REPORT OF THE INDEPENDENT ACCOUNTANT

To the management of DigiCert, Inc. ("DigiCert"):

Scope

We have examined DigiCert management's assertion, that for its Certification Authority ("CA") operations in the locations as enumerated in Attachment A, for its CAs enumerated in Attachment B, DigiCert has:

- disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in the applicable versions of its DigiCert Certification Practices Statement ("CPS"), DigiCert Certificate Policy ("CP") and DigiCert Certificate Policy and Certification Practices Statement for Public Trust Store PKI Services ("CP/CPS") as enumerated in Attachment A

- maintained effective controls to provide reasonable assurance that:
  - the applicable versions of its CPS and CP/CPS are consistent with the applicable versions of its CP; and
  - DigiCert provides its services in accordance with its CP, CPS and CP/CPS

- maintained effective controls to provide reasonable assurance that:
  - the integrity of keys and certificates it manages is established and protected throughout their lifecycles;
  - the integrity of subscriber keys and certificates it manages is established and protected throughout their lifecycles;
  - subscriber information is properly authenticated (for the registration activities performed by DigiCert); and
  - subordinate CA certificate requests are accurate, authenticated, and approved

- maintained effective controls to provide reasonable assurance that:
  - logical and physical access to CA systems and data is restricted to authorized individuals;
  - the continuity of key and certificate management operations is maintained; and
  - CA systems development, maintenance, and operations are properly authorized and performed to maintain CA systems integrity

throughout the period September 1, 2023 to August 31, 2024, based on the WebTrust Principles and Criteria for Certification Authorities v2.2.2.

DigiCert makes use of external registration authorities for specific subscriber registration activities as disclosed in DigiCert's business practices. Our examination did not extend to the controls exercised by these external registration authorities.

DigiCert does not escrow its CA keys, does not provide certificate suspension services and does not provide integrated circuit card lifecycle management services for subscribers. Accordingly, our examination did not extend to controls that would address those criteria.

Certification Authority's Responsibilities

DigiCert's management is responsible for its assertion, including the fairness of its presentation, and the provision of its described services in accordance with the WebTrust Principles and Criteria for Certification Authorities v2.2.2.

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 DigiCert 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 unauthorized 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 DigiCert's services other than its CA operations in the locations as enumerated in Attachment A, nor the suitability of any of DigiCert's services for any customer's intended purpose.

Other Matters

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

	Matter Topic	Matter Description
1	Certificate Content	DigiCert disclosed in Mozilla Bug #1853463 that it misissued 33 S/MIME certificates with issues including missing policy OIDs and the subject common name being an individual for Mailbox-validated certificates.
		DigiCert disclosed in Mozilla Bug #1860697 that it misissued eight (8) S/MIME certificates with issues including an incorrect SAN and an incorrect AIA CAIssuers.
		DigiCert disclosed in Mozilla Bug #1875205 that it misissued 240 S/MIME certificates with missing state identifiers in the Subject DN.
		DigiCert disclosed in Mozilla Bug #1881364 that it misissued one (1) certificate with unvalidated information and a missing S/MIME BR OID.
		DigiCert disclosed in Mozilla Bug #1891531 that it issued 27 EV SSL certificates with "Government Entity" listed in the Subject:Serial Number field instead of the registration number.
		DigiCert disclosed in Mozilla Bug #1894560 that it issued 10,926 EV certificates with incorrect businessCategory capitalizations.
		DigiCert disclosed in Mozilla Bug #1898986 that it issued 89 S/MIME certificates that had incorrect values in their organizationIdentifier field.
		DigiCert disclosed in Mozilla Bug #1910258 that it issued one (1) TLS certificate that had an incorrect Subject Organization Name.
		DigiCert disclosed in Mozilla Bug #1927506 that it misissued 70,204 S/MIME certificates for one (1) organization where the organziationIdentifier Registration Scheme was incorrectly formatted.

	Matter Topic	Matter Description
2	Certificate Revocation	DigiCert disclosed in Mozilla Bug #1896053 that it did not revoke 3,788 TLS certificates within the Baseline Requirements timeframe.
		DigiCert disclosed in Mozilla Bug #1910805 that it did not revoke 83,267 TLS and 1,308 S/MIME certificates within the Baseline Requirements timeframe.
3	Subscriber Registration	DigiCert disclosed in Mozilla Bug #1910322 that it issued 83,267 TLS and 1,308 S/MIME certificates where the random value used in the DNS-based validation was not properly using an underscore prefix.
		DigiCert disclosed in Mozilla Bug #1914911 that it issued 185 TLS certificates with an Issuer Domain Name that DigiCert had not disclosed in Section 4.2 of their CP/CPS.

While the DigiCert assertion notes all issues disclosed on Bugzilla from September 1, 2023 through the date of this report, we have only noted those instances relevant to the CAs enumerated in Attachment B and applicable to the WebTrust Principles and Criteria for Certification Authorities v2.2.2.

Use of the WebTrust Seal

DigiCert's use of the WebTrust for Certification Authorities 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 to provide any additional assurance.

BDO USA

November 27, 2024

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

Certificate Policy/Certificate Practice Statement[1]

Policy Name	Version	Effective Date
DigiCert Certificate Policy and Certification Practices Statement for Public Trust Store PKI Services	7.01	August 27, 2024
DigiCert Certificate Policy and Certification Practices Statement for Public Trust Store PKI Services	7.00	July 29, 2024

Certificate Policies

Policy Name	Version	Effective Date
DigiCert Certificate Policy	6.06	May 23, 2024
DigiCert Certificate Policy	6.05	January 10, 2024
DigiCert Certificate Policy	6.04	December 14, 2023
DigiCert Certificate Policy	6.03	November 09, 2023
DigiCert Certificate Policy	6.02	September 07, 2023
DigiCert Certificate Policy	6.01	September 05, 2023
DigiCert Certificate Policy	6.00	August 16, 2023

Certification Practice Statements

Policy Name	Version	Effective Date
DigiCert Certification Practices Statement	6.06	May 23, 2024
DigiCert Certification Practices Statement	6.05	January 10, 2024
DigiCert Certification Practices Statement	6.04	December 14, 2023
DigiCert Certification Practices Statement	6.03	November 09, 2023
DigiCert Certification Practices Statement	6.02	September 07, 2023
DigiCert Certification Practices Statement	6.01	September 05, 2023
DigiCert Certification Practices Statement	6.00	August 16, 2023

CA Locations In-Scope

CA Locations	
California, United States	St. Gallen, Switzerland
Utah, United States	Nieuwegein, Netherlands
Virginia, United States	Amstel, Netherlands
Amsterdam (South), The Netherlands	Kawasaki, Japan
Lupfig, Switzerland	Sapporo, Japan

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[1] Effective July 29, 2024, the DigiCert Certificate Policy and DigiCert Certification Practices Statement combined into the DigiCert Certificate Policy and Certification Practices Statement for Public Trust Store PKI Services.

![BDO]

ATTACHMENT B - LIST OF CAs IN SCOPE

Root CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
C=IE, O=Baltimore, OU=CyberTrust, CN=Baltimore CyberTrust Root	16AF57A9F676B0AB126095AA5EBADEF22AB31119D644AC95CD4B93DBF3F26AEB	5/12/2000	5/12/2025
O=Cybertrust, Inc, CN=Cybertrust Global Root	802447EE521CC666CDB7BBAE93A385E55F200D76A3D1356A85445AC4CBDBED12	1/8/2014	12/15/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Assured ID Root CA	3E9099B5015E8F486C00BCEA9D111EE721FABA355A89BCF1DF69561E3DC6325C	11/10/2006	11/10/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Assured ID Root G2	7D05EBB682339F8C9451EE094EEBFEFA7953A114EDB2F44949452FAB7D2FC185	8/1/2013	1/15/2038
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Assured ID Root G3	7E37CB8B4C47090CAB36551BA6F45DB840680FBA166A952DB100717F43053FC2	8/1/2013	1/15/2038
C=US, O=DigiCert, Inc., CN=DigiCert Client ECC P384 Root G5	CD851C5C25467C0095A43927D0B2292D932975E84DCE4C5E794542C6574C3AA4	1/15/2021	1/14/2046
C=US, O=DigiCert, Inc., CN=DigiCert Client RSA4096 Root G5	3AF21466920FA91FA31F4331E445C16BE2330024BFD2C239C0D85AB530714766	1/15/2021	1/14/2046
C=US, O=DigiCert, Inc., CN=DigiCert CS ECC P384 Root G5	26C56AD2208D1E9B152F66853BF4797CBEB7552C1F3F477251E8CB1AE7E797BF	1/15/2021	1/14/2046
C=US, O=DigiCert, Inc., CN=DigiCert CS RSA4096 Root G5	7353B6D6C2D6DA4247773F3F07D075DECB5134212BEAD0928EF1F46115260941	1/15/2021	1/14/2046
C=US, O=DigiCert, Inc., CN=DigiCert ECC P384 Root G5	C1468CF2254E6004B24696ABA209D1A30BA6E2DFF68A9A4E32C6AB414F90C8D9	1/15/2021	1/14/2046
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Global Root CA	4348A0E9444C78CB265E058D5E8944B4D84F9662BD26DB257F8934A443C70161	11/10/2006	11/10/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Global Root G2	CB3CCBB76031E5E0138F8DD39A23F9DE47FFC35E43C1144CEA27D46A5AB1CB5F	8/1/2013	1/15/2038
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Global Root G3	31AD6648F8104138C738F39EA4320133393E3A18CC02296EF97C2AC9EF6731D0	8/1/2013	1/15/2038
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert High Assurance EV Root CA	7431E5F4C3C1CE4690774F0B61E05440883BA9A01ED00BA6ABD7806ED3B118CF	11/10/2006	11/10/2031
C=US, O=DigiCert, Inc., CN=DigiCert RSA4096 Root G5	E46A392204A8DCA342A71C1CA9A60C9185B9A930370120C3B9C7E3856F0D8F3B	1/15/2021	1/14/2046
C=US, O=DigiCert, Inc., CN=DigiCert SMIME ECC P384 Root G5	E8E8176536A60CC2C4E10187C3BEFCA20EF263497018F566D5BEA0F94D0C111B	1/15/2021	1/14/2046
C=US, O=DigiCert, Inc., CN=DigiCert SMIME RSA4096 Root G5	90370D3EFA88BF58C30105BA25104A358460A7FA52DFC2011DF233A0F417912A	1/15/2021	1/14/2046
C=US, O=DigiCert, Inc., CN=DigiCert TLS ECC P384 Root G5	018E13F0772532CF809BD1B17281867283FC48C6E13BE9C69812854A490C1B05	1/15/2021	1/14/2046
C=US, O=DigiCert, Inc., CN=DigiCert TLS RSA4096 Root G5	371A00DC0533B3721A7EEB40E8419E70799D2B0A0F2C1D80693165F7CEC4AD75	1/15/2021	1/14/2046

Root CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Trusted Root G4	552F7BDCF1A7AF9E6CE672017F4F12ABF77240C78E761AC203D1D9D20AC89988	8/1/2013	1/15/2038
C=US, O=DigiCert, Inc, OU=www.digicert.com, CN=DigiCert Universal Transition Root	AF0E363CAE6DF489F2976A284D12D4C33C94B135FA77F89E89298D7491E99974	12/8/2017	12/8/2037
C=US, S=Utah, L=Lehi, O=DigiCert, Inc., OU=www.digicert.com, CN=DigiCert Verified Mark Root CA	504386C9EE8932FECC95FADE427F69C3E2534B7310489E300FEE448E33C46B42	9/23/2019	9/23/2049
C=US, O=WFA Hotspot 2.0, CN=Hotspot 2.0 Trust Root CA - 03	A3CC68595DFE7E86D8AD1772A8B5284ADD54ACE3B8A798DF47BCCAFB1FDB84DF	12/8/2013	12/8/2043
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis Client ECC P384 Root G4	D3C07AC44BD8FF1975BC62F1C7E9840EA8E188A4BA51133B8C4EFF05E34A2729	3/16/2023	3/9/2048
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis Client RSA 4096 Root G4	80AC91FA891C79723A61ABC77F86E19905A92DA27E51695CA0C0B66C1C039BF2	3/16/2023	3/9/2048
C=BM, O=QuoVadis Limited, CN=QuoVadis Root CA 1 G3	8A866FD1B276B57E578E921C65828A2BED58E9F2F288054134B7F1F4BFC9CC74	1/12/2012	1/12/2042
C=BM, O=QuoVadis Limited, CN=QuoVadis Root CA 2 G3	8FE4FB0AF93A4D0D67DB0BEBB23E37C71BF325DCBCDD240EA04DAF58B47E1840	1/12/2012	1/12/2042
C=BM, O=QuoVadis Limited, CN=QuoVadis Root CA 2	85A0DD7DD720ADB7FF05F83D542B209DC7FF4528F7D677B18389FEA5E5C49E86	11/24/2006	11/24/2031
C=BM, O=QuoVadis Limited, CN=QuoVadis Root CA 3 G3	88EF81DE202EB018452E43F864725CEA5FBD1FC2D9D205730709C5D8B8690F46	1/12/2012	1/12/2042
C=BM, O=QuoVadis Limited, CN=QuoVadis Root CA 3	18F1FC7F205DF8ADDDEB7FE007DD57E3AF375A9C4D8D73546BF4F1FED1E18D35	11/24/2006	11/24/2031
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis Signing ECC P384 Root G4	771535D43D4633BD307EB7B8A3966B5DF00707C088089920080C1AE6D3CB0F68	3/16/2023	3/9/2048
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis Signing RSA 4096 Root G4	9F8E6DB31E740285E0C2C2DEB09E442BDD4E74BDEEAE2962BC82D1ECB9F39855	3/16/2023	3/9/2048
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis SMIME ECC P384 Root G4	83FDDB2FD9DAE3B21EEBD33CF46251D746F0D6102B683150DD7B98AD8E4BB9F8	3/16/2023	3/9/2048
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis SMIME RSA 4096 Root G4	5232A304AA4A10CFE6C47842EA3381CB31D619E24F58126D534CD50C5CE7845D	3/16/2023	3/9/2048
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis TLS ECC P384 Root G4	6E1FD3AE0D2D477C8F5EE5F335CC5B6356872654E5356A73D8C0A30A17C252A2	3/16/2023	3/9/2048
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis TLS RSA 4096 Root G4	C8A2D38A24F5AC302D8A08EBD38923D9A750B49220F092E82D1C53249E1533D0	3/16/2023	3/9/2048

Root CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 1 Public Primary Certification Authority - G4	363F3C849EAB03B0A2A0F636D7B86D04D3AC7FCFE26A0A9121AB9795F6E176DF	10/5/2011	1/18/2038
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 1 Public Primary Certification Authority - G6	9D190B2E314566685BE8A889E27AA8C7D7AE1D8AADDBA3C1ECF9D24863CD34B9	10/18/2011	12/1/2037
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 2 Public Primary Certification Authority - G6	CB627D18B58AD56DDE331A30456BC65C601A4E9B18DEDCEA08E7DAAA07815FF0	10/18/2011	12/1/2037
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Public Primary Certification Authority - G4	53DFDFA4E297FCFE07594E8C62D5B8AB06B32C7549F38A163094FD6429D5DA43	10/18/2012	12/1/2037
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Public Primary Certification Authority - G6	B32396746453442F353E616292BB20BBAA5D23B546450FDB9C54B8386167D529	10/18/2012	12/1/2037
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Web PKI ECC Root - G1	92BB72F15EB75DE467C84B438181034BDAE9A016EC26434BEE3C9BBAD8CD8AF0	9/21/2017	9/20/2042
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Web PKI RSA Root - G1	F6BB5B7985A8736594C14679FA31603814502AAEB5F4282A69985DC84A450777	9/21/2017	9/20/2042
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 1999 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 1 Public Primary Certification Authority - G3	CBB5AF185E942A2402F9EACBC0ED5BB876EEA3C1223623D00447E4F3BA554B65	10/1/1999	7/16/2036
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 1999 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 1 Public Primary Certification Authority - G3	7B2A147C2FEFED78A7A4BAE0147A5177C4CA1035B5281CDF989BA0B9F97A054A	10/1/1999	7/16/2036
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 1999 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 1 Public Primary Certification Authority - G3	0939110E0DCC06CEBFD0D73C01AB7BFBB7A97979F7649EABD725B18CC9BC85F8	10/1/1999	10/1/2049
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 1999 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 2 Public Primary Certification Authority - G3	BA7D7BB1DFBE64EA956CD776185C8DACC7E1ED548C4A9BD40631BEF5BFB1522A	10/1/1999	7/16/2036
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 1999 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 2 Public Primary Certification Authority - G3	4DDDA06A1A9B475C38B89EED41B1535A3A35AB321BD5C6607B312E46DD766876	10/1/1999	10/1/2049
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 1999 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 2 Public Primary Certification Authority - G3	92A9D9833FE1944DB366E8BFAE7A95B6480C2D6C6C2A1BE65D4236B608FCA1BB	10/1/1999	7/16/2036

Root CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 2008 VeriSign, Inc. - For authorized use only, CN=VeriSign Universal Root Certification Authority	2399561127A57125DE8CEFEA610DDF2FA078B5C8067F4E828290BFB860E84B3C	4/2/2008	12/1/2037
C=US, O=Verizon Business, OU=OmniRoot, CN=Verizon Global Root CA	68AD50909B04363C605EF13581A939FF2C96372E3F12325B0A6861E1D59F6603	7/30/2009	7/30/2034

Cross-Signed Root CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
O=Cybertrust, Inc, CN=Cybertrust Global Root	E71D8C3BAF43F6B3352DF574A9F0D4A2065BF03DA179514B1FCC5D9BEC8C8FCD	12/3/2014	12/3/2024
O=Cybertrust, Inc, CN=Cybertrust Global Root	64B3542D1BC972F58A1D179F3D0B9652BE434F3AE3842E0C447880D4D623A4DE	4/23/2014	4/23/2024
O=Cybertrust, Inc, CN=Cybertrust Global Root	24905145BD9B9BFE99C60354B49951BE0E709F1634CFBD0E370FEB9F068ED6C3	12/3/2014	12/3/2024
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Global Root CA	6DACBB8945137B1DAD4211B0436EFBE06F12ACE36904973B45AE25740823D369	12/7/2016	5/10/2025
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert High Assurance EV Root CA	CBF8FB77660167E6BAACD0DF77CDA397D0117EE2BEEA23B935317F8BB5B5E3B0	12/7/2016	5/10/2025
C=US, O=Verizon Business, OU=OmniRoot, CN=Verizon Global Root CA	B90EEAE931E5E2B7D335F149DA6C2210986000D214FFDB62A72F7332D63731AF	4/9/2014	4/9/2024
C=US, O=Verizon Business, OU=OmniRoot, CN=Verizon Global Root CA	D96CBC03B523CD3315918651CF4862162887DD563AFB2352D3F34BB94576F93D	5/13/2014	5/13/2024
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Trusted Root G4	33846B545A49C9BE4903C60E01713C1BD4E4EF31EA65CD95D69E62794F30B941	8/1/2022	11/9/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Global Root G2	79D57B15DFA65C2870EAFE11B637765909CFE937B49C15CE7F194030CAB395AD	1/18/2024	11/9/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Global Root G2	6523C34F1E879ADD7603CB2048A898A5E2F0C6C4B512C0D22782B85D43AE3371	8/15/2023	11/9/2031
C=US, O=DigiCert, Inc., CN=DigiCert TLS RSA4096 Root G5	A4BCDA32D49CDF05F0CDD085E73C3A2E67880BD48579FED4DF5940DF76A076D7	9/21/2022	11/9/2031
C=US, O=DigiCert, Inc., CN=DigiCert TLS RSA4096 Root G5	1BA02FF4A2562BBE6B799563990C88CC50E1182395719A4EAA803976E2F50860	10/3/2023	11/9/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Trusted Root G4	AD8EB32C9DA91DDC855F382745990147DC6F23D9FBB04FC9D476B1EE20FC71D8	7/1/2013	10/22/2023
C=US, O=DigiCert, Inc., CN=DigiCert TLS RSA4096 Root G5	1C8C70B263CB13A9E6EE3F097A9673194CC9D686BC14A72C8CDC705F2C0E68A7	10/3/2023	10/2/2033
C=US, O=DigiCert, Inc., CN=DigiCert TLS RSA4096 Root G5	048E39BBB6B15EF83525F163192CEA0DF21D3FFABAFAB7C63909FB1553EE4966	7/12/2023	7/11/2033
C=US, O=DigiCert, Inc., CN=DigiCert CS ECC P384 Root G5	2F30A9B2F110FB7B7C07C1E2CD652C3B71392D55AB7402E3F40D56F414540622	5/19/2022	5/18/2037
C=US, O=DigiCert, Inc., CN=DigiCert TLS ECC P384 Root G5	D92E93252EABCA950870B94331990963A2DD5DB96D833C82B08E41AFD1719178	9/21/2022	9/20/2037
C=US, O=DigiCert, Inc., CN=DigiCert TLS RSA4096 Root G5	B9D53F235C5FA8C92EB31DCFCADF4959B34A32AF36ACA1EA10F07D6551C398A5	5/10/2023	11/9/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Trusted Root G4	E9158C6AF5688CFCF9890206C43061C81FA7FC07D08E28A27C068C58073A699A	1/13/2022	11/9/2031
C=US, O=DigiCert, Inc., CN=DigiCert CS RSA4096 Root G5	63A9756FF8A0DB5CBF94C97CD894DBAEED4BB1BD2ECFB890A9E55336FECDF060	5/19/2022	5/18/2037
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Global Root G2	0BA8C0D459B76ABC0825294F565E24F4F169D4A4819D0692D371522D297724B8	3/4/2021	3/3/2031

Time-Stamping CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec SHA256 TimeStamping CA	F3516DDCC8AFC808788BD8B0E840BDA2B5E23C6244252CA3000BB6C87170402A	1/12/2016	1/11/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert SHA2 Assured ID Timestamping CA	CA8D0F4736454AECBEC5DEEC80998C9EBF41D06C728F3C76CCA24151BC62D463	1/7/2016	1/7/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Trusted Root G4	4C913D04FB495DC36119552D6068F7B9891EFE40344E9E5C1E9132F65BAEFF7F	6/9/2022	11/9/2031
C=US, O=DigiCert, Inc., CN=DigiCert Trusted G4 RSA4096 SHA256 TimeStamping CA	281734D4592D1291D27190709CB510B07E22C405D5E0D6119B70E73589F98ACF	3/23/2022	3/22/2037
CN=BT Class 2 DigiCert PKI Platform CA, O=British Telecommunications plc, C=GB	843782303040BFB33576766E1700696DE0FC14887BE293D7265EB59ECE4ED9CC	8/6/2019	6/6/2031

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=Amazon, CN=Amazon RSA 2048 M01	5338EBEC8FB2AC60996126D3E76AA34FD0F3318AC78EBB7AC8F6F1361F484B33	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon RSA 2048 M02	B0F330A31A0C50987E1C3A7BB02C2DDA682991D3165B517BD44FBA4A6020BD94	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon RSA 2048 M03	BF8A69027BCC8D2D42A6E6D25BDD4873F6A34B8F90EDF07E86C5D6916DA0B933	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon RSA 2048 M04	138BDF6E23AC971EB4E626B279DD6A26F057510F1DE394293A5EEA2860DE019B	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon RSA 4096 M01	40FE28DC925D1A8A6B8F861863EB57CD30C6776416AB8A99920BAC7C925A4174	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon RSA 4096 M02	2CC39F6789B967B0282AEACA4548F602A1B274E90D260773E9E7B0F7C0F13432	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon RSA 4096 M03	41BDC074EB9531EC81FEF08D9FFA16536F61FC59789265E95E89A4982AEF3F91	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon RSA 4096 M04	3B6FAB0AB11C14EEF9031969E0ADB037C8FCC3366728A6567623D3C26B3632CB	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon ECDSA 256 M01	332B101539FA89CA4E228719FE5287AB6869AF31AB21CBF110F5DD3C5994C1C7	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon ECDSA 256 M02	F9693255933B68159D168AA9A247DA1DC66E23C0620338EF7149E48F83B1AE79	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon ECDSA 256 M03	493E78EEE8CCA1F26E6494ED924985AF3FA9E6110EAA61C3214E8D73B4047316	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon ECDSA 256 M04	D241192CCE57D438986723972DD6F18B5A3A3456A708E8F273D147223AB6FA5D	8/23/2022	8/23/2030
C=US, O=Amazon, OU=Server CA 3B, CN=Amazon	ECC295B6DDCD084BA7179FB53BDD1D422CB6C0A8D94F154D4A5B17780B7279ED	7/16/2018	7/16/2028
C=US, O=Amazon, CN=Amazon ECDSA 384 M01	DFE35C740CF41C0B053E2202EA5AFC2F021F70BF90B26BC861FE1D9A0BFC4F1E	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon ECDSA 384 M02	A7D15E62C78825919FB59BDE58EFCFB0225B4107DFC600026885420185DC69B63	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon ECDSA 384 M03	F40DA455BE136E0DB31A116FFD3C3002B1EBBC591558493FE630A9C8C9AFAD70	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon ECDSA 384 M04	47FD11AD552AB264D7F272770D3B5590AAE145412F4AD6081BDC485298D8E000	8/23/2022	8/23/2030
CN=Apple IST CA 2 - G1, OU=Certification Authority, O=Apple Inc., C=US	C9B06CC083186220618E61A8772640F824DF69D561AD56BDC15AD56D0CE08608	12/12/2018	5/7/2025
CN=Apple IST CA 8 - G1, OU=Certification Authority, O=Apple Inc., C=US	5C29DBEA9B7CC8B02418F28C1C8736DFDF170665D098EF681D903BE76987D249	12/12/2018	5/7/2025
C=US, O=Apple Inc., CN=Apple Public Client RSA CA 2 - G1	32B4B3768CA5A4D80E9DF8D557B7424F80AF5560B1148D05548DC3D76A7ED619	12/12/2018	5/7/2025
C=US, O=Apple Inc., CN=Apple Public Server ECC CA 2 - G1	DA8546816D891C1241E9387DE436D1B9F7EA70DBA1EB3D25F58271CE816A7ABC	12/12/2018	5/7/2025
C=US, O=Apple Inc., CN=Apple Public Server RSA CA 2 - G1	F518F0BB716521F0A26FDB40C304FF9B82FBDBE7ACBD46BF0EF23A180188EB5C	12/12/2018	5/7/2025
C=US, O=Cloudflare, Inc., CN=Cloudflare Inc ECC CA-3	3ABBE63DAF756C5016B6B85F52015FD8E8ACBE277C5087B127A60563A841ED8A	1/27/2020	12/31/2024
C=US, O=Cloudflare, Inc., CN=Cloudflare Inc RSA CA-2	AEC863898F284D6CD4C6A3F6C3E6523480A359C33DAF66FAD3381849B8BB018B	1/27/2020	12/31/2024
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Baltimore CA-1 G2	BF1CB0E213D8D3C70BAE89429FC16DE2C74F755963D1B9B488BD0260DBC91B9C	10/14/2015	5/10/2025
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Baltimore CA-2 G2	F9690880819F06CDCC0B2F224B207F2AF6003FB57339B8679A160FA95208D62D	12/8/2015	5/10/2025
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Baltimore EV CA	D46931E0182DD655EA0C16E6DD99F8E61AFFE401F734C6CA8EA0056A968EAF81	10/14/2015	5/10/2025
C=US, O=DigiCert Inc, CN=DigiCert Baltimore SMIME RSA SHA256 2020 CA1	D1E87FFD17F95602571D08ADBDA469A04B14258996EC09776CD953582AF0B87E	9/24/2020	5/11/2025
C=US, O=DigiCert Inc, CN=DigiCert Baltimore TLS RSA SHA256 2020 CA1	38F73647F1ECAEEC0FC5AFE68AC30E0C26171E9F232F4530729412408FD53626	9/24/2020	5/11/2025
C=US, O=DigiCert Inc, CN=DigiCert Baltimore TLS RSA SHA256 2020 CA1	701317250210AB91280527C3B436931015B8DCEE69A6893ADA4FFAD25A6FE44F	4/22/2021	5/12/2025

