

- Opera Desktop:
  - from OS + CRLSets from Chrome
- Opera for Android:
  - from OS + CRLSets from Chrome
- Opera Mini:
  - AndroidCAStore
  - our own (in Turbo mode)
- We also support VEWD (former Opera TV) - 200 mln of devices (TV boxes)

# Quick Facts

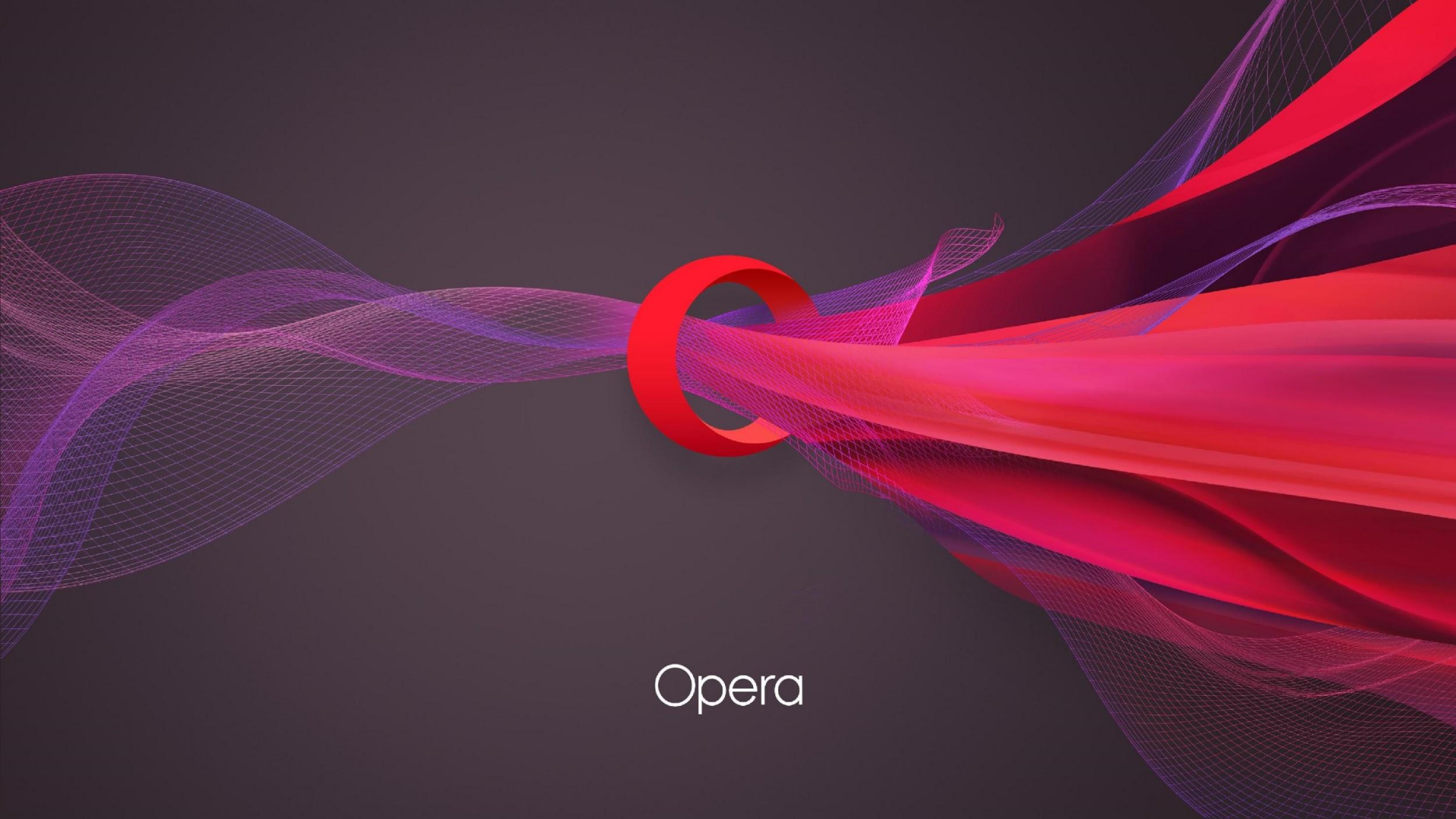
- Certificate root store management for Presto-based products (Mini, TV, etc.)
- Basic mechanism:
  - Fetch Mozilla's store
  - Apply our own modifications
  - Sign
  - Serve on [certs.opera.com](https://certs.opera.com)
- No strict update schedule. Update requests usually come from the Mini team.

# Additional blacklist for Desktop



# Additional blacklist for Desktop

- Opera's private certificate revocation list
- Based on CRLSets
- Last updated in 2015-11
- Removed from codebase this month  
(not to rewrite it to Network Service)
- We believe that lists composed by  
Operating System Vendors and Google's  
CRLSets will be updated quick enough



Opera