



REPORT OF THE INDEPENDENT ACCOUNTANT

To the management of Sectigo Limited (“Sectigo”):

Scope

We have examined Sectigo management’s [assertion](#) that for its Certification Authority (CA) operations in the locations as enumerated in [Attachment B](#), for its CAs enumerated in [Attachment C](#), Sectigo has:

- disclosed its code signing (“CS”) certificate lifecycle management business practices in the applicable versions of its Sectigo Certification Practice Statement (“CPS”) and Sectigo WebPKI Certificate Policy (“CP”) enumerated in [Attachment A](#), including its commitment to provide CS certificates in conformity with the applicable Baseline Requirements for the Issuance and Management of Publicly-Trusted Code Signing Certificates, and provided such services in accordance with its disclosed practices
- maintained effective controls to provide reasonable assurance that:
 - CS subscriber information was properly collected, authenticated (for the registration activities performed by Sectigo) and verified;
 - the integrity of keys and CS certificates it manages is established and protected throughout their life cycles.
- maintained effective controls to provide reasonable assurance that its CS Timestamp Authority is operated in conformity with the current version of the CA/Browser Forum Code Signing Working Group requirements.
- maintained effective controls to provide reasonable assurance that:
 - EV CS subscriber information was properly collected, authenticated (for the registration activities performed by Sectigo) and verified;
 - the integrity of keys and EV CS certificates it manages is established and protected throughout their life cycles.

throughout the period April 1, 2023 to March 31, 2024, based on the [WebTrust Principles and Criteria for Certification Authorities - Code Signing Baseline Requirements, v3.2](#).

The CA/Browser Forum Baseline Requirements for the Issuance and Management of Publicly-Trusted Code Signing Certificates requires compliance with the Network and Certificate System Security Requirements (“Network Security Requirements”) as set forth by the CA/Browser Forum. The relevant principle and criteria are included as part of WebTrust Principles and Criteria for Certification Authorities - Network Security, which are reported on under separate cover.



Certification Authority's Responsibilities

Sectigo's management is responsible for its assertion, including the fairness of its presentation, and the provision of its described services, based on the [WebTrust Principles and Criteria for Certification Authorities - Code Signing Baseline Requirements, v3.2](#).

Independent Accountant's Responsibilities

Our responsibility is to express an opinion on management's assertion based on our examination. Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether management's assertion is fairly stated, in all material respects. An examination involves performing procedures to obtain evidence about management's assertion. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risks of material misstatement of management's assertion, whether due to fraud or error. We believe that the evidence we obtained is sufficient and appropriate to provide a reasonable basis for our opinion.

We are required to be independent and to meet our other ethical responsibilities in accordance with relevant ethical requirements relating to the engagement.

The relative effectiveness and significance of specific controls at Sectigo and their effect on assessments of control risk for subscribers and relying parties are dependent on their interaction with the controls, and other factors present at individual subscriber and relying party locations. Our examination did not extend to controls at individual subscriber and relying party locations and we have not evaluated the effectiveness of such controls.

Inherent Limitations

There are inherent limitations in the effectiveness of any system of internal control, including the possibility of human error and the circumvention of controls. For example, because of their nature, controls may not prevent, or detect unauthorised access to systems and information, or failure to comply with internal and external policies or requirements. Also, the projection to the future of any conclusions based on our findings is subject to the risk that controls may become ineffective.

Independent Accountant's Opinion

In our opinion, management's assertion, as referred to above, is fairly stated, in all material respects.

This report does not include any representation as to the quality of Sectigo's services other than its CA operations in the locations as enumerated in [Attachment B](#), nor the suitability of any of Sectigo's services for any customer's intended purpose.



Other Matter

Without modifying our opinion, we noted the following other matters during our procedures:

Matter Topic		Matter Description
1	Certificate Validation	Sectigo disclosed in Mozilla Bug #1891039 that it disabled CRL generation to a Root CA with an expired self-signed certificate, which also had 2 unexpired certificates cross-signed by another Root CA.

While the Sectigo assertion notes all issues disclosed on Bugzilla from April 1, 2023 through the date of this report, we have only noted those instances relevant to the CAs enumerated in [Attachment C](#) and applicable to the [WebTrust Principles and Criteria for Certification Authorities - Code Signing Baseline Requirements, v3.2](#).

Use of the WebTrust Seal

Sectigo's use of the WebTrust for Certification Authorities - Code Signing Seal constitutes a symbolic representation of the contents of this report and it is not intended, nor should it be construed, to update this report or provide any additional assurance.

BDO USA

June 24, 2024



ATTACHMENT A - CERTIFICATION PRACTICE STATEMENT AND CERTIFICATE POLICY VERSIONS IN-SCOPE

Certificate Policy

Policy Name	Version	Effective Date
Sectigo WebPKI Certificate Policy	1.3.4	February 7, 2024
Sectigo WebPKI Certificate Policy	1.3.3	March 23, 2023

Certification Practice Statement

Policy Name	Version	Effective Date
Sectigo Certification Practice Statement	5.4.1	February 7, 2024
Sectigo Certification Practice Statement	5.4.0	August 31, 2023
Sectigo Certification Practice Statement	5.3.7	May 17, 2023
Sectigo Certification Practice Statement	5.3.6	March 23, 2023



ATTACHMENT B - LOCATIONS IN-SCOPE

Location	Function
Secaucus, NJ, United States of America	Datacenter Facility
Manchester, United Kingdom	Datacenter Facility
Amsterdam (West), The Netherlands	Datacenter Facility
Amsterdam (South), The Netherlands	Datacenter Facility
Bradford, United Kingdom	Back-end Office Support
Chennai, India	Back-end Office Support
Iași, Romania	Back-end Office Support
Kanata, ON, Canada	Back-end Office Support
Roseland, NJ, United States of America ¹	Back-end Office Support
Lille, France	Back-end Office Support
Alkmaar, The Netherlands	Back-end Office Support
Scottsdale, AZ, United States of America ²	Back-end Office Support

¹ As of December 31st, 2023, use of this office was discontinued for the remainder of the period.

² As of December 1st, 2023, this office is in scope.



ATTACHMENT C - CAs IN-SCOPE FOR CODE SIGNING AND EV CODE SIGNING

Root CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=AAA Certificate Services O=Comodo CA Limited L=Salford ST=Greater Manchester C=GB	D7A7A0FB5D7E2731D771E9484EBCDEF71D5F0C3E0A2948782BC83EE0EA699EF4	1/1/2004	12/31/2028
CN=COMODO Certification Authority O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	0C2CD63DF7806FA399EDE809116B575BF87989F06518F9808C860503178BAF66	12/1/2006	12/31/2029
CN=COMODO Certification Authority O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	1A0D20445DE5BA1862D19EF880858CBCE50102B36E8F0A040C3C69E74522FE6E	1/1/2011	12/31/2030
CN=COMODO ECC Certification Authority O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	1793927A0614549789ADCE2F8F34F7F0B66D0F3AE3A3B84D21EC15DBBA4FADC7	3/6/2008	1/18/2038
CN=COMODO RSA Certification Authority O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	52F0E1C4E58EC629291B60317F074671B85D7EA80D5B07273463534B32B40234	1/19/2010	1/18/2038
CN=Ensured Root CA O=Ensured B.V. L=Heerhugowaard ST=Noord-Holland C=NL	E99BA2CEF1B86154C7362AD2001C3DB99083F155769B69B6280E0BC7E8672AA4	11/11/2014	1/18/2038
CN=Ensured Root CA O=Ensured B.V. L=Heerhugowaard ST=Noord-Holland C=NL	100CF7E1373EBDAE233E5F8B1A5385FDABFEE8A31F752E33219D343DE3AFBC9C	7/23/2015	1/18/2038
CN=Sectigo Public Code Signing Root E46 O=Sectigo Limited C=GB	8F6371D8CC5AA7CA149667A98B5496398951E4319F7AFBCC6A660D673E438D0B	3/22/2021	3/21/2046



Root CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=Sectigo Public Code Signing Root R46 O=Sectigo Limited C=GB	7E76260AE69A55D3F060B0FD18B2A8C01443C87B60791030C9FA0B0585101A38	3/22/2021	3/21/2046
CN=Sectigo Public Root E46 O=Sectigo Limited C=GB	56C9A62B261589B0F5CD71E2E2C2E569D74B51A831B7ACB6A7FA4EB238EFC2FF	3/22/2021	3/21/2046
CN=Sectigo Public Root R46 O=Sectigo Limited C=GB	E3B08CB86E2D62C9DA72992069CB0AC4ECBB5BD895581C24CD301C5756F78BF4	3/22/2021	3/21/2046
CN=Sectigo Public Time Stamping Root E46 O=Sectigo Limited C=GB	E44DDB7952261F15005CD60C1DOC38C18CBFD17C273A31F8ED4C8F53E2685F32	3/22/2021	3/21/2046
CN=Sectigo Public Time Stamping Root R46 O=Sectigo Limited C=GB	4941B001B8A97E961B7817C9D9E960EC4B056BFC915A8C1AABF6EF6B3AC046A5	3/22/2021	3/21/2046
CN=USERTrust ECC Certification Authority O=The USERTRUST Network L=Jersey City ST=New Jersey C=US	4FF460D54B9C86DABFBCFC5712E0400D2BED3FBC4D4FBDAA86E06ADCD2A9AD7A	2/1/2010	1/18/2038
CN=USERTrust RSA Certification Authority O=The USERTRUST Network L=Jersey City ST=New Jersey C=US	E793C9B02FD8AA13E21C31228ACCB08119643B749C898964B1746D46C3D4CBD2	2/1/2010	1/18/2038