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Subordinate CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
C=US, O=Microsoft Corporation, CN=Microsoft RSA TLS CA 01	04EEEA8E50B4775B3C24797262917EE50002EC4C75B56CDF3EE1C18CFCA5BA52	7/21/2020	10/8/2024
C=US, O=Microsoft Corporation, CN=Microsoft RSA TLS CA 02	05E4005DB0C382F3BD66B47729E9011577601BF6F7B287E9A52CED710D258346	7/21/2020	10/8/2024
C=US, S=Washington, L=Redmond, O=Microsoft Corporation, OU=Microsoft Certificate Services, CN=Microsoft SMIME CA	4919F64D664397933DE8A1B4E8808DFA0A6A8CD79A34957B79B5AE6BD1AE4895	2/9/2018	2/9/2025
C=US, O=Microsoft Corporation, CN=MSFT BALT RS256 CA	069DF2F8919D9209D0C524A56BA1181DF6D1BBFC4AA61C9F01D092E2D5C3A1FD	4/7/2022	5/11/2025
C=IT, O=Telecom Italia Trust Technologies S.r.l., OU=Digital Identity and Security, CN=Trust Technologies Global CA	191E0B48B78B7EFA4822A465AD69B34405B878D10BD853D8E57CB8B9D9E50B8B	8/24/2017	5/10/2025
C=IT, O=Telecom Italia Trust Technologies S.r.l., OU=Digital Identity and Security, CN=Trust Technologies Global Client CA	AA6A2380A7E8254DAD4620AE0895DE74047F33F5268758DCF27C4D280B384A50	8/24/2017	5/10/2025
C=CL, O=CertiNet S.A., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=CertiNet S.A. Firma Electronica Avanzada - G2, emailAddress=certinet@certinet.cl	163DDECF86B4708A77705D106FD630C30331B1070C4BD9A36374AC0A68A83DD7	8/18/2015	9/15/2024
C=US, O=Comcast Corporation, CN=Comcast Trusted User CA	5764D931D3FB3819BB5CD19DD09E075A3320114F079292494A4F64E92634808F	1/17/2017	1/17/2027
C=US, O=Comcast Corporation, CN=Comcast Trusted User RSA CA	9B8DD7F84D5AD52AADDEA5729A6DA865FF28EE944A8379FC274103B9B5F094D9	1/31/2017	1/31/2027
C=US, O=Fresenius Kabi AG, CN=Data Management Intermediate CA2	422F9D4E68134E362B7569E5298A173CEC40C7C7274B2263A9BC8ADA1D1A23FA	10/9/2020	8/25/2025
C=US, O=Fresenius Kabi AG, OU=Fresenius Kabi USA, CN=Data Management Intermediate Certificate Authority	54837EF7B5AC4AA23606A15EF30DE46E9BB7E23E60F6ED4F2612092B94EDC68F	8/25/2015	8/25/2025
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Assured ID Code Signing CA-1	E57208CBFD286CE9718267E44491CB5B435C95BB09DC9720F5B64B25AC7974CD	2/10/2011	2/10/2026
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Assured ID Code Signing CA-1	3C8B0D5C2ADF2F7090A9B8FF452A4141833DEAA05B5F44E9513DB94BFDF1D6BD	2/11/2011	2/10/2026
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID Grid Client RSA2048 SHA256 2022 CA1	FC8B43C36CCB521FE0E5BD24B14665DAD350BA2C232006B98933D7878D775718	4/12/2022	11/9/2031
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID Grid Client RSA2048 SHA256 2022 CA1	915836DC82516AD3C85250375E4CB9FD7AA6123610884D3C4D120AEE0C9EFABC	1/30/2024	11/9/2031
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID Grid Client RSA2048 SHA256 2024 CA1	32D509B92CD803AB88177C62793BAEE4E2E2C4D9CBAF8ECE344357C2B6957D32	2/7/2024	11/9/2031
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID Grid TLS RSA2048 SHA256 2022 CA1	0181B2B6173179562E75632344037CA523018618A7F7168269A3EB85367FF75C	3/10/2022	11/9/2031
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID SMIME RSA SHA256 2020 CA1	5944AA2A86792A7BF5B748B79144DB7FD91FEEA5A3F3E2129C6B3145A3125B10	12/8/2020	12/7/2030
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID SMIME RSA2048 SHA256 2021 CA1	61E163C56C6100A91463ACCEC29B01A881E3F9C3B3AEF2CCD0B21DB0EAF9F2AE	12/14/2021	11/9/2031

Subordinate CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Assured ID TLS CA	D7737E5F2D3FFCA429902E9F388CFD6C5959CD35A0FC103CEE2F7E93D1C66A52	2/9/2018	2/9/2030
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID TLS RSA4096 SHA256 2022 CA1	987FF2E3B25A3A14CB843D907B3C7F007C274921AFC10017F85D4FAE7B0CB8B6	3/3/2022	11/8/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Document Signing CA	B9C3073AAD74B368832F5497958E279B1D2777CAF8841713B28AB10A4BAA0810	11/5/2013	11/5/2028
C=US, O=DigiCert Grid, OU=www.digicert.com, CN=DigiCert Grid Trust CA G2	28CBB4E0D9C4EE6D04AC8F14717605AE3A4BD8CBF8D081B27AF6EDB2F3D76A32	1/8/2014	1/8/2029
C=US, O=DigiCert Grid, OU=www.digicert.com, CN=DigiCert Grid Trust CA	1E0A3AB9931571717281D42ABF801EB64DEED500E4168CA706D6A71D8103C73A2	12/7/2011	12/7/2026
C=US, O=DigiCert Inc, CN=DigiCert Secure Auth CA2	4759D6F4ED6DF0E08FC4CA801986E2BE10594DBAF341B4C45ABAFA3748887D25	10/9/2020	10/8/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Secure Auth CA	24E9F20AC167BB8F09DE8A1E9968CC53F0B5F3A4948F51B8647B40B186C75EBE	4/23/2014	4/23/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert SHA2 Assured ID CA	A542BCA09C5E4579C619774AE59082BCE0F86D261C5A7A5A0F6217C10279EA7C	11/5/2013	11/5/2028
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert SHA2 Assured ID Code Signing CA	51044706BD237B91B89B781337E6D62656C69F0FCFFBE8E43741367948127862	10/22/2013	10/22/2028
C=US, S=CA, L=Mountain View, O=Google, Inc., CN=Google CA1	438F473EBFC8884EF5D3E0D52D264CDBE56CA382D9EBFC689D77489409F55A6E	8/25/2015	8/25/2025
C=US, O=Imprivata, OU=www.imprivata.com, CN=Imprivata Secure ID CA-1	B49B1B7209D1A83F6CDBBA743AD720ACC24440FB9002F9DDB3C6F2F5CE337A47	10/25/2016	10/25/2026
C=US, S=Minnesota, L=Minneapolis, O=Optum, CN=Optum Public Trust CA 1	253E3C9732DF8874C3D54DA522C1711142C98C2CEA7664635152A89A03EE9364	4/28/2015	4/28/2025
C=US, O=Plex, Inc., CN=Plex Devices High Assurance CA	48A7C9C5A36734FC9E204D63CE6BBBCD9E21C1978604760CD8D30D6F4C67B67C	1/14/2015	1/14/2025
C=US, O=Riverbed Technology, Inc., CN=Riverbed Certificate Issuer	BB39497035ED9583D286CDE70FB644EB95806598092B1E8D8F11BC035D7A476A	11/20/2018	11/20/2028
C=US, O=Riverbed Technology, Inc., CN=RVBD Certificate Issuer	72563CC98ADA2C5D2126542ACC908154AEB1F9D6F7E83A55C09744C7D7ADDDBA	11/20/2018	11/20/2028
C=US, O=Sonavation, Inc., OU=sonavation.com, CN=Sonavation IoT CA	4C56CA7A3C10EB58765E0FFCF8035C57C9F3BDB014862F676756CF789193F10E	5/19/2015	5/19/2025
C=NL, S=Noord-Holland, L=Amsterdam, O=TERENA, CN=TERENA Code Signing CA 3 G3	794C63DB244BA73FB286F15DAB8D0CA5425508381E98844954E63823BB5D7F74	12/9/2014	12/9/2024
C=NL, S=Noord-Holland, L=Amsterdam, O=TERENA, CN=TERENA Code Signing CA 3	B7C6EBDC2A1B65EF1836DC00250C44E15703121052C1AB6B9D0385A058153AE3	11/18/2014	11/18/2024
C=NL, S=Noord-Holland, L=Amsterdam, O=TERENA, CN=TERENA eScience Personal CA 3	FDA947208BFA3203A6C57B8714A647B7009E5168E88951345450B1D2D3F91A7D	11/18/2014	11/18/2024
C=NL, S=Noord-Holland, L=Amsterdam, O=TERENA, CN=TERENA eScience SSL CA 3	E1BE6BBBB70F5A241E736FC44C6A2160BF6CE19B95EDD67BF7BE896E83778745	11/18/2014	11/18/2024
C=NL, S=Noord-Holland, L=Amsterdam, O=TERENA, CN=TERENA Personal CA 3 G3	C123F5AFACC9F9096809850355E5BF78CA93377348111B5167A964DDEDC044DE9	12/9/2014	12/9/2024

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=NL, S=Noord-Holland, L=Amsterdam, O=TERENA, CN=TERENA Personal CA 3	DD4E0C17900F3FC2A5B7B773AE40218AD73216B5CE5D285EBFFCE8830D0F034A	11/18/2014	11/18/2024
C=NL, S=Noord-Holland, L=Amsterdam, O=TERENA, CN=TERENA SSL CA 3 G3	C9D6913F3FEDDEFF184C9EE1D7E17C5AEC90886EED5CC3D6E98105831C8C0E0B	12/9/2014	12/9/2024
C=NL, S=Noord-Holland, L=Amsterdam, O=TERENA, CN=TERENA SSL CA 3	BEB8EFE9B1A73C841B375A90E5FFF8048848E3A2AF66F6C4DD7B938D6FE8C5D8	11/18/2014	11/18/2024
C=CN, O=TrustAsia Technologies, Inc., OU=www.trustasia.com, CN=TrustAsia Secure Email CA	047217772051D292238F3355F5C5435E9B84364CCD143FC49F9C31CD605439F0	4/27/2018	4/27/2028
C=CN, O=TrustAsia Technologies, Inc., OU=www.trustasia.com, CN=TrustAsia Secure Enterprise Email CA	3D774B65EE95FD6EFD1C8732B57E607C9BEE423C36E46F6E1CC8CA1F0AE62E23	4/27/2018	4/27/2028
C=AU, O=Verokey, CN=Verokey Assured Business ID and Secure Email G2	421D08ED8E5E01B538ED9789CCE47A453791A39A600941BD40B7123DD5285247	1/30/2024	11/9/2031
C=AU, O=Verokey, CN=Verokey Assured Business ID and Secure Email	4D7DA8F7A331D30C8955C8F9A79CE75A109F2BA41969EEFF6C13A5475E1B9935	3/17/2022	11/9/2031
C=AU, O=Verokey, CN=Verokey Secure Email G2	940444F98EA287D6F4853763AD6DEA123813BAB5705B71CA391714322269A4C0	1/30/2024	11/9/2031
C=AU, O=Verokey, CN=Verokey Secure Email	0E6DDE73CC50DE243F83724F5635360556F0BB18FAB31266B046B55A0FBBAFE6	3/17/2022	11/9/2031
C=ZA, O=Absa Group Limited, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=Absa Group Limited Public CA	8FB88641F4E231CE81436375138A5B36D2A06A3CC2A49E5B1F4699981BE1E451	8/5/2019	8/5/2029
C=GR, O=Adacom S.A., CN=Adacom S.A. Class 1 - Public Trust CA G3	F76881339118572F9568095BE6E81D5252BC3E2EB3A5BB64D9EEEC75D54C705A	4/3/2024	4/2/2034
C=GR, O=Adacom S.A., CN=Adacom S.A. Class 1 - Public Trust CA	40CEBC99D7D6BE08E863F9816A651801574E97D69AB839DB92A0E18F607BD1FC	3/11/2021	3/10/2031
C=GR, O=Adacom S.A., CN=Adacom S.A. Class 2 - Public Trust CA G3	74F3D438C526D37BA2775BF5E9F57D32E09F95ACAA25F0AC3A7D57B096C30343	4/3/2024	4/2/2034
C=GR, O=Adacom S.A., CN=Adacom S.A. Class 2 - Public Trust CA	912E37CAA496E53CD175C05D4334B4D060FBD0C69105AF82085CAF7AD4BBD318	3/11/2021	3/10/2031
C=US, O=Adobe Inc, CN=Adobe Public Issuing CA	7B6BA0B173658101250395D547643037A68216155270BC9BA46B358C3B77E90E	2/5/2020	2/5/2030
C=US, O=Alcon Vision, LLC, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=Alcon Public Online CA	4F8137882B6D7B7F1ABBCFDED0082F0E5CDEC870BA3923EF84D08DDE42E43749	7/2/2019	7/2/2029
C=AU, O=Attorney Generals Department, CN=Attorney Generals Department Public CA - G2	F4DC92DB2CD8B9158D011335A95BB61BD340ACE2E5BDC8816373ABCB2D31D288	10/28/2020	10/27/2030
C=AU, O=Attorney Generals Department, CN=Attorney Generals Department Public CA - G3	3A6F06233A059C0C8FE3C68289FD35A0DB7520F9D65984BBBF2D8E37C0BBFCDB	10/11/2021	10/10/2031
C=US, O=Avaya Inc, OU=Avaya IT, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=Avaya Client Services Users CA 2	1FFA0D1F55CE4A0507E8C38E8B557B88CBDD690D903D996B1F7850D81D6A4A93	11/26/2019	11/26/2029

Subordinate CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
C=US, O=Bechtel Global Corporation, CN=Bechtel Managed SMIME CA	D1A7ABBA00B566B8C6A4BD99A242740C45A5C5FCE6651213A3CD292E1FDCF3B5	6/23/2022	6/22/2032
C=US, O=Brown Brothers Harriman & Co., CN=Brown Brothers Harriman Public Issuer CA	FB586897D15FF353CFE83F9B214D234310A191E0CC63C0808E40E981754DD5A6	9/25/2020	9/24/2030
C=GB, O=British Telecommunications plc, CN=BT Corporate User - Public Trust CA1	B19B321258FB89E8548124748C16726B42BE74721BDF219636B3CE9E81C29522	2/11/2021	2/10/2031
C=GB, O=British Telecommunications plc, CN=BT Corporate User - Public Trust CA2	78C065F4A95B84387E38682A8D9685FEA2BB45EE5D099E38CCB660A6319FC8E4	9/14/2021	9/13/2031
C=GB, O=British Telecommunications plc, CN=BT Corporate User - Public Trust CA3	01914E03C37A07A5B7A20BB9D1F9652C966658DEEA52921E3699D233E3FC68AD	2/27/2024	2/26/2034
C=US, O=City of New York, CN=City of New York Office of the Actuary - G3	2431090A8009CA6F9F44DCC9E5FBD3C2F4A3152185BDA08ED313B861D895F7B4	10/21/2020	10/20/2030
C=US, O=Common Securitization Solutions LLC, CN=CSS Public Issuing CA G2	D040BEF3C50B536E2E8DA2AD7721A772C76B718FF10165D5AA88674C233E3766	9/25/2020	9/24/2030
C=US, O=Common Securitization Solutions LLC, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=CSS Public Issuing CA	00BFE5177DA40E040506A04417FB4B8064816B5D875852A07FC3A36700091080	10/31/2019	10/31/2029
C=DE, O=Daiichi Sankyo Europe GmbH, CN=Daiichi Sankyo Europe GmbH Issuing CA	A34B4B3BA3B93302804740CFF3F01A9C0FD9CFFEE5A193C997B87C5BE43A9E94	9/25/2020	9/24/2030
C=US, O=Government of the District of Columbia, OU=Office of the Chief Technology Officer, CN=DC Government SHA2 Assured ID Intermediate CA	FB1147E7AB97A29BB9C1140ABF3DE831F4C5F60D11B90FEC999A0816375D8457	7/13/2017	7/13/2027
C=IE, O=DigiCert Ireland Limited, CN=DigiCert Assured G2 EUR SMIME RSA4096 SHA384 2023 CA1	8682865D0B127A67FC0F8656CE4DD19846906671FBB97D3F3929A291FA548003	8/30/2023	8/29/2033
C=US, O=DigiCert, Inc., CN=DigiCert Assured G2 mPKI SMIME RSA4096 SHA384 2023 CA1	BE1AF7D2FFED61A2140D610482952450E380448F9CAB9D63C6CDE2014A0ADE0A	8/30/2023	8/29/2033
C=IE, O=DigiCert Ireland Limited, CN=DigiCert Assured G2 Multi Doc Sign EUR RSA4096 SHA384 2023 CA1	9F396CD402F9039132E6F6145C78C852F74EE1CF790FCEB31A68A4E6E58CAD26	5/24/2023	5/23/2033
C=US, O=DigiCert, Inc., CN=DigiCert Assured G2 SMIME RSA4096 SHA384 2023 CA1	0F18E75571996FD1F75BE6CC6186B045EA2E76FB70A1FDEBFE9CB923A010EB43	8/30/2023	8/29/2033
C=US, O=DigiCert, Inc., CN=DigiCert Assured G2 SMIME RSA4096 SHA384 2024 CA1	CD5729AD30AC925A6B4985972BA93CD0550C6430616EC057D887AE79D00A9D58	3/13/2024	3/12/2034
C=US, O=DigiCert Inc, CN=DigiCert Assured ID CA G2	93C381CB07B353A920C2A7BED6BEBF195C68279DD0527D37F20BDD0D99C330FA	8/1/2013	8/1/2028
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Assured ID Client CA G2	9E12D6E13DDD53A890A2B3A37423AE5E457731A7B34A153992F1EF1F5489A45E	9/23/2019	9/23/2034
C=IE, O=DigiCert Ireland Limited, CN=DigiCert Assured ID G2 AATL Europe RSA4096 SHA256 2023 CA1	20E2FE0D0A6E2FE9E26C09B0F4E1E1A5C556D9FC23F10F21F400F8B99884E401	3/30/2023	3/29/2033
C=IE, O=DigiCert Ireland Limited, CN=DigiCert Assured ID G2 Client 2FA Europe RSA4096 SHA256 2023 CA1	70B2A6C71F1969DA8B4E1B95E8422EF8CDDF31FCA5B2308E8AB634C42DA96B4B	3/30/2023	3/29/2033

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID G2 Client Europe RSA4096 SHA256 2023 CA1	79A7354CB43093E182240970EF186A4F4A23471C67B6FA3D0E30043AF30FDEF8	2/23/2023	2/22/2033
C=IE, O=DigiCert Ireland Limited, CN=DigiCert Assured ID G2 Client Europe RSA4096 SHA256 2024 CA1	275200E6BABC64D829536365E75C1A6AA80654A65E8F59F66ECFA55BF94F80EC	4/3/2024	4/2/2034
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID G2 DocSigning Europe RSA4096 SHA256 2023 CA1	690B373C5A3B09FF56C44EEF01F39CFDA9DCF48AFEE7DD4BC748E8BC1DA66A2F	2/23/2023	2/22/2033
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID G2 Multi Doc Signing RSA4096 SHA384 2023 CA1	0D2739351ED2CF711DA26D1D4E3AC787EEFC4145440F3CE6569DB833FE00CFA5	5/24/2023	5/23/2033
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID G2 SMIME Europe RSA4096 SHA256 2023 CA1	2724D9D7B945BB253E379CEF6CF4156775EE9AC7660E62D1384DD7B4A4E958FA	2/23/2023	2/22/2033
C=IE, O=DigiCert Ireland Limited, CN=DigiCert Assured ID G2 SMIME Europe RSA4096 SHA256 2023 CA2	3DED2BDFEAA4F0BEA10C95C4B48EC94BC593470155A723B937B74890049BE0F6	3/30/2023	3/29/2033
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID G2 TLS RSA4096 SHA256 2022 CA1	43A70E3620BC452339D878AA68F2E5358AC4607AC722C4D77D3C4D2C204F7F71	3/31/2022	3/30/2032
C=US, O=DigiCert Inc, CN=DigiCert Assured ID TLS CA G2	77CD51784A693D9482E7EA694E4053BCFD9DF65580FBCE14B2A7527C081803E1	3/25/2020	3/25/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert EV Code Signing CA (SHA2) G1	8A78B966C73D769040C1A81C32168CEF8B9B9E96ECC2D33CC4ABB5A0CF8C1C67	4/27/2018	4/27/2028
C=US, O=DigiCert Inc., CN=DigiCert One AATL CA	419507E46D6520ECEC453A0C2B5292A099431C35E8967A6D0EE573CAAB116C71	4/29/2021	4/28/2031
C=US, O=DigiCert, Inc., CN=DigiCert PKI Platform AATL CA	7E15A84E1A0927AED136C59A048AE48E63BA82EDAA9827892C105A9A89BDE659	3/11/2021	3/10/2031
C=US, O=DigiCert, Inc., CN=DigiCert PKI Platform C2 Shared Individual Subscriber CA	69713E3E4E6E5AF51E302E95EEC2771EB06B79E81C5462594932ACB4E8A28D1C	5/29/2019	5/29/2029
C=US, O=DigiCert, Inc., CN=DigiCert PKI Platform C2 Shared SMIME Individual Subscriber CA	55F3A359F0A26D72FF244C2EE396FD51BC2400EA250C91EFC355E2F8103C9939	6/4/2019	6/4/2029
C=US, O=DigiCert, Inc., CN=DigiCert PKI Platform Class 3 Shared SMIME Organization CA	7F755DC2B9EE99EB02D71CB1805059AAABB5EB3E8558DCA8C09A1D0DE258D767	5/29/2019	5/29/2029
C=US, O=DigiCert, Inc., CN=DigiCert Secure Auth CA3	4A5B67AE540E54E158B0976F82FCFBD70BBA5C63CA1A5826819810212732B646	3/31/2022	3/30/2032
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert SHA2 Assured ID Code Signing	4ADB819C250A2E183313405499D8735299C88F970A5019A27566B27E5818F41B	4/27/2018	4/27/2028
C=PT, O=DigitalSign - Certificadora Digital SA, CN=DigitalSign CA - G5	7AA50B4EACCB422A19EF8597A71D56CB8E6910CFA4DD9BDDFAB1EFE7BCB7801F	7/7/2021	7/6/2031
C=DE, O=Duerr IT Service GmbH, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=Duerr Group Global IT CA	B48CF36ABB49825C3B7C407866958C24085C938C60C7C1A48A18D00859CA348C	9/23/2019	9/23/2024
C=US, O=eGlobalCustody, CN=eGlobalCustody Public Issuer CA	1E1E62AE4F4721617A2CA0E3F7CA6D843AE7530151B9D8C19B5D07D4BDB33324	9/25/2020	9/24/2030

Subordinate CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
C=JP, O=Mitsubishi Electric Information Network Corporation, CN=Enterprise Premium Public CA	6D7B31B61ADB78EBC6A766296886209EA8E74F4600DAE47B78DA3F08BE79F4E5	3/13/2020	3/13/2030
C=JP, O=Mitsubishi Electric Information Network Corporation, CN=Enterprise Premium Public CA	4A45559AD89684BB439FCD2CC4C5EC0F92EE0692CD6B9763957DE31A2F467CCA	4/29/2020	4/29/2030
C=US, O=Fannie Mae, CN=Fannie Mae Shared Online CA G2	28F7CD588FC5B0DF460DD4C678F9DC51077A0E89D38DCCBA09BC1AEEE9D698C1	9/25/2020	9/24/2030
C=US, O=Fannie Mae, CN=Fannie Mae Shared Online CA G3	249CB0551F86DB117BD83E72C9B08B7314F78117843EC2A9D9DD89ABE1DF2C5E	8/31/2021	8/30/2031
C=US, O=FedEx Corporation, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=FedEx Public Online CA	AA942E512B4287D5BEEC85A1C5A81C2DDD136B3CC7065B6830F0685110530412	9/23/2019	9/23/2029
C=AU, O=Fuji Xerox Businessforce Pty. Limited, CN=Fuji Xerox Businessforce CA - G2	A12A8446C0E1E5CF4079642B31A0675ECFD1D09FAD2E4884591F380026D9EAEF	9/25/2020	9/24/2030
C=US, O=GE Aerospace, CN=GE Aerospace SMIME Issuing CA 1	A62553F0504B752EDB55E81973A0CE3D2462AB9F41A1D720716788F3617F78E7	10/11/2023	10/10/2033
C=US, O=General Electric Company, CN=GE SMIME Issuing CA 3	BDE2A6CEC1A1C04C2E423C1457949F180ED086E021BBF090556BE3CE6AD1863F	9/25/2020	9/24/2030
C=US, O=General Electric Company, CN=GE SMIME Issuing CA 4	1D5A72D631E13879A6F6F9F2E04FA94940D6D0AAA8A1542A736FE156BDBDE98E	4/24/2024	4/23/2034
C=DE, O=Giesecke+Devrient GmbH, CN=Giesecke and Devrient CA	0A4FF256B1A0A14BB81F318B64D47D6C36A4C3529F9C39299A47ED51A2B8EE52	3/11/2021	3/10/2031
C=DE, O=Henkel AG & Co. KGaA, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=Henkel Secure E-mail CA	7D89BA7764CFF6FE2EE9AD44838D56C5D57F3DD736F96068DE9B0A1710FB3D47	5/29/2019	5/29/2024
C=US, O=Hewlett Packard Enterprise Company, CN=Hewlett Packard Enterprise Collaboration CA G3	D5E2AAA678A3EC0D88415D9B6E2CB1B0D0CD5960C562B20913625EBDCB3A3F0C	9/11/2024	9/10/2034
C=US, O=Hewlett Packard Enterprise Company, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Hewlett Packard Enterprise Collaboration CA G21	B6E4C8D9D575A61404DE568E27BD6F3048D7B0F803065E2F6526260BDCA3D211	4/1/2019	4/1/2029
C=US, O=Hewlett Packard Enterprise Company, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Hewlett Packard Enterprise Collaboration CA G22	AB480D8F7D720A161C9671843EADEAAAABC5447EFD9EF8F3470874D927CCB861	4/1/2019	4/1/2029
C=CH, O=Hitachi Energy Ltd, CN=Hitachi Energy Assured ID CA	8EAEC34A01A9E7017FD4BCE8BA432A350A2A16561ABE0617CCE1A0D4B1E09EEC	9/14/2021	9/13/2026
C=CH, O=Hitachi Energy Ltd, CN=Hitachi Energy User ID CA	C92F438C530C39FFCA70F05B9AAFF45118D2C076DE44CF52DCEA755049B8100C	6/5/2024	6/4/2034
C=US, O=Honeywell International Inc., CN=Honeywell International Co-branded CA - G2	B78DFC942032C042CD45490E3B32433CA167067B330B52CB1453EA3AD5819080	9/25/2020	9/24/2030

Subordinate CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
C=US, O=Honeywell International Inc., CN=Honeywell International Co-branded QA CA - G2	55F064E2983EEB9AAA54229F8E35023ED10AC6BA19188B05C247BC0E79F85ACB	10/21/2020	10/20/2030
C=US, O=International Business Machines Corporation, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=IBM Certification Authority G4	60F53E603B0EFA71C6CC34B6E87C1145F70DC942C89F71763D90FE18E7AC589E	9/23/2019	9/23/2029
C=US, O=International Business Machines Corporation, CN=IBM Certification Authority G5	A9A0073F6BBA1509995DAF51991CCB1337C0DAA65099F9C1D108AA520285A7C5	4/24/2024	4/23/2034
C=US, O=International Business Machines Corporation, CN=IBM Certification Authority G6	C6CB9291A32B4937A19FCC72FD3A0B7F6EAF7397E45EA0B2D0FD27393E132B73	5/23/2024	5/22/2034
C=US, O=International Business Machines Corporation, CN=IBM Certification Authority G7	81CB1E6BE7220B9DD7676E7A665B6B8FAFAC2C5725919A0654EDD5C0FFAE5A59	8/8/2024	8/7/2034
C=IL, O=ITsMine LTD, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=ITsMine Document Signing CA	965BD258388DDDD4EA7BAAFB7754DF49F896CF02E15BE0925DE33B0038E9925F	8/5/2019	8/5/2029
C=SA, O=Johns Hopkins Aramco Healthcare, CN=Johns Hopkins Aramco Healthcare Issuing CA - G2	6E1A79CCA1FA4EBC380EAE3C8B58A999B2FE6D7E6F88CFB0A8FB6DE12D3A2583	9/10/2024	9/9/2034
C=SA, O=Johns Hopkins Aramco Healthcare, CN=Johns Hopkins Aramco Healthcare Issuing CA	C48FC3FF9EEA47057F827CFD63944701839CA2ACD809CDD04475956895C841CD	12/14/2021	12/13/2031
C=GB, O=Kainos Software Ltd, CN=KAINOS-PUBLIC-TRUST G2	15EA4560F517504F76AEDC836F287FA7BECB738D5C50793D23BC77D96F2AFA33	7/10/2024	7/9/2034
C=GB, O=Kainos Software Ltd, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=KAINOS-PUBLIC-TRUST	802E0B133D61441A0A6AF799DC5E4B260972990D6DCB87DC0ACFC585D9082610	11/26/2019	11/26/2029
C=US, O=KMS Solutions, LLC, CN=KMS Solutions LLC Email CA	A42AD4E053901C06BEF79F9A7A03DB0631C2B64F780EFAB753CFB2629EFB648D	11/10/2022	11/9/2032
C=US, O=Kyndryl, Inc., CN=Kyndryl Certification Authority G1	D83CD35EFE9C610529D4CB2E27229E4DE74A1A29573C24282E0C05C3B388BFAD	10/26/2021	10/25/2031
C=US, O=Kyndryl, Inc., CN=Kyndryl Certification Authority G2	1F9D2D44E84DC190F0A9A6DBB44D75C6FDDBAB1C82985D09A6D9866BF746758B	5/8/2024	5/7/2034
C=GB, O=LMAX Limited, CN=LMAX Trust Services CA R2	84F83527414D88C44BFD875A8521DD0C3BFC38190848DBC24914A22B24AFBC9C	8/17/2022	8/16/2037
C=GB, O=LMAX Limited, CN=LMAX Trust Services CA R2	303DB0C10906D93F45749447B63399B1739271DDC6DD045F5E0077D9A6F6BA94	3/20/2024	3/19/2034
C=GB, O=LMAX Limited, CN=LMAX Trust Services CA R3	70D29802ADD470C775BA7CBEC3BB5FFC473DD5096CBC4E59AF0B78D18A9A31D6	4/3/2024	4/2/2034
C=KW, O=M.H. Alshaya Co. WLL, CN=M.H. Alshaya Co. W.L.L. Public RSA User CA1	4B3EC62A1FC5155C5864CB3963D9F77B506C48A07AB50E97DCA928AAD77859E4	12/13/2023	12/12/2033
C=US, O=FAA, CN=NAIMES	78E69AD84C6464BC56C539C534FCC69CE709557EABB69390139B1AD9EC4A4207	9/1/2022	8/31/2032

