

Your browser trusts many root CAs **by default**

Keychain Access

Click to unlock the System Roots keychain.

Keychains

- login
- Microsoft_Int...diate_Certificates
- Local Items
- System
- System Roots**

Category

- All Items
- Passwords
- Secure Notes
- My Certificates
- Keys
- Certificates**

GeoTrust Global CA
Root certificate authority
Expires: Saturday, May 21, 2022 at 7:00:00 AM Arabian Standard Time
This certificate is valid

Name	Kind	Expires	Keychain
Echoworx Root CA2	certificate	Oct 7, 2030, 1:49:13 PM	System Roots
EE Certification Centre Root CA	certificate	Dec 18, 2030, 2:59:59 AM	System Roots
Entrust Root Certification Authority	certificate	Nov 27, 2026, 11:53:42 PM	System Roots
Entrust Root Certification Authority - EC1	certificate	Dec 18, 2037, 6:55:36 PM	System Roots
Entrust Root Certification Authority - G2	certificate	Dec 7, 2030, 8:55:54 PM	System Roots
Entrust.net Certification Authority (2048)	certificate	Dec 24, 2019, 9:20:51 PM	System Roots
Entrust.net Certification Authority (2048)	certificate	Jul 24, 2029, 5:15:12 PM	System Roots
ePKI Root Certification Authority	certificate	Dec 20, 2034, 5:31:27 AM	System Roots
Federal Common Policy CA	certificate	Dec 1, 2030, 7:45:27 PM	System Roots
GeoTrust Global CA	certificate	May 21, 2022, 7:00:00 AM	System Roots
GeoTrust Primary Certification Authority	certificate	Jul 17, 2036, 2:59:59 AM	System Roots
GeoTrust Primary Certification Authority - G2	certificate	Jan 19, 2038, 2:59:59 AM	System Roots
GeoTrust Primary Certification Authority - G3	certificate	Dec 2, 2037, 2:59:59 AM	System Roots
Global Chambersign Root	certificate	Sep 30, 2037, 7:14:18 PM	System Roots
Global Chambersign Root - 2008	certificate	Jul 31, 2038, 3:31:40 PM	System Roots
GlobalSign	certificate	Mar 18, 2029, 1:00:00 PM	System Roots
GlobalSign	certificate	Jan 19, 2038, 6:14:07 AM	System Roots
GlobalSign	certificate	Jan 19, 2038, 6:14:07 AM	System Roots
GlobalSign	certificate	Dec 15, 2021, 11:00:00 AM	System Roots
GlobalSign Root CA	certificate	Jan 28, 2028, 3:00:00 PM	System Roots
Go Daddy Class 2 Certification Authority	certificate	Jun 29, 2034, 8:06:20 PM	System Roots
Go Daddy Root Certificate Authority - G2	certificate	Jan 1, 2038, 2:59:59 AM	System Roots
Government Root Certification Authority	certificate	Dec 31, 2037, 6:59:59 PM	System Roots
Hellenic Academic and Research Institutions RootCA 2011	certificate	Dec 1, 2031, 4:49:52 PM	System Roots
Hongkong Post Root CA 1	certificate	May 15, 2023, 7:52:29 AM	System Roots

177 items

Real attacks

Google Security Blog

The latest news and insights from Google on security and safety on the Internet

An update on attempted man-in-the-middle attacks

August 29, 2011

Posted by Heather Adkins, Information Security Manager

Today we received reports of attempted SSL man-in-the-middle (MITM) attacks against Google users, whereby someone tried to get between them and encrypted Google services. The people affected were primarily located in Iran. The attacker used a fraudulent SSL certificate issued by DigiNotar, a root certificate authority that should not issue certificates for Google (and has since revoked it).

Google Chrome users were protected from this attack because Chrome was able to [detect](#) the fraudulent certificate.

Google Security Blog

The latest news and insights from Google on security and safety on the Internet

Enhancing digital certificate security

January 3, 2013

Posted by Adam Langley, Software Engineer

Late on December 24, Chrome detected and blocked an unauthorized digital certificate for the "*.google.com" domain. We investigated immediately and found the certificate was issued by an [intermediate certificate authority](#) (CA) linking back to TURKTRUST, a Turkish certificate authority. Intermediate CA certificates carry the full authority of the CA, so anyone who has one can use it to create a certificate for any website they wish to impersonate.