Subordinate CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=COMODO ECC Certification Authority O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	53612513970B9F264CA4BCC3BFD84DBC5FE774E3C6295B3EBB99EB9D74069E2A	1/1/2004	12/31/2028
CN=COMODO RSA Certification Authority O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	38392F17CE7B682C198D29C6E71D2740964A2074C8D2558E6CFF64C27823F129	1/1/2004	12/31/2028
CN=Sectigo Public Code Signing Root E46 O=Sectigo Limited C=GB	DB44CB073B747CB2ADDFADA3B7A6BF855E0A278194BE6DC28113CE97A7ED26BB	2/28/2023	12/31/2028
CN=Sectigo Public Code Signing Root R46 O=Sectigo Limited C=GB	7DB9F7402A523DD338663B33D55AAD0DD08CB67E687DF0D4D98E7C5FCA27EFD1	5/25/2021	12/31/2028
CN=Sectigo Public Time Stamping Root E46 O=Sectigo Limited C=GB	71A851AC67886D088B6262400BCAC7EFFF6B37EC1960DB8F2602A8509D890AA7	3/22/2021	12/31/2028
CN=Sectigo Public Time Stamping Root R46 O=Sectigo Limited C=GB	9C502040A5C9E95C09182A498D1EB0A30384950A27EA8BC960BB7FBC10982AD2	3/22/2021	12/31/2028
CN=USERTrust ECC Certification Authority O=The USERTRUST Network L=Jersey City ST=New Jersey C=US	A6CF64DBB4C8D5FD19CE48896068DB03B533A8D1336C6256A87D00CBB3DEF3EA	3/12/2019	12/31/2028
CN=USERTrust RSA Certification Authority O=The USERTRUST Network L=Jersey City ST=New Jersey C=US	68B9C761219A5B1F0131784474665DB61BBDB109E00F05CA9F74244EE5F5F52B	3/12/2019	12/31/2028
CN=UTN-USERFirst-Client Authentication and Email OU=http://www.usertrust.com O=The USERTRUST Network L=Salt Lake City ST=UT C=US	565C82702B5EC63202754D4F4B76CC3BAE32A4C9146ED3BEC73A404FFAD4CDE	1/1/2004	12/31/2028



Subordinate CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=COMODO ECC Code Signing CA O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	2FD42A96C830FD2C552B2C27660EEE9307D84706DE9B75CF39AE750EB221B9EE	1/28/2014	1/27/2029
CN=COMODO ECC Extended Validation Code Signing CA O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	702DB904D41A038C0C9295CF743FC31F2D0EA17CC4228BBFCF81E57B9A1398F9	12/3/2014	12/2/2029
CN=COMODO ECC Extended Validation Secure Server CA O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	06C27461C0417D513CE0F634FAB5ADD30C88EF0E25C84FDE0E42125B88CA0475	4/15/2013	4/14/2028
CN=COMODO RSA Client Authentication and Secure Email CA O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	15FAC425AA84404B362FA3489EB67D055D5DA276F8685C4D698DA1830D420F0F	1/10/2013	1/9/2028
CN=COMODO RSA Code Signing CA O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	5E6D2F88F617DC8B809AEE712445A41B3CDE26AF874A221A9DC98EA1DC68E3D5	5/9/2013	5/8/2028
CN=COMODO RSA Extended Validation Code Signing CA O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	D1863B55A0629F32A5DAD867D02DF1D1A4550B23AC422B53581E79E548FD6617	12/3/2014	12/2/2029
CN=COMODO RSA Extended Validation Secure Server CA O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	7E0E16C0056F41A9F4C61F571503C3BCF079E2BDD8228BF2219AC31200496B5C	2/12/2012	2/11/2027



Subordinate CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=COMODO RSA Extended Validation Secure Server CA O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	CD730E53FE732D8F09D68C2CDBFD1EFD98A855F5E149021C01CB2EEE1D8186E7	2/12/2012	2/11/2027
CN=Trustico RSA Codesigning CA O=The Trustico Group Ltd L=Croydon ST=London C=GB	78CDBC6AA95CAA547448379F8CD3AD01722CAD1C28C7CD016EA3032178B6F90E	9/8/2017	9/8/2027
CN=United Parcel Service, Inc. RSA Codesigning CA O=United Parcel Service, Inc. L=Atlanta ST=GA C=US	6E6CCCCDD7A8830EA2288D3576053295425C05F5EE9DB4B72632A1E269DDD0C3	2/26/2016	2/25/2026
CN=WebNIC Code Signing CA O=WebNIC L=Singapore C=SG	D334D359A9944864B4D08F6B509E370BBE378F71BDED0B239A3AB8BE052A296E	9/23/2019	9/22/2029
CN=Ensured Timestamping CA O=Ensured B.V. L=Heerhugowaard ST=Noord-Holland C=NL	1F54B4B47B9404EE66086C6CF7CA60D236754BCF6EF835B19791CF91592A25D9	11/18/2014	11/17/2029
CN=Ensured Timestamping CA O=Ensured B.V. L=Heerhugowaard ST=Noord-Holland C=NL	E396A793475EB6FF150A64D6133A7EE0A2C7B6775CBEEBA695B90DA01D81A044	10/25/2016	10/24/2031
CN=Sectigo Public Code Signing CA E36 O=Sectigo Limited C=GB	C2CFED7CEBBE2E733E21CAE659A734C83581FB72D321AB565B042EAA84C90CC3	3/22/2021	3/21/2036
CN=Sectigo Public Code Signing CA EV E36 O=Sectigo Limited C=GB	9ECE96BDA8EEC6F28E40D78E0C2D58D57837827EAA23B43176F1C0BE255B993	3/22/2021	3/21/2036
CN=Sectigo Public Code Signing CA EV R36 O=Sectigo Limited C=GB	384E9F98355A133565EB03083B79E71A46F00C21352ED7C06990D841228CBE88	3/22/2021	3/21/2036



Subordinate CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=Sectigo Public Code Signing CA R36 O=Sectigo Limited C=GB	7FB0F58D71130ABE724969F1CDC9B6A8D3274DA18D059229B009A5B9B5557445	3/22/2021	3/21/2036
CN=Sectigo Public Time Stamping CA E36 O=Sectigo Limited C=GB	610154D5822ED07D5E01F67BB9333E316CD7FB37DD9F1F0699066B8639F3217A	3/22/2021	3/21/2036
CN=Sectigo Public Time Stamping CA R36 O=Sectigo Limited C=GB	F74D68FAC08AE231D4A25825B193E51B9FFC494FB321818F1F11535E4F976961	3/22/2021	3/21/2036
CN=CATrust ECC Code Signing CA O=Zhejiang Xinya Network Technology Co., Ltd. C=CN	7944C3B7C0BACC289F489C9E59AA798A87C50B972995F9A7E3298BABED967347	2/24/2023	2/23/2033
CN=CTI ECC Code Signing CA O=Centre Testing International Group Co., Ltd. C=CN	ED2F6940ACCF5E919142F4AEA3FD28CCB7DD6EDB3963A5244129D5399DADEDFB	8/2/2023	8/1/2033
CN=GeoSSL ECC Code Signing CA O=GeoSSL C=CN	912C91F7C302E40FF58DCF21E494B004FC77168DB512C95C20A378F7D11BC679	11/11/2022	11/10/2032
CN=InCommon ECC Code Signing CA 2 O=Internet2 C=US	7B5081166FBEB8D07B63599D0E501E3BC319DA5E5CD553A9A366FF0BBF7A305C	11/16/2022	11/15/2032
CN=RZTrust ECC Code Signing CA O=Zhongxiong Century Credit Co., Ltd C=CN	A8C40CCDBC81CA45BEE1C003145DCE3914B6F124BDC6929B8E96F2DA022A15BC	8/2/2023	8/1/2033
CN=Sectigo ECC Code Signing CA O=Sectigo Limited L=Salford ST=Greater Manchester C=GB	7C143092C96B6459F5430694E26FC2FD3204DB3EA5E23A0D84E1410431D8F3AA	11/2/2018	12/31/2030
CN=Sectigo ECC Extended Validation Code Signing CA O=Sectigo Limited L=Salford ST=Greater Manchester C=GB	2AABE42CB568E95D428D3FAF5B26BE40724ECD997840E0555BD58B62C4EF23	11/2/2018	12/31/2030
CN=Sectigo Partners - Code Signing - ECC O=Sectigo Limited C=GB	8839D2B776751DE68D3312498DBB608C08AA4FE727A5C325DA66AC8064E057D3	3/20/2020	1/18/2038