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=SG, O=National University of Singapore, CN=National University of Singapore CA - G3	7C29A15B74F9171BE581630394B83791120EABCBA8B9387538BDF50F9D96EAFE	7/16/2020	7/16/2030
C=SG, O=National University of Singapore, CN=National University of Singapore CA - G4	F2395C85E1ECA37838BE939C1E7B60FDAF1BF09F680327489BC228865C02F670	5/15/2024	5/14/2034
C=US, O=NBCUNIVERSAL MEDIA, LLC, CN=NBCU SMIME CA 1	58048CAAE127A2071EA048CE646F5E9D97775ED8F0DD71BDB27C18B0A47CDEBC	3/8/2022	3/7/2032
C=AU, O=NBN Co Limited, CN=NBN CO Limited Public Issuing CA - G3	4708DD6D092D7FB5958F5B43501F6173FB9669EDB05AFD4BBCCDDD2D5068D8D0	6/9/2020	6/9/2030
C=AU, O=NBN Co Limited, CN=NBN Co Limited Public Issuing CA - G4	AA1EBE811133A605B78C12C5BE9AD15A818A45D4E51B0EC2F66DCB57E603E081	5/8/2024	5/7/2034
C=ZA, O=Nedbank Limited, OU=Digicert PKI Platform Individual Subscriber CA, CN=Nedbank Limited Public CA-2	F392F1416B914915D910F7A7289B0636019823F3828416F55DC3EB044E13DB91	8/3/2022	8/2/2032
C=ZA, O=Nedbank Limited, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=Nedbank Limited Public CA	4946337D3954305F36770EE8317F67CFEFF3943576828BF55C1538476B4A20D8	7/2/2019	5/12/2025
C=US, O=National Geospatial-Intelligence Agency, CN=NGA CA G3	357985D17EF02893AB63FE0EE4C464B8AD3A4B05EF72B27AE73D7258C8996FB8	2/5/2020	2/5/2025
C=DE, O=OSRAM Continental GmbH, CN=OSRAM Continental Secure Email CA - G2	B5D61B50ACB993A27EF05D4324A04A671CEE7502E62BA5E9122CC2100BFDF6CF	9/25/2020	9/24/2030
C=DE, O=OSRAM Continental GmbH, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=OSRAM Continental Secure Email CA	D87A91DAC26D64E3659507119E80B11BE37ADA87A8D6C01E4E175DBB32B1A0D3	11/26/2019	11/26/2029
C=GB, O=Oxford Nanopore Technologies Ltd, CN=Oxford Nanopore Public Issuing CA	F7C25E1D01F743DD1F87CEFE2E572E186647CD6FA95F2DD41F12AE36D6C083CF	7/15/2021	7/14/2031
C=QA, O=Qatar Rail, CN=Qatar Rail Issuing CA	B4B636DED84A7719149D63EAB51A370AF35CADA1A8E2BD1F738D4C026B4ADD5D	2/11/2021	2/10/2031
C=SA, O=Saudi Basic Industries Corporation (SABIC), CN=Saudi Basic Industries Corporation Issuing CA	3AB4DE79829AF704A1DD79B13892BBAE44B2770F88AE833450F5B1D33802F0C4	7/16/2020	7/16/2030
C=SA, O=Saudi Enaya Cooperative Insurance Company, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=Saudi Enaya Public Issuing CA	8F76367A7ADAE4642258E6586A2A9642A00F3ECBB1EB725F18B5E7AD3D95AED9	10/31/2019	10/31/2024
C=SA, O=Saudi Telecom Company, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=Saudi Telecom Company Email CA	E33076FFB5267DF419F72DE06C46E2C6CA44FF4383B5316CF7D6E628E98D9BFD	7/2/2019	7/2/2029
C=US, O=Fidelity National Information Services, Inc., OU=Class 2 Managed PKI Individual Subscriber CA, CN=SGN FISGLOBAL PUBLIC CA 2	15F06C6C39DB15F8C14EEFA6B793403F30C7EDDB8C99408DBE36FC3EE9D56913	7/19/2023	7/18/2033
C=US, O=Fidelity National Information Services, Inc., OU=Class 2 Managed PKI Individual Subscriber CA, CN=SGN FISGLOBAL PUBLIC CA	0AD6A7334A5A23C986980F6FECD25006B563A0B6F1BCAA65C0345BA2D96928D3	1/8/2019	1/8/2024
C=NL, O=Shell Information Technology International BV, CN=Shell Corporate Email CA	7A16D63926765A78E8E7666715E865F7A436E3EEE9A4DB71B66996B63448D203	4/14/2021	4/13/2031

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=Solenis LLC, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=Solenis Public Online CA	0F3284B306AC422986C8F560EA46226FD8425519A6F61AA9C55AB508274B82D2	7/2/2019	7/2/2029
C=US, O=SRI International, CN=SRI International CA - G3	A6D9A37927349DE7464C8DA63F601CE55C214BEFD7B324679E64E1B30F75CEFF	1/27/2020	1/27/2030
C=US, O=SRI International, CN=SRI International CA - G4	4557EBFE931588FBA167038F3DC7A3B6B1FDBFE0F74B5CAA0B0DD3BDF5286E9F	6/5/2024	6/4/2034
C=CH, O=STMicroelectronics International N.V., CN=STMicroelectronics Public User CA1	CE15B88ECA32A371D0B51B3B04759055D6A8FF0C3D1A0D60488DF356DC050E55	4/29/2020	4/29/2030
C=CH, O=STMicroelectronics International N.V., CN=STMicroelectronics Public User CA2	10404ACA4342C813622AD6A9CC5601AEF8B6197BE2692D2FE7CE0C3AEB10ED2F	6/19/2024	6/18/2034
C=NO, O=Telenor Norge AS, CN=Telenor Norge AS Dealer G2 CA	9C33CB6A76596752A0C7E51C72D480CE7876C772794EBEE5841FA07035E6E8E0	4/29/2020	4/29/2030
C=NO, O=Telenor Norge AS, CN=Telenor Norge AS EDC CA G2	56D58B26F45BF3878AF4397016A96AF486E9895F66C5F3B73175120B3B4E4A48	4/29/2020	4/29/2030
C=NO, O=Telenor Norge AS, CN=Telenor Norge AS NF CA G2	5752C5FBDC03543F0CEC6CD294CD965D8D32C4EAA993D550F24491ECF9B73836	4/29/2020	4/29/2030
C=NO, O=Telenor Norge AS, CN=Telenor Norge AS OTL CA G2	70340886D08FE1B093158F11A4CC2B2AD45A67F402632A040E9067C6E447E4FE	4/29/2020	4/29/2030
C=NO, O=Telenor Norge AS, CN=Telenor Norge B2B2 CA	DDA4BE3F78C6D742B100146C26011B41752AEBB810C04588C3AF81F0D3451118	3/25/2020	3/25/2030
C=US, O=Thomson Reuters Special Services LLC, CN=Thomson Reuters Special Services CA - G2	B84D709820A8FEB41CE1872E237260B446F99BD3CC158F7738D9146B13FAE64E	3/25/2020	3/25/2030
C=IT, O=Trust Italia S.p.A., CN=Trust Italia Intermediate CA G2	02AF66C64A57A322DF7451B417E8DAD0B84DCC7EF2A8AB488992E35787B27B11	8/14/2024	8/13/2034
C=IT, O=Trust Italia S.p.A., CN=Trust Italia Intermediate CA	1D64D347A041AE7A4F9545047E3760D16ECF98360CDF7888A1CC23C2AFA3BC27	6/28/2021	6/27/2036
C=IT, O=Trust Italia S.p.A., CN=Trust Italia S.p.A. Class 1 - Public Trust CA	AA10D99FD120217012E67F225DB544CBBAEA13BB01F7B0B766520C13FA1A33FF	3/11/2021	3/10/2031
C=IT, O=Trust Italia S.p.A., CN=Trust Italia S.p.A. Class 2 - Public Trust CA	38CF02E361BC737A46DCF02DC1A5664936868267CBF8D4423488BD538EB76518	3/11/2021	3/10/2031
C=IT, O=Trust Italia S.p.A., CN=Trust Italia S.p.A. Mailbox Validated - Public Trust CA	601EE30F57FDDFD8C7F051C7F379081F3DF893A61BA5BE518DC50F7F9F654CB6	6/5/2024	6/4/2034
C=IT, O=Trust Italia S.p.A., CN=Trust Italia S.p.A. Sponsor Validated - Public Trust CA	261F131BEF55C14992A756D2DC3F1003EEEDAEA7920E6059CD0ABB076AC494D6	6/5/2024	6/4/2034
C=IT, O=Trust Italia S.p.A., CN=Trust Italia Shared Client Authentication Issuing CA	7A4697191E9D97412B755F56E2B369A32DDC68488AEB9226CFD03E322FEC539B	6/24/2021	6/23/2036
C=US, O=United Launch Alliance, LLC, CN=ULA CA - G5	818B703BC75A0E86692DE5F4477E8D8E085071E2435CB0FEA829CA9FEB72BA7C	10/11/2021	10/10/2031
C=US, O=United Launch Alliance, LLC, CN=ULA CA - G6	054B8B4242D6C216D97EBB401570F8519D9FEC2C3C01E022A3C5C0612B416F4A	9/4/2024	9/3/2034
C=US, O=VMware, Inc., CN=VMware Issuing SM	2996B56FE08307B04F8963B83F4AFAC25F47C34B33C25DB399F3A850D158C9F1	7/2/2020	7/2/2030
C=SE, O=Volvo Car Corporation AB, CN=Volvo Car Corporation CA	B1D29BE013CF27982AAAB694785A3E9F5A169A682F8B8D38677694670C428288	2/5/2020	2/5/2030

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Subordinate CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
C=CH, O=World Intellectual Property Organization, OU=Class 2 Managed PKI Individual Subscriber CA, CN=WIPO CA - G4	16D809ED155C2AC7E9489E1A204116C9D16EFBE4C91F53369725A2B395535E28	1/29/2019	1/29/2024
C=CH, O=World Intellectual Property Organization, CN=WIPO CA - G5	ECB4DDD4C2CD5FB973C724315A1A2317773254623560FBA860804508538D466C	3/8/2022	3/7/2032
C=JP, O=ZIPAIR Tokyo, K.K., CN=ZIPAIR-Public-CA	7E882B1CC5439B7FB95A05943C5A8F40DAE75AADBB6B624C55EDD94624EFA0E3	3/25/2020	3/25/2025
C=JP, O=ZIPAIR Tokyo, K.K., CN=ZIPAIR-Public-CA-G2	3762B847AC53E454AF86A2ECC3E328B2696F370AECDA70C726B6A877FF266252	3/13/2024	3/12/2029
C=US, O=DigiCert Inc, CN=DigiCert Assured ID CA G3	634FDF26C994E76A2918D9EFC4CAB9C6FCB344EF642A79C89192BCDA0ED52F4C	8/1/2013	8/1/2028
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Assured ID Client CA G3	14FAFCA84BDB8B0EC32719272BE730FE18D6FC29301C5CF789400596EC429AFE	9/23/2019	9/23/2034
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID G3 TLS ECC384 SHA384 2022 CA1	1C8846C406AC6294FAF0D32A5A14E79C841385A57F1159B61E9014605E37E5E9	3/3/2022	3/2/2032
C=US, O=DigiCert, Inc., CN=DigiCert G5 Code Signing ECC P256 SHA384 2022 CA1	C5EBBAF62A45DA6D2B4132F970DD281CFA1FE4F1CA86246B726A0EBDF77454CE	5/19/2022	5/18/2037
C=US, O=DigiCert, Inc., CN=DigiCert G5 Code Signing ECC P384 SHA384 2022 CA1	327F4DEAFFD4EAC5A863724E483033580AD68FC0373A4F4D20C7DBECDD25B5DD	5/19/2022	5/18/2037
C=US, O=DigiCert, Inc., CN=DigiCert G5 Code Signing Europe ECC P-384 SHA384 2023 CA1	18A15F14E6C625C40D46611C80A84E235369F5B97ABD6B851CCDB550E6A33555	2/14/2023	2/13/2038
C=US, O=DigiCert, Inc., CN=DigiCert G5 CS ECC SHA384 2021 CA1	EDAECE94C3C0F7C3239312EAAFB7F6D499410A55D0E008CB6A64779DAD3A1998	2/11/2021	2/10/2036
C=US, O=.NET Foundation, CN=.NET Foundation Projects Code Signing CA2	D60D2D02F83920E89C0063AECA7C4630642C80EB824FFE43D9A11C250E5F51B9	7/15/2021	7/14/2031
C=US, O=DigiCert, Inc., CN=DigiCert G5 Code Signing Europe RSA4096 SHA384 2023 CA1	061D67CC7000C1406A24B51F22BE26857100521710E7CD80BAA521E3675BA1AB	2/14/2023	2/13/2038
C=US, O=DigiCert, Inc., CN=DigiCert G5 Code Signing RSA4096 SHA256 2022 CA1	2DDE0BF74C225CE090EEB57F60A4C307E636B9B0DB20ECD362EEA49AB9AC46BC	5/19/2022	5/18/2037
C=US, O=DigiCert, Inc., CN=DigiCert G5 Code Signing RSA4096 SHA384 2022 CA1	F8D85D3FA345C654CF794DD3C8CE96866960505A170F7A057B5C5086208C9FA3	5/19/2022	5/18/2037
C=US, O=DigiCert, Inc., CN=DigiCert G5 CS RSA4096 SHA384 2021 CA1	26A9454579B138E765087276AF42C1C206C8B2ED0DE6639D1BA992626A797A91	2/11/2021	2/10/2036
C=US, O=DigiCert, Inc., CN=DigiCert G5 ECC SHA384 2021 CA1	4E1AB9F0122809E2A8E93133187AFAF26E71C9C3BF86971065D578FC4C08AF79	3/11/2021	3/10/2031
C=US, O=DigiCert, Inc., CN=DigiCert G5 ECC SHA384 2021 CA1	7A2311B472B99171164FFA0BCA3FA7AC9AC46D035657BFC1EA133095C9703933	4/14/2021	4/13/2031
C=US, O=Anne Arundel Medical Center, OU=AAMC Direct Messaging, CN=AAMC Direct Intermediate CA	BB1C01E884DD0919AB94D5AF5575CD6FEB71E560B2B58735A78B150A10D54BF3	5/28/2015	5/28/2025
C=US, O=Allina Health System, OU=Information Services, CN=Allina Health Connect HIE Intermediate CA	826C6AA610EF190BE2D7C03E22D032405B289804E3319E233C4C37FFBF305F1A	12/8/2015	12/8/2025
C=US, O=Abbott Laboratories Inc., CN=Abbott Laboratories Secure Authentication CA G2	2697ACB96A49BE2BFC5C06C393949F0D8E75106AD6D4C73E2DA172A90831A85A	1/21/2021	1/20/2031

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Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=Abbott Laboratories Inc., CN=Abbott Laboratories Secure Authentication CA G3	ABFD261AB3733480BF58616991FFE266B6DB315E226A32339702D6C0BE6B96F2	3/11/2021	3/10/2031
C=US, O=Abbott Laboratories Inc., CN=Abbott Laboratories Secure Authentication CA	DB99A4F284CCF10B26DE7B7A5D651725B857CBC871EBB33028D67B55510EFCD9	8/23/2016	8/23/2026
C=US, O=Abbott Laboratories Inc., CN=Abbott Laboratories Secure Server CA	6C69E201656440EB98CD0875764A1ED19015ED8C4427601ACA9C68AFA8973959	7/12/2016	7/12/2026
C=US, O=Cisco Systems, Inc., CN=Cisco Meraki CA2	CDBCBEF16E37237702FACC4B55D3AB92A17CFA17835E13377AA4D2BA0FD47A02	9/24/2020	7/12/2026
C=US, O=Cisco Systems, Inc., CN=Cisco Meraki CA	199EE58009555DAE2CDA0626931C64391D6A88CCCB1F9F0B2EE80B667F581C06	7/12/2016	7/12/2026
C=JP, O=Cybertrust Japan Co., Ltd., CN=Cybertrust Japan Secure Server CA	33D57359831F87754E6E755D6B5B56E7E71297DDDFEA1D6397086604280F6FFC	12/7/2016	12/7/2031
C=US, O=DigiCert Inc, CN=DigiCert Basic ECC CN CA G2	97C4B44316055F26A52A1F664CE385800A964A8552C99D2BCAFD618E6D8074A0	3/4/2020	3/4/2030
C=US, O=DigiCert Inc, CN=DigiCert Basic RSA CN CA G2	CB57B3FF2040CB269497625BC90FA9D7B4ED4938C6F60F42F69AFDF508AC2993	3/4/2020	3/4/2030
C=US, O=DigiCert Inc, CN=DigiCert Cloud Services CA-1	2F6889961A7CA7067E8BA103C2CF9B9A924F8CA293F11178E23A1978D2F133D3	8/4/2015	8/4/2030
C=US, O=DigiCert Inc, CN=DigiCert Cloud Services CA-1	5F88694615E4C61686E106B84C3338C6720C535F60D36F61282ED15E1977DD44	9/25/2020	9/24/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert CN RSA CA G1	03CE9BC71B91FDB7CB3C5235CAE0701CB486BBD628D4AADE5841FC5F0AA37A46	6/20/2019	6/20/2029
C=US, O=DigiCert Inc, CN=DigiCert Secure Site CN CA G3	6AF5C4EAC180289B94A77A5D231E3865FFE934F3E6A24BF487EB4E2BFD809A4B	3/13/2020	3/13/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Secure Site ECC CA-1	99935E20424535EC016F337B2BE68F1349DE66CCE4CA5AB367F8F3738215B833	2/15/2019	2/15/2029
C=US, O=DigiCert Inc, CN=DigiCert Secure Site ECC CN CA G3	00C0CBA95CBFE1E270814275F32B505D6E5916C2B6DA67FAF4DD309EE6E86CBE	3/13/2020	3/13/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Secure Site Korea ECC CA	EF9138993654DF92D2FB5860E28DE8818A9F49DB56ECB689A67A7FC2D5881DD2	3/25/2019	3/25/2029
C=US, O=DigiCert Inc, CN=DigiCert Secure Site Pro CN CA G3	A66C97AE59DFF9EA015E73C744EE5520745F101A395C497D19E1F168D39AFCD0	3/13/2020	3/13/2030
C=US, O=DigiCert Inc, CN=DigiCert Secure Site Pro ECC CN CA G3	985140919342239C89086B22DFCAA4508590B11A3DE0A423E25EBC3DDAF8910D	3/13/2020	3/13/2030
C=US, O=DigiCert Inc, CN=DigiCert SHA2 Secure Server CA	C1AD7778796D20BCA65C889A2655021156528BB62FF5FA43E1B8E5A83E3D2EAA	9/23/2020	9/22/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert SHA-2 RADIUS CA	524CF7331C4EE353EEB1ECD74E1F801A0F1F08DFA0322092F42205AFC3A17675	9/20/2016	9/20/2026
C=US, O=DigiCert Inc, CN=DigiCert TLS Hybrid ECC SHA384 2020 CA1	D79A2D5E03295C0E9FEAE36D021EBD5209700AB1A9E817A43F30FA3C66F78D21	9/23/2020	9/22/2030
C=US, O=DigiCert Inc, CN=DigiCert TLS Hybrid ECC SHA384 2020 CA1	F7A9A1B2FD964A3F2670BD668D561FB7C55D3AA9AB8391E7E169702DB8A3DBCF	4/14/2021	4/13/2031
C=US, O=DigiCert Inc, CN=DigiCert TLS RSA SHA256 2020 CA1	25768713D3B459F9382D2A594F85F34709FD2A8930731542A4146FFB246BEC69	9/24/2020	9/23/2030

Subordinate CA Certificates

Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=DigiCert Inc, CN=DigiCert TLS RSA SHA256 2020 CA1	52274C57CE4DEE3B49DB7A7FF708C040F771898B3BE88725A86FB4430182FE14	4/14/2021	4/13/2031
C=US, O=DigiCert Inc, CN=DigiCert Trust Service CA	75AC8E41D9A7CC758D3998FE030F638CFD28855823DA4E9B56954CFBDE054EB6	3/4/2020	3/4/2030
C=US, O=DigiCert Inc, CN=DigiCert Trust Service ECC CA	F269AC00B410003F72DC628AFB3D950279630C7C5D0C82148A0FD24DF4DA4301	3/4/2020	3/4/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Encryption Everywhere DV TLS CA - G1	15EB0A75C673ABFBDCD2FAFC02823C91FE6CBC36E00788442C8754D72BEC3717	11/27/2017	11/27/2027
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Encryption Everywhere ECC DV TLS CA	1E4FC34D26E0793D559E322FE111F1E19A9D2E34BC25D3C427B032A48D2C5B6A	7/23/2019	7/23/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=GeoTrust CN RSA CA G1	23DDF08B22373D86158EB9C99FDB5366B19804560531372DD20DCE3FB766F56C	6/20/2019	6/20/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=GeoTrust ECC CA 2018	D8E269A6EB08CBC337AD6578C72135787484C99D2FB08CCED029E806BE1040FC	11/6/2017	11/6/2027
C=US, O=DigiCert Inc, CN=GeoTrust ECC CN CA G2	7CAEEC680E6497FC5109073F83816E798F27F8968A2663C1C95711B548192E35	3/4/2020	3/4/2030
C=US, O=DigiCert Inc, CN=GeoTrust ECC CN CA G3	52DDE89FDD6F610473F9314C7A8B1AC442F8AA833AA5D773006FDA758C9FF1EC	6/9/2020	6/9/2030
C=US, O=DigiCert, Inc., CN=GeoTrust Global TLS RSA4096 SHA256 2022 CA1	A797108A05AD9328585FC0CB842FBD824FAC6510B8D7EB4FF47991EEE58AA924	5/4/2022	11/9/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=GeoTrust RSA CA 2018	8CC34E11C167045824ADE61C4907A6440EDB2C4398E99C112A859D661F8E2BC7	11/6/2017	11/6/2027
C=US, O=DigiCert Inc, CN=GeoTrust RSA CN CA G2	E3C24279DD6A337F881B1BC692E878F4A31AFE95851F208F94800B0C24D88C38	3/4/2020	3/4/2030
C=US, O=DigiCert Inc, CN=GeoTrust RSA CN CA G3	8A023C08E4A1AACC925B34C5C7965A8D0527565AEA130ABB915E508CD33AFB45	6/9/2020	6/9/2030
C=NL, O=SupremeSSL, OU=www.supremessl.com, CN=GeoTrust SupremeSSL 1 CA	354FCFC6162A0EE2205DBEF68931E78033ECE9D125E0824E49BAEBF82DFDD167	5/7/2019	5/7/2029
C=LV, O=EnVers Group SIA, CN=GoGetSSL Legacy TLS RSA2048 SHA256 2022 CA-1	C5EB54EB458E38183C70BF4BD1064D0CF557EA07EAA1CB305968E8A8A50733ED	6/23/2022	11/9/2031
C=US, O=Avalanche Cloud Corporation, CN=HydrantID SSL CA D1	A847544CC3CD54E855CA39780C2162431F5C8E327EC66D5A43CF266877BEC50F	3/4/2021	3/3/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=RapidSSL ECC CA 2018	A0D1523A0BF663550EB9081E9BDDEDA12814F9570B7697D95DF2EA53D4FF75E3	11/6/2017	11/6/2027
C=US, O=DigiCert, Inc., CN=RapidSSL Global TLS RSA4096 SHA256 2022 CA1	92A5F515AD35D3A27C490EDB135DE7044B1E399D608AC1ABE883FC82FB4B16BE	5/4/2022	11/9/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=RapidSSL RSA CA 2018	C790B47128447EC0B60F22BFCB795D71C326DD910EE12CBB4CC5A86191EB91BC	11/6/2017	11/6/2027
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site CA G2	F614AE2B101484F15F66F4DDA56EE6EB422728F179D94399EDE19AC1D85A8BD3	6/20/2019	6/20/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site CA	B26EB310F8FAF0EF5B0D0B71AA65EC050FA3ADE29134FB438AB6440288FA6E67	5/17/2018	5/17/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site Pro CA G2	02FED3BA2E6A7843A318A981BC847061FD282D9E8847FFA9F54D785B6B81D6F3	6/20/2019	6/20/2029

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Subordinate CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site Pro CA	BA6A0C1170E1C7323860749B5E7B0ED365975D8FC90740B15D70F843A2394942	4/27/2018	4/27/2028
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site Pro ECC CA G2	DA3BE2B6A6D9715C1295A42BE526E0001D10E5D7540F06E7631B34E644934848	6/20/2019	6/20/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site Pro ECC CA	A206644F57AFD10B94169498858981C16D633858CE0C88B57CF14FA2A92AACFD	4/27/2018	4/27/2028
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Thawte CN RSA CA G1	7867AAE905EB8D55635FFEBBBF8CF05A63B9B390665DE2367AC1073E92913728	6/20/2019	6/20/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Thawte ECC CA 2018	6E62CBE3E42A41C50405B3E2F1A442576832678856184AF9C02112070AC836936	11/6/2017	11/6/2027
C=US, O=DigiCert Inc, CN=Thawte ECC CN CA G2	58E89F4F70410DA00B41473CFA413FA0737ED2729F3ED77BE29A7F4705377147	3/13/2020	3/13/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Thawte RSA CA 2018	9A5EECEE9C7D898BD81DC3BF066DAF6AEFB8DB1C59676206D2BFDD682312C6F6	11/6/2017	11/6/2027
C=US, O=DigiCert Inc, CN=Thawte RSA CN CA G2	95141A355A5A2AA3E011221CAB9FE73810FDB5D88135864F03E4D852BD0BBEDB	3/13/2020	3/13/2030
C=CN, O=TrustAsia Technologies, Inc., CN=TrustAsia ECC OV TLS Pro CA G2	70357B9E56D3FB3C6C009C38C7181454C462908DFBCE6D54D60DFE1E506E14FD	6/20/2019	6/20/2029
C=CN, O=TrustAsia Technologies, Inc., CN=TrustAsia ECC OV TLS Pro CA G3	756AAB900E3F5C762734B6461FC32A9DD341EA1D4A04283409233C39787A867E	3/13/2020	3/13/2030
C=CN, O=TrustAsia Technologies, Inc., CN=TrustAsia ECC OV TLS Pro CA	F1CACA6AB2350A7668C13E41960908681DAFCC7E368DCB8D47FECF9631390481	4/27/2018	4/27/2028
C=CN, O=TrustAsia Technologies, Inc., CN=TrustAsia OV TLS Pro CA G2	DBDFA91ACC4DB8AD83FCC7978E35D62F6E32E55108273C8EC998E3133580D664	6/20/2019	6/20/2029
C=CN, O=TrustAsia Technologies, Inc., CN=TrustAsia OV TLS Pro CA G3	D0E8A51ACAAB9AF82767E2EF16543C2CC635551B5DE0DAE25D6AAC71E7862870	3/13/2020	3/13/2030
C=CN, O=TrustAsia Technologies, Inc., CN=TrustAsia OV TLS Pro CA	33E8A4ED48930760CE1AD7A2D44F079B22F660052753976109E6FC74752552BD	4/27/2018	4/27/2028
C=CN, O=TrustAsia Technologies, Inc., OU=Domain Validated SSL, CN=TrustAsia TLS ECC CA	68D0B2E8C85BF009B4DB39AC8B5E2FA8E1FD9FD1E5028704EA9288C7E472AAEB	12/8/2017	12/8/2027
C=CN, O=TrustAsia Technologies, Inc., OU=Domain Validated SSL, CN=TrustAsia TLS RSA CA	79F1F5AB697DEBF195F5B7DA65F95399682EDAEB80115B9D42A6AE5E2FA98802	12/8/2017	12/8/2027
C=AU, O=Verokey, CN=Verokey High Assurance Verified Business	2F0E385864D2DCA8AC7AE48164287BFE45126C6BCD92E91BB3DF1250C7B2DABA	3/17/2022	11/9/2031
C=AU, O=Verokey, CN=Verokey Secure Web	DBAF58DEBFBBA1DE8E04DCAE7A2C163B09D39E7E732E91DEA8655C2BD732AB00	3/17/2022	11/9/2031
C=AU, O=Verokey, CN=Verokey Verified Business	D6CC57B9260E9B012DFAC40A81BFC022B92D91FA49B7C45C59DF86702AAC2906	3/17/2022	11/9/2031
C=GR, O=Adacom S.A., CN=ADACOM Class 2 Public Trust CA G2	C1D5F777F98E6CC616EEE9A212F070990E818D06751CC2A86551FB4A9168E29D	9/14/2021	9/13/2031
C=GR, O=Adacom S.A., CN=ADACOM Class 2 Public Trust CA G3	11847D4866674DB8A00D0CD74EB2E13143E449B1AC3BB314A6257D796BAF3780	4/3/2024	4/2/2034
C=DE, O=CertCenter AG, OU=Domain Validated SSL, CN=AlwaysOnSSL TLS RSA CA G1	2A41BA819EB6125AF5CB4B8B0E9E954ECE798C2A7EE43DCDAF7D395987C4D552	11/2/2017	11/2/2027