Subordinate CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=Sectigo Public Code Signing Root E46 O=Sectigo Limited C=GB	B70BC24105AFED250E219296462EF2370D833A570D17231026F52060EFE536C9	3/22/2021	1/18/2038
CN=Sectigo Public Time Stamping Root E46 O=Sectigo Limited C=GB	09D9489103F615AC523015390A3F6F89737D4FF3693BC477157FD2C6D836617D	3/22/2021	1/18/2038
CN=Site Blindado ECC Code Signing CA 3 O=Site Blindado S.A. C=BR	C8474388A65232ABF5C711DFF0245569FF83D81D207F490362CF9538DE2364C7	8/2/2023	8/1/2033
CN=sslTrus ECC Code Signing CA O=sslTrus C=CN	60E035C52B0D8F78F588E54AD22442A5ED581DEC27A762EC03FCD25C1C3F2BE5	8/2/2023	8/1/2033
CN=TrustAsia ECC Code Signing CA G3 O=TrustAsia Technologies, Inc. C=CN	8D8ED18DF5FD229411CB32A37F50CDAA412D1E77E788044E5D6E0F115E91167B	4/20/2022	4/19/2032
CN=USERTrust ECC Code Signing CA O=The USERTRUST Network L=Jersey City ST=New Jersey C=US	345A52F164DF613463C87288426CAD246BAB028245294DDBFA618C6BB3BE3C3C	1/28/2014	1/27/2029
CN=USERTrust ECC Extended Validation Code Signing CA O=The USERTRUST Network L=Jersey City ST=New Jersey C=US	1B97A6F0DBBD90C12070A4B22450C89ED7DA9E00D1B0C1D32C739F91F0544369	12/3/2014	12/2/2029
CN=USERTrust ECC Extended Validation Secure Server CA O=The USERTRUST Network L=Jersey City ST=New Jersey C=US	E81443141E3C1232D06465E11BBD1F6CA7181A3E037F815BB8FAAEADE6BEBED1	4/15/2013	4/14/2028
CN=时代互联 ECC Code Signing CA O=广东时代互联科技有限公司 C=CN	A0EBAF7DE9903D90DA4E6F6CAB5557C71704FCD62DF48E691D86F52D7066B7B0	8/2/2023	8/1/2033
CN=纳网 ECC Code Signing CA O=厦门纳网科技股份有限公司 C=CN	1B82BAC29DD85791FE7A130852AD67AF862E1C728C48F86574DE8669BE319C02	5/20/2023	5/19/2033



Subordinate CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=BlackCert, Inc. RSA Codesigning Certification Authority O=BlackCert, Inc. L=Denver ST=CO C=US	EDB7353E1811E5F37851C620CFC7D45AE828899EB0577E4FE77674C868DCB890	7/17/2015	7/16/2025
CN=CATrust RSA Code Signing CA O=Zhejiang Xinya Network Technology Co., Ltd. C=CN	8C4BDBF8208BC06E6EDCC56446703151CC3FF8DB0A9A36D6EA5DAB32BD981672	2/24/2023	2/23/2033
CN=CerSign Code Signing CA O=CerSign Technology Limited C=CN	BE4CA78B0FB90546FF0D54FDE80FDF49C0EDDFA4D541814E8EF8A42B7A8F5BBF	9/13/2021	9/12/2031
CN=CertAssure RSA Code Signing CA O=CertAssure Inc. L=San Jose ST=CA C=US	F350DA861B51D170567DBCE0DE7BF66BB3340DFC4596216310D4662BC1DEA058	10/14/2014	10/13/2024
CN=CertCloud Code Signing CA O=CertCloud Pte. Ltd. C=SG	42C51E7DEF2F7F41132908A493A3D95677DE19DF4EB793B2622C564B014E866F	8/18/2020	8/17/2030
CN=CERTDATA CODESIGN CA [Run by the Issuer] O=CERTDATA SERVICOS DE INFORMACAO LTDA C=BR	87304E954AAA1D3CD87FD7574FFF3F60D98484774439B13E2F71071A2CFDA095	3/5/2020	3/5/2030
CN=Certera Code Signing CA O=Certera C=US	90FCE751C5F538605C6F1118D9D7361750B078C4F956619569A272924396F0A9	9/7/2022	9/6/2032
CN=CloudSecure RSA Code Signing CA 2 O=CloudSecure Corporation C=JP	CE21274887AE5D3B1038D9514EA1E3F19F22096DB2BD106AEB93E2E3DAEB924A	1/31/2024	1/30/2034
CN=cnTrus Code Signing O=Zhejiang Huluwa Digital Certification Co., Ltd. C=CN	9A09772862D0270357F9C79B70F0DC977807B2FA90056A9BCB7DCC11B3F57CCD	8/24/2022	8/23/2032
CN=cnWebTrust Code Signing O=cnWebTrust Inc C=CN	18F293560DCC769EEA22A13E13B2010BB7361E06D934C0B0268E2935FD40C6AB	6/6/2022	6/5/2032



Subordinate CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=CSP Code Signing Service CA 2 O=CENTRAL SECURITY PATROLS CO., LTD. L=Shinjuku-ku ST=Tokyo C=JP	471E5D0B8E857450C42DAF34293E839769BAAA9664510A15A48B83336BEF0A6C	9/10/2014	9/9/2024
CN=CTI RSA Code Signing CA O=Centre Testing International Group Co., Ltd. C=CN	167F1EB47AA7F4551950356BE663F85029EAF4433C3B4358440EB3918177E9CB	8/2/2023	8/1/2033
CN=Digi-Sign CA Digi-Code O=Digi-Sign Limited L=Dublin ST=County Dublin C=IE	61BAD6899232F6415DE0DEA2D434EA4ECDC0F04EF3B690D7CA23D27D46BB0515	11/7/2014	11/6/2024
CN=DOMENY CODE SIGNING Certification Authority O=DOMENY.PL sp. z o.o L=Kraków ST=Małopolskie C=PL	56ED86ED869AB8863116886312BB9915B89D99A45623E0F065F81CBD56937919	12/2/2014	12/1/2024
CN=Don Dominio / MrDomain RSA Codesigning CA O=Soluciones Corporativas IP, SL L=Manacor ST=Illes Balears C=ES	71EFC303B79F62773A62065090629109137616DAFA3814F764F2A4F2DE308C97	2/16/2018	2/16/2028
CN=EuropeanSSL Code Signing CA O=EUNETIC GmbH C=DE	EF7E3C7B2DCB29E175CC2ED7D9FCAB4F4529381EEA3C10E49F248F035065C2D3	8/4/2021	8/3/2031
CN=FujiSSL OV Code Signing CA (SHA2) O=Nijimo K.K. L=Shibuya-ku ST=Tokyo C=JP	3EC39ACF966CBC17D89BFCF2E07B155B9B04716CDECA73CD864C26F2B2FA9A70	5/15/2019	5/14/2029
CN=GEANT Code Signing CA 4 O=GEANT Vereniging C=NL	D140650B0AA1FC54DF92CB46985337C068214727770947D6788589A52007EA20	2/18/2020	5/1/2033



Subordinate CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=Gehirn Managed Certification Authority - RSA Code Signing O=Gehirn Inc. L=Chiyoda-ku ST=Tokyo C=JP	0DA819E52DD85C6BFC8899635C8BDBB6AF0FB4F28304AE11DB679A67EAB68ED5	3/16/2018	3/15/2028
CN=GeoSSL RSA Code Signing CA O=GeoSSL C=CN	FF980A6A02ABC51D0793B1EFC50EC0CE58A523F8433C4CA7A840935805E7839	11/11/2022	11/10/2032
CN=GoGetSSL RSA Codesigning CA O=GoGetSSL L=Riga C=LV	AB289C60357ED69050DC5E99957F3164CC9CACA3B43E20CB151989D76E32019	9/6/2018	9/5/2028
CN=InCommon RSA Code Signing CA 2 O=Internet2 C=US	F5BCA13952115D00F5F4C61DF9A84B27AB0491D8FEDC9E227AF6BF8794900794	11/16/2022	11/15/2032
CN=InCommon RSA Code Signing CA OU=InCommon O=Internet2 L=Ann Arbor ST=MI C=US	51911C02598A39A245594A781768F9503C546B3EEDB1B7261AFE0FA436E3374F	9/19/2014	9/18/2024
CN=KeyNet Systems RSA Codesigning CA O=KeyNet Systems LLC L=Las Vegas ST=Nevada C=US	EE0F647B0379D3E4BD24B4CDA6F8707B67C44D5511F5A25B31DD2993ED13B991	8/13/2015	8/12/2025
CN=McAfee Code Signing CA 2 O=McAfee, Inc. L=Santa Clara ST=CA C=US	537F60B88A3176F4B2156747DB71F7E2C106684526D9FA7F526B6E9144178B55	10/27/2014	10/26/2024
CN=Omit Security RSA Code Signing CA O=Omit Security, Inc C=US	3E80DE577A485F71A212BDA5637F91A1D7F42EB62A7900C8CDCBBC8ADEFFD13E	4/7/2021	4/6/2031
CN=OneSign OV Code Signing CA O=One Sign Pte. Ltd. L=Singapore ST=Singapore C=SG	3D7FE79C6037C92B2F71E6EE32EA8E4897BE0E524713FA5766FE5070ABAE35B4	6/10/2019	6/9/2029