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=Apple Inc., CN=Apple Public Client RSA CA 1 - G1	BE13A5D2F5C78F440119D484C710427325EB10CEA9623EF6200CB11B04F650E1	12/12/2018	12/11/2030
C=US, O=Apple Inc., CN=Apple Public EV Server RSA CA 1 - G1	340CA5BA402D140B65A2C976E7AE8128A1505C29D190E0E034F59CCAE7A92BC2	4/29/2020	4/10/2030
C=US, O=Apple Inc., CN=Apple Public Server RSA CA 1 - G1	392583543B93B10E0506DE75D69399FCBBC1469C8DE396066C756088B92241DA	12/12/2018	12/11/2030
C=US, O=Bloomberg LP, CN=Bloomberg TLS CA	F5F1A8C04E5CF0FDB678DD279994463E48508C4349643B0D92CBFD7523F6C40A	3/30/2021	3/29/2031
C=US, O=Bloomberg LP, CN=Bloomberg TLS CA	440B037416F2DE852CA386150D611EC0AF31DD58D8A27F882815A7EA3EE6848EE	9/24/2020	9/23/2030
C=US, O=Cloudflare, Inc., CN=Cloudflare Inc RSA CA-3	9FB0385317FAB1C00541B274A6C82B7644DE7C7FD4BB5E335DE445FA0A96BFD9	7/10/2024	7/9/2029
C=US, O=CrowdStrike, Inc., CN=CrowdStrike Federal EV RSA CA G1	EDEDD0053CB844592E673EF2A081C15B38EE3ECBEB5856C9A4FE9B7169FAFFE7	8/15/2023	8/14/2033
C=US, O=DigiCert, Inc., CN=DigiCert Basic EV G2 TLS CN RSA4096 SHA256 2022 CA1	8534345E71F5450B6BD2758CEF8495547008A6E302AC8DAC625361CB24DC6BD5	12/15/2022	12/14/2032
C=US, O=DigiCert, Inc., CN=DigiCert Basic OV G2 TLS CN RSA4096 SHA256 2022 CA1	F16C99CDE19ED1ACE8B4FBC700E05E7EFF2116FD6A22427766B251C6E8BB3CE7	12/15/2022	12/14/2032
C=US, O=DigiCert Inc, CN=DigiCert EV RSA CA G2	9588EF74199E45ACEFCCCFC0C47010E9F2A37A1DD44C61A4E1C6B334DA5AF614	7/2/2020	7/2/2030
C=IE, O=DigiCert Ireland Limited, CN=DigiCert G2 TLS EU RSA4096 SHA384 2022 CA1	A4ADFC2917BB1451D312371D441ACDB686107FBC0B3156D5570E99E1121974FA	9/19/2022	9/18/2032
C=US, O=DigiCert Inc, CN=DigiCert Global CA G2	8FAC576439C9FD3EF153B51F9EDD0D381B5DF7B87559CEBECA04297DD44A639B	8/1/2013	8/1/2028
C=US, O=DigiCert, Inc., OU=www.digicert.com, CN=DigiCert Global CA-3 G2	9B2DD4FBEE941F6510F716C04969B364288927654617 01EF47D41B3289475D50	11/12/2019	11/12/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Global Client CA G2	A449DBAB6D4C035FAAFD9D045891FE98ABD73D286268A8A83F854145551692E3	9/23/2019	9/23/2034
C=US, O=DigiCert, Inc., CN=DigiCert Global G2 TLS EE+ RSA4096 SHA256 2022 CA1	B915B806A8B7BE2E3809F2E932996E7C10CC82691864A89606BD50080DC2EAB3	4/28/2022	4/27/2032
C=US, O=DigiCert Inc, CN=DigiCert Global G2 TLS RSA SHA256 2020 CA1	C8025F9FC65FDFC95B3CA8CC7867B9A587B5277973957917463FC813D0B625A9	3/30/2021	3/29/2031
C=US, O=DigiCert Inc, CN=DigiCert Global G2 TLS RSA SHA256 2020 CA1	1F8EB9E9A8E066CC5B3833E06B3129764B622639D5B163F600E1C79120BF3EED	9/24/2020	9/23/2030
C=US, O=DigiCert KMS Solutions, LLC, CN=DigiCert KMS Solutions LLC GCC High Email CA	4CBB63C9CD73883DBDAC9BAA662C356602FB30C4EE68B86642EA12AFBC71D367	2/14/2023	2/13/2033
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site EV G2 TLS CN RSA4096 SHA256 2022 CA1	8FC89B7368A2912973567744047690 8711DA8F3F04C0AB6A61D6DE9D4EB4D1C2	12/15/2022	12/14/2032
C=JP, O=DigiCert Japan G.K., OU=www.digicert.co.jp, CN=DigiCert Secure Site Japan CA	AD14A68BEC949E84F6063419D63465D137C2ADD3E3A85E00E9E3EE82E5B4018F	11/20/2018	11/20/2028
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Secure Site Korea CA	6555D661D37F2494A23C2D5F83479E78051B6DE76A147B506D6BEA2882B4D066	11/20/2018	11/20/2028
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site OV G2 TLS CN RSA4096 SHA256 2022 CA1	7CD6CDD25EEE2512AAF1419AFD44C146C43AA1093D5A60D4ED39EFBDDA815AD4	12/15/2022	12/14/2032

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site Pro EV G2 TLS CN RSA4096 SHA256 2022 CA1	B480E11A6BD0C2BC538B1C7DB1C63B40694E5DEDD93752D082D9FD422FCB3FBD	12/15/2022	12/14/2032
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site Pro G2 TLS CN RSA4096 SHA256 2022 CA1	826EBD90E946C25D3DF05ABFB911AC0A426C7A9A063B7224464710BEC5A58CE1	12/15/2022	12/14/2032
C=PT, O=DigitalSign - Certificadora Digital SA, CN=DigitalSign CA - G7	FE7AA77C5DE2D1466852F6D9070A320BE3DA439C72D74F71C62697502DA5BFCF	11/3/2021	11/2/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Encryption Everywhere DV TLS CA - G2	B1AC8CFB181B9C9354E1775FCBDFCFE7898C5CC9A17D76315B57C112EEE55234	11/27/2017	11/27/2027
C=JP, O=Mitsubishi Electric Information Network Corporation, CN=Enterprise Premium Public CA	DF025DCE2A36411BE5EB6590C161EFD2652EC2B3F70D5C651F90D023C46F3A00	6/9/2020	6/9/2030
C=FR, O=Gandi SAS, CN=GandiCert	3337D4E4B4EF6A94F04915D2E86B1F8F47A3C83667DA2519D9B95AE7270AFFE1	4/17/2024	4/16/2034
C=US, O=DigiCert, Inc., CN=GeoTrust EV G2 TLS CN RSA4096 SHA256 2022 CA1	6FE24FBFFBBFFBDC3BE69A472DBF75EF30CACF8AEA319F3893654C91BAB91143	12/15/2022	12/14/2032
C=US, O=DigiCert Inc, CN=GeoTrust EV RSA CA G2	2D140F20B8A96E2B4D2F1CC5ACA5E5A1E7DC56A7491E510906960F38D2D21AEF	7/2/2020	7/2/2030
C=US, O=DigiCert, Inc., CN=GeoTrust G2 TLS CN RSA4096 SHA256 2022 CA1	05DC9EDC0FDDFA975A1432EF806EC780078B5362AD45AF76DB15C907630DB25D	12/15/2022	12/14/2032
C=IE, O=DigiCert Ireland Limited, CN=GeoTrust Global G2 TLS EUR RSA4096 SHA384 2023 CA1	9E7E310303EDA686FCC5F55F7506895B15FF05C780EEEADEAB9D016DB672F3BA	6/14/2023	6/13/2033
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=GeoTrust TLS RSA CA G1	C06E307F7CFC1D32FA72A4C033C87B90019AF216F0775D64978A2ECA6C8A230E	11/2/2017	11/2/2027
C=LV, O=EnVers Group SIA, CN=GoGetSSL G2 TLS RSA4096 SHA256 2022 CA-1	8AADF068A1B7C04B3E346F7C97FD9619FFF14ECC6C82C2F15594B9732F3F3E72	6/23/2022	6/22/2032
C=CH, O=Hostpoint AG, OU=Domain Validated SSL, CN=Hostpoint TLS RSA CA	F7FBDEB82BE99D41CDCA419FC91859D3E5286C076204E0E903D678BB213ED89B	11/2/2017	11/2/2027
C=JP, O=DigiCert Japan G.K., CN=Individual Certificate Issuance Service CA	1C8DF080957A9B79F31D090297B047DCD6B541CBC0A83FDFF0674A2004BFCDA6	3/11/2021	3/10/2036
C=DE, O=Legacy Technologies GmbH, CN=Legacy Technologies Intermediate	1032C6001ED664A0CD343B138BCB6860E2111011C3D5F06540F5BE41147812A5	7/2/2020	7/2/2030
C=US, O=Microsoft Corporation, CN=Microsoft Azure RSA TLS Issuing CA 03	9D1BC5D2DD75BF8B64F35E7F919E2546C225BE888C1A8CBE82C0E9579234A7ED	6/8/2023	8/25/2026
C=US, O=Microsoft Corporation, CN=Microsoft Azure RSA TLS Issuing CA 04	33F9731BE910A66DC6ACD07D9D9CA212EE8D0A9A5C78C8BF3E89BB74DF8FB936	6/8/2023	8/25/2026
C=US, O=Microsoft Corporation, CN=Microsoft Azure RSA TLS Issuing CA 07	724247794951C93F3E41711617E95CE143263E3196C345A1DA78F6639749EC03	6/8/2023	8/25/2026
C=US, O=Microsoft Corporation, CN=Microsoft Azure RSA TLS Issuing CA 08	511C1C41CB7EB2A10078C32C82F17925BA786DE46C633921D038E7409E15A5EA	6/8/2023	8/25/2026
C=US, O=Microsoft Corporation, CN=Microsoft Azure TLS Issuing CA 01	24C7299864E0A2A6964F551C0E8DF2461532FA8C48E4DBBB6080716691F190E5	7/29/2020	6/27/2024
C=US, O=Microsoft Corporation, CN=Microsoft Azure TLS Issuing CA 02	15A98761EBE011554DA3A46D206B0812CB2EB69AE87AAA11A6DD4CB84ED5142A	7/29/2020	6/27/2024

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=Microsoft Corporation, CN=Microsoft Azure TLS Issuing CA 05	D6831BA43607F5AC19778D627531562AF55145F191CAB5EFAFA0E0005442B302	7/29/2020	6/27/2024
C=US, O=Microsoft Corporation, CN=Microsoft Azure TLS Issuing CA 06	48FF8B494668C752304B48BFE818758987DEF6582E5F09B921F4B60BB3D6A8DD	7/29/2020	6/27/2024
C=US, O=Microsoft Corporation, CN=MSFT RS256 CA-1	F5D4CAD53B3F2EF39810DA6D3CD5FF7663F4ABB87738827CCECAFF6FCC3EAFC4	4/28/2022	4/27/2032
C=US, O=National Geospatial-Intelligence Agency, CN=NGA CA G4	69F46822031ECDE9D85B563BAFC3915051B396986562F2DDF160075C29FB8DF0	2/27/2024	2/26/2029
C=US, O=Oracle Corporation, OU=Organization Validated SSL, CN=Oracle TLS RSA CA G1	319896E3954D510DA3A4B75387E8C870B3BC2C3228D8550916EBE9ABDCB7F921	11/2/2017	11/2/2027
C=NL, O=PerfectSSL, CN=PerfectSSL	6B40D3DBAAD68BE6E804E32085F7837CEE08B7C4FA6A990B36227A6DCFF0873B	4/17/2024	4/16/2034
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=RapidSSL TLS RSA CA G1	4422E963EE53CD58CC9F85CD40BF5FFEC0095FDF1A154535661C1C06BCADC69B	11/2/2017	11/2/2027
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site CA	D3533B732A518A6DA68EF266085E11DFD114C0EB0092CD43530A44D54B913ED1	2/9/2018	2/9/2030
C=DE, O=STRATO AG, OU=Domain Validated SSL, CN=STRATO TLS RSA CA	A8AD1C25CC580B2131FCC6FC6D6513746F38EA99BD162C81B5C5393495175B18	11/2/2017	11/2/2027
C=US, O=DigiCert Inc, CN=Thawte EV RSA CA G2	3286691412F30ECE5C065FD62F4392A4762D1E778153338359DF390299FBD61EF	7/2/2020	7/2/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Thawte Partner CA	635AF6889F49060FE0E7BABC0F23314FB118F3B18243DD17F47D8647A69684B1	11/20/2018	11/20/2028
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Thawte TLS RSA CA G1	4BCC5E234FE81EDE4EAF883AA19C31335B0B26E85E066B9945E4CB6153EB20C2	11/2/2017	11/2/2027
C=NL, O=Trust Provider B.V., OU=Domain Validated SSL, CN=Trust Provider B.V. TLS RSA CA G1	009871C3A4C607311E5AE92F01095F9BF76100B8794AB0A9A5210E6794C8607C	11/2/2017	11/2/2027
C=NL, O=Trust Provider B.V., CN=Trust Provider B.V. TLS RSA EV CA G2	B23A29C312A7A80B0FE6B4E71B909CAE92AD649E88766E56C9EE8E1D7C013945	2/21/2020	2/21/2030
C=CN, O=TrustAsia Technologies, Inc., OU=Domain Validated SSL, CN=TrustAsia TLS RSA CA G8	036A18F5F0EB9DD5EE02B7854DF5C33845601D8939CFB7B607F69D142C01D909	11/2/2017	11/2/2027
C=AU, O=Verokey, CN=Verokey High Assurance Verified Business SHA256	A542DE4E6ECD35ABEB009EB5D5EC3887EC4371794BCF25CEEAE0E1881C51D5DD	7/24/2024	7/23/2034
C=AU, O=Verokey, CN=Verokey Secure Web G2	5EE5AAD704A8B698883F4029720C8FA1CB79C9FA3463CC24340629EBE6C5A62B	3/17/2022	3/16/2032
C=AU, O=Verokey, CN=Verokey Verified Business G2	7EDBE6F8C49A1E3988CAADD438B72F07B6AF9CE751CF5835163161D63CAE4DDF	3/17/2022	3/16/2032
C=AU, O=Verokey, CN=Verokey Verified Business SHA256	B10ED8C2C76C7C99FC175B23B8E78F3F0C15D197DF3AA2C87FF29E92414711E9	7/24/2024	7/23/2034
C=US, O=Vitalwerks Internet Solutions, LLC, CN=Vitalwerks Internet Solutions, No-IP TLS ICA	2AE0626F9A43EDB2B0A22D410EB06C482EF982563A717A247287C504D79BF980	2/23/2023	2/22/2033
C=US, O=Wells Fargo & Company, OU=Organization Validated TLS, CN=Wells Fargo Public Trust Certification Authority 01 G2	CF7CFA4F9DBCCBCA6D20EFDEBEAD4E173B34E76BDA1EB1E619F44E06E95FC208	11/15/2017	11/15/2027

Subordinate CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
C=DE, O=CertCenter AG, OU=Domain Validated SSL, CN=AlwaysOnSSL TLS ECC CA G1	BD193C475E4E67938BEF34122B98B558A2882E7ED94369A6CB011320EF15623C	11/2/2017	11/2/2027
CN=Apple IST CA 8 - G1, O=Apple Inc., C=US	8711EE539E74213F5F412EB4A18A98C3B58DA620B4D43E75B0542AFC39FC6033	12/12/2018	6/8/2031
CN=Apple IST CA 8 - G1, OU=Certification Authority, O=Apple Inc., C=US	9218BAB94E7D5D1F81D62D0FC23E31C8BBCBEE3545D1D7E9D3FD29B30BC188C8	12/21/2018	6/8/2031
C=US, O=Apple Inc., CN=Apple Public EV Server ECC CA 1 - G1	2585928D2C5BFD952E025BD12E27C6776224CF752EC362D3031CDD49351844D4	4/29/2020	4/10/2030
C=US, O=Apple Inc., CN=Apple Public Server ECC CA 1 - G1	2AF988F26F6EF0DAB9055697F0941FB4E5C42247CA982826895EF29985D30CD6	12/12/2018	12/11/2030
C=US, O=Cloudflare, Inc., CN=Cloudflare Inc ECC CA-4	7EB5F4AAAC39B3A7835D76F722A473F9B4911E4A3691DE78B3C2973595764EA2	7/10/2024	7/9/2029
C=JP, O=Cybertrust Japan Co., Ltd., CN=Cybertrust Japan ECC EV CA	92E3770B1EB44F84C2F2CB0097C2FD7126BD212B41C2610E78DDFD8946761738	8/24/2017	8/24/2032
C=JP, O=Cybertrust Japan Co., Ltd., CN=Cybertrust Japan Secure Server ECC CA	C3683F7D91754219DADA4E8DC30E4B18BD3928B53D3AB93D07384BC5871CE355	7/13/2017	7/13/2032
C=US, O=DigiCert, Inc., CN=DigiCert Basic EV G3 TLS CN ECC P-384 SHA384 2022 CA1	1CA57EF159812BFBE2D8106F6152E51DDD0A5A4C9489CD097595B797CB37843E	12/20/2022	12/19/2032
C=US, O=DigiCert, Inc., CN=DigiCert Basic OV G3 TLS CN ECC P-384 SHA384 2022 CA1	B5528F4A43957E1ABBE08C4EBF2D8ACF4C2C1914D6354117492C8C3FE033FD97	12/20/2022	12/19/2032
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Extended Validation CA G3	7C0912E5DE8478BB86E8EA46BA5AE65DC3870BCEFCBC2F46795EEECF648CFBE7	11/11/2015	11/11/2030
C=US, O=DigiCert, Inc., OU=www.digicert.com, CN=DigiCert Extended Validation CA-3 G3	DA7E5778F62F87655B8FD24A89E651E57329DC9C0765A71158CE56443CA44E95	11/12/2019	11/12/2029
C=IE, O=DigiCert Ireland Limited, CN=DigiCert G3 TLS EU ECC P-384 SHA384 2022 CA1	F0F573763C616F762AA6AB927CBDE789FA8EF4E69AF8A27EC63C62EEF329ECA1	9/19/2022	9/18/2032
C=US, O=DigiCert Inc, CN=DigiCert Global CA G3	F7541CF69D1DE1AC953ABC1FAD6F7807A34EDFE9E12C11E66A195930C23AD6C6	8/1/2013	8/1/2028
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Global Client CA G3	BA361260FF1D46031686305E082DE836D4A320466E0DE9E013F00CDEDDD62317	9/23/2019	9/23/2034
C=US, O=DigiCert, Inc., CN=DigiCert Global G3 Code Signing ECC P256 SHA384 2021 CA1	DDF122E12D2BE604BEEF8A4A55C5EB802E19D5B8D8E1AF994580BD92F4A179E3	7/28/2021	7/27/2036
C=US, O=DigiCert, Inc., CN=DigiCert Global G3 Code Signing ECC SHA384 2021 CA1	35769D41EF436A4D63DDB00AB11C6CE968989FCDD829E7018F5DB90AC4BD3CD0	4/29/2021	4/28/2036
C=US, O=DigiCert, Inc., CN=DigiCert Global G3 Code Signing Europe ECC P-384 SHA384 2023 CA1	5903EE782F4FA2072EDCC94B8CC3DE6AE4AB27B3A079259262884167D5501F371	2/14/2023	2/13/2033
C=US, O=DigiCert, Inc., CN=DigiCert Global G3 mPKI SMIME ECC P384 SHA384 2023 CA1	EB46C072E983B1F6F1E34C397CF7064E77D921ED82E913A27224668FE8C25901	8/30/2023	8/29/2033
C=US, O=DigiCert, Inc., CN=DigiCert Global G3 SMIME ECC P384 SHA384 2024 CA 1	7AA5398910F171FDC333FB7204D7C37AE5F10000E026335F728FDC49C8DBC394	7/24/2024	7/23/2034
C=US, O=DigiCert Inc, CN=DigiCert Global G3 TLS ECC SHA384 2020 CA1	338EDB04FB8BEAF07A10749E7F4E538DE0715DAFB6478D58063FB7C8BDB0C30D	9/24/2020	9/23/2030

Subordinate CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
C=US, O=DigiCert Inc, CN=DigiCert Global G3 TLS ECC SHA384 2020 CA1	699ED65BDD3D5E790776D165EA7A325B7AEAF419647921A92FF28BB0680D72BA	3/30/2021	3/29/2031
C=US, O=DigiCert Inc, CN=DigiCert Global G3 TLS ECC SHA384 2020 CA1	0587D6BD2819587AB90FB596480A5793BD9F7506A3EACE73F5EAB366017FE259	4/14/2021	4/13/2031
C=US, O=DigiCert, Inc., CN=DigiCert Global G3 TLS EE+ ECC384 SHA384 2022 CA1	15E77C59404015659EE26F92561F007AAF53986A27926F0E707585C2A7F301B8	4/28/2022	4/27/2032
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site EV G3 TLS CN ECC P-384 SHA384 2022 CA1	943BC406B0B45ACF88413045227265703F1AC8B21D6FBC2B8CBDE59D7CE51B81	12/20/2022	12/19/2032
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site OV G3 TLS CN ECC P-384 SHA384 2022 CA1	38D530FB170053617E47AA6CEFF21C2DB43C9D96741AF1584566072091474BB3	12/20/2022	12/19/2032
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site Pro EV G3 TLS CN ECC P-384 SHA384 2022 CA1	95F6B9230F27FB5FC0CB29443DBE7300168B5992C7558F3F63D4352F32B8C9CB	12/20/2022	12/19/2032
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site Pro G3 TLS CN ECC P-384 SHA384 2022 CA1	34CDC67D88D25217ADC8A25348E114CBEC63148391CFA475D382874695202D2C	12/20/2022	12/19/2032
C=US, O=DigiCert, Inc., CN=Encryption Everywhere G3 TLS ECC P384 SHA384 2023 CA1	DA1F7CBF322E55CC082276F8519147DFA1E80CBAF7D5799FF771358832ED1712	2/2/2023	2/1/2033
C=US, O=DigiCert, Inc., CN=GeoTrust EV G3 TLS CN ECC P-384 SHA384 2022 CA1	02F40238BA372E9DF51D7540E04EDFEDAB5439323F9A02DF5B38C074CA7D406E	12/20/2022	12/19/2032
C=US, O=DigiCert, Inc., CN=GeoTrust G3 TLS CN ECC P-384 SHA384 2022 CA1	662871C80F4E0FD219EA69AAFC4D28AD7B41E9381560BEE787848D4EEF1CBF24	12/20/2022	12/19/2032
C=IE, O=DigiCert Ireland Limited, CN=GeoTrust Global G3 TLS EUR ECC P384 SHA384 2023 CA1	57E0B33504DBAF6F29A095CB8A297A4ABEC121CE11640EFAFC17594098F6CAA9	6/14/2023	6/13/2033
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=GeoTrust TLS ECC CA G1	A838405EBB03F5DFD8D4A9572AE6E0E3F356EC4EC134375A59DB7B195DC3EC44	11/2/2017	11/2/2027
C=LV, O=EnVers Group SIA, CN=GoGetSSL G3 TLS ECC P-384 SHA384 2022 CA-1	7E687FA866802535C3AFC393939376D4BF0FD753D9421719A8AA91A4FF305AD2	6/23/2022	6/22/2032
C=GB, O=LMAX Limited, CN=LMAX Trust Services CA X2	ADBF61297BC10F2C4150F26E6A94DA024DA60854AB5DCACED1C8486456838735	6/30/2022	6/29/2037
C=GB, O=LMAX Limited, CN=LMAX Trust Services CA X2	24AE529BED1387750B11152E34054EA8A0BDC05F037BA908869F2ADD2464CAF9	3/20/2024	3/19/2034
C=GB, O=LMAX Limited, CN=LMAX Trust Services CA X3	51D6C9A0CE4146768E730A5AD77BCA863949FA0D74108FF9B6AD48FC35DE0DE9	4/3/2024	4/2/2034
C=US, O=Microsoft Corporation, CN=Microsoft Azure ECC TLS Issuing CA 01	949D6B4B761CA134AD3E7A8571186F580EE887F2C6B568B5140F4157F98D68DD	8/12/2020	6/27/2024
C=US, O=Microsoft Corporation, CN=Microsoft Azure ECC TLS Issuing CA 02	9C64A9A43E990E98FBCE8317B2D4C1C07FFE6E032DA8BB6D60A696E2FF038F1F	8/12/2020	6/27/2024
C=US, O=Microsoft Corporation, CN=Microsoft Azure ECC TLS Issuing CA 03	BBD27139C5302C63D903F570F173AD4DC06C974B9EBE292C90FFCCAB5D6FA54E	6/8/2023	8/25/2026
C=US, O=Microsoft Corporation, CN=Microsoft Azure ECC TLS Issuing CA 04	7A3AE4F12920D5A8129BE1183FBEC4370EF10B8B3AD41EAE4A58D5385AA94D33	6/8/2023	8/25/2026

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Subordinate CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
C=US, O=Microsoft Corporation, CN=Microsoft Azure ECC TLS Issuing CA 05	003F71DC4820216575FC5AACFE3B1AEB76F72AEA5B8E8FCEFC80B9F517A4A612	8/12/2020	6/27/2024
C=US, O=Microsoft Corporation, CN=Microsoft Azure ECC TLS Issuing CA 06	2975BAB51D00D862D0E16EEDEF8306A759C65CD4B9F00DAF50ECDFCB4EC396E4	8/12/2020	6/27/2024
C=US, O=Microsoft Corporation, CN=Microsoft Azure ECC TLS Issuing CA 07	BE23414A42E74886E7C72A861BA2DDDA0175ED829223D894C5D272651FC0C189	6/8/2023	8/25/2026
C=US, O=Microsoft Corporation, CN=Microsoft Azure ECC TLS Issuing CA 08	89AADE767B7BA43F8DDE8E9E74A2FCBBEA40D57155F7E1F2259C88835601FAED	6/8/2023	8/25/2026
C=US, O=NCC Group, CN=NCC Group Secure Server CA G3	963056B0D941D9DBE27AC778053D85E43CC79F476AD34CFDD799C27E381840EB	7/30/2014	7/30/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=RapidSSL TLS ECC CA G1	FC16D53203BD9187D69CC99D2DA551076B4DCB298140D6751F7A012966C99FDD	11/2/2017	11/2/2027
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Thawte TLS ECC CA G1	AE82201F565E0439B7F4AD689327594EB974A4F781B1A6CBFED59BD382317F13	11/2/2017	11/2/2027
C=CN, O=TrustAsia Technologies, Inc., OU=Domain Validated SSL, CN=TrustAsia TLS ECC CA G9	877F24CE70F4A3047E4EA70BEC1BC31BE9B6533ADFF3A393FF9BFB3C81029446	11/2/2017	11/2/2027
C=AU, O=Verokey, CN=Verokey High Assurance Verified Business ECC	34263E9424D819B94BCFA87E69DD9EF43205D4E2DE84A53497314063D822969B	3/17/2022	3/16/2032
C=AU, O=Verokey, CN=Verokey Secure Web ECC	BCFD2614E42D63C59691C3CE8BEC792DE2FCE89CED4F9C460D0A848573074FCB	3/17/2022	3/16/2032
C=AU, O=Verokey, CN=Verokey Verified Business ECC	F1ED3B35C92FA5DAAAA3DD45F99EBA3B823A2FB1C24A89CED1699D95E02564A2	3/17/2022	3/16/2032
C=US, O=.NET Foundation, CN=.NET Foundation Projects Code Signing CA	024F162B1D09F6A0868C38B4C8B4257C1EEA6C5A31589416D520CF1624917EB3	4/27/2018	4/27/2028
C=US, O=Abbott Laboratories Inc., CN=Abbott Laboratories Secure Code Signing CA	5F1A82C09CBAE239D4E3F0704C970755547E53E3CF290F9479FE7E98665FEF0F	6/7/2016	6/7/2026
C=US, O=Aetna Inc, CN=Aetna Inc. Secure CA2	DDCBB4F3051D6E601310EB0E46B5BB99C5E8B99F7A539E367A987DEA030E318E	9/24/2020	12/9/2024
C=US, O=Aetna Inc, CN=Aetna Inc. Secure CA2	5D28761CBF304EAFCD127B34D614FE179AC7744F1552AF1C31298425AD05A275	12/9/2014	12/9/2024
C=US, O=Aetna Inc, CN=Aetna Inc. Secure CA2	428B87B8061A79ABA75877FD0383ADB831A1459B86BC408CE7D8D17B295B75BB	3/30/2021	3/29/2025
C=US, O=Aetna Inc, CN=Aetna Inc. Secure EV CA2	1DDFDDF883E3945B2CB24FA5B83788379C5AB058422AB979DF66C77473988687	12/8/2017	12/8/2027
C=US, O=Aetna Inc, CN=Aetna Inc. Secure EV CA	A1448A015E1399C5A891812F0E88C6D847B221D21F9326A6626BA43A0EB612D9	9/24/2020	12/9/2024
C=US, O=Aetna Inc, CN=Aetna Inc. Secure EV CA	0A163600631BD66267FB7AEAD25C538B2B7D72AD6416A2BBD285F654BB642F6D	12/9/2014	12/9/2024
C=US, O=Aetna Inc, CN=Aetna Inc. Secure EV CA	8B6CCC3BE92F0121E6494AC704BF0B9B9CEBBA2E363C8E8122D90984D3EBF386	3/30/2021	3/29/2025
C=US, O=Apple Inc., CN=Apple Public EV Server RSA CA 2 - G1	D6EF3E09EBE0D9370E51F5C09A532B3AC70D3CE822253F9FC84C28E9BFA550D5	4/29/2020	4/10/2030
C=US, O=Apple Inc., CN=Apple Public EV Server RSA CA 3 - G1	E881D3B83C3BC694D7D99F92DE83B2BFF5C6EE2D9871A446DEA107D6397565FC	7/15/2021	4/10/2030
C=US, O=CrowdStrike, Inc., CN=CrowdStrike Global EV CA G2	5EBD9874E6B88DA38F4A7B9566CE5D4DF05E0C224D94986AD8CC5EBA004A0C04	3/4/2021	3/3/2031

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Subordinate CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
C=US, O=CrowdStrike, Inc., CN=CrowdStrike Global EV CA G2	9ED1EDEA95AA5B72B513A3E41A1BA0D2EFB14CEC88891E34D00495C95556605C	3/30/2021	3/29/2031
C=US, O=CrowdStrike, Inc., CN=CrowdStrike Global EV CA	8CD728F9C3391BA4360A10C66CA484C807651D6207F10633669ED8881FE91BF5	2/21/2020	11/9/2031
C=US, O=CrowdStrike, Inc., CN=CrowdStrike Global EV CA	86B109232C19EC514F8CB26788E65090293F96DD8D2942017A33035AB225D5FB	3/30/2021	3/29/2031
C=JP, O=Cybertrust Japan Co., Ltd., CN=Cybertrust Japan Extended Validation Server CA	0E10BDDEE7512DBD79EBF0B4F48FEED7C83C2BD3DD81765565F4FF110B7BFA42	12/7/2016	12/7/2031
C=US, O=DigiCert Inc, CN=DigiCert Basic EV ECC CN CA G2	D619F3257B98756D28811D3CEE9ADAD8BCAE1B4367BBB0C73F6B5E558FBA4563	3/4/2020	3/4/2030
C=US, O=DigiCert Inc, CN=DigiCert Basic EV RSA CN CA G2	B41A4864F0D4EC4EA632D01B3E7F232775E55E22B3BFD8642EE1292280D0E47A	3/4/2020	3/4/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert CN RSA EV CA G1	B131905CC7221270613B529AC9E786AA230ABFE154A0ACBE452BC350BD1EFE4B	6/20/2019	6/20/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert ECC Extended Validation Server CA	FDC8986CFAC4F35F1ACD517E0F61B879882AE076E2BA80B77BD3F0FE5CEF8862	6/21/2016	6/21/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert EV Code Signing CA (SHA2)	C7460B0EDDA1B44C8E2164B234EBECC3962A6A37A936B74A6E7D46682938F084	4/18/2012	4/18/2027
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert EV Code Signing CA	376377FD1FAF4B8A5B1472647A70B941039A62D74CFE99447E48616F8D63A978	4/18/2012	4/18/2027
C=US, O=DigiCert Inc, CN=DigiCert High Assurance CA-3b	4E30F8004C18D3D798EC5A7734346B5A5EBE8D54423CE98257FC57735A6F738D	5/28/2020	11/9/2031
C=US, O=DigiCert Inc, CN=DigiCert High Assurance CA-3b	28506E33F55A6072115F3E04C9BDBF5AF5312CA8FC132508B97AC99FEE0516E8	3/30/2021	3/29/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert High Assurance Code Signing CA-1	BEAF46D0FF62645F56BE11830DDEFC663379619F337E85713491C83AE179481D	2/10/2011	2/10/2026
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert High Assurance Code Signing CA-1	007D2C8B15786232BAC0EAA31F60AAE06DC572921BAD0D46C77107D8C2DCA4B3	2/11/2011	2/10/2026
C=US, O=DigiCert, Inc., CN=DigiCert High Assurance TLS Hybrid ECC SHA256 2020 CA1	5D270CB4EFF587AD6CD17CB2B60D9084A153D77D2AA79A2CB3DB1DDB904684F5	3/30/2021	3/29/2031
C=US, O=DigiCert, Inc., CN=DigiCert High Assurance TLS Hybrid ECC SHA256 2020 CA1	74EAB573DA7DB195097BE0E90F334934C7A4C89E8083759DB4333A00EDD243D9	12/17/2020	12/16/2030
C=US, O=DigiCert, Inc., CN=DigiCert High Assurance TLS RSA SHA256 2020 CA1	9BFED3D9DC95236BCFFCB35D4B120DB0E3867F62B1FD015A928DA0B303966683	12/17/2020	12/16/2030
C=US, O=DigiCert, Inc., CN=DigiCert High Assurance TLS RSA SHA256 2020 CA1	495E6624A15340C4C74AB86037748AD62D1EF4F14E7C81AB7CDB629BE1404757	3/30/2021	3/29/2031
C=US, O=DigiCert Inc, CN=DigiCert High Assurance Trust Service ECC EV CA	E9529B428FB67390BC6455D79BA2434E816C54FE4F359930CB709DB256FDDF94	3/4/2020	3/4/2030
C=US, O=DigiCert Inc, CN=DigiCert High Assurance Trust Service EV CA	72D0F7CBF4529B80C34A7CBB438BD1D0E1FC26E80E59CBD4FD7314FCDDF0E994	3/4/2020	3/4/2030
C=US, O=DigiCert Inc, CN=DigiCert Secure Site EV CN CA G3	139AC36BD85398BBBB4588687C20DC36827D03A5F42AADF87F02BECC4BE9BFC2	3/13/2020	3/13/2030

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Subordinate CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
C=US, O=DigiCert Inc, CN=DigiCert Secure Site EV ECC CN CA G3	A4B2B47545559F5FFFB7CDDA7A1220E62FB74D1B7A9A4D4DACB2B2A839CE7456	3/13/2020	3/13/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Secure Site Korea EV CA	C022D5CEAA275F2A6268FA79AC35653B3A730DEFA41F9CD8817D6D159BD33097	3/25/2019	3/25/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Secure Site Korea EV ECC CA	B0505BF2947F0807ABAE2D42C19343EAF08D1DDE3F8745B0589A57362792E470	3/25/2019	3/25/2029
C=US, O=DigiCert Inc, CN=DigiCert Secure Site Pro EV CN CA G3	B75AEE9836FEFBC446F288A2970B84FC60AAF9EFBD2CB9F82F7581790DE4B8DC	3/13/2020	3/13/2030
C=US, O=DigiCert Inc, CN=DigiCert Secure Site Pro EV ECC CN CA G3	BC91379A21E7BDE11B455BF1D51186331682805A4A353A8EE258F7A03706C664	3/13/2020	3/13/2030
C=US, O=DigiCert, Inc., OU=www.digicert.com, CN=DigiCert SHA2 Extended Validation Server CA-3	085A0714524DF7AE9919A6F597884439E12A533E61552D29D6A18C35096FC548	11/12/2019	11/12/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert SHA2 Extended Validation Server CA	403E062A2653059113285BAF80A0D4AE422C848C9F78FAD01FC94BC5B87FEF1A	10/22/2013	10/22/2028
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert SHA2 High Assurance Code Signing CA	C51B83A0DE49A201A5FBE947032C04702F8CA7C2D02ADF28B73D42C8ACD1C362	10/22/2013	10/22/2028
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert SHA2 High Assurance Server CA	19400BE5B7A31FB733917700789D2F0A2471C0C9D506C0E504C06C16D7CB17C0	10/22/2013	10/22/2028
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=GeoTrust EV CN RSA G1	C87CE03AFFB5DE6319C219971F2ED2D8F6F5389E2D53B22DD2C562A5C9827FC0	6/20/2019	6/20/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=GeoTrust EV ECC CA 2018	BF3558F877E89D27DAA60DA9671676570DFBEB215D84AC5A37122D6776B78F6E	11/6/2017	11/6/2027
C=US, O=DigiCert Inc, CN=GeoTrust EV ECC CN CA G2	FC01B58FC78B9C59211784C2E25BF1D012A1E23F337218847A62EB4145EE4AB6	3/4/2020	3/4/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=GeoTrust EV RSA CA 2018	185C0AE470423B9D4678A7C1055B5B48D90705505B794E215C063851336981F4	11/6/2017	11/6/2027
C=US, O=DigiCert Inc, CN=GeoTrust EV RSA CN CA G2	8937E90E1495C9A78EFB18182D43FDC73FCD292AB6347A12B9077DE878530E62	3/4/2020	3/4/2030
C=NL, O=SupremeSSL, OU=www.supremessl.com, CN=GeoTrust SupremeSSL EV 1 CA	0FB6CE80909D19AFEE6A88C959E9E9AA6466715BCE05C6449FEB530A086DAF14	5/7/2019	5/7/2029
C=NL, O=SupremeSSL, OU=www.supremessl.com, CN=GeoTrust SupremeSSL EV 1 ECC CA	2FBA8FE915415049AA942857CB53137FFD3D9E5A47B27B5782DAB9B4DA7D624D	5/7/2019	5/7/2029
C=US, O=Avalanche Cloud Corporation, CN=HydrantID EV SSL CA D1	F9D4A6C011E9C6A8F5A4CF7ED0416869C7238EF93A56161EA6CA3D8B41716097	3/30/2021	3/29/2031
C=US, O=Avalanche Cloud Corporation, CN=HydrantID EV SSL CA D1	863472EC79DB54077114DADE720CE1F7B41A233748FC6773FA86520F0B9AAA21	3/4/2021	3/3/2031
C=US, O=NCC Group, CN=NCC Group Secure Server CA G2	6075DA5CECD15D6584C5560322D5C09FC2199E52DEA7921D91040AA75248672E	7/30/2014	7/30/2029
C=US, O=Plex, Inc., CN=Plex Devices High Assurance CA2	50D3D71FC0CD7E36ADAE32221FEFBE8CC29B2676BA326C09B8FA1B24DBE75514	5/19/2015	5/19/2025

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Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=Plex, Inc., CN=Plex Devices High Assurance CA3	FB6060848440AA4594FE8109741EFAB40C56732B26C67C36D6DC945BB2FE13CF	9/24/2020	5/19/2025
C=US, O=Plex, Inc., CN=Plex Devices High Assurance CA3	1316ED42A849217D51CFB4DE1A1418A8D3A77902FB305D3024F72D4636B82FF0	3/30/2021	3/29/2025
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site Extended Validation CA G2	B6EB4F8AD197073FE5203F8FCEBFD5C509CDE9CA3AA65EC59D203831424192D4	6/20/2019	6/20/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site Extended Validation CA	1A8D790AF9B2B34D7DD6AF61B5AA4CF1380B86095CBAC2BCAB35BD566D0180C3	4/27/2018	4/27/2028
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site Pro Extended Validation CA G2	40D69920EA05456FA0117DE608B8A8013790B542097E343EC1CBCE2DFB9713B0	6/20/2019	6/20/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site Pro Extended Validation CA	3883E6DE4917A46B594ECC2D2AC6A95D43E7EAA8E089A91F9BC104FF16DF8DE6	4/27/2018	4/27/2028
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site Pro Extended Validation ECC CA G2	70DC86F9F7750B74B1DEC8CD352EC25837C36E640F7148E08464EF5901E5A589	6/20/2019	6/20/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site Pro Extended Validation ECC CA	C3804DE51E8C17052220AE1CAD3D383E54D5B7DC28843C42F0DBD9913C1E8658	4/27/2018	4/27/2028
C=NL, S=Noord-Holland, L=Amsterdam, O=TERENA, CN=TERENA SSL High Assurance CA 3	BE6A0D9E1D115F2293F6ABF11B3EC8E882E24426EEEB09AAA503597993E77A25	11/18/2014	11/18/2024
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Thawte CN RSA EV CA G1	ADA188F830C313F6046488EC341F1ED4AF793C6DC28C58600445DFBEB4163746	6/20/2019	6/20/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Thawte EV ECC CA 2018	F74C3B2C7E455D654D9EE5AAA712789CCB267B961C1A1CE48A69C860CD193678	11/6/2017	11/6/2027
C=US, O=DigiCert Inc, CN=Thawte EV ECC CN CA G2	EA1F3BFB4D3296B467D4B582559D6518D676D5AFC7D1C24BE80252F79191046F	3/13/2020	3/13/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Thawte EV RSA CA 2018	93569B26AA535E3E07C891C6BD2FA9DC0939C24DB4B3726AD8531EDB17C497CA	11/6/2017	11/6/2027
C=US, O=DigiCert Inc, CN=Thawte EV RSA CN CA G2	69919D820EDF582ADBCF8E092A9284D901772EE2B419EA9DE1F5872C791FC6FA	3/13/2020	3/13/2030
C=CN, O=TrustAsia Technologies, Inc., CN=TrustAsia ECC EV TLS Pro CA G2	C0DD060FF8CE556F35683D564E0E66B2907178808693F83F3AA642326BF6D0C8	6/20/2019	6/20/2029
C=CN, O=TrustAsia Technologies, Inc., CN=TrustAsia ECC EV TLS Pro CA G3	8D83D69FA615AA2683B13D7894482C542B0BCF18BB92D30F015FB42471AFBB66	3/13/2020	3/13/2030
C=CN, O=TrustAsia Technologies, Inc., CN=TrustAsia ECC EV TLS Pro CA	2DAAC6FDFAC16C548C53FF1198254D7E937761D22A1E7CC5C1A9462E971461F5	4/27/2018	4/27/2028
C=CN, O=TrustAsia Technologies, Inc., CN=TrustAsia EV TLS Pro CA G2	0D51B6CDCF34A9F22144787F3FD920DC8800FB60490BFC8D289A1953E0FBDA4D	6/20/2019	6/20/2029
C=CN, O=TrustAsia Technologies, Inc., CN=TrustAsia EV TLS Pro CA G3	9DB0A20C305541E15E818A880D06579876A9C901B8EECD968482C58D9BA7F0A7	3/13/2020	3/13/2030
C=CN, O=TrustAsia Technologies, Inc., CN=TrustAsia EV TLS Pro CA	4AFFE4FEF39464D1788C660AF591D5E601B261C4811DF0A3DD9D61CAFE8E5ED8	4/27/2018	4/27/2028

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=GB, O=TRUSTCUBES LIMITED, identified-organization=223013701, legal_entity_identifier=984500505FE80CD0NE58, OU=www.trustcubes.com, CN=TrustCubes ICA G1	2106CC7907C64B8A5DA2FC338EE94DFFF10EF711DEDBB4FC694EE092EC532B1D	7/18/2018	7/18/2028
C=CN, O=WoSign CA Limited, CN=WoSign EV Code Signing Pro CA	F6DFDED61FF88EF10B9E6DCFBCE0F1615E05866CEBAFCD6D48AEE80132C70347	5/23/2017	5/23/2027
C=CN, O=WoSign CA Limited, CN=WoSign EV SSL Pro CA	891EE2E23282E5076C9AE9047DE8EA900E066F81D6DCD9B843C59078B0F105BC	5/23/2017	5/23/2027
C=CN, O=WoSign CA Limited, CN=WoSign OV SSL Pro CA	AA61C2927DC89DB225CA9A17D600373D058F696D86D10E2BD7B5E8F44A97EED1	5/23/2017	5/23/2027
C=CN, O=WoTrus CA Limited, CN=WoTrus EV SSL Pro CA	070531383CCD100D3E9CD964DB07AA5E845A0686F2EAE3BC8A627B182057B1F1	2/9/2018	2/9/2028
C=CN, O=WoTrus CA Limited, CN=WoTrus OV SSL Pro CA	09033FE23996FE4A59C4C0F523D2560E31DFE4C17D8EA1403D429A971F4BD65A	2/9/2018	2/9/2028
C=US, O=DigiCert, Inc., CN=DigiCert G5 RSA4096 SHA384 2021 CA1	C68B6C455593E7CE57383A736517CA46FE86641E46BDFB25C12E41E17DE53B59	3/11/2021	3/10/2031
C=US, O=DigiCert, Inc., CN=DigiCert G5 RSA4096 SHA384 2021 CA1	A11C3BC528FFE2BCEC915A5B3437D4269AD74156E0166B47A1D5F141735104FD	4/14/2021	4/13/2031
C=US, O=DigiCert, Inc., CN=DigiCert G5 SMIME ECC SHA384 2021 CA1	873DD73022087B9179FA060EF3D34381845A37E88A6A2BF20ECBAFDE8C3DB993	7/15/2021	7/14/2031
C=US, O=DigiCert, Inc., CN=DigiCert G5 SMIME RSA4096 SHA384 2021 CA1	58A5988F1BEB2558FB4C168B97AE748E448C974FD51CB521818BBA9FC6CB1B7B	7/15/2021	7/14/2031
C=US, O=DigiCert, Inc., CN=DigiCert Basic EV G5 TLS CN ECC P-384 SHA384 2022 CA1	FDB76E78A450C0F3AF093D5186C3B28A1280567A0EC531CA5977FF4E616B35E3	1/19/2023	1/18/2033
C=US, O=DigiCert, Inc., CN=DigiCert Basic OV G5 TLS CN ECC P-384 SHA384 2022 CA1	1D75A0B37B4AE11E883C97D3FF0DC5D84D93FE129C12DD78086C4A78DAF3F709	1/19/2023	1/18/2033
C=US, O=DigiCert, Inc., CN=DigiCert G5 TLS CN ECC P-384 SHA384 2022 CA1	915EC8DCC237FA932CB0245A996FF3A711550A464214FD7512F225AA608061C8	7/12/2022	7/11/2032
C=US, O=DigiCert, Inc., CN=DigiCert G5 TLS ECC SHA384 2021 CA1	E5A1C1919E3BEAEE5935A8485DDCE0E3F01A2618DB0F0793B3DB3D9AC2D967C7	2/11/2021	2/10/2031
C=US, O=DigiCert, Inc., CN=DigiCert G5 TLS ECC SHA384 2021 CA1	97A073957C5812725757672F222690655A1407D71011EDFC8B2FADC5128911DA	4/14/2021	4/13/2031
C=IE, O=DigiCert Ireland Limited, CN=DigiCert G5 TLS EU ECC P-384 SHA384 2022 CA1	2C171064DBFA280A1F294F72E2A1FC24C86111B23723DB9375D3004B27E7B33B	9/19/2022	9/18/2032
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site EV G5 TLS CN ECC P-384 SHA384 2022 CA1	49C1F25A88B5B15A80C1A2DA11589111C5AD8E222104FDC49022FD6AEF1CF54D	1/19/2023	1/18/2033
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site OV G5 TLS CN ECC P-384 SHA384 2022 CA1	9E561A4B486076C219F3C95387BF11670D72F6C4F0DCD9BBB47F59F5C142EF88	1/19/2023	1/18/2033
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site Pro EV G5 TLS CN ECC P-384 SHA384 2022 CA1	290E698939A24F7B63AB14D0490DE92BEBEF6C1C2D3BE717F3775B71C1AB626D	1/19/2023	1/18/2033
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site Pro G5 TLS CN ECC P-384 SHA384 2022 CA1	D43B3FBC2E6715B33D3D7037200FA9D4181F97492C44DBEBA8FBAE9680D64CD0	1/19/2023	1/18/2033

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=DigiCert, Inc., CN=Encryption Everywhere G5 TLS ECC P-384 SHA384 2022 CA1	AD7F57AA3FC5EAF4310224A4750A97CD879DE1989D4B86AB08B7A28373BCB489	11/3/2022	11/2/2032
C=US, O=DigiCert, Inc., CN=GeoTrust EV G5 TLS CN ECC P-384 SHA384 2022 CA1	07F55A105E886D191FBD2253283E77B1FC1CCDCC9F26A3E6C7E69706A7593FEF	1/19/2023	1/18/2033
C=US, O=DigiCert, Inc., CN=GeoTrust G5 TLS CN ECC P-384 SHA384 2022 CA1	E43BAAD78B78F9EEA6903E56F456DEC24BD9648C13AE02E2DE17A1F84F3D0807	7/12/2022	7/11/2032
C=US, O=DigiCert, Inc., CN=GeoTrust G5 TLS EC P-384 SHA384 2022 CA1	72F104084DB7914BD8AFE6E347B9257ED4C1D7FC71D3F1E51F3CF47B739B386A	5/26/2022	5/25/2032
C=US, O=DigiCert, Inc., CN=GeoTrust G5 TLS ECC P-384 SHA384 2022 CA2	66E795550B16497E7CF4566EC63B56660F28DBD551C357C526FBB0D7620A8112	7/28/2022	7/27/2032
C=US, O=DigiCert, Inc., CN=RapidSSL G5 TLS ECC P-384 SHA384 2022 CA1	D2A3D4ED9C05964F4A0984381933C5AB1E93E4A0BA7FCDD60940946D68BD6262	6/2/2022	6/1/2032
C=US, O=DigiCert, Inc., CN=Thawte G5 TLS CN ECC P-384 SHA384 2022 CA1	D604F0148A25D93BAB577D38705CBAAE2C4477DE7EB51D86A0F6B26584013D7A	7/12/2022	7/11/2032
C=US, O=DigiCert, Inc., CN=Thawte G5 TLS EC P-384 SHA384 2022 CA1	7F4E38B8B22F91DAF46ED5856D6E7F1180296FB152C026473C6328519D2AC99A	5/26/2022	5/25/2032
C=US, O=DigiCert, Inc., CN=Thawte G5 TLS ECC P-384 SHA384 2022 CA2	0215DB7E22D36D0E7535A12691A9EC0DC7F43D83AB580C0709711C1E7A9B55EC	7/28/2022	7/27/2032
C=US, O=CrowdStrike, Inc., CN=CrowdStrike TLS RSA CA G5	E5BFCED9D216EBA7DA3634819FB534FB9CEBA1ECF9E6379ED83583D2EB177C1B	5/1/2024	4/30/2034
C=US, O=DigiCert, Inc., CN=DigiCert Basic EV G5 TLS CN RSA4096 SHA384 2022 CA1	7BAD1EBDE38C5226B5CE118E386775FAFBC4C8A545598D965CD01E97491DEF8F	1/12/2023	1/11/2033
C=US, O=DigiCert, Inc., CN=DigiCert Basic OV G5 TLS CN RSA4096 SHA384 2022 CA1	AFED062E87DF98182AD9BEF7EB13C0E2F2B6698AB4E3F33932A10E286E024E9D	1/12/2023	1/11/2033
C=US, O=DigiCert, Inc., CN=DigiCert G5 TLS CN RSA4096 SHA384 2022 CA1	AB7EF705B0B8DB2291C2BC8DC9F69AD8345A3CC543DB8CDC49A8B419282DEA22	7/12/2022	7/11/2032
C=IE, O=DigiCert Ireland Limited, CN=DigiCert G5 TLS EU RSA4096 SHA384 2022 CA1	4D27EF6357BC929783575C0C8C9340B67FBEFC045FDC263B8C88362E6D3ADB6F	9/15/2022	9/14/2032
C=US, O=DigiCert, Inc., CN=DigiCert G5 TLS RSA4096 SHA384 2021 CA1	EF9296036A6D7C986C8D59DB936093E78E85C70AEDB4FE7A54DDCAA821031C72	2/11/2021	2/10/2031
C=US, O=DigiCert, Inc., CN=DigiCert G5 TLS RSA4096 SHA384 2021 CA1	C6270A150691FBE190D831F5139BDFEECF7B298B4FA0CA17306A69D7E91E7BA2	4/14/2021	4/13/2031
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site EV G5 TLS CN RSA4096 SHA384 2022 CA1	65248FA866C854908D0DB045F88CDABC9452553B982AECE6B0D845866B426B7F	1/12/2023	1/11/2033
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site OV G5 TLS CN RSA4096 SHA384 2022 CA1	5534127F056498B4CF1C967365B1DC2D44F33109ABCFA6454F25BEE4F2B65481	1/12/2023	1/11/2033
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site Pro EV G5 TLS CN RSA4096 SHA384 2022 CA1	7A3839D4B8790B197440C94DA687DCEB1A5AC07D936F81ACF40B163364B0A951	1/12/2023	1/11/2033
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site Pro G5 TLS CN RSA4096 SHA384 2022 CA1	AAA627EEDAC466DBC4C7750C87D999588AB4B03E74B9BFDCDA2902DD36DAE0F8	1/12/2023	1/11/2033
C=US, O=DigiCert, Inc., CN=Encryption Everywhere G5 TLS RSA4096 SHA384 2022 CA1	654BF73B2639091FA18F296755B704959F52F67FDF7A65AAF1C315441201A09D	11/3/2022	11/2/2032

Subordinate CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
C=US, O=DigiCert, Inc., CN=GeoTrust EV G5 TLS CN RSA4096 SHA384 2022 CA1	25026FEBE5324EEACA89376B13EDB96991594112C311120D579364E3CC0442F4	1/12/2023	1/11/2033
C=US, O=DigiCert, Inc., CN=GeoTrust G5 TLS CN RSA4096 SHA384 2022 CA1	2B6D199F7E35C8C67E0BBA829F92991CF31466265E11FA30BD19FC5B6C36151C	7/12/2022	7/11/2032
C=US, O=DigiCert, Inc., CN=GeoTrust G5 TLS RSA4096 SHA384 2022 CA1	0030C68C53FC05237FCC7AB6017D81FEBBA06315526C57F7E72907C87B982B61	5/26/2022	5/25/2032
C=US, O=DigiCert, Inc., CN=RapidSSL G5 TLS RSA4096 SHA384 2022 CA1	BB320985266F61C5D182724F15CEC428A698ED71262B4E097CB11AED8A41AAE6	6/2/2022	6/1/2032
C=US, O=Tesla, Inc., CN=Tesla China Public RSA TLS Issuing CA 2024	7754CAB7C25AD2605A681E3A04187C1E3B3A46F188A8247DC86E02A0FC336F91	3/13/2024	3/12/2034
C=US, O=Tesla, Inc., CN=Tesla Public RSA TLS Issuing CA 2024	32952030B947D80858A87425788518BDF6D94A631D55E20117585C89EBB29197	3/13/2024	3/12/2034
C=US, O=DigiCert, Inc., CN=Thawte G5 TLS CN RSA4096 SHA384 2022 CA1	1E89E3D2702D3F1735DCE7DA99561600534A06454A94874D0780D0443CAF4151	7/12/2022	7/11/2032
C=US, O=DigiCert, Inc., CN=Thawte G5 TLS RSA4096 SHA384 2022 CA1	48569C4FABFF4E3AA22E0E19613E90DA89AA2EE2469B0718695437F5384EDC4C	5/26/2022	5/25/2032
C=US, O=DigiCert, Inc, OU=www.digicert.com, CN=DigiCert Transition Issuing CA G3	25B66390DD425867EC0DE58A6B198F5985BE58A43A4605E1A0B8C6F35B92D7EE	12/8/2017	12/8/2027
C=US, O=Abbott Laboratories Inc., CN=Abbott Laboratories Secure Code Signing CA - G2	481E80747EC14339A968C374B8BDF3FFA6EBB1F38A09E7D01360DE265BE7B90C	11/19/2021	11/18/2036
C=US, O=Government of the District of Columbia, OU=Office of the Chief Technology Officer, CN=DC Government SHA2 EV Intermediate CA	F12241EE34C03A608D34DBC0EA465E1BD1AA13091554F9D4D086253FF3CE83D4	7/13/2017	7/13/2027
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert EV Server CA G4	710024B37BD9F0E1537C18A4C20F9A31C4B485D1248C643F20B4C00F3716BA85	1/17/2017	1/17/2032
C=US, O=DigiCert, Inc., CN=DigiCert Trusted G4 AATL RSA4096 SHA384 2022 CA1	D149AF9F74029C8DBD957022BE03707F110DB1E1D0E55DDA11376A8F766D367E	7/21/2022	7/20/2032
C=US, O=DigiCert, Inc., CN=DigiCert Trusted G4 Code Signing Europe RSA4096 SHA256 2023 CA1	E2612327EAF98AF9423EFEA184368E19BF9798D7DCEE0C5CF8E792C8893ED9F0	2/14/2023	2/13/2033
C=US, O=DigiCert, Inc., CN=DigiCert Trusted G4 Code Signing Europe RSA4096 SHA384 2023 CA1	086528D3B9FDB2577D82790E48A003DE74D74E4D8CBC44765F6F924A9D3FFB82	2/14/2023	2/13/2033
C=US, O=DigiCert, Inc., CN=DigiCert Trusted G4 Code Signing RSA4096 SHA256 2021 CA1	47818F36F1DBA7D4F2A29360DB710E9BD75E3B13613618AAD45C01A10626523A	7/28/2021	7/27/2036
C=US, O=DigiCert, Inc., CN=DigiCert Trusted G4 Code Signing RSA4096 SHA384 2021 CA1	46011EDE1C147EB2BC731A539B7C047B7EE93E48B9D3C3BA710CE132BBDFAC6B	4/29/2021	4/28/2036
C=US, O=DigiCert Inc, CN=DigiCert Trusted G4 TLS RSA SHA384 2020 CA1	4F35C6B9C100905FF25BB01C0A20EBE335BCEEF249CE9FFA1E11E062ED66FCD1	9/24/2020	9/23/2030
C=US, O=DigiCert Inc, CN=DigiCert Trusted G4 TLS RSA SHA384 2020 CA1	1E29690F957F64BA9C3658A31055751AACD4B440A9589DFA1D780FE07069DB52	3/30/2021	3/29/2031
C=US, O=DigiCert Inc, CN=DigiCert Trusted Server CA G4	6E8D952FDBABAD8DE3D61E094393739B5A47371A52BDCB2A3C2F8C43622F640F	8/1/2013	8/1/2028