Subordinate CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=Positiwise Code Signing CA O=Positiwise Software LLC C=US	981995944D4DE95A719DC90E3BAE22A9EF236F4857905ABBF51C638CEF67F873	8/3/2022	8/2/2032
CN=RZTrust RSA Code Signing CA O=Zhongxiong Century Credit Co., Ltd C=CN	FF1A9DC25AA340E466BD303611858BF7F3C56CF6747269E9CACF784A4DD94C71	8/2/2023	8/1/2033
CN=Sectigo Partners - Code Signing - RSA O=Sectigo Limited C=GB	1985E7038D7909BB0370C169971FB33EF705FA3BE9FAD1BF8B2AE7C214E0493F	3/20/2020	1/18/2038
CN=Sectigo Public Code Signing Root R46 O=Sectigo Limited C=GB	17A999FE8BB02FAE28C5EA8B0FDA68AE4828B6B589E13E27D9D5E4017F776418	3/22/2021	1/18/2038
CN=Sectigo Public Time Stamping Root R46 O=Sectigo Limited C=GB	B53AC15CC1AFB6E2AC06828F555BB3BF5BAD8B2BAC1733CE4CB7AAFE729356DE	3/22/2021	1/18/2038
CN=Sectigo RSA Code Signing CA 2 O=Sectigo Limited C=GB	BEAA5952D62D561EBCE61051DF0D10D11D81C153E2B30D2813243F7C88C99E62	5/25/2021	5/24/2036
CN=Sectigo RSA Code Signing CA O=Sectigo Limited L=Salford ST=Greater Manchester C=GB	5051BD69E19D6CD036147949AC5BBCF99834561F119F60DC7938248D61C77BBD	11/2/2018	12/31/2030
CN=Sectigo RSA Document Signing CA O=Sectigo Limited L=Salford ST=Greater Manchester C=GB	B7AAE826FFF72DE3FD6B31881A56221D7077C3D55C64B3940CEDFB7AFD0DCE35	4/24/2019	12/31/2030
CN=Sectigo RSA Extended Validation Code Signing CA O=Sectigo Limited L=Salford ST=Greater Manchester C=GB	FC281B1A254C2A0073D9593F182381BE2787065E3B52213454294C5C2F119537	11/2/2018	12/31/2030
CN=Sectigo RSA Time Stamping CA O=Sectigo Limited L=Salford ST=Greater Manchester C=GB	56D8F6E145B291F5FBA29EB9898CF522BDE7B14AB38929D0A4C4D1DDDABA2A69	5/2/2019	1/18/2038



Subordinate CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=SecureCore RSA Code Signing CA O=SecureCore L=OSAKA ST=OSAKA C=JP	75C155003B1141C5B09FD7DD032E2F413C47195D3B9A5DAF6C4510385CD7B0DA	2/27/2015	2/26/2025
CN=Site Blindado RSA Code Signing CA 3 O=Site Blindado S.A. C=BR	962485623B151A4A1AFC67FDDD1F9C6D238BDE3F8FF76038021CE50153E5F2B6	8/2/2023	8/1/2033
CN=SSL.com Object CA OU=www.ssl.com O=SSL.com C=US	DC85B8A7DF3B1862174AA6FC97143C9E9CC22D6F19A776D5C57E5C1DF700D951	7/4/2014	7/3/2024
CN=sslTrus RSA Code Signing CA O=sslTrus C=CN	714BC8B3AFD7A25C4F58E589A31560B45B00E6500C2E6A238FB9E80E079058BB	8/2/2023	8/1/2033
CN=TERENA Code Signing CA 2 O=TERENA L=Amsterdam ST=Noord-Holland C=NL	042119533A0DB678D0304267DF9F5F1DF197951E02F5E5DB2E60A0165802E21E	10/9/2014	10/8/2024
CN=TrustAsia RSA Code Signing CA G3 O=TrustAsia Technologies, Inc. C=CN	6CBB97B77A29E865DE488578B48CFD1EA5ABC9ABC4872C24DA9B6659124CDFEA	4/20/2022	4/19/2032
CN=TrustAsia RSA Code Signing CA O=TrustAsia Technologies, Inc. ST=Shanghai C=CN	CFC08FBFA21983E425EBF96CCCC4A72AC09E8737BA814202A0D68BDF8C157C22	3/11/2015	3/10/2025
CN=TrustOcean Organization Software Vendor CA O=TrustOcean Limited C=US	4D40B5F2ADE65F92BA487A0DD139DA275612200C1C069551D55761D31AFEF54D	1/29/2020	1/28/2030
CN=USERTrust RSA Code Signing CA O=The USERTRUST Network L=Jersey City ST=New Jersey C=US	9210D3FEB6B1F01ECAF8C7261125758905BF887E8D0B28248CA7FA7284C2F739	1/28/2014	1/27/2029
CN=USERTrust RSA Extended Validation Code Signing CA O=The USERTRUST Network L=Jersey City ST=New Jersey C=US	3EED76DB0A40CBD196DE4FB27CA40480D2A42ACE25FF36291EE1DA1028D61907	12/3/2014	12/2/2029



Subordinate CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=USERTrust RSA Extended Validation Secure Server CA O=The USERTRUST Network L=Jersey City ST=New Jersey C=US	125A5FD7C640D5E59F5CE5763CD8C932F5E597DDDC4EAF1D59667CF4B556A237	2/12/2012	2/11/2027
CN=USERTrust RSA Extended Validation Secure Server CA O=The USERTRUST Network L=Jersey City ST=New Jersey C=US	5367692ECE62B758D04D9B7E6DFB0DB307F859EBC6A6CB5F77FF24561D7CC004	2/12/2012	2/11/2027
CN=Verokey Secure Code O=Verokey C=AU	4900124EA65AF928D72C7730425C0DC5F41B3C634C35B3D1107B635F7F443523	6/25/2021	6/24/2031
CN=XinChaCha Trust Code Signing O=Beijing Xinchacha Credit Management Co., Ltd. C=CN	9D13339294305CD502F10E95F55B768636C4E266A8761CB0D4C8901EF1759ED0	8/24/2022	8/23/2032
CN=ZoTrus Code Signing CA O=ZoTrus Technology Limited C=CN	D321940A165F2C04EA3423D53944361E92F3183732C16D352A966CA2212DDF47	9/13/2021	9/12/2031
CN=ZwTrus Code Signing CA O=北京中万网络科技有限公司 C=CN	A890B08A821B14913E24AE402987AC899DBB5773B3DF49C3F9914351035CD619	6/6/2022	6/5/2032
CN=上海锐成信息科技有限公司 Code Signing CA O=上海锐成信息科技有限公司 C=CN	9670CCA36AF350B9B46ADFE646EDEBBFABCEC01CCF83B819CE7C7864EDCB66C8	6/9/2020	6/9/2030
CN=时代互联 RSA Code Signing CA O=广东时代互联科技有限公司 C=CN	358D207BD3183ECE407AA190C86945437FCF0E1FE1B505C9A8D47DBBE84A22FF	8/2/2023	8/1/2033
CN=纳网 RSA Code Signing CA O=厦门纳网科技股份有限公司 C=CN	DDBFDC548D543C44AF9D9133C577BC3E3C7BBC9D3402E3552166D29222C1FE65	5/20/2023	5/19/2033



Subordinate CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=COMODO/HP Secure Email CA O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	FD029ADE3F7A80A98D6FFFC9429046585EF1D8CB8193A17F6214317D0652D7C3	9/11/2007	12/31/2028
CN=COMODO/PKWARE Secure Email CA O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	COA1CA36475D33B471E4E58E5574DD9294D354C457295954DB555B24EAD2AA4B	11/13/2007	12/31/2028
CN=DREAMHOST SECURE EMAIL CA O=DREAMHOST CERTIFICATION AUTHORITY C=US	E904A057D839BCBE631092B4215DD8CC4F8849BA87B51AAF2728B71E64ACE751	3/4/2009	12/31/2028
CN=EuropeanSSL Client CA O=EUNETIC GmbH C=DE	2618C415C146BA98A5F0AD7EA498AA58780BA55FA8E3B072D13C330D41010717	7/18/2008	12/31/2028
CN=Gandi Secure Email CA O=GANDI SAS C=FR	F017E510918B77DA67E4D020E2B76A42461876E822F620C5573BCBC3BBB37406	10/23/2008	12/31/2028
CN=GlobalSSL Secure E-Mail and Client Authentication CA O=GlobalSSL C=DE	4F2C0C1701BDE01B6BEEDA6D17C336042421AF73117063347F7E97B76AD897F5	8/11/2009	12/31/2028
CN=GLOBE SSL SECURE EMAIL CA O=GLOBE HOSTING CERTIFICATION AUTHORITY C=RO	8F7240F160936F1FD406BF028B35B5D609B64B3BD0E31E13CC6DD9AB7CA12E6F	2/23/2009	12/31/2028
CN=SGTRUST EMAIL AND CLIENT CA O=SGssl C=KR	5F0A35BA4F84A65F68B16D4A33F6517C097708393EAAFD2856FB9A93418719F4	7/3/2009	12/31/2028
CN=TERENA eScience Personal CA O=TERENA C=NL	F405077C7174703B9781C79544A7BE994263854D15173E61A8D19A28CF7A4AB1	5/18/2009	12/31/2028
CN=TERENA Personal CA O=TERENA C=NL	62616E9B11BD0E3A358360C83B78DBC5BEEA575C90B97E68244833FB30437C6B	5/18/2009	12/31/2028
CN=The Code Project Secure Email (S/mime) CA O=The Code Project C=CA	F68A23EB9737A8C744EE67112F2FC024AADC503BBBB04F25CDED4F2576C93485	9/5/2008	12/31/2028



Sectigo Limited
Unit 7 Campus Road
Listerhills Science Park, Bradford
BD7 1HR, United Kingdom

SECTIGO LIMITED MANAGEMENT'S ASSERTION

Sectigo Limited ("Sectigo") operates the Certification Authority (CA) services for the root and other CAs in scope enumerated in [Attachment C](#), and provides Code Signing (CS) CA services.