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=DE, O=Deutsche Kreditbank AG, CN=DKB CA 1O1	0E5B8040B3AB60A50D2D5FB11E19AEB2E45B564B335B79D773D42B81D8219C75	2/4/2021	2/3/2031
C=DE, O=Deutsche Kreditbank AG, CN=DKB CA 1O1	D889A2641F5DF941353817C87A5CD0D9CDACED3886240BFBD937329E94D3A45B	3/30/2021	3/29/2031
C=LV, O=EnVers Group SIA, CN=GoGetSSL G4 CS RSA4096 SHA256 2022 CA-1	D5B54EBE9373F451FF0AE7CD6BC6A1FB2BD03EE9C54AB4CA019ACFC14B6E50D6	6/23/2022	6/22/2032
C=DE, O=Henkel AG & Co. KGaA, CN=Henkel Secure E-mail CA G2	0872E14A4E2B7B1BA0DE0B785493E0F4B25E2E584A3F3462F0A1901CB7BBE5F0	5/10/2023	5/9/2033
C=DE, O=Henkel AG & Co. KGaA, CN=Henkel Secure E-mail CA G3	CA365E4C288118297CDC78B4DC01734E2B7A3CAB2CDFED6A2DB7788D3AA39A7C	5/23/2024	5/22/2034
C=US, O=NCC Group, CN=NCC Group Secure Server CA G4	B7DFDC27E5FF9F35EFEC9F4BC532C35F727789B69C90A0489B40247299D97038	7/30/2014	7/30/2029
C=US, O=Riverbed Technology, Inc., CN=Riverbed Certificate Issuer - G2	8EF3DB3C6DD26AE8B6DF5087FDAFE023092CC524F8E0271A45FE9416AEF43854	12/7/2021	12/6/2036
C=US, O=Riverbed Technology, Inc., CN=RVBD ENG Certificate Issuer - G2	AB422C705556BB41DB8663FFBF288B91E16B06EBCEBF5BAD1095B4FACB38FE39	12/7/2021	12/6/2036
C=DE, O=Uniper IT GmbH, CN=Uniper SE SMIME CA	43067D5EF78F7276DF9B23855BF54E8DDB7DEF0D8B79A365573D05627F0A6638	6/29/2023	6/28/2033
C=DE, O=Uniper IT GmbH, CN=Uniper SMIME CA G2	5828E5B8E043088CC15F16753F90D143212A875D1662757A7858D510228F0F3F	5/15/2024	5/14/2034
C=AU, O=Verokey, CN=Verokey High Assurance Secure Code EV	E03E9D15D653BCA7181522B98CBA4311E509FB81BF4FA646DDFA569B001C8E63	3/17/2022	3/16/2037
C=AU, O=Verokey, CN=Verokey High Assurance Verified Business G2	BE89264A58313012B749603C9BEBC3CD7914DB716A49E5E0EA97E43A3883A5DF	3/17/2022	3/16/2032
C=AU, O=Verokey, CN=Verokey Secure Code	3877D964C1983E41940D849D3ABB5EF0C8CA07D430B0DA779067E29FB700797E	3/17/2022	3/16/2037
C=AU, O=Verokey, CN=Verokey Secure Web G3	CB01BEAC6315F30EB675B19CA08DC249E73867B0DAFAB5A5C30631A2372B2E65	7/24/2024	7/23/2034
C=US, O=DigiCert, Inc., CN=DigiCert Verified Mark Europe RSA4096 SHA256 2023 CA1	80EC7C231BEF5810B27F0EC8B4A46D1A7C45CF1C71C483471A28151BEB65B882	3/8/2023	3/7/2038
C=US, O=DigiCert, Inc., CN=DigiCert Verified Mark RSA4096 SHA256 2021 CA1	0F2024A1F5AB051C55369D7353E55255BED427E3EBD6D7C59A212D38361B930A	7/1/2021	6/30/2036
CN=Apple IST CA 8 - G1, OU=Certification Authority, O=Apple Inc., C=US	A4FE7C7F15155F3F0AEF7AAA83CF6E06DEB97CA3F909DF920AC1490882D488ED	6/9/2016	6/8/2031
C=US, O=DigiCert, Inc, OU=www.digicert.com, CN=GeoTrust Primary Issuing CA	F7A84E24E8E0D891548747221C5B641F48A1EF0FF3B198F53BE021DB53F097BD0	12/8/2017	12/8/2027
C=US, O=Wi-Fi Alliance, CN=WFA Hotspot 2.0 Intermediate CA	AE0D0BA5AC3EEB823F5CA77331A99D7FDB2EC231D7CE47B7C208E3830E08A891	12/9/2013	12/9/2023
C=US, O=Wi-Fi Alliance, CN=WFA Hotspot 2.0 Intermediate CA	FEA342D00D1A355CF51569EF7E0F617ABB0F22D6D1E73DAA11DCB4D407975543	11/25/2013	11/25/2023
C=BE, oid_2.5.4.97=NTRBE-0537698318, O=QuoVadis Trustlink BVBA, CN=QuoVadis Belgium Issuing CA G2	AA0E83B4AE0036679703D1603BC7E63A080464A033AE4B9F465838ADC85C61ED	1/28/2020	1/27/2030
C=NL, oid_2.5.4.97=NTRNL-30237459, O=QuoVadis Trustlink B.V., CN=QuoVadis EU Issuing Certification Authority G4	1D24222B5EEC71FE99BE9D700FA5FF72312DB3EB0FCB4A4F3BCC135DA36C1355	10/7/2019	10/6/2029

Subordinate CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
C=CH, O=Health Info Net AG, oid_2.5.4.97=NTRCH-CHE-103.489.218, CN=HIN Health Info G3 CH RSA4096 SHA256 2023 CA1	8F474B18C4E49CD8488F950CA17F2AAA7F869C1BBD8E60379AC8A26EBF8EE350	10/25/2023	6/6/2031
C=CH, oid_2.5.4.97=NTRCH-CHE-103.489.218, O=Health Info Net AG, CN=HIN Health Info Net CA G2	3645E0F05E195BE8ECD456E518C8C23C1BB259CD6CF4691F29C744AEF0C11FDD	5/12/2017	5/10/2027
C=CH, O=Berner Kantonalbank AG, OU=Issuing Certification Authority, CN=BEKB BCBE G3 SMIME CH RSA4096 SHA256 2023 CA1	174ED245170A592A7985436B9F590A3E96C134807C4AFDA872BC7E09A49855ED	9/25/2023	9/23/2031
C=DE, O=DigiCert Deutschland GmbH, CN=DigiCert QuoVadis 1G3 ClientAuth RSA4096 SHA256 2023 CA1	FF961F3F4738037D4261612ADA93FDFF5ED00D4681C90B099C7F5E9F4B4AFFA3	10/26/2023	10/23/2033
C=BE, O=DigiCert Europe Belgium B.V., oid_2.5.4.97=NTRBE-0537698318, CN=DigiCert QuoVadis G3 Qualified BE itsme RIV RSA4096 256 2023 CA1	A610AD2025ED0AA84259EBB9289E828267D35082430CBFB5562F3066DEBC2E88	3/14/2023	3/11/2032
C=BE, O=DigiCert Europe Belgium B.V., oid_2.5.4.97=NTRBE-0537698318, CN=DigiCert QuoVadis G3 Qualified BE itsme RSA4096 SHA256 2023 CA1	C0EE0CCED463096DF07D27257AF79C986FF92B678F669C109FFF570F32AB433F	3/14/2023	3/11/2032
C=BE, O=DigiCert Europe Belgium B.V., oid_2.5.4.97=NTRBE-0537698318, CN=DigiCert QuoVadis G3 Qualified BE RSA4096 SHA256 2023 CA1	2CB07880B4E584F366E083791511BB48812FF5164C5BA3BBB3C1688AA456B13C	3/14/2023	3/11/2032
C=CH, O=QuoVadis Trustlink Schweiz AG, oid_2.5.4.97=NTRCH-CHE-112.210.349, CN=DigiCert QuoVadis G3 Qualified CH Reg RSA4096 SHA256 2023 CA1	A9462BF3D725EDF669FF392113E5270E3DE79DB820D792581F07AB4B0ED75064	3/14/2023	3/12/2031
C=CH, O=QuoVadis Trustlink Schweiz AG, oid_2.5.4.97=NTRCH-CHE-112.210.349, CN=DigiCert QuoVadis G3 Qualified CH Reg SP RSA4096 SHA256 2023 CA1	8C44440AA473191A540EC01B17413DE6A904D64D79BB8B30E6D1FC1ADA798F51	3/14/2023	3/12/2031
C=NL, O=QuoVadis Trustlink B.V., oid_2.5.4.97=NTRNL-30237459, CN=DigiCert QuoVadis G3 Qualified Europe RSA4096 SHA256 2023 CA1	B36425F1491B2EE08EC87B69C23EA6A76EBF769C4C34FE3798A4CB9A1990E070	3/14/2023	3/11/2032
C=IE, O=DigiCert Ireland Limited, CN=DigiCert QuoVadis G3 SMIME RSA4096 SHA384 2023 CA1	3C980210C4F0803388C4D9FA9699E19F88FA3B96B3CF68D675808876747A678A	7/27/2023	7/24/2033
C=NL, O=QuoVadis Trustlink B.V., oid_2.5.4.97=NTRNL-30237459, CN=DigiCert QuoVadis G3 TS Europe ECC P256 SHA256 2023 CA1	CE49790DCEB21562949C5270BB02C0F34C7B3861D85F98D1069E20453C426BC5	3/14/2023	3/11/2032

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=NL, O=QuoVadis Trustlink B.V., oid_2.5.4.97=NTRNL-30237459, CN=DigiCert QuoVadis G3 TS Europe RSA4096 SHA256 2023 CA1	8CD1E1AFA9F976519AA252A0C4568B22092A5773D7E2B4631D19DE2B39ABFA3B	3/14/2023	3/11/2032
C=US, O=DigiCert, Inc, CN=DigiCert QuoVadis TLS ICA QV Root CA 1 G3	C42A4D8C0904BB211906F43B441BBBC9B5A003BA3611879FD34AE576F7C2F764	1/6/2021	1/4/2031
C=BE, O=DigiCert Europe Belgium B.V., CN=itsme Sign Issuing CA G2	0B7AF5EB38D90B83C893410EC6714601A4EF6EC5C32B9D1D9AD54FBD38E18AEA	8/31/2020	8/29/2030
C=BE, O=DigiCert Europe Belgium B.V., CN=itsme Sign Issuing CA G2x	B965A4354E7E1FFEDD1F947F13B065819B3A53C6889DC643E1D0D4C514AB68AE	10/5/2020	10/3/2030
C=BE, O=DigiCert Europe Belgium B.V., oid_2.5.4.97=NTRBE-0537698318, CN=QuoVadis Belgium Issuing CA G4	3516BDAB7F57115A7AEB2EBF9C521EF00F04AD891501979BE1EFBF4493409669	8/12/2020	8/10/2029
C=BM, O=QuoVadis Limited, CN=QuoVadis Enterprise Trust CA 1 G3	0531C86F785958939FDC539924D395D1EFA409364E6827D3AB9876311FFB27B0	6/6/2016	6/6/2031
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis Enterprise Trust CA 1 G4	597623E05FD1B591711194EB190590F903A2B73F74CD5E8F787EC528033DAB7F	7/23/2020	7/20/2035
C=NL, O=QuoVadis Trustlink B.V., oid_2.5.4.97=NTRNL-30237459, CN=QuoVadis EU Issuing Certification Authority G6	19B74B7E41CA73465832838A14EB432C4826F1B15DEF42B90AAE9F8FAB8B79B3	8/12/2020	8/10/2029
C=DE, O=QuoVadis Trustlink Deutschland GmbH, CN=QuoVadis Europe Advanced CA G2	EBCD0C73FE44B60E25789419C07B0B234B3F586E092316FB2CBDA39C223224A3	7/22/2020	7/20/2030
C=BM, O=QuoVadis Limited, CN=QuoVadis Issuing CA G5	08204C52ADDAA97A6FDEF702F6CEB4B94E578F8FC1C301C9D5136AB381CFA7D9	10/7/2019	10/4/2029
C=BM, O=QuoVadis Limited, CN=QuoVadis RCA1G3 TLS CA	18BB70EFDA3F91438115C9EB4F333EB4EC68354571E6949195A0A91C9E6FBCD8	10/21/2020	10/19/2030
C=CH, O=QuoVadis Trustlink Schweiz AG, CN=QuoVadis Swiss Advanced CA G4	085A74D4683D0FCCDE44677CFA579B732C9CE2DA6921AD3FE70F814EE7C0BF52	7/22/2020	7/20/2030
C=CH, O=QuoVadis Trustlink Schweiz AG, oid_2.5.4.97=NTRCH-CHE-112.210.349, CN=QuoVadis Swiss Regulated CA G2x	941B8AEE4BCF1EFEB0475FB279FDDDCF37FC5B20F64E842CD9DA0770B157E84D	11/27/2019	11/24/2029
C=CH, O=QuoVadis TrustLink Schweiz AG, CN=QuoVadis Swiss Regulated CA G3	726FB1F3D9FBFE0B4043004A27A43CF65CB214363B093034FC4185C86C9D8B0D	7/27/2020	7/25/2028
C=NL, oid_2.5.4.97=NTRNL-30237459, O=QuoVadis Trustlink B.V., CN=QuoVadis Time-Stamping Authority CA G1	D2BA0BFEC43FA7803860CDE6B3377421B1F563EC124B51D908415B0E937323E6	11/20/2018	11/17/2028
C=NL, O=QuoVadis Trustlink B.V., oid_2.5.4.97=NTRNL-30237459, CN=QuoVadis Time-Stamping Authority CA G2	B9583D4E090E8A6B1B5FD3FD079ABAD2B1EC326E183A4B763473E2ACE04E43CD	10/1/2021	9/29/2031
C=IE, O=DigiCert Ireland Limited, CN=DigiCert QuoVadis 2G3 TLS RSA4096 SHA384 2023 CA1	9163F1910D4944BE32D0D224A79F9FA6B4036E9098795AC81D3DD14CE4FF24D2	12/12/2023	12/11/2033
C=NL, O=QuoVadis Trustlink B.V., oid_2.5.4.97=NTRNL-30237459, CN=DigiCert QuoVadis G3 Qualified TLS RSA4096 SHA256 2023 CA1	FE3CBED838D30BAB900184C1F21A4B27D3211CB5C9257D7E985C2AE43AC6A89F	3/14/2023	3/11/2033

Subordinate CA Certificates			
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C=US, O=DigiCert, Inc., CN=DigiCert QV EV TLS ICA G1	6A7B2AA3414039A663D5D8BBAB8256A3979A84C332BF5E1EE8F6D0E0ADA84668	3/16/2020	3/14/2030
C=US, O=DigiCert, Inc., CN=DigiCert QV TLS ICA G1	93E33AF7DA3030530D090C9C55762CADE7EAE943F834349D1057A90EB67F306B	3/16/2020	3/14/2030
C=BM, O=QuoVadis Limited, CN=QuoVadis Enterprise Trust CA 2 G3	B6F6559BBCE0A2CC91E507B5D7319E32487EDAE28A063BC73B6405E6C44665B6	9/22/2020	6/6/2031
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis Enterprise Trust CA 2 G4	1E356823FE40C0EAAC29F9ED5463B7B2DB1C088B63EBB05876A2E631C1087798	7/23/2020	7/20/2035
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis Europe EV SSL CA G1	CB6666B32BFF2EFEDCC4187DF149A6D34A5D10B7165B9CFF2A67C0E311AEEED7	7/20/2020	7/18/2030
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis Europe SSL CA G2	B1AAE1BCD555E8A3D1E3DDA8EC84E757C552655344CE3FEEBBAF98E895DBEDAC	7/22/2020	7/20/2030
C=BM, O=QuoVadis Limited, CN=QuoVadis Global SSL ICA G3	161EE5386329B28A27FF405736552A621D5A844A43811E3623E52EEFA0BA840A	11/3/2021	11/2/2026
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis Qualified Web ICA G2	7FEB9374EAB08D392717C647436DAE06176A24C010607FDA1CCE5E5F0106B472	7/22/2020	7/20/2030
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis Qualified Web ICA G3	3F225BDBCD788CE924870CAF92F814B7C6FF4EDABABAD93F1D3A9177252CF1D1	8/28/2020	8/26/2030
C=US, O=DigiCert, Inc, CN=DigiCert QuoVadis TLS ICA QuoVadis Root CA 2	673E8FEEB1168277D0153111D20ED38E9DA51F440BE7FD50B218540937741A48	1/6/2021	1/4/2031
C=US, O=HydrantID (Avalanche Cloud Corporation), CN=HydrantID EV SSL CA G2	60388B773D33E9141648613F36B9149F015A114378BACF3E3694864FFDA426EC	7/21/2020	7/19/2030
C=US, O=HydrantID (Avalanche Cloud Corporation), CN=HydrantID SSL CA G3	AA57F482CBC516B4D10CA4097DD90D99F5AA727D207090D07DA9C36998ABB9AD	9/29/2020	9/27/2030
C=US, O=HydrantID (Avalanche Cloud Corporation), CN=HydrantID SSL ICA G2	9C6D08933201407FBF2B12540B67CC0E4C9666F132E1504762A717CBAE8F3FD6	12/17/2013	12/17/2023
C=US, O=HydrantID (Avalanche Cloud Corporation), CN=HydrantID SSL ICA G2	01453F645CD91E233B7484827F23F8A573FD641029EA8A6BFE549EF4ED8B323D	1/14/2021	12/17/2023
C=BM, O=QuoVadis Limited, CN=QuoVadis Code Signing CA G1	DA0AFAF15CD300E34B520FB78A4FA68EB42C4601E939B903E0B1D71DF5965BFF	5/30/2014	5/30/2024
C=BM, O=QuoVadis Limited, CN=QuoVadis Global SSL ICA G2	E5CD0DD44E1120C79415C84F5369D79AE04F047E80DC0856351AABC232056CA5	5/25/2022	5/24/2027
C=BM, O=QuoVadis Limited, CN=QuoVadis Grid ICA G2	278ECF211E2518E9DD9913AFC583EEB3127C8184BCBEEDAAD7BD64E89E8C4310	9/22/2020	5/23/2026
C=DE, O=Fiducia & GAD IT AG, CN=VR IDENT EV SSL CA 2020	D33A847F640377BE0AE1A429153A07E87C8827FA4840B5158BCDCB85E10A453A	7/22/2020	7/20/2030
C=DE, O=Fiducia & GAD IT AG, CN=VR IDENT SSL CA 2020	347D18DCCC2EFC51A920E7A7FBB07BFBDA35613681F82DCA5C4C72BB0C83C035	7/22/2020	7/20/2030
C=US, O=DigiCert, Inc, CN=DigiCert QuoVadis TLS ICA QV Root CA 3 G3	728E4BD2B399840E9D437AF975B0198910B4129B7AB708CB5C0B445D3B04D999	1/6/2021	1/4/2031
C=US, O=HydrantID (Avalanche Cloud Corporation), CN=HydrantID Client ICA G2	5286AE1C558A81537CD9870F749D96EFABC2D2BA393DF818DFE95EA7CE6450A7	10/7/2019	10/4/2029
C=BM, O=QuoVadis Limited, CN=QuoVadis Enterprise Trust CA 3 G3	DA5462526A0C2E9852A86186B025390158759CDCA6AE21F09F713CA6ACCDD1F1	6/6/2016	6/6/2031

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis Enterprise Trust CA 3 G4	31EFF7DF4DDEB71CBDFB08B5C7FC9604A93600251E8917D6960C32BF4C0B5A77	7/23/2020	7/20/2035
C=BM, O=QuoVadis Limited, CN=QuoVadis RCA3G3 TLS CA	ECC0D17AC3263AC6A164DCDB08F82D07E93FCEA723F66B88B06EEBA9678DF2BB	10/21/2020	10/19/2030
C=CH, O=Berner Kantonalbank AG, OU=Issuing Certification Authority, CN=BEKB - BCBE Issuing CA G2	B399EFE42C01A05BDC38978447A78E950467793FB11C1B6B426C419A0FC73911	10/10/2013	10/10/2023
C=US, O=DigiCert, Inc, CN=DigiCert QuoVadis TLS ICA QV Root CA 3	D8CC89C6AA6B7452881907927C81E66DA01A7598CF7674E4E2E133F16546D5F0	1/6/2021	1/4/2031
C=BM, O=QuoVadis Limited, CN=QuoVadis RCA3G1 TLS CA	3A66E648212E6321F94D9EABCC92C052E679D992C99AD4596A4E7B85ADCEE5DE	10/21/2020	10/19/2030
C=IE, O=DigiCert Ireland Limited, CN=DigiCert QuoVadis G4 SMIME ECC P384 SHA384 2023 CA1	D80AB934DED2B399A781F270005393D5162A2707B2A007C39A27C740F1E5CE26	12/5/2023	3/13/2033
C=IE, O=DigiCert Ireland Limited, CN=DigiCert QuoVadis G4 SMIME ECC P384 SHA384 2023 CA1	E117CBC55073D91A61E7636FE46184AB8726466A338C2DF109E8A284DE551650	3/16/2023	3/13/2033
C=IE, O=DigiCert Ireland Limited, CN=DigiCert QuoVadis G4 SMIME RSA4096 SHA384 2023 CA1	E234809774CD0125626EA578E36F35740959B61B7790582DFE7828730F818546	12/5/2023	3/13/2033
C=IE, O=DigiCert Ireland Limited, CN=DigiCert QuoVadis G4 SMIME RSA4096 SHA384 2023 CA1	369AE7BD4D9E9E698A6F731D5AC19936AB3859431A502497357FE93ACF01982D	3/16/2023	3/13/2033
C=IE, O=DigiCert Ireland Limited, CN=DigiCert QuoVadis G4 TLS ECC P384 SHA384 2023 CA1	0CAB7DBD736B1BFBE8E63ABE2DD55D64A0805140386DA05FC6E28D4FCF81B9B6	3/16/2023	3/13/2033
C=IE, O=DigiCert Ireland Limited, CN=DigiCert QuoVadis G4 TLS RSA4096 SHA384 2023 CA1	3E8FC16AADA8FCB6F51CA4848BB15F8ABE8DD807F9CEAA4C6CCBE9864F6CE9DE	3/16/2023	3/13/2033
C=NL, O=QuoVadis Trustlink B.V., unknown_2.5.4.97=NTRNL-30237459, CN=DigiCert QuoVadis PKIoverheid Burger CA - 2023	66388EE649CBE920FD949FA9B77E2AA45B5DEC4120B8FFAB371B0C9C5E38C1C1	3/20/2023	11/12/2028
C=NL, O=QuoVadis Trustlink B.V., oid_2.5.4.97=NTRNL-30237459, CN=QuoVadis PKIoverheid Burger CA - 2021	3AC3DB2C474FC34FE8011C5A01F622824C6F8B11076F56192AC701DAE3D70534	2/25/2021	11/12/2028
C=NL, O=QuoVadis Trustlink B.V., unknown_2.5.4.97=NTRNL-30237459, CN=DigiCert QuoVadis PKIoverheid Organisatie Persoon CA - 2023	C8C77ECF368D73214D50D88384464339E6F8E59F34B47E39E7965F4E5787CF1D	3/20/2023	11/12/2028
C=NL, O=QuoVadis Trustlink B.V., unknown_2.5.4.97=NTRNL-30237459, CN=QuoVadis PKIoverheid Organisatie Persoon CA - 2022	56521521E7EA27EAAE33F0095D5B871CDA3AF4A80A62E08594CBAD6EF2806307	1/27/2022	11/12/2028
C=NL, O=QuoVadis Trustlink B.V., oid_2.5.4.97=NTRNL-30237459, CN=QuoVadis PKIoverheid Organisatie Persoon CA - G3	15073C6BBDC74699A88518C27A57C956E5E23D6CA9619E521A468C7873DE4F8A	11/3/2016	11/12/2028

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Subordinate CA Certificates			
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C=NL, O=QuoVadis Trustlink B.V., unknown_2.5.4.97=NTRNL-30237459, CN=QuoVadis PKIoverheid Organisatie Services CA - 2022	B0D9AFDA74163609E4EAB017EEE4CE0B235AEEF7D68C06F86E74C6387999B2B7	1/27/2022	11/12/2028
C=NL, O=QuoVadis Trustlink B.V., oid_2.5.4.97=NTRNL-30237459, CN=QuoVadis PKIoverheid Organisatie Services CA - G3	BECFDE124CEDD344D925CB55EDDA662D9A9C0688FA9A0870CE3DBB6DA4313E4E	11/3/2016	11/12/2028
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Japan Class 1 CA	5077797A1815E482873858986189008BD7ED182D03725F03B02F13BFFD6652F6A	4/15/2014	4/14/2024
C=AU, O=Attorney Generals Department, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Attorney Generals Department Public CA	CEF711147D8B0A1DC5200B8383BED23C1D294F2F89EBFE179D2501EA5E24AB8A	7/21/2015	7/20/2025
C=US, O=Fannie Mae, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Fannie Mae Shared Online CA	D39495B310669DC6BFF57D547C53E3FF9E7B452BB609272C981F514CCA0B146F	12/20/2016	12/19/2026
C=US, O=General Electric Company, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=GE SMIME Issuing CA 2.1	2D53B8177062E4C7CEA79EEBF62BFA52A5B18BC9B89483597E5714E4E9B52315	7/16/2015	7/15/2025
C=US, O=General Electric Company, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=GE SMIME Issuing CA 2.1	6BE39EC9E02D54008A7A716DD35A3D2F0A1FD8F8F34DAE235446150C6F48BC7E	7/16/2015	7/15/2025
C=AU, O=NBN Co Limited, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=NBN Co Limited Public Issuing CA - G2	758F496C9928A3C67E0D50D03D2E2CAAFF733D427E57AB5FEE7D5AC4153C4071	2/10/2015	2/9/2025
C=ZA, O=Nedbank Limited, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Nedbank Limited Public CA	267D014C81E6D02ED5898306B64D7B5EA91BAF9DB3183CF3BC64C25D2B35CAE6	9/10/2015	9/9/2025
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 2 Signing RSA Intermediate CA	66F7B0147C09F9DA79E63800A96F649DA7E59757F876F08126D07E8FB8542488	1/22/2015	1/21/2030
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Japan Class 2 CA	AB62A0A1DE53BA06E771438E5D0526D3D8B0235330C65AA4BF80D855908E2DC4	4/15/2014	4/14/2024
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Japan Class 2 CA	8C82B76FCA9CED6A0C6A7B3141CCB585EC941921EC0B33D956CB29071851C7D9	4/15/2014	4/14/2024
C=US, O=United Launch Alliance, LLC, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=ULA CA - G3	232AD338F64E3FC71048E1D6CCC96EA6FD5782274AA96FD618F5425087BA2FFE	8/31/2017	8/30/2027

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=Veritas Technologies LLC, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Veritas Technologies LLC Class 2 Employee CA	1AB7DCA7F8B28027F2B71FBBA8CB87162FE112C47AC4D09638C8EA01915A177D	9/10/2015	9/9/2025
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 2 Individual Signing RSA CA	4E74475D2C33E1DD4732306B79712B5EE6997C2DBDF596CC8BD1362163DAA4F4	1/22/2015	1/20/2035
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 2 Individual Signing RSA CA	8B9218D93DB5377CFE7D5923E7016D379D446F0019C47B9B4EA737AEDF86A558	1/22/2015	1/20/2030
C=US, O=DigiCert, Inc., CN=DigiCert TLS ICA SYMC PCA3-G4	B1D1244218C903B64EBF42150C5FD891EB5B663CE6F20DD12E8352DD7D1E6693	1/8/2021	1/7/2031
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 ECC 256 bit EV CA - G3	4B2CBA18EFBCE6C3C4A80AAABC952337000CD9346B768D062412A2DED846EDC9	1/7/2016	1/6/2026
C=US, O=DigiCert, Inc., CN=DigiCert TLS ICA SYMC PCA3-G6	FDB351BDA2D821C3DFBB924A12D90D6DC760D5F6200144529E502E467BBF9ECC	1/8/2021	1/7/2031
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 EV SSL CA - G4	31862233620E789330CC893E8B5E66705331B8B88B0ED30A44574D9E0A71C4F1	1/7/2016	1/6/2026
C=US, O=Symantec Corporation, OU=Windows Phone Enterprise Applications, CN=Symantec Enterprise Mobile CA for Microsoft - G2	65E5B094657AA1D7161BA5710F024FE8DDF21ADB6270A20BAE0814183AA85370	5/24/2017	3/13/2032
C=JP, O=Astellas Pharma Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Astellas Global SMIME CA - G2	B2ED9A6D9B6C48DD1494EE0CD4802179F6208C7F75894DE2607E16573BE464AE	4/15/2014	10/22/2022
C=JP, O=Symantec Japan, Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Class2 Individual Certificate Service CA	9268449725E5DE18F8A76548BBEC1F8C845B17387590E1855BFFCA5B02CF6C28	1/22/2015	4/13/2024
C=JP, O=DAIICHI SANKYO COMPANY, LIMITED, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=DAIICHI SANKYO COMPANY Public CA - G2	68361FD0131D79AC91C9939F3E5479CA32E2BE419A7CF519E026F992234509EE	4/15/2014	8/27/2022
C=US, O=DigiCert, Inc, OU=www.digicert.com, CN=thawte Primary Issuing CA G3	F6CF5D6FF850D14DB082CC9CF7C056BC60E36B1E54F1CCA3E24BDF393948978D	12/8/2017	12/8/2027
C=US, O=DigiCert, Inc, OU=www.digicert.com, CN=thawte Primary Issuing CA	9A9FC39029ABE132D674D032D199CB8431AAC878DABCE6E9E1AECB81EC99F4CC	12/8/2017	12/8/2027
C=IT, O=Monte Titoli S.P.A., CN=Monte Titoli Public Trust CA G2	6405BB14292E08C440E28186E24F20DB0B4DF93F13D57C4847EA30EA558044B3	8/20/2024	8/12/2034
C=IT, O=Monte Titoli S.P.A., CN=Monte Titoli Public Trust CA	561FB017C53FE711EA356164B3A486E60C369267BA0FBF1B5A6C839AE26EFA7E	7/7/2021	7/6/2031

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Persona Not Validated, CN=Symantec Class 1 Individual Subscriber CA - G5	42A5FBCA2D6AA262FF62333AB78699CE1E4BF1CF5F49F806FD324CBE5BB62CF4	10/1/2015	9/30/2025
C=ZA, O=Absa Bank Limited, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Absa Bank Limited Public CA	02302C4CF831335C9DD145DF91A8C1C703008FD234215D0E187895092BD81AD4	6/8/2017	6/7/2027
C=US, O=Computer Sciences Corporation, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=AGC Public CA	5E71C746D45EBCFD6D2DCE4A2DABCCD9335E3AD8D63B349989341911ECD70E88	11/11/2014	11/10/2024
C=US, O=APX Inc, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=APX Public CA	8B1C10711C007BE2ABF9BF6C79CE5EBD5F8EAC36D5037228237AEFB236BF2A91	4/4/2014	4/3/2024
C=AU, O=ASCIANO EXECUTIVE SERVICES PTY LTD, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Asciano CA	5FC7C6E19AF873E0941D7C6AB344D3E6E4F73DD67693FADFA2DA9C6438AC1A1A	11/3/2015	11/2/2025
C=US, O=ATT Services Inc, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=ATT Services Inc Email Certificates CA - G2	AE7A31EB7007A6F64237387343C083D11950F1D6D546EDDAD8B5AA3DAC30B70C	3/3/2016	3/2/2026
C=US, O=Blue Cross and Blue Shield of Florida, Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Blue Cross and Blue Shield of Florida CA G3	BBCA83E909A956AA38BA04EA5FC6A6A13F99495DA1E23981BE5BEDE03970450A	5/3/2016	5/2/2026
C=US, O=Blue Cross and Blue Shield of Florida, Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Blue Cross Blue Shield of Florida CA G3	30C955BBF62B0E73573DDD9564A51235ED40B3B5BBDD5E9B5561D64F96AD65D6	5/5/2016	5/4/2026
C=US, O=Brown Brothers Harriman & Co., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Brown Brothers Harriman G3 CA	B3FAEBD9495096D2C5B26CE20D7DE785DFF83CEA63BF9BC6605BC08B89996224	6/10/2014	6/9/2024
O=CertiSur S.A., OU=Symantec Trust Network, CN=CertiSur Class 2 CA - G3	041E70B7DDDD0F2F90F285C4C71E0E20533312A10773794A21B5791EC8755958	8/18/2015	8/17/2025
C=US, O=City of New York, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=City of New York Office of the Actuary - G2	A3E2E9FDC693C7536CD3A9ABC8E09705C113DD391635C6239BBFF21DA258C96F	6/11/2015	6/10/2025
C=US, O=HP Inc, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Collaboration Certification Authority	B864FF6DE0CB1BEAF6AA5C68DB8769C91F18E1721E22AC3ECDD91C0889D77078	6/11/2015	6/10/2025