The management of Sectigo is responsible for establishing and maintaining controls over its CS CA operations, including its CS CA business practices disclosure on its [repository](#), CS key lifecycle management controls, CS certificate lifecycle management controls, and CS Timestamp Authority certificate lifecycle management controls. These controls contain monitoring mechanisms, and actions are taken to correct deficiencies identified.

There are inherent limitations in any controls, including the possibility of human error, and the circumvention or overriding of controls. Accordingly, even effective controls can only provide reasonable assurance with respect to Sectigo's CA operations. Furthermore, because of changes in conditions, the effectiveness of controls may vary over time.


Sectigo management has assessed its disclosures of its certificate practices and controls over its CS CA services. Based on that assessment, in Sectigo management's opinion, in providing its CS CA services in the locations as enumerated in [Attachment B](#), Sectigo has:

- disclosed its code signing ("CS") certificate lifecycle management business practices in the applicable versions of its Sectigo Certification Practice Statement ("CPS") and Sectigo WebPKI Certificate Policy ("CP") enumerated in [Attachment A](#), including its commitment to provide CS certificates in conformity with the applicable Baseline Requirements for the Issuance and Management of Publicly-Trusted Code Signing Certificates, and provided such services in accordance with its disclosed practices
- maintained effective controls to provide reasonable assurance that:
 - CS subscriber information was properly collected, authenticated (for the registration activities performed by Sectigo) and verified;
 - the integrity of keys and CS certificates it manages is established and protected throughout their life cycles.
- maintained effective controls to provide reasonable assurance that its CS Timestamp Authority is operated in conformity with the current version of the CA/Browser Forum Code Signing Working Group requirements.
- maintained effective controls to provide reasonable assurance that:
 - EV CS subscriber information was properly collected, authenticated (for the registration activities performed by Sectigo) and verified;
 - the integrity of keys and EV CS certificates it manages is established and protected throughout their life cycles.



Sectigo Limited
Unit 7 Campus Road
Listerhills Science Park, Bradford
BD7 1HR, United Kingdom

throughout the period April 1, 2023 to March 31, 2024, based on the [WebTrust Principles and Criteria for Certification Authorities - Code Signing Baseline Requirements, v3.2.](#)

DocuSigned by:

6/24/2024
DC419D56E2C04C0...
Tim Callan
Chief Compliance Officer



Sectigo Limited
Unit 7 Campus Road
Listerhills Science Park, Bradford
BD7 1HR, United Kingdom

ATTACHMENT A - CERTIFICATION PRACTICE STATEMENT AND CERTIFICATE POLICY VERSIONS IN-SCOPE

Certificate Policy

Policy Name	Version	Effective Date
Sectigo WebPKI Certificate Policy	1.3.4	February 7, 2024
Sectigo WebPKI Certificate Policy	1.3.3	March 23, 2023

Certification Practice Statement

Policy Name	Version	Effective Date
Sectigo Certification Practice Statement	5.4.1	February 7, 2024
Sectigo Certification Practice Statement	5.4.0	August 31, 2023
Sectigo Certification Practice Statement	5.3.7	May 17, 2023
Sectigo Certification Practice Statement	5.3.6	March 23, 2023



ATTACHMENT B - LOCATIONS IN-SCOPE

Location	Function
Secaucus, NJ, United States of America	Datacenter Facility
Manchester, United Kingdom	Datacenter Facility
Amsterdam (West), The Netherlands	Datacenter Facility
Amsterdam (South), The Netherlands	Datacenter Facility
Bradford, United Kingdom	Back-end Office Support
Chennai, India	Back-end Office Support
Iași, Romania	Back-end Office Support
Kanata, ON, Canada	Back-end Office Support
Roseland, NJ, United States of America ¹	Back-end Office Support
Lille, France	Back-end Office Support
Alkmaar, The Netherlands	Back-end Office Support
Scottsdale, AZ, United States of America ²	Back-end Office Support

¹ As of December 31st, 2023, use of this office was discontinued for the remainder of the period.

² As of December 1st, 2023, this office is in scope.



ATTACHMENT C - CAs IN-SCOPE FOR CODE SIGNING AND EV CODE SIGNING

Root CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=AAA Certificate Services O=Comodo CA Limited L=Salford ST=Greater Manchester C=GB	D7A7A0FB5D7E2731D771E9484EBCDEF71D5F0C3E0A2948782BC83EE0EA699EF4	1/1/2004	12/31/2028
CN=COMODO Certification Authority O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	0C2CD63DF7806FA399EDE809116B575BF87989F06518F9808C860503178BAF66	12/1/2006	12/31/2029
CN=COMODO Certification Authority O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	1A0D20445DE5BA1862D19EF880858CBCE50102B36E8F0A040C3C69E74522FE6E	1/1/2011	12/31/2030
CN=COMODO ECC Certification Authority O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	1793927A0614549789ADCE2F8F34F7F0B66D0F3AE3A3B84D21EC15DBBA4FADC7	3/6/2008	1/18/2038
CN=COMODO RSA Certification Authority O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	52F0E1C4E58EC629291B60317F074671B85D7EA80D5B07273463534B32B40234	1/19/2010	1/18/2038
CN=Ensured Root CA O=Ensured B.V. L=Heerhugowaard ST=Noord-Holland C=NL	E99BA2CEF1B86154C7362AD2001C3DB99083F155769B69B6280E0BC7E8672AA4	11/11/2014	1/18/2038
CN=Ensured Root CA O=Ensured B.V. L=Heerhugowaard ST=Noord-Holland C=NL	100CF7E1373EBDAE233E5F8B1A5385FDABFEE8A31F752E33219D343DE3AFBC9C	7/23/2015	1/18/2038
CN=Sectigo Public Code Signing Root E46 O=Sectigo Limited C=GB	8F6371D8CC5AA7CA149667A98B5496398951E4319F7AFBCC6A660D673E438D0B	3/22/2021	3/21/2046



Sectigo Limited
 Unit 7 Campus Road
 Listerhills Science Park, Bradford
 BD7 1HR, United Kingdom

Root CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=Sectigo Public Code Signing Root R46 O=Sectigo Limited C=GB	7E76260AE69A55D3F060B0FD18B2A8C01443C87B60791030C9FA0B0585101A38	3/22/2021	3/21/2046
CN=Sectigo Public Root E46 O=Sectigo Limited C=GB	56C9A62B261589B0F5CD71E2E2C2E569D74B51A831B7ACB6A7FA4EB238EFC2FF	3/22/2021	3/21/2046
CN=Sectigo Public Root R46 O=Sectigo Limited C=GB	E3B08CB86E2D62C9DA72992069CB0AC4ECBB5BD895581C24CD301C5756F78BF4	3/22/2021	3/21/2046
CN=Sectigo Public Time Stamping Root E46 O=Sectigo Limited C=GB	E44DDB7952261F15005CD60C1D0C38C18CBFD17C273A31F8ED4C8F53E2685F32	3/22/2021	3/21/2046
CN=Sectigo Public Time Stamping Root R46 O=Sectigo Limited C=GB	4941B001B8A97E961B7817C9D9E960EC4B056BFC915A8C1AABF6EF6B3AC046A5	3/22/2021	3/21/2046
CN=USERTrust ECC Certification Authority O=The USERTRUST Network L=Jersey City ST=New Jersey C=US	4FF460D54B9C86DABFBCFC5712E0400D2BED3FBC4D4FBDAA86E06ADCD2A9AD7A	2/1/2010	1/18/2038
CN=USERTrust RSA Certification Authority O=The USERTRUST Network L=Jersey City ST=New Jersey C=US	E793C9B02FD8AA13E21C31228ACCB08119643B749C898964B1746D46C3D4CBD2	2/1/2010	1/18/2038



Sectigo Limited
 Unit 7 Campus Road
 Listerhills Science Park, Bradford
 BD7 1HR, United Kingdom

Subordinate CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=COMODO ECC Certification Authority O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	53612513970B9F264CA4BCC3BFD84DBC5FE774E3C6295B3EBB99EB9D74069E2A	1/1/2004	12/31/2028
CN=COMODO RSA Certification Authority O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	38392F17CE7B682C198D29C6E71D2740964A2074C8D2558E6CFF64C27823F129	1/1/2004	12/31/2028
CN=Sectigo Public Code Signing Root E46 O=Sectigo Limited C=GB	DB44CB073B747CB2ADDFADA3B7A6BF855E0A278194BE6DC28113CE97A7ED26BB	2/28/2023	12/31/2028
CN=Sectigo Public Code Signing Root R46 O=Sectigo Limited C=GB	7DB9F7402A523DD338663B33D55AAD0DD08CB67E687DF0D4D98E7C5FCA27EFD1	5/25/2021	12/31/2028
CN=Sectigo Public Time Stamping Root E46 O=Sectigo Limited C=GB	71A851AC67886D088B6262400BCAC7EFFC6B37EC1960DB8F2602A8509D890AA7	3/22/2021	12/31/2028
CN=Sectigo Public Time Stamping Root R46 O=Sectigo Limited C=GB	9C502040A5C9E95C09182A498D1EB0A30384950A27EA8BC960BB7FBC10982AD2	3/22/2021	12/31/2028
CN=USERTrust ECC Certification Authority O=The USERTRUST Network L=Jersey City ST=New Jersey C=US	A6CF64DBB4C8D5FD19CE48896068DB03B533A8D1336C6256A87D00CBB3DEF3EA	3/12/2019	12/31/2028
CN=USERTrust RSA Certification Authority O=The USERTRUST Network L=Jersey City ST=New Jersey C=US	68B9C761219A5B1F0131784474665DB61BBDB109E00F05CA9F74244EE5F5F52B	3/12/2019	12/31/2028
CN=UTN-USERFirst-Client Authentication and Email OU=http://www.usertrust.com O=The USERTRUST Network L=Salt Lake City ST=UT C=US	565C82702B5EC63202754D4F4B76CC3BAE32A4C9146ED3BECDD73A404FFAD4CDE	1/1/2004	12/31/2028



Sectigo Limited
 Unit 7 Campus Road
 Listerhills Science Park, Bradford
 BD7 1HR, United Kingdom

Subordinate CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=COMODO ECC Code Signing CA O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	2FD42A96C830FD2C552B2C27660EEE9307D84706DE9B75CF39AE750EB221B9EE	1/28/2014	1/27/2029
CN=COMODO ECC Extended Validation Code Signing CA O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	702DB904D41A038C0C9295CF743FC31F2D0EA17CC4228BBFCF81E57B9A1398F9	12/3/2014	12/2/2029
CN=COMODO ECC Extended Validation Secure Server CA O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	06C27461C0417D513CE0F634FAB5ADD30C88EF0E25C84FDE0E42125B88CA0475	4/15/2013	4/14/2028
CN=COMODO RSA Client Authentication and Secure Email CA O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	15FAC425AA84404B362FA3489EB67D055D5DA276F8685C4D698DA1830D420F0F	1/10/2013	1/9/2028
CN=COMODO RSA Code Signing CA O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	5E6D2F88F617DC8B809AEE712445A41B3CDE26AF874A221A9DC98EA1DC68E3D5	5/9/2013	5/8/2028
CN=COMODO RSA Extended Validation Code Signing CA O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	D1863B55A0629F32A5DAD867D02DF1D1A4550B23AC422B53581E79E548FD6617	12/3/2014	12/2/2029
CN=COMODO RSA Extended Validation Secure Server CA O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	7E0E16C0056F41A9F4C61F571503C3BCF079E2BDD8228BF2219AC31200496B5C	2/12/2012	2/11/2027



Sectigo Limited
 Unit 7 Campus Road
 Listerhills Science Park, Bradford
 BD7 1HR, United Kingdom

Subordinate CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=COMODO RSA Extended Validation Secure Server CA O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	CD730E53FE732D8F09D68C2CDBFD1EFD98A855F5E149021C01CB2EEE1D8186E7	2/12/2012	2/11/2027
CN=Trustico RSA Codesigning CA O=The Trustico Group Ltd L=Croydon ST=London C=GB	78CDBC6AA95CAA547448379F8CD3AD01722CAD1C28C7CD016EA3032178B6F90E	9/8/2017	9/8/2027
CN=United Parcel Service, Inc. RSA Codesigning CA O=United Parcel Service, Inc. L=Atlanta ST=GA C=US	6E6CCCCDD7A8830EA2288D3576053295425C05F5EE9DB4B72632A1E269DDDD0C3	2/26/2016	2/25/2026
CN=WebNIC Code Signing CA O=WebNIC L=Singapore C=SG	D334D359A9944864B4D08F6B509E370BBE378F71BDED0B239A3AB8BE052A296E	9/23/2019	9/22/2029
CN=Ensured Timestamping CA O=Ensured B.V. L=Heerhugowaard ST=Noord-Holland C=NL	1F54B4B47B9404EE66086C6CF7CA60D236754BCF6EF835B19791CF91592A25D9	11/18/2014	11/17/2029
CN=Ensured Timestamping CA O=Ensured B.V. L=Heerhugowaard ST=Noord-Holland C=NL	E396A793475EB6FF150A64D6133A7EE0A2C7B6775CBEEBA695B90DA01D81A044	10/25/2016	10/24/2031
CN=Sectigo Public Code Signing CA E36 O=Sectigo Limited C=GB	C2CFED7CEBBE2E733E21CAE659A734C83581FB72D321AB565B042EAA84C90CC3	3/22/2021	3/21/2036
CN=Sectigo Public Code Signing CA EV E36 O=Sectigo Limited C=GB	9ECEEE96BDA8EEC6F28E40D78E0C2D58D57837827EAA23B43176F1C0BE255B993	3/22/2021	3/21/2036
CN=Sectigo Public Code Signing CA EV R36 O=Sectigo Limited C=GB	384E9F98355A133565EB03083B79E71A46F00C21352ED7C06990D841228CBE88	3/22/2021	3/21/2036



Sectigo Limited
 Unit 7 Campus Road
 Listerhills Science Park, Bradford
 BD7 1HR, United Kingdom

Subordinate CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=Sectigo Public Code Signing CA R36 O=Sectigo Limited C=GB	7FB0F58D71130ABE724969F1CDC9B6A8D3274DA18D059229B009A5B9B5557445	3/22/2021	3/21/2036
CN=Sectigo Public Time Stamping CA E36 O=Sectigo Limited C=GB	610154D5822ED07D5E01F67BB9333E316CD7FB37DD9F1F0699066B8639F3217A	3/22/2021	3/21/2036
CN=Sectigo Public Time Stamping CA R36 O=Sectigo Limited C=GB	F74D68FAC08AE231D4A25825B193E51B9FFC494FB321818F1F11535E4F976961	3/22/2021	3/21/2036
CN=CATrust ECC Code Signing CA O=Zhejiang Xinya Network Technology Co., Ltd. C=CN	7944C3B7C0BACC289F489C9E59AA798A87C50B972995F9A7E3298BABED967347	2/24/2023	2/23/2033
CN=CTI ECC Code Signing CA O=Centre Testing International Group Co., Ltd. C=CN	ED2F6940ACCF5E919142F4AEA3FD28CCB7DD6EDB3963A5244129D5399DADEDFB	8/2/2023	8/1/2033
CN=GeoSSL ECC Code Signing CA O=GeoSSL C=CN	912C91F7C302E40FF58DCF21E494B004FC77168DB512C95C20A378F7D11BC679	11/11/2022	11/10/2032
CN=InCommon ECC Code Signing CA 2 O=Internet2 C=US	7B5081166FBEB8D07B63599D0E501E3BC319DA5E5CD553A9A366FF0BBF7A305C	11/16/2022	11/15/2032
CN=RZTrust ECC Code Signing CA O=Zhongxiong Century Credit Co., Ltd C=CN	A8C40CCDBC1CA45BEE1C003145DCE3914B6F124BDC6929B8E96F2DA022A15BC	8/2/2023	8/1/2033
CN=Sectigo ECC Code Signing CA O=Sectigo Limited L=Salford ST=Greater Manchester C=GB	7C143092C96B6459F5430694E26FC2FD3204DB3EA5E23A0D84E1410431D8F3AA	11/2/2018	12/31/2030
CN=Sectigo ECC Extended Validation Code Signing CA O=Sectigo Limited L=Salford ST=Greater Manchester C=GB	2AABE42CB568E95D428D3FAF5B26BE40724ECD997840E0555BD58B62C4EF23	11/2/2018	12/31/2030
CN=Sectigo Partners - Code Signing - ECC O=Sectigo Limited C=GB	8839D2B776751DE68D3312498DBB608C08AA4FE727A5C325DA66AC8064E057D3	3/20/2020	1/18/2038



Sectigo Limited
 Unit 7 Campus Road
 Listerhills Science Park, Bradford
 BD7 1HR, United Kingdom