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Subordinate CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
C=PE, O=Cosapi Data S.A., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Cosapi Data Public CA - G2	AFCD78EBA95C0801A2FEBAE6F695D469AF346215C5A3E554F161D23C4BB40F91	5/12/2016	5/11/2026
C=US, O=eGlobalCustody, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=eGlobalCustody G3 CA	2DE8DD6BE750435D703D60CF87D203AF12D1E0F2960691888F47546EED9087D6	6/10/2014	6/9/2024
C=DE, O=Heuer und Partner - Rechtsanwälte mbB, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Feddersen Heuer Public CA	A402AA0AE53F484A07BF4E35B55D1274127650AD6145E243B719330B92B2A10A	1/5/2016	1/4/2026
C=AU, O=Fuji Xerox Businessforce Pty. Limited, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Fuji Xerox Businessforce CA - G2	92587CDC27A5C019B413AA94D21944AC8562E8DAA8C78AEA17C623D1B77714DE	6/4/2015	6/3/2025
C=US, O=General Electric Company, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=GE Enterprise SMIME CA 2.1	5C854634778E6DDC076ABAA36E5B8F4F45140578BD3A45AF09B7F23C34F032AD	6/16/2015	6/15/2025
C=US, O=Hewlett Packard Enterprise Company, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Hewlett Packard Enterprise Collaboration CA	2EAA4251B3FFDD3AE904833A08B7FE1E7717C17082455C07F6F6DA902CBAC5D0	3/17/2015	3/16/2025
C=US, O=International Business Machines Corporation, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=IBM Certification Authority G3	CB16C58F10AFFDA46A0FC05BF49F0B707C579EC52E3527EEBA0448F9B8C16E99	11/10/2016	11/9/2026
C=DE, O=LfA Foerderbank Bayern, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=LfA Foerderbank Bayern - G2	315AC96789B49D48A1C420F32F9A4A73F4871AF75A4CA53CF41CE3FB3E2E76FC	6/16/2015	6/15/2025
C=SG, O=National University of Singapore, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=National University of Singapore CA - G2	438BA9C85C9A8C5506ACD1146ADA068B777A32FA2C78A6D4AB57241174881AB2	9/18/2014	9/17/2024
C=FI, O=Nokia Solutions and Networks, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Nokia Solutions and Networks CA	0B5F13974CEB577E1CC39DFFADF616FCF0C17ECA6747201AEBA6AF3BC20CE4F4	10/10/2013	10/9/2023
C=ID, O=PT Astra Daihatsu Motor, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=PT Astra Daihatsu Motor CA	9FF4EC074FE370818B15ABA1BBDCB0A4DBE3F8420A993A7B5176BCC7FB4E4EAD	5/31/2016	5/30/2026
C=DE, O=RWE Dea AG, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=RWE Dea AG CA	7FC6CAB96C16C850F457DCBBFB893539EA2664395F2409693789F41BFD64714E	12/11/2014	12/10/2024

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=State Street Bank and Trust Company, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=State Street Bank and Trust - Global Markets CA	2C68D776FFD51155D98957A66043F896E2BC69CB1943570389350057A2C70616	7/10/2015	7/9/2025
C=AU, O=Sydney Trains, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Sydney Trains CA	BD80A335B5EBB7279960E0B5802257C256062895F33D3DCBC0B7CB7199DFA75F	11/24/2015	11/23/2025
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Symantec Class 2 Employee CA - G3	2F320624CC3EBC01796080BEDEB5B2ED916F02A0AE5F537EDC4766BC455659DD	1/6/2015	1/5/2025
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Symantec Class 2 MPKI Individual Subscriber CA - G3	A67582B9277224D98010272171 56D283136B29FD2F33031781F604EB807970D7	11/15/2016	11/14/2026
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Symantec Class 2 MPKI Individual Subscriber CA - G3	E79BACE9FF58B8EE6D3BD94AE8ADB13DF42DFD86B3701BFF8EDFF5C4E84BAE91	11/15/2016	11/14/2026
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Symantec Class 2 Shared Intermediate Certificate Authority - G2	68E63395029061641385B8AFF77F6D66F2D1FD87A821630D27EC3645C9FE235D	4/23/2015	4/22/2025
C=NO, O=Telenor Norge AS, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Telenor Norge AS EDC CA - G2	BC8EB15B0FEE05D953758E1D2C29A9E7D1E1B5AFD5659AB95E981F6F75BD1D71	9/3/2015	9/2/2025
C=NO, O=Telenor Norge AS, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Telenor Norge AS NF CA - G2	22261C8F0BCD85571AF2F801C47712E6C16DCAE3C7DFC4CD2451D9C538B349D1	9/3/2015	9/2/2025
C=NO, O=Telenor Norge AS, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Telenor Norge AS Test EDC CA - G2	26661F230442332E5F8F109C05A3FAA3EA339C29D22B07B8D1A048C693FA1F0C	9/3/2015	9/2/2025
C=NO, O=Telenor Norge AS, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Telenor Norge AS Test NF CA - G2	597D5A286729E73A324E5665CEE4B97FDD5A9FD14EBA4B903319A16CFC946680	9/3/2015	9/2/2025
C=MU, O=The Mauritius Commercial Bank Limited, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=The Mauritius Commercial Bank Limited CA	0A646FDC704F494A67739A7E99FD74955BB0AF1ABA622CEFE000B39557C5FC81	9/30/2014	9/29/2024

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=Thomson Reuters Holdings Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Thomson Reuters - LEDO CA	F5DF7A85240E93C602EE9C6F77C2B126C7A37CED8F34DD714B82C47F31F3544D	12/20/2016	12/19/2026
C=US, O=Thomson Reuters Special Services LLC, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Thomson Reuters Special Services CA	BFC05BC249D92B892CE288A0E85F0E96BB9150F741719D9B73EB41EB89D49241	3/5/2015	3/4/2025
C=US, O=United Launch Alliance, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=ULA CA - G2	4A84F84E880F3D96C3BFBA2AED67B0EE300FBEE0A4A90D736EF738A089FD6B17	4/25/2017	4/24/2027
C=US, O=University of Houston, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=University of Houston CA - G2	69FF03E05230DFD61E4D6F6DD6662808C65A85CBE8FEA5E43FBF387128E8B4F4	6/18/2015	6/17/2025
C=US, O=Voya Financial, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Voya Public Issuing CA1	63B7404D57FE17FD7E32DAC98D934EC98AB69F64D03389987193657A64364BE60	3/4/2016	3/3/2026
C=US, O=Yaana Technologies, LLC, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Yaana	7C73C0E9D52BC63E713110DA4705C7CECCB4D49F1F5FED0B6D1A707E63A4E31C	1/6/2015	1/5/2025
C=US, O=DigiCert, Inc., CN=DigiCert TLS ICA Universal 2021	23EE12A8DA9D38549C54A32BC1E4A18BAF1570488107D169EBD734DFDA330B0E	1/12/2021	1/11/2031
C=US, O=DigiCert, Inc., OU=www.digicert.com, CN=DigiCert TLS ICA VRSN Universal	BA5B6E5DFEBDAE1C80BD72790BC85BCC6538AB4613023DA706CE826415F5E5B3	1/17/2019	1/16/2029
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Domain Validated SSL, CN=Symantec Basic DV SSL CA - G2	DFF583E3A1ED35E57D95104817AD823C055FB9071CD400435B5FC74E692081DB	6/7/2016	6/6/2026
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Extended Validation Code Signing CA - G3	C267DC115D57DD0226279B346DF1953DD2C07A85CB48A0D899FD5724F5AF681F	5/12/2016	5/11/2026
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 SHA256 Code Signing CA - G2	2042E38FC57388F1DB3222C7AB5BE11C6EDB7E454BF45487AE44FF2D6A2B7645	7/22/2014	7/21/2024
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Universal Root Managed PKI Individual Subscriber CA, CN=Symantec Shared Individual Email Certificate Authority	B7021BCF346E8502B1275F80057F3B97467AC8B8A761608340ECF8484EC3848C	8/22/2017	8/21/2027
C=CN, O=TrustAsia Technologies, Inc., OU=Symantec Trust Network, OU=Domain Validated SSL, CN=TrustAsia DV SSL CA - G6	B90E17AB4B8778B10F9F28CBAA7664DE2EE3D66E1AFC574D168EDD24A10339FF	8/11/2016	8/10/2026
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Cybertrust Japan Issuing CA-1	87942388D29A46C06FE1E56AAB791594D0FB2E8EABF124048F130EEA9BEDD3FD	9/1/2016	9/1/2026

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=DigiCert, Inc., CN=DigiCert Omni TLS RSA4096 SHA256 2022 CA1	632ABAFBCDD7E86A19EDCB404332A9003A0478D75D58D86AAA776570B1D874E9	8/1/2022	7/31/2032

DIGICERT, INC. MANAGEMENT'S ASSERTION

DigiCert, Inc. ("DigiCert") operates the Certification Authority ("CA") services for its CAs enumerated in Attachment B and provides the following CA services:

- Subscriber registration
- Certificate renewal
- Certificate rekey
- Certificate issuance
- Certificate distribution
- Certificate revocation
- Certificate validation
- Subscriber key generation and management
- Subordinate CA certification and cross-certification

The management of DigiCert is responsible for establishing and maintaining effective controls over its CA operations, including its CA business practices disclosure on its repository, CA business practices management, CA environmental controls, CA key lifecycle management controls, subscriber key lifecycle management controls, certificate lifecycle management controls, and subordinate CA 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 DigiCert's CA operations. Furthermore, because of changes in conditions, the effectiveness of controls may vary over time.

DigiCert management has assessed its disclosures of its certificate practices and controls over its CA services. Based on that assessment, in DigiCert management's opinion, in providing its CA services in the locations as enumerated in Attachment A, DigiCert has:

- disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in the applicable versions of its DigiCert Certification Practices Statement ("CPS"), DigiCert Certificate Policy ("CP") and DigiCert Certificate Policy and Certification Practices Statement for Public Trust Store PKI Services ("CP/CPS") as enumerated in Attachment A

- maintained effective controls to provide reasonable assurance that:
  - the applicable versions of its CPS and CP/CPS are consistent with the applicable versions of its CP; and
  - DigiCert provides its services in accordance with its CP, CPS and CP/CPS

- maintained effective controls to provide reasonable assurance that:
  - the integrity of keys and certificates it manages is established and protected throughout their lifecycles;

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- o the integrity of subscriber keys and certificates it manages is established and protected throughout their lifecycles;
- o subscriber information is properly authenticated (for the registration activities performed by DigiCert); and
- o subordinate CA certificate requests are accurate, authenticated, and approved

- maintained effective controls to provide reasonable assurance that:
  - o logical and physical access to CA systems and data is restricted to authorized individuals;
  - o the continuity of key and certificate management operations is maintained; and
  - o CA systems development, maintenance, and operations are properly authorized and performed to maintain CA systems integrity

throughout the period September 1, 2023 to August 31, 2024, based on WebTrust Principles and Criteria for Certification Authorities v2.2.2, including the following:

CA Business Practices Disclosure
- Certificate Practice Statement (CPS)
- Certificate Policy (CP)

CA Business Practices Management
- Certificate Policy Management
- Certification Practice Statement Management
- CP and CPS Consistency

CA Environmental Controls
- Security Management
- Asset Classification and Management
- Personnel Security
- Physical and Environmental Security
- Operations Management
- System Access Management
- System Development, Maintenance, and Change Management
- Disaster Recovery, Backups, and Business Continuity Management
- Monitoring and Compliance
- Audit Logging

CA Lifecycle Management Controls
- CA Key Generation
- CA Key Storage, Backup, and Recovery
- CA Public Key Distribution
- CA Key Usage
- CA Key Archival
- CA Key Destruction
- CA Key Compromise
- CA Cryptographic Hardware Lifecycle Management

- CA Key Transportation
- CA Key Migration

Subscriber Key Lifecycle Management Controls
- CA-Provided Subscriber Key Generation Services
- CA-Provided Subscriber Key Storage and Recovery Services
- Requirements for Subscriber Key Management

Certificate Lifecycle Management Controls
- Subscriber Registration
- Certificate Renewal
- Certificate Rekey
- Certificate Issuance
- Certificate Distribution
- Certificate Revocation
- Certificate Validation

Subordinate CA Certificate and Cross Certificate Lifecycle Management Controls
- Subordinate CA Certificate and Cross Certificate Lifecycle Management

DigiCert does not escrow its CA keys, does not provide certificate suspension services and does not provide integrated circuit card lifecycle management services for subscribers. Accordingly, our assertion does not extend to controls that would address those criteria.

DigiCert makes use of external registration authorities for specific subscriber registration activities as disclosed in DigiCert's business practices. Our examination did not extend to the controls exercised by these external registration authorities.

DigiCert has disclosed the following matters publicly Mozilla's Bugzilla platform. These matters were included below due to being open during the period September 1, 2023 through the date of this report.

Bug ID	Summary	Opened	Closed	Resolution
#1845634	DigiCert: TLS certificates with incorrect policy OID	7/26/2023	9/2/2023	Fixed
#1846784	DigiCert: Delayed revocation of IV certificates	8/2/2023	9/2/2023	Fixed
#1853463	DigiCert: SMIME certificates issued inconsistent with BR's	9/15/2023	10/12/2023	Fixed
#1860697	DigiCert: Certificates issued inconsistent with S/MIME BR v1.0.1	10/23/2023	1/4/2024	Fixed
#1865235	DigiCert: Late background refreshment check	11/16/2023	12/7/2023	Fixed
#1875205	DigiCert: SMIME certs missing State in Org ID	1/17/2024	1/26/2024	Fixed
#1881364	DigiCert: SMIME certificate with unvalidated information	2/21/2024	3/29/2024	Fixed

Bug ID	Summary	Opened	Closed	Resolution
#1891531	DigiCert: Government Entity listed instead of registration number	4/15/2024	5/2/2024	Fixed
#1894560	DigiCert: Incorrect case in Business Category	5/1/2024	7/3/2024	Fixed
#1896053	DigiCert: Delayed Revocation for bug 1894560	5/10/2024	Open	---
#1896462	DigiCert: Preview certificate uploaded to CCADB instead of the actual certificate	5/13/2024	6/1/2024	Fixed
#1898986	DigiCert: Incorrect Org ID Scheme in S/MIME	5/25/2024	6/21/2024	Fixed
#1910258	DigiCert: Typo in TLS Org Name	7/27/2024	Open	---
#1910322	DigiCert: Random value in CNAME without underscore prefix	7/28/2024	Open	---
#1910805	DigiCert: Delayed revocation of 1910322	7/30/2024	Open	---
#1914911	DigiCert: Unclear Disclosure of CAA Issuer Domain Names	8/26/2024	Open	---
#1925106	DigiCert: Incorrect CP listed in CCADB	10/16/2024	Open	---
#1927506	DigiCert: Incorrect OrgID in S/MIME certificates for one customer	10/28/2024	Open	---
#1930759	DigiCert: Domain used for CRLs and OCSP has expired	11/12/2024	Open	---

DigiCert, Inc.

DocuSigned by:

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Jason Sabin
Chief Technology Officer

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

Certificate Policy/Certificate Practice Statement[1]

Policy Name	Version	Effective Date
DigiCert Certificate Policy and Certification Practices Statement for Public Trust Store PKI Services	7.01	August 27, 2024
DigiCert Certificate Policy and Certification Practices Statement for Public Trust Store PKI Services	7.00	July 29, 2024

Certificate Policies

Policy Name	Version	Effective Date
DigiCert Certificate Policy	6.06	May 23, 2024
DigiCert Certificate Policy	6.05	January 10, 2024
DigiCert Certificate Policy	6.04	December 14, 2023
DigiCert Certificate Policy	6.03	November 09, 2023
DigiCert Certificate Policy	6.02	September 07, 2023
DigiCert Certificate Policy	6.01	September 05, 2023
DigiCert Certificate Policy	6.00	August 16, 2023

Certification Practice Statements

Policy Name	Version	Effective Date
DigiCert Certification Practices Statement	6.06	May 23, 2024
DigiCert Certification Practices Statement	6.05	January 10, 2024
DigiCert Certification Practices Statement	6.04	December 14, 2023
DigiCert Certification Practices Statement	6.03	November 09, 2023
DigiCert Certification Practices Statement	6.02	September 07, 2023
DigiCert Certification Practices Statement	6.01	September 05, 2023
DigiCert Certification Practices Statement	6.00	August 16, 2023

CA Locations In-Scope

CA Locations	
California, United States	St. Gallen, Switzerland
Utah, United States	Nieuwegein, Netherlands
Virginia, United States	Amstel, Netherlands
Amsterdam (South), The Netherlands	Kawasaki, Japan
Lupfig, Switzerland	Sapporo, Japan

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[1] Effective July 29, 2024, the DigiCert Certificate Policy and DigiCert Certification Practices Statement combined into the DigiCert Certificate Policy and Certification Practices Statement for Public Trust Store PKI Services.

ATTACHMENT B - LIST OF CAs IN SCOPE

Root CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=IE, O=Baltimore, OU=CyberTrust, CN=Baltimore CyberTrust Root	16AF57A9F676B0AB126095AA5EBADEF22AB31119D644AC95CD4B93DBF3F26AEB	5/12/2000	5/12/2025
O=Cybertrust, Inc, CN=Cybertrust Global Root	802447EE521CC666CDB7BBAE93A385E55F200D76A3D1356A85445AC4CBDBED12	1/8/2014	12/15/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Assured ID Root CA	3E9099B5015E8F486C00BCEA9D111EE721FABA355A89BCF1DF69561E3DC6325C	11/10/2006	11/10/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Assured ID Root G2	7D05EBB682339F8C9451EE094EEBFEFA7953A114EDB2F44949452FAB7D2FC185	8/1/2013	1/15/2038
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Assured ID Root G3	7E37CB8B4C47090CAB36551BA6F45DB840680FBA166A952DB100717F43053FC2	8/1/2013	1/15/2038
C=US, O=DigiCert, Inc., CN=DigiCert Client ECC P384 Root G5	CD851C5C25467C0095A43927D0B2292D932975E84DCE4C5E794542C6574C3AA4	1/15/2021	1/14/2046
C=US, O=DigiCert, Inc., CN=DigiCert Client RSA4096 Root G5	3AF21466920FA91FA31F4331E445C16BE2330024BFD2C239C0D85AB530714766	1/15/2021	1/14/2046
C=US, O=DigiCert, Inc., CN=DigiCert CS ECC P384 Root G5	26C56AD2208D1E9B152F66853BF4797CBEB7552C1F3F477251E8CB1AE7E797BF	1/15/2021	1/14/2046
C=US, O=DigiCert, Inc., CN=DigiCert CS RSA4096 Root G5	7353B6D6C2D6DA4247773F3F07D075DECB5134212BEAD0928EF1F46115260941	1/15/2021	1/14/2046
C=US, O=DigiCert, Inc., CN=DigiCert ECC P384 Root G5	C1468CF2254E6004B24696ABA209D1A30BA6E2DFF68A9A4E32C6AB414F90C8D9	1/15/2021	1/14/2046
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Global Root CA	4348A0E9444C78CB265E058D5E8944B4D84F9662BD26DB257F8934A443C70161	11/10/2006	11/10/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Global Root G2	CB3CCBB76031E5E0138F8DD39A23F9DE47FFC35E43C1144CEA27D46A5AB1CB5F	8/1/2013	1/15/2038
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Global Root G3	31AD6648F8104138C738F39EA4320133393E3A18CC02296EF97C2AC9EF6731D0	8/1/2013	1/15/2038
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert High Assurance EV Root CA	7431E5F4C3C1CE4690774F0B61E05440883BA9A01ED00BA6ABD7806ED3B118CF	11/10/2006	11/10/2031
C=US, O=DigiCert, Inc., CN=DigiCert RSA4096 Root G5	E46A392204A8DCA342A71C1CA9A60C9185B9A930370120C3B9C7E3856F0D8F3B	1/15/2021	1/14/2046
C=US, O=DigiCert, Inc., CN=DigiCert SMIME ECC P384 Root G5	E8E8176536A60CC2C4E10187C3BEFCA20EF263497018F566D5BEA0F94D0C111B	1/15/2021	1/14/2046
C=US, O=DigiCert, Inc., CN=DigiCert SMIME RSA4096 Root G5	90370D3EFA88BF58C30105BA25104A358460A7FA52DFC2011DF233A0F417912A	1/15/2021	1/14/2046
C=US, O=DigiCert, Inc., CN=DigiCert TLS ECC P384 Root G5	018E13F0772532CF809BD1B17281867283FC48C6E13BE9C69812854A490C1B05	1/15/2021	1/14/2046
C=US, O=DigiCert, Inc., CN=DigiCert TLS RSA4096 Root G5	371A00DC0533B3721A7EEB40E8419E70799D2B0A0F2C1D80693165F7CEC4AD75	1/15/2021	1/14/2046

Root CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Trusted Root G4	552F7BDCF1A7AF9E6CE672017F4F12ABF77240C78E761AC203D1D9D20AC89988	8/1/2013	1/15/2038
C=US, O=DigiCert, Inc, OU=www.digicert.com, CN=DigiCert Universal Transition Root	AF0E363CAE6DF489F2976A284D12D4C33C94B135FA77F89E89298D7491E99974	12/8/2017	12/8/2037
C=US, S=Utah, L=Lehi, O=DigiCert, Inc., OU=www.digicert.com, CN=DigiCert Verified Mark Root CA	504386C9EE8932FECC95FADE427F69C3E2534B7310489E300FEE448E33C46B42	9/23/2019	9/23/2049
C=US, O=WFA Hotspot 2.0, CN=Hotspot 2.0 Trust Root CA - 03	A3CC68595DFE7E86D8AD1772A8B5284ADD54ACE3B8A798DF47BCCAFB1FDB84DF	12/8/2013	12/8/2043
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis Client ECC P384 Root G4	D3C07AC44BD8FF1975BC62F1C7E9840EA8E188A4BA51133B8C4EFF05E34A2729	3/16/2023	3/9/2048
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis Client RSA 4096 Root G4	80AC91FA891C79723A61ABC77F86E19905A92DA27E51695CA0C0B66C1C039BF2	3/16/2023	3/9/2048
C=BM, O=QuoVadis Limited, CN=QuoVadis Root CA 1 G3	8A866FD1B276B57E578E921C65828A2BED58E9F2F288054134B7F1F4BFC9CC74	1/12/2012	1/12/2042
C=BM, O=QuoVadis Limited, CN=QuoVadis Root CA 2 G3	8FE4FB0AF93A4D0D67DB0BEBB23E37C71BF325DCBCDD240EA04DAF58B47E1840	1/12/2012	1/12/2042
C=BM, O=QuoVadis Limited, CN=QuoVadis Root CA 2	85A0DD7DD720ADB7FF05F83D542B209DC7FF4528F7D677B18389FEA5E5C49E86	11/24/2006	11/24/2031
C=BM, O=QuoVadis Limited, CN=QuoVadis Root CA 3 G3	88EF81DE202EB018452E43F864725CEA5FBD1FC2D9D205730709C5D8B8690F46	1/12/2012	1/12/2042
C=BM, O=QuoVadis Limited, CN=QuoVadis Root CA 3	18F1FC7F205DF8ADDDEB7FE007DD57E3AF375A9C4D8D73546BF4F1FED1E18D35	11/24/2006	11/24/2031
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis Signing ECC P384 Root G4	771535D43D4633BD307EB7B8A3966B5DF00707C088089920080C1AE6D3CB0F68	3/16/2023	3/9/2048
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis Signing RSA 4096 Root G4	9F8E6DB31E740285E0C2C2DEB09E442BDD4E74BDEEAE2962BC82D1ECB9F39855	3/16/2023	3/9/2048
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis SMIME ECC P384 Root G4	83FDDB2FD9DAE3B21EEBD33CF46251D746F0D6102B683150DD7B98AD8E4BB9F8	3/16/2023	3/9/2048
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis SMIME RSA 4096 Root G4	5232A304AA4A10CFE6C47842EA3381CB31D619E24F58126D534CD50C5CE7845D	3/16/2023	3/9/2048
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis TLS ECC P384 Root G4	6E1FD3AE0D2D477C8F5EE5F335CC5B6356872654E5356A73D8C0A30A17C252A2	3/16/2023	3/9/2048

Root CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis TLS RSA 4096 Root G4	C8A2D38A24F5AC302D8A08EBD38923D9A750B49220F092E82D1C53249E1533D0	3/16/2023	3/9/2048
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 1 Public Primary Certification Authority - G4	363F3C849EAB03B0A2A0F636D7B86D04D3AC7FCFE26A0A9121AB9795F6E176DF	10/5/2011	1/18/2038
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 1 Public Primary Certification Authority - G6	9D190B2E314566685BE8A889E27AA8C7D7AE1D8AADDBA3C1ECF9D24863CD34B9	10/18/2011	12/1/2037
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 2 Public Primary Certification Authority - G6	CB627D18B58AD56DDE331A30456BC65C601A4E9B18DEDCEA08E7DAAA07815FF0	10/18/2011	12/1/2037
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Public Primary Certification Authority - G4	53DFDFA4E297FCFE07594E8C62D5B8AB06B32C7549F38A163094FD6429D5DA43	10/18/2012	12/1/2037
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Public Primary Certification Authority - G6	B32396746453442F353E616292BB20BBAA5D23B546450FDB9C54B8386167D529	10/18/2012	12/1/2037
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Web PKI ECC Root - G1	92BB72F15EB75DE467C84B438181034BDAE9A016EC26434BEE3C9BBAD8CD8AF0	9/21/2017	9/20/2042
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Web PKI RSA Root - G1	F6BB5B7985A8736594C14679FA31603814502AAEB5F4282A69985DC84A450777	9/21/2017	9/20/2042
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 1999 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 1 Public Primary Certification Authority - G3	CBB5AF185E942A2402F9EACBC0ED5BB876EEA3C1223623D00447E4F3BA554B65	10/1/1999	7/16/2036
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 1999 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 1 Public Primary Certification Authority - G3	7B2A147C2FEFED78A7A4BAE0147A5177C4CA1035B5281CDF989BA0B9F97A054A	10/1/1999	7/16/2036
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 1999 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 1 Public Primary Certification Authority - G3	0939110E0DCC06CEBFD0D73C01AB7BFBB7A97979F7649EABD725B18CC9BC85F8	10/1/1999	10/1/2049
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 1999 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 2 Public Primary Certification Authority - G3	BA7D7BB1DFBE64EA956CD776185C8DACC7E1ED548C4A9BD40631BEF5BFB1522A	10/1/1999	7/16/2036

Root CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 1999 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 2 Public Primary Certification Authority - G3	4DDDA06A1A9B475C38B89EED41B1535A3A35AB321BD5C6607B312E46DD766876	10/1/1999	10/1/2049
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 1999 VeriSign, Inc. - For authorized use only, CN=VeriSign Class 2 Public Primary Certification Authority - G3	92A9D9833FE1944DB366E8BFAE7A95B6480C2D6C6C2A1BE65D4236B608FCA1BB	10/1/1999	7/16/2036
C=US, O=VeriSign, Inc., OU=VeriSign Trust Network, OU=(c) 2008 VeriSign, Inc. - For authorized use only, CN=VeriSign Universal Root Certification Authority	2399561127A57125DE8CEFEA610DDF2FA078B5C8067F4E828290BFB860E84B3C	4/2/2008	12/1/2037
C=US, O=Verizon Business, OU=OmniRoot, CN=Verizon Global Root CA	68AD50909B04363C605EF13581A939FF2C96372E3F12325B0A6861E1D59F6603	7/30/2009	7/30/2034