Subordinate CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=Sectigo Public Code Signing Root E46 O=Sectigo Limited C=GB	B70BC24105AFED250E219296462EF2370D833A570D17231026F52060EFE536C9	3/22/2021	1/18/2038
CN=Sectigo Public Time Stamping Root E46 O=Sectigo Limited C=GB	09D9489103F615AC523015390A3F6F89737D4FF3693BC477157FD2C6D836617D	3/22/2021	1/18/2038
CN=Site Blindado ECC Code Signing CA 3 O=Site Blindado S.A. C=BR	C8474388A65232ABF5C711DFF0245569FF83D81D207F490362CF9538DE2364C7	8/2/2023	8/1/2033
CN=sslTrus ECC Code Signing CA O=sslTrus C=CN	60E035C52B0D8F78F588E54AD22442A5ED581DEC27A762EC03FCD25C1C3F2BE5	8/2/2023	8/1/2033
CN=TrustAsia ECC Code Signing CA G3 O=TrustAsia Technologies, Inc. C=CN	8D8ED18DF5FD229411CB32A37F50CDA412D1E77E788044E5D6E0F115E91167B	4/20/2022	4/19/2032
CN=USERTrust ECC Code Signing CA O=The USERTRUST Network L=Jersey City ST=New Jersey C=US	345A52F164DF613463C87288426CAD246BAB028245294DDBFA618C6BB3BE3C3C	1/28/2014	1/27/2029
CN=USERTrust ECC Extended Validation Code Signing CA O=The USERTRUST Network L=Jersey City ST=New Jersey C=US	1B97A6F0DBBD90C12070A4B22450C89ED7DA9E00D1B0C1D32C739F91F0544369	12/3/2014	12/2/2029
CN=USERTrust ECC Extended Validation Secure Server CA O=The USERTRUST Network L=Jersey City ST=New Jersey C=US	E81443141E3C1232D06465E11BBD1F6CA7181A3E037F815BB8FAAEADE6BEBED1	4/15/2013	4/14/2028
CN=时代互联 ECC Code Signing CA O=广东时代互联科技有限公司 C=CN	A0EBAF7DE9903D90DA4E6F6CAB5557C71704FCD62DF48E691D86F52D7066B7B0	8/2/2023	8/1/2033
CN=纳网 ECC Code Signing CA O=厦门纳网科技股份有限公司 C=CN	1B82BAC29DD85791FE7A130852AD67AF862E1C728C48F86574DE8669BE319C02	5/20/2023	5/19/2033



Sectigo Limited
 Unit 7 Campus Road
 Listerhills Science Park, Bradford
 BD7 1HR, United Kingdom

Subordinate CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=BlackCert, Inc. RSA Codesigning Certification Authority O=BlackCert, Inc. L=Denver ST=CO C=US	EDB7353E1811E5F37851C620CFC7D45AE828899EB0577E4FE77674C868DCB890	7/17/2015	7/16/2025
CN=CATrust RSA Code Signing CA O=Zhejiang Xinya Network Technology Co., Ltd. C=CN	8C4BDBF8208BC06E6EDCC56446703151CC3FF8DB0A9A36D6EA5DAB32BD981672	2/24/2023	2/23/2033
CN=CerSign Code Signing CA O=CerSign Technology Limited C=CN	BE4CA78B0FB90546FF0D54FDE80FDF49C0EDDFA4D541814E8EF8A42B7A8F5BBF	9/13/2021	9/12/2031
CN=CertAssure RSA Code Signing CA O=CertAssure Inc. L=San Jose ST=CA C=US	F350DA861B51D170567DBCE0DE7BF66BB3340DFC4596216310D4662BC1DEA058	10/14/2014	10/13/2024
CN=CertCloud Code Signing CA O=CertCloud Pte. Ltd. C=SG	42C51E7DEF2F7F41132908A493A3D95677DE19DF4EB793B2622C564B014E866F	8/18/2020	8/17/2030
CN=CERTDATA CODESIGN CA [Run by the Issuer] O=CERTDATA SERVICOS DE INFORMACAO LTDA C=BR	87304E954AAA1D3CD87FD7574FFF3F60D98484774439B13E2F71071A2CFDA095	3/5/2020	3/5/2030
CN=Certera Code Signing CA O=Certera C=US	90FCE751C5F538605C6F1118D9D7361750B078C4F956619569A272924396F0A9	9/7/2022	9/6/2032
CN=CloudSecure RSA Code Signing CA 2 O=CloudSecure Corporation C=JP	CE21274887AE5D3B1038D9514EA1E3F19F22096DB2BD106AEB93E2E3DAEB924A	1/31/2024	1/30/2034
CN=cnTrus Code Signing O=Zhejiang Huluwa Digital Certification Co., Ltd. C=CN	9A09772862D0270357F9C79B70F0DC977807B2FA90056A9BCB7DCC11B3F57CCD	8/24/2022	8/23/2032
CN=cnWebTrust Code Signing O=cnWebTrust Inc C=CN	18F293560DCC769EEA22A13E13B2010BB7361E06D934C0B0268E2935FD40C6AB	6/6/2022	6/5/2032



Sectigo Limited
 Unit 7 Campus Road
 Listerhills Science Park, Bradford
 BD7 1HR, United Kingdom

Subordinate CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=CSP Code Signing Service CA 2 O=CENTRAL SECURITY PATROLS CO., LTD. L=Shinjuku-ku ST=Tokyo C=JP	471E5D0B8E857450C42DAF34293E839769BAAA9664510A15A48B83336BEF0A6C	9/10/2014	9/9/2024
CN=CTI RSA Code Signing CA O=Centre Testing International Group Co., Ltd. C=CN	167F1EB47AA7F4551950356BE663F85029EAF4433C3B4358440EB3918177E9CB	8/2/2023	8/1/2033
CN=Digi-Sign CA Digi-Code O=Digi-Sign Limited L=Dublin ST=County Dublin C=IE	61BAD6899232F6415DE0DEA2D434EA4ECDC0F04EF3B690D7CA23D27D46BB0515	11/7/2014	11/6/2024
CN=DOMENY CODE SIGNING Certification Authority O=DOMENY.PL sp. z o.o L=Kraków ST=Małopolskie C=PL	56ED86ED869AB8863116886312BB9915B89D99A45623E0F065F81CBD56937919	12/2/2014	12/1/2024
CN=Don Dominio / MrDomain RSA Codesigning CA O=Soluciones Corporativas IP, SL L=Manacor ST=Illes Balears C=ES	71EFC303B79F62773A62065090629109137616DAFA3814F764F2A4F2DE308C97	2/16/2018	2/16/2028
CN=EuropeanSSL Code Signing CA O=EUNETIC GmbH C=DE	EF7E3C7B2DCB29E175CC2ED7D9FCAB4F4529381EEA3C10E49F248F035065C2D3	8/4/2021	8/3/2031
CN=FujiSSL OV Code Signing CA (SHA2) O=Nijimo K.K. L=Shibuya-ku ST=Tokyo C=JP	3EC39ACF966CBC17D89BFCF2E07B155B9B04716CDECA73CD864C26F2B2FA9A70	5/15/2019	5/14/2029
CN=GEANT Code Signing CA 4 O=GEANT Vereniging C=NL	D140650B0AA1FC54DF92CB46985337C068214727770947D6788589A52007EA20	2/18/2020	5/1/2033



Subordinate CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=Gehirn Managed Certification Authority - RSA Code Signing O=Gehirn Inc. L=Chiyoda-ku ST=Tokyo C=JP	0DA819E52DD85C6BFC8899635C8BDBB6AF0FB4F28304AE11DB679A67EAB68ED5	3/16/2018	3/15/2028
CN=GeoSSL RSA Code Signing CA O=GeoSSL C=CN	FF980A6A02ABC51D0793B1EFC50EC0CE58A523F8433C4CA7A840935805E7839	11/11/2022	11/10/2032
CN=GoGetSSL RSA Codesigning CA O=GoGetSSL L=Riga C=LV	AB289C60357ED69050DC5E99957F3164CC9CACA3B43E20CB151989D76E32019	9/6/2018	9/5/2028
CN=InCommon RSA Code Signing CA 2 O=Internet2 C=US	F5BCA13952115D00F5F4C61DF9A84B27AB0491D8FEDC9E227AF6BF8794900794	11/16/2022	11/15/2032
CN=InCommon RSA Code Signing CA OU=InCommon O=Internet2 L=Ann Arbor ST=MI C=US	51911C02598A39A245594A781768F9503C546B3EEDB1B7261AFE0FA436E3374F	9/19/2014	9/18/2024
CN=KeyNet Systems RSA Codesigning CA O=KeyNet Systems LLC L=Las Vegas ST=Nevada C=US	EE0F647B0379D3E4BD24B4CDA6F8707B67C44D5511F5A25B31DD2993ED13B991	8/13/2015	8/12/2025
CN=McAfee Code Signing CA 2 O=McAfee, Inc. L=Santa Clara ST=CA C=US	537F60B88A3176F4B2156747DB71F7E2C106684526D9FA7F526B6E9144178B55	10/27/2014	10/26/2024
CN=Omit Security RSA Code Signing CA O=Omit Security, Inc C=US	3E80DE577A485F71A212BDA5637F91A1D7F42EB62A7900C8CDCBBC8ADEFFD13E	4/7/2021	4/6/2031
CN=OneSign OV Code Signing CA O=One Sign Pte. Ltd. L=Singapore ST=Singapore C=SG	3D7FE79C6037C92B2F71E6EE32EA8E4897BE0E524713FA5766FE5070ABAE35B4	6/10/2019	6/9/2029



Sectigo Limited
 Unit 7 Campus Road
 Listerhills Science Park, Bradford
 BD7 1HR, United Kingdom

Subordinate CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=Positiwise Code Signing CA O=Positiwise Software LLC C=US	981995944D4DE95A719DC90E3BAE22A9EF236F4857905ABBF51C638CEF67F873	8/3/2022	8/2/2032
CN=RZTrust RSA Code Signing CA O=Zhongxiong Century Credit Co., Ltd C=CN	FF1A9DC25AA340E466BD303611858BF7F3C56CF6747269E9CACF784A4DD94C71	8/2/2023	8/1/2033
CN=Sectigo Partners - Code Signing - RSA O=Sectigo Limited C=GB	1985E7038D7909BB0370C169971FB33EF705FA3BE9FAD1BF8B2AE7C214E0493F	3/20/2020	1/18/2038
CN=Sectigo Public Code Signing Root R46 O=Sectigo Limited C=GB	17A999FE8BB02FAE28C5EA8B0FDA68AE4828B6B589E13E27D9D5E4017F776418	3/22/2021	1/18/2038
CN=Sectigo Public Time Stamping Root R46 O=Sectigo Limited C=GB	B53AC15CC1AFB6E2AC06828F555BB3BF5BAD8B2BAC1733CE4CB7AAFE729356DE	3/22/2021	1/18/2038
CN=Sectigo RSA Code Signing CA 2 O=Sectigo Limited C=GB	BEAA5952D62D561EBCE61051DF0D10D11D81C153E2B30D2813243F7C88C99E62	5/25/2021	5/24/2036
CN=Sectigo RSA Code Signing CA O=Sectigo Limited L=Salford ST=Greater Manchester C=GB	5051BD69E19D6CD036147949AC5BBCF99834561F119F60DC7938248D61C77BBD	11/2/2018	12/31/2030
CN=Sectigo RSA Document Signing CA O=Sectigo Limited L=Salford ST=Greater Manchester C=GB	B7AAE826FFF72DE3FD6B31881A56221D7077C3D55C64B3940CEDFB7AFD0DCE35	4/24/2019	12/31/2030
CN=Sectigo RSA Extended Validation Code Signing CA O=Sectigo Limited L=Salford ST=Greater Manchester C=GB	FC281B1A254C2A0073D9593F182381BE2787065E3B52213454294C5C2F119537	11/2/2018	12/31/2030
CN=Sectigo RSA Time Stamping CA O=Sectigo Limited L=Salford ST=Greater Manchester C=GB	56D8F6E145B291F5FBA29EB9898CF522BDE7B14AB38929D0A4C4D1DDDABA2A69	5/2/2019	1/18/2038



Sectigo Limited
 Unit 7 Campus Road
 Listerhills Science Park, Bradford
 BD7 1HR, United Kingdom

Subordinate CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=SecureCore RSA Code Signing CA O=SecureCore L=OSAKA ST=OSAKA C=JP	75C155003B1141C5B09FD7DD032E2F413C47195D3B9A5DAF6C4510385CD7B0DA	2/27/2015	2/26/2025
CN=Site Blindado RSA Code Signing CA 3 O=Site Blindado S.A. C=BR	962485623B151A4A1AFC67FDDD1F9C6D238BDE3F8FF76038021CE50153E5F2B6	8/2/2023	8/1/2033
CN=SSL.com Object CA OU=www.ssl.com O=SSL.com C=US	DC85B8A7DF3B1862174AA6FC97143C9E9CC22D6F19A776D5C57E5C1DF700D951	7/4/2014	7/3/2024
CN=sslTrus RSA Code Signing CA O=sslTrus C=CN	714BC8B3AFD7A25C4F58E589A31560B45B00E6500C2E6A238FB9E80E079058BB	8/2/2023	8/1/2033
CN=TERENA Code Signing CA 2 O=TERENA L=Amsterdam ST=Noord-Holland C=NL	042119533A0DB678D0304267DF9F5F1DF197951E02F5E5DB2E60A0165802E21E	10/9/2014	10/8/2024
CN=TrustAsia RSA Code Signing CA G3 O=TrustAsia Technologies, Inc. C=CN	6CBB97B77A29E865DE488578B48CFD1EA5ABC9ABC4872C24DA9B6659124CDFEA	4/20/2022	4/19/2032
CN=TrustAsia RSA Code Signing CA O=TrustAsia Technologies, Inc. ST=Shanghai C=CN	CFC08FBFA21983E425EBF96CCCC4A72AC09E8737BA81420A0D68BDF8C157C22	3/11/2015	3/10/2025
CN=TrustOcean Organization Software Vendor CA O=TrustOcean Limited C=US	4D40B5F2ADE65F92BA487A0DD139DA275612200C1C069551D55761D31AFEF54D	1/29/2020	1/28/2030
CN=USERTrust RSA Code Signing CA O=The USERTRUST Network L=Jersey City ST=New Jersey C=US	9210D3FEB6B1F01ECA8C7261125758905BF887E8D0B28248CA7FA7284C2F739	1/28/2014	1/27/2029
CN=USERTrust RSA Extended Validation Code Signing CA O=The USERTRUST Network L=Jersey City ST=New Jersey C=US	3EED76DB0A40CBD196DE4FB27CA40480D2A42ACE25FF36291EE1DA1028D61907	12/3/2014	12/2/2029



Subordinate CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=USERTrust RSA Extended Validation Secure Server CA O=The USERTRUST Network L=Jersey City ST=New Jersey C=US	125A5FD7C640D5E59F5CE5763CD8C932F5E597DDDC4EAF1D59667CF4B556A237	2/12/2012	2/11/2027
CN=USERTrust RSA Extended Validation Secure Server CA O=The USERTRUST Network L=Jersey City ST=New Jersey C=US	5367692ECE62B758D04D9B7E6DFB0DB307F859EBC6A6CB5F77FF24561D7CC004	2/12/2012	2/11/2027
CN=Verokey Secure Code O=Verokey C=AU	4900124EA65AF928D72C7730425C0DC5F41B3C634C35B3D1107B635F7F443523	6/25/2021	6/24/2031
CN=XinChaCha Trust Code Signing O=Beijing Xinchacha Credit Management Co., Ltd. C=CN	9D13339294305CD502F10E95F55B768636C4E266A8761CB0D4C8901EF1759ED0	8/24/2022	8/23/2032
CN=ZoTrus Code Signing CA O=ZoTrus Technology Limited C=CN	D321940A165F2C04EA3423D53944361E92F3183732C16D352A966CA2212DDF47	9/13/2021	9/12/2031
CN=ZwTrus Code Signing CA O=北京中万网络科技有限责任公司 C=CN	A890B08A821B14913E24AE402987AC899DBB5773B3DF49C3F9914351035CD619	6/6/2022	6/5/2032
CN=上海锐成信息科技有限公司 Code Signing CA O=上海锐成信息科技有限公司 C=CN	9670CCA36AF350B9B46ADFE646EDEBBFABCEC01CCF83B819CE7C7864EDCB66C8	6/9/2020	6/9/2030
CN=时代互联 RSA Code Signing CA O=广东时代互联科技有限公司 C=CN	358D207BD3183ECE407AA190C86945437FCF0E1FE1B505C9A8D47DBBE84A22FF	8/2/2023	8/1/2033
CN=纳网 RSA Code Signing CA O=厦门纳网科技股份有限公司 C=CN	DDBFDC548D543C44AF9D9133C577BC3E3C7BBC9D3402E3552166D29222C1FE65	5/20/2023	5/19/2033



Subordinate CA Certificates			
Subject DN	SHA-256 Thumbprint	Valid From	Valid To
CN=COMODO/HP Secure Email CA O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	FD029ADE3F7A80A98D6FFFC9429046585EF1D8CB8193A17F6214317D0652D7C3	9/11/2007	12/31/2028
CN=COMODO/PKWARE Secure Email CA O=COMODO CA Limited L=Salford ST=Greater Manchester C=GB	C0A1CA36475D33B471E4E58E5574DD9294D354C457295954DB555B24EAD2AA4B	11/13/2007	12/31/2028
CN=DREAMHOST SECURE EMAIL CA O=DREAMHOST CERTIFICATION AUTHORITY C=US	E904A057D839BCBE631092B4215DD8CC4F8849BA87B51AAF2728B71E64ACE751	3/4/2009	12/31/2028
CN=EuropeanSSL Client CA O=EUNETIC GmbH C=DE	2618C415C146BA98A5F0AD7EA498AA58780BA55FA8E3B072D13C330D41010717	7/18/2008	12/31/2028
CN=Gandi Secure Email CA O=GANDI SAS C=FR	F017E510918B77DA67E4D020E2B76A42461876E822F620C5573BCBC3BBB37406	10/23/2008	12/31/2028
CN=GlobalSSL Secure E-Mail and Client Authentication CA O=GlobalSSL C=DE	4F2C0C1701BDE01B6BEEEDA6D17C336042421AF73117063347F7E97B76AD897F5	8/11/2009	12/31/2028
CN=GLOBE SSL SECURE EMAIL CA O=GLOBE HOSTING CERTIFICATION AUTHORITY C=RO	8F7240F160936F1FD406BF028B35B5D609B64B3BD0E31E13CC6DD9AB7CA12E6F	2/23/2009	12/31/2028
CN=SGTRUST EMAIL AND CLIENT CA O=SGssl C=KR	5F0A35BA4F84A65F68B16D4A33F6517C097708393EAAFD2856FB9A93418719F4	7/3/2009	12/31/2028
CN=TERENA eScience Personal CA O=TERENA C=NL	F405077C7174703B9781C79544A7BE994263854D15173E61A8D19A28CF7A4AB1	5/18/2009	12/31/2028
CN=TERENA Personal CA O=TERENA C=NL	62616E9B11BD0E3A358360C83B78DBC5BEEA575C90B97E68244833FB30437C6B	5/18/2009	12/31/2028
CN=The Code Project Secure Email (S/mime) CA O=The Code Project C=CA	F68A23EB9737A8C744EE67112F2FC024AADC503BBBB04F25CDED4F2576C93485	9/5/2008	12/31/2028