Cross-Signed Root CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
O=Cybertrust, Inc, CN=Cybertrust Global Root	E71D8C3BAF43F6B3352DF574A9F0D4A2065BF03DA179514B1FCC5D9BEC8C8FCD	12/3/2014	12/3/2024
O=Cybertrust, Inc, CN=Cybertrust Global Root	64B3542D1BC972F58A1D179F3D0B9652BE434F3AE3842E0C447880D4D623A4DE	4/23/2014	4/23/2024
O=Cybertrust, Inc, CN=Cybertrust Global Root	24905145BD9B9BFE99C60354B49951BE0E709F1634CFBD0E370FEB9F068ED6C3	12/3/2014	12/3/2024
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Global Root CA	6DACBB8945137B1DAD4211B0436EFBE06F12ACE36904973B45AE25740823D369	12/7/2016	5/10/2025
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert High Assurance EV Root CA	CBF8FB77660167E6BAACD0DF77CDA397D0117EE2BEEA23B935317F8BB5B5E3B0	12/7/2016	5/10/2025
C=US, O=Verizon Business, OU=OmniRoot, CN=Verizon Global Root CA	B90EEAE931E5E2B7D335F149DA6C2210986000D214FFDB62A72F7332D63731AF	4/9/2014	4/9/2024
C=US, O=Verizon Business, OU=OmniRoot, CN=Verizon Global Root CA	D96CBC03B523CD3315918651CF4862162887DD563AFB2352D3F34BB94576F93D	5/13/2014	5/13/2024
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Trusted Root G4	33846B545A49C9BE4903C60E01713C1BD4E4EF31EA65CD95D69E62794F30B941	8/1/2022	11/9/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Global Root G2	79D57B15DFA65C2870EAFE11B637765909CFE937B49C15CE7F194030CAB395AD	1/18/2024	11/9/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Global Root G2	6523C34F1E879ADD7603CB2048A898A5E2F0C6C4B512C0D22782B85D43AE3371	8/15/2023	11/9/2031
C=US, O=DigiCert, Inc., CN=DigiCert TLS RSA4096 Root G5	A4BCDA32D49CDF05F0CDD085E73C3A2E67880BD48579FED4DF5940DF76A076D7	9/21/2022	11/9/2031
C=US, O=DigiCert, Inc., CN=DigiCert TLS RSA4096 Root G5	1BA02FF4A2562BBE6B799563990C88CC50E1182395719A4EAA803976E2F50860	10/3/2023	11/9/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Trusted Root G4	AD8EB32C9DA91DDC855F382745990147DC6F23D9FBB04FC9D476B1EE20FC71D8	7/1/2013	10/22/2023
C=US, O=DigiCert, Inc., CN=DigiCert TLS RSA4096 Root G5	1C8C70B263CB13A9E6EE3F097A9673194CC9D686BC14A72C8CDC705F2C0E68A7	10/3/2023	10/2/2033
C=US, O=DigiCert, Inc., CN=DigiCert TLS RSA4096 Root G5	048E39BBB6B15EF83525F163192CEA0DF21D3FFABAFAB7C63909FB1553EE4966	7/12/2023	7/11/2033
C=US, O=DigiCert, Inc., CN=DigiCert CS ECC P384 Root G5	2F30A9B2F110FB7B7C07C1E2CD652C3B71392D55AB7402E3F40D56F414540622	5/19/2022	5/18/2037
C=US, O=DigiCert, Inc., CN=DigiCert TLS ECC P384 Root G5	D92E93252EABCA950870B94331990963A2DD5DB96D833C82B08E41AFD1719178	9/21/2022	9/20/2037
C=US, O=DigiCert, Inc., CN=DigiCert TLS RSA4096 Root G5	B9D53F235C5FA8C92EB31DCFCADF4959B34A32AF36ACA1EA10F07D6551C398A5	5/10/2023	11/9/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Trusted Root G4	E9158C6AF5688CFCF9890206C43061C81FA7FC07D08E28A27C068C58073A699A	1/13/2022	11/9/2031
C=US, O=DigiCert, Inc., CN=DigiCert CS RSA4096 Root G5	63A9756FF8A0DB5CBF94C97CD894DBAEED4BB1BD2ECFB890A9E55336FECDF060	5/19/2022	5/18/2037
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Global Root G2	0BA8C0D459B76ABC0825294F565E24F4F169D4A4819D0692D371522D297724B8	3/4/2021	3/3/2031

Time-Stamping CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec SHA256 TimeStamping CA	F3516DDCC8AFC808788BD8B0E840BDA2B5E23C6244252CA3000BB6C87170402A	1/12/2016	1/11/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert SHA2 Assured ID Timestamping CA	CA8D0F4736454AECBEC5DEEC80998C9EBF41D06C728F3C76CCA24151BC62D463	1/7/2016	1/7/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Trusted Root G4	4C913D04FB495DC36119552D6068F7B9891EFE40344E9E5C1E9132F65BAEFF7F	6/9/2022	11/9/2031
C=US, O=DigiCert, Inc., CN=DigiCert Trusted G4 RSA4096 SHA256 TimeStamping CA	281734D4592D1291D27190709CB510B07E22C405D5E0D6119B70E73589F98ACF	3/23/2022	3/22/2037
CN=BT Class 2 DigiCert PKI Platform CA, O=British Telecommunications plc, C=GB	843782303040BFB33576766E1700696DE0FC14887BE293D7265EB59ECE4ED9CC	8/6/2019	6/6/2031

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=Amazon, CN=Amazon RSA 2048 M01	5338EBEC8FB2AC60996126D3E76AA34FD0F3318AC78EBB7AC8F6F1361F484B33	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon RSA 2048 M02	B0F330A31A0C50987E1C3A7BB02C2DDA682991D3165B517BD44FBA4A6020BD94	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon RSA 2048 M03	BF8A69027BCC8D2D42A6E6D25BDD4873F6A34B8F90EDF07E86C5D6916DA0B933	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon RSA 2048 M04	138BDF6E23AC971EB4E626B279DD6A26F057510F1DE394293A5EEA2860DE019B	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon RSA 4096 M01	40FE28DC925D1A8A6B8F861863EB57CD30C6776416AB8A99920BAC7C925A4174	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon RSA 4096 M02	2CC39F6789B967B0282AEACA4548F602A1B274E90D260773E9E7B0F7C0F13432	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon RSA 4096 M03	41BDC074EB9531EC81FEF08D9FFA16536F61FC59789265E95E89A4982AEF3F91	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon RSA 4096 M04	3B6FAB0AB11C14EEF9031969E0ADB037C8FCC3366728A6567623D3C26B3632CB	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon ECDSA 256 M01	332B101539FA89CA4E228719FE5287AB6869AF31AB21CBF110F5DD3C5994C1C7	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon ECDSA 256 M02	F9693255933B68159D168AA9A247DA1DC66E23C0620338EF7149E48F83B1AE79	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon ECDSA 256 M03	493E78EEE8CCA1F26E6494ED924985AF3FA9E6110EAA61C3214E8D73B4047316	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon ECDSA 256 M04	D241192CCE57D438986723972DD6F18B5A3A3456A708E8F273D147223AB6FA5D	8/23/2022	8/23/2030
C=US, O=Amazon, OU=Server CA 3B, CN=Amazon	ECC295B6DDCD084BA7179FB53BDD1D422CB6C0A8D94F154D4A5B17780B7279ED	7/16/2018	7/16/2028
C=US, O=Amazon, CN=Amazon ECDSA 384 M01	DFE35C740CF41C0B053E2202EA5AFC2F021F70BF90B26BC861FE1D9A0BFC4F1E	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon ECDSA 384 M02	A7D15E62C78825919FB59BDE58EFCFB0225B4107DFC60026885420185DC69B63	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon ECDSA 384 M03	F40DA455BE136E0DB31A116FFD3C3002B1EBBC591558493FE630A9C8C9AFAD70	8/23/2022	8/23/2030
C=US, O=Amazon, CN=Amazon ECDSA 384 M04	47FD11AD552AB264D7F272770D3B5590AAE145412F4AD6081BDC485298D8E000	8/23/2022	8/23/2030
CN=Apple IST CA 2 - G1, OU=Certification Authority, O=Apple Inc., C=US	C9B06CC083186220618E61A8772640F824DF69D561AD56BDC15AD56D0CE08608	12/12/2018	5/7/2025
CN=Apple IST CA 8 - G1, OU=Certification Authority, O=Apple Inc., C=US	5C29DBEA9B7CC8B02418F28C1C8736DFDF170665D098EF681D903BE76987D249	12/12/2018	5/7/2025
C=US, O=Apple Inc., CN=Apple Public Client RSA CA 2 - G1	32B4B3768CA5A4D80E9DF8D557B7424F80AF5560B1148D05548DC3D76A7ED619	12/12/2018	5/7/2025
C=US, O=Apple Inc., CN=Apple Public Server ECC CA 2 - G1	DA8546816D891C1241E9387DE436D1B9F7EA70DBA1EB3D25F58271CE816A7ABC	12/12/2018	5/7/2025
C=US, O=Apple Inc., CN=Apple Public Server RSA CA 2 - G1	F518F0BB716521F0A26FDB40C304FF9B82FBDBE7ACBD46BF0EF23A180188EB5C	12/12/2018	5/7/2025
C=US, O=Cloudflare, Inc., CN=Cloudflare Inc ECC CA-3	3ABBE63DAF756C5016B6B85F52015FD8E8ACBE277C5087B127A60563A841ED8A	1/27/2020	12/31/2024
C=US, O=Cloudflare, Inc., CN=Cloudflare Inc RSA CA-2	AEC863898F284D6CD4C6A3F6C3E6523480A359C33DAF66FAD3381849B8BB018B	1/27/2020	12/31/2024
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Baltimore CA-1 G2	BF1CB0E213D8D3C70BAE89429FC16DE2C74F755963D1B9B488BD0260DBC91B9C	10/14/2015	5/10/2025
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Baltimore CA-2 G2	F9690880819F06CDCC0B2F224B207F2AF6003FB57339B8679A160FA95208D62D	12/8/2015	5/10/2025
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Baltimore EV CA	D46931E0182DD655EA0C16E6DD99F8E61AFFE401F734C6CA8EA0056A968EAF81	10/14/2015	5/10/2025

Subordinate CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
C=US, O=DigiCert Inc, CN=DigiCert Baltimore SMIME RSA SHA256 2020 CA1	D1E87FFD17F95602571D08ADBDA469A04B14258996EC09776CD953582AF0B87E	9/24/2020	5/11/2025
C=US, O=DigiCert Inc, CN=DigiCert Baltimore TLS RSA SHA256 2020 CA1	38F73647F1ECAEEC0FC5AFE68AC30E0C26171E9F232F4530729412408FD53626	9/24/2020	5/11/2025
C=US, O=DigiCert Inc, CN=DigiCert Baltimore TLS RSA SHA256 2020 CA1	701317250210AB91280527C3B436931015B8DCEE69A6893ADA4FFAD25A6FE44F	4/22/2021	5/12/2025
C=US, O=Microsoft Corporation, CN=Microsoft RSA TLS CA 01	04EEEA8E50B4775B3C24797262917EE50002EC4C75B56CDF3EE1C18CFCA5BA52	7/21/2020	10/8/2024
C=US, O=Microsoft Corporation, CN=Microsoft RSA TLS CA 02	05E4005DB0C382F3BD66B47729E9011577601BF6F7B287E9A52CED710D258346	7/21/2020	10/8/2024
C=US, S=Washington, L=Redmond, O=Microsoft Corporation, OU=Microsoft Certificate Services, CN=Microsoft SMIME CA	4919F64D664397933DE8A1B4E8808DFA0A6A8CD79A34957B79B5AE6BD1AE4895	2/9/2018	2/9/2025
C=US, O=Microsoft Corporation, CN=MSFT BALT RS256 CA	069DF2F8919D9209D0C524A56BA1181DF6D1BBFC4AA61C9F01D092E2D5C3A1FD	4/7/2022	5/11/2025
C=IT, O=Telecom Italia Trust Technologies S.r.l., OU=Digital Identity and Security, CN=Trust Technologies Global CA	191E0B48B78B7EFA4822A465AD69B34405B878D10BD853D8E57CB8B9D9E50B8B	8/24/2017	5/10/2025
C=IT, O=Telecom Italia Trust Technologies S.r.l., OU=Digital Identity and Security, CN=Trust Technologies Global Client CA	AA6A2380A7E8254DAD4620AE0895DE74047F33F5268758DCF27C4D280B384A50	8/24/2017	5/10/2025
C=CL, O=CertiNet S.A., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=CertiNet S.A. Firma Electronica Avanzada - G2, emailAddress=certinet@certinet.cl	163DDECF86B4708A77705D106FD630C30331B1070C4BD9A36374AC0A68A83DD7	8/18/2015	9/15/2024
C=US, O=Comcast Corporation, CN=Comcast Trusted User CA	5764D931D3FB3819BB5CD19DD09E075A3320114F079292494A4F64E92634808F	1/17/2017	1/17/2027
C=US, O=Comcast Corporation, CN=Comcast Trusted User RSA CA	9B8DD7F84D5AD52AADDEA5729A6DA865FF28EE944A8379FC274103B9B5F094D9	1/31/2017	1/31/2027
C=US, O=Fresenius Kabi AG, CN=Data Management Intermediate CA2	422F9D4E68134E362B7569E5298A173CEC40C7C7274B2263A9BC8ADA1D1A23FA	10/9/2020	8/25/2025
C=US, O=Fresenius Kabi AG, OU=Fresenius Kabi USA, CN=Data Management Intermediate Certificate Authority	54837EF7B5AC4AA23606A15EF30DE46E9BB7E23E60F6ED4F2612092B94EDC68F	8/25/2015	8/25/2025
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Assured ID Code Signing CA-1	E57208CBFD286CE9718267E44491CB5B435C95BB09DC9720F5B64B25AC7974CD	2/10/2011	2/10/2026
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Assured ID Code Signing CA-1	3C8B0D5C2ADF2F7090A9B8FF452A4141833DEAA05B5F44E9513DB94BFDF1D6BD	2/11/2011	2/10/2026

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Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID Grid Client RSA2048 SHA256 2022 CA1	FC8B43C36CCB521FE0E5BD24B14665DAD350BA2C232006B98933D7878D775718	4/12/2022	11/9/2031
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID Grid Client RSA2048 SHA256 2022 CA1	915836DC82516AD3C85250375E4CB9FD7AA6123610884D3C4D120AEE0C9EFABC	1/30/2024	11/9/2031
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID Grid Client RSA2048 SHA256 2024 CA1	32D509B92CD803AB88177C62793BAEE4E2E2C4D9CBAF8ECE344357C2B6957D32	2/7/2024	11/9/2031
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID Grid TLS RSA2048 SHA256 2022 CA1	0181B2B6173179562E75632344037CA523018618A7F7168269A3EB85367FF75C	3/10/2022	11/9/2031
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID SMIME RSA SHA256 2020 CA1	5944AA2A86792A7BF5B748B79144DB7FD91FEEA5A3F3E2129C6B3145A3125B10	12/8/2020	12/7/2030
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID SMIME RSA2048 SHA256 2021 CA1	61E163C56C6100A91463ACCEC29B01A881E3F9C3B3AEF2CCD0B21DB0EAF9F2AE	12/14/2021	11/9/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Assured ID TLS CA	D7737E5F2D3FFCA429902E9F388CFD6C5959CD35A0FC103CEE2F7E93D1C66A52	2/9/2018	2/9/2030
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID TLS RSA4096 SHA256 2022 CA1	987FF2E3B25A3A14CB843D907B3C7F007C274921AFC10017F85D4FAE7B0CB8B6	3/3/2022	11/8/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Document Signing CA	B9C3073AAD74B368832F5497958E279B1D2777CAF8841713B28AB10A4BAA0810	11/5/2013	11/5/2028
C=US, O=DigiCert Grid, OU=www.digicert.com, CN=DigiCert Grid Trust CA G2	28CBB4E0D9C4EE6D04AC8F14717605AE3A4BD8CBF8D081B27AF6EDB2F3D76A32	1/8/2014	1/8/2029
C=US, O=DigiCert Grid, OU=www.digicert.com, CN=DigiCert Grid Trust CA	1E0A3AB9931577717281D42ABF801EB64DEED500E4168CA706D6A71D8103C73A2	12/7/2011	12/7/2026
C=US, O=DigiCert Inc, CN=DigiCert Secure Auth CA2	4759D6F4ED6DF0E08FC4CA801986E2BE10594DBAF341B4C45ABAFA3748887D25	10/9/2020	10/8/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Secure Auth CA	24E9F20AC167BB8F09DE8A1E9968CC53F0B5F3A4948F51B8647B40B186C75EBE	4/23/2014	4/23/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert SHA2 Assured ID CA	A542BCA09C5E4579C619774AE59082BCE0F86D261C5A7A5A0F6217C10279EA7C	11/5/2013	11/5/2028
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert SHA2 Assured ID Code Signing CA	51044706BD237B91B89B781337E6D62656C69F0FCFFBE8E43741367948127862	10/22/2013	10/22/2028
C=US, S=CA, L=Mountain View, O=Google, Inc., CN=Google CA1	438F473EBFC8884EF5D3E0D52D264CDBE56CA382D9EBFC689D77489409F55A6E	8/25/2015	8/25/2025
C=US, O=Imprivata, OU=www.imprivata.com, CN=Imprivata Secure ID CA-1	B49B1B7209D1A83F6CDBBA743AD720ACC24440FB9002F9DDB3C6F2F5CE337A47	10/25/2016	10/25/2026
C=US, S=Minnesota, L=Minneapolis, O=Optum, CN=Optum Public Trust CA 1	253E3C9732DF8874C3D54DA522C1711142C98C2CEA7664635152A89A03EE9364	4/28/2015	4/28/2025
C=US, O=Plex, Inc., CN=Plex Devices High Assurance CA	48A7C9C5A36734FC9E204D63CE6BBBCD9E21C1978604760CD8D30D6F4C67B67C	1/14/2015	1/14/2025

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Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=Riverbed Technology, Inc., CN=Riverbed Certificate Issuer	BB39497035ED9583D286CDE70FB644EB95806598092B1E8D8F11BC035D7A476A	11/20/2018	11/20/2028
C=US, O=Riverbed Technology, Inc., CN=RVBD Certificate Issuer	72563CC98ADA2C5D2126542ACC908154AEB1F9D6F7E83A55C09744C7D7ADDDBA	11/20/2018	11/20/2028
C=US, O=Sonavation, Inc., OU=sonavation.com, CN=Sonavation IoT CA	4C56CA7A3C10EB58765E0FFCF8035C57C9F3BDB014862F676756CF789193F10E	5/19/2015	5/19/2025
C=NL, S=Noord-Holland, L=Amsterdam, O=TERENA, CN=TERENA Code Signing CA 3 G3	794C63DB244BA73FB286F15DAB8D0CA5425508381E98844954E63823BB5D7F74	12/9/2014	12/9/2024
C=NL, S=Noord-Holland, L=Amsterdam, O=TERENA, CN=TERENA Code Signing CA 3	B7C6EBDC2A1B65EF1836DC00250C44E157031210521AB6B9D0385A058153AE3	11/18/2014	11/18/2024
C=NL, S=Noord-Holland, L=Amsterdam, O=TERENA, CN=TERENA eScience Personal CA 3	FDA947208BFA3203A6C57B8714A647B7009E5168E88951345450B1D2D3F91A7D	11/18/2014	11/18/2024
C=NL, S=Noord-Holland, L=Amsterdam, O=TERENA, CN=TERENA eScience SSL CA 3	E1BE6BBBB70F5A241E736FC44C6A2160BF6CE19B95EDD67BF7BE896E83778745	11/18/2014	11/18/2024
C=NL, S=Noord-Holland, L=Amsterdam, O=TERENA, CN=TERENA Personal CA 3 G3	C123F5AFACC9F9096809850355E5BF78CA9377348111B5167A964DDEDC044DE9	12/9/2014	12/9/2024
C=NL, S=Noord-Holland, L=Amsterdam, O=TERENA, CN=TERENA Personal CA 3	DD4E0C17900F3FC2A5B7B773AE40218AD73216B5CE5D285EBFFCE8830D0F034A	11/18/2014	11/18/2024
C=NL, S=Noord-Holland, L=Amsterdam, O=TERENA, CN=TERENA SSL CA 3 G3	C9D6913F3FEDDEFF184C9EE1D7E17C5AEC90886EED5CC3D6E98105831C8C0E0B	12/9/2014	12/9/2024
C=NL, S=Noord-Holland, L=Amsterdam, O=TERENA, CN=TERENA SSL CA 3	BEB8EFE9B1A73C841B375A90E5FFF8048848E3A2AF66F6C4DD7B938D6FE8C5D8	11/18/2014	11/18/2024
C=CN, O=TrustAsia Technologies, Inc., OU=www.trustasia.com, CN=TrustAsia Secure Email CA	047217772051D292238F3355F5C5435E9B84364CCD143FC49F9C31CD605439F0	4/27/2018	4/27/2028
C=CN, O=TrustAsia Technologies, Inc., OU=www.trustasia.com, CN=TrustAsia Secure Enterprise Email CA	3D774B65EE95FD6EFD1C8732B57E607C9BEE423C36E46F6E1CC8CA1F0AE62E23	4/27/2018	4/27/2028
C=AU, O=Verokey, CN=Verokey Assured Business ID and Secure Email G2	421D08ED8E5E01B538ED9789CCE47A453791A39A600941BD40B7123DD5285247	1/30/2024	11/9/2031
C=AU, O=Verokey, CN=Verokey Assured Business ID and Secure Email	4D7DA8F7A331D30C8955C8F9A79CE75A109F2BA41969EEFF6C13A5475E1B9935	3/17/2022	11/9/2031
C=AU, O=Verokey, CN=Verokey Secure Email G2	940444F98EA287D6F4853763AD6DEA123813BAB5705B71CA391714322269A4C0	1/30/2024	11/9/2031
C=AU, O=Verokey, CN=Verokey Secure Email	0E6DDE73CC50DE243F83724F5635360556F0BB18FAB31266B046B55A0FBBAFE6	3/17/2022	11/9/2031
C=ZA, O=Absa Group Limited, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=Absa Group Limited Public CA	8FB88641F4E231CE81436375138A5B36D2A06A3CC2A49E5B1F4699981BE1E451	8/5/2019	8/5/2029

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=GR, O=Adacom S.A., CN=Adacom S.A. Class 1 - Public Trust CA G3	F76881339118572F9568095BE6E81D5252BC3E2EB3A5BB64D9EEEC75D54C705A	4/3/2024	4/2/2034
C=GR, O=Adacom S.A., CN=Adacom S.A. Class 1 - Public Trust CA	40CEBC99D7D6BE08E863F9816A651801574E97D69AB839DB92A0E18F607BD1FC	3/11/2021	3/10/2031
C=GR, O=Adacom S.A., CN=Adacom S.A. Class 2 - Public Trust CA G3	74F3D438C526D37BA2775BF5E9F57D32E09F95ACAA25F0AC3A7D57B096C30343	4/3/2024	4/2/2034
C=GR, O=Adacom S.A., CN=Adacom S.A. Class 2 - Public Trust CA	912E37CAA496E53CD175C05D4334B4D060FBD0C69105AF82085CAF7AD4BBD318	3/11/2021	3/10/2031
C=US, O=Adobe Inc, CN=Adobe Public Issuing CA	7B6BA0B173658101250395D547643037A68216155270BC9BA46B358C3B77E90E	2/5/2020	2/5/2030
C=US, O=Alcon Vision, LLC, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=Alcon Public Online CA	4F8137882B6D7B7F1ABBCFDED0082F0E5CDEC870BA3923EF84D08DDE42E43749	7/2/2019	7/2/2029
C=AU, O=Attorney Generals Department, CN=Attorney Generals Department Public CA - G2	F4DC92DB2CD8B9158D011335A95BB61BD340ACE2E5BDC8816373ABCB2D31D288	10/28/2020	10/27/2030
C=AU, O=Attorney Generals Department, CN=Attorney Generals Department Public CA - G3	3A6F06233A059C0C8FE3C68289FD35A0DB7520F9D65984BBBF2D8E37C0BBFCDB	10/11/2021	10/10/2031
C=US, O=Avaya Inc, OU=Avaya IT, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=Avaya Client Services Users CA 2	1FFA0D1F55CE4A0507E8C38E8B557B88CBDD690D903D996B1F7850D81D6A4A93	11/26/2019	11/26/2029
C=US, O=Bechtel Global Corporation, CN=Bechtel Managed SMIME CA	D1A7ABBA00B566B8C6A4BD99A242740C45A5C5FCE6651213A3CD292E1FDCF3B5	6/23/2022	6/22/2032
C=US, O=Brown Brothers Harriman & Co., CN=Brown Brothers Harriman Public Issuer CA	FB586897D15FF353CFE83F9B214D234310A191E0CC63C0808E40E981754DD5A6	9/25/2020	9/24/2030
C=GB, O=British Telecommunications plc, CN=BT Corporate User - Public Trust CA1	B19B321258FB89E8548124748C16726B42BE74721BDF219636B3CE9E81C29522	2/11/2021	2/10/2031
C=GB, O=British Telecommunications plc, CN=BT Corporate User - Public Trust CA2	78C065F4A95B84387E38682A8D9685FEA2BB45EE5D099E38CCB660A6319FC8E4	9/14/2021	9/13/2031
C=GB, O=British Telecommunications plc, CN=BT Corporate User - Public Trust CA3	01914E03C37A07A5B7A20BB9D1F9652C966658DEEA52921E3699D233E3FC68AD	2/27/2024	2/26/2034
C=US, O=City of New York, CN=City of New York Office of the Actuary - G3	2431090A8009CA6F9F44DCC9E5FBD3C2F4A3152185BDA08ED313B861D895F7B4	10/21/2020	10/20/2030
C=US, O=Common Securitization Solutions LLC, CN=CSS Public Issuing CA G2	D040BEF3C50B536E2E8DA2AD7721A772C76B718FF10165D5AA88674C233E3766	9/25/2020	9/24/2030
C=US, O=Common Securitization Solutions LLC, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=CSS Public Issuing CA	00BFE5177DA40E040506A04417FB4B8064816B5D875852A07FC3A36700091080	10/31/2019	10/31/2029

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=DE, O=Daiichi Sankyo Europe GmbH, CN=Daiichi Sankyo Europe GmbH Issuing CA	A34B4B3BA3B93302804740CFF3F01A9C0FD9CFFEE5A193C997B87C5BE43A9E94	9/25/2020	9/24/2030
C=US, O=Government of the District of Columbia, OU=Office of the Chief Technology Officer, CN=DC Government SHA2 Assured ID Intermediate CA	FB1147E7AB97A29BB9C1140ABF3DE831F4C5F60D11B90FEC999A0816375D8457	7/13/2017	7/13/2027
C=IE, O=DigiCert Ireland Limited, CN=DigiCert Assured G2 EUR SMIME RSA4096 SHA384 2023 CA1	8682865D0B127A67FC0F8656CE4DD19846906671FBB97D3F3929A291FA548003	8/30/2023	8/29/2033
C=US, O=DigiCert, Inc., CN=DigiCert Assured G2 mPKI SMIME RSA4096 SHA384 2023 CA1	BE1AF7D2FFED61A2140D610482952450E380448F9CAB9D63C6CDE2014A0ADE0A	8/30/2023	8/29/2033
C=IE, O=DigiCert Ireland Limited, CN=DigiCert Assured G2 Multi Doc Sign EUR RSA4096 SHA384 2023 CA1	9F396CD402F9039132E6F6145C78C852F74EE1CF790FCEB31A68A4E6E58CAD26	5/24/2023	5/23/2033
C=US, O=DigiCert, Inc., CN=DigiCert Assured G2 SMIME RSA4096 SHA384 2023 CA1	0F18E75571996FD1F75BE6CC6186B045EA2E76FB70A1FDEBFE9CB923A010EB43	8/30/2023	8/29/2033
C=US, O=DigiCert, Inc., CN=DigiCert Assured G2 SMIME RSA4096 SHA384 2024 CA1	CD5729AD30AC925A6B4985972BA93CD0550C6430616EC057D887AE79D00A9D58	3/13/2024	3/12/2034
C=US, O=DigiCert Inc, CN=DigiCert Assured ID CA G2	93C381CB07B353A920C2A7BED6BEBF195C68279DD0527D37F20BDD0D99C330FA	8/1/2013	8/1/2028
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Assured ID Client CA G2	9E12D6E13DDD53A890A2B3A37423AE5E457731A7B34A153992F1EF1F5489A45E	9/23/2019	9/23/2034
C=IE, O=DigiCert Ireland Limited, CN=DigiCert Assured ID G2 AATL Europe RSA4096 SHA256 2023 CA1	20E2FE0D0A6E2FE9E26C09B0F4E1E1A5C556D9FC23F10F21F400F8B99884E401	3/30/2023	3/29/2033
C=IE, O=DigiCert Ireland Limited, CN=DigiCert Assured ID G2 Client 2FA Europe RSA4096 SHA256 2023 CA1	70B2A6C71F1969DA8B4E1B95E8422EF8CDDF31FCA5B2308E8AB634C42DA96B4B	3/30/2023	3/29/2033
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID G2 Client Europe RSA4096 SHA256 2023 CA1	79A7354CB43093E182240970EF186A4F4A23471C67B6FA3D0E30043AF30FDEF8	2/23/2023	2/22/2033
C=IE, O=DigiCert Ireland Limited, CN=DigiCert Assured ID G2 Client Europe RSA4096 SHA256 2024 CA1	275200E6BABC64D829536365E75C1A6AA80654A65E8F59F66ECFA55BF94F80EC	4/3/2024	4/2/2034
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID G2 DocSigning Europe RSA4096 SHA256 2023 CA1	690B373C5A3B09FF56C44EEF01F39CFDA9DCF48AFEE7DD4BC748E8BC1DA66A2F	2/23/2023	2/22/2033
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID G2 Multi Doc Signing RSA4096 SHA384 2023 CA1	0D2739351ED2CF711DA26D1D4E3AC787EEFC4145440F3CE6569DB833FE00CFA5	5/24/2023	5/23/2033

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID G2 SMIME Europe RSA4096 SHA256 2023 CA1	2724D9D7B945BB253E379CEF6CF4156775EE9AC7660E62D1384DD7B4A4E958FA	2/23/2023	2/22/2033
C=IE, O=DigiCert Ireland Limited, CN=DigiCert Assured ID G2 SMIME Europe RSA4096 SHA256 2023 CA2	3DED2BDFEAA4F0BEA10C95C4B48EC94BC593470155A723B937B74890049BE0F6	3/30/2023	3/29/2033
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID G2 TLS RSA4096 SHA256 2022 CA1	43A70E3620BC452339D878AA68F2E5358AC4607AC722C4D77D3C4D2C204F7F71	3/31/2022	3/30/2032
C=US, O=DigiCert Inc, CN=DigiCert Assured ID TLS CA G2	77CD51784A693D9482E7EA694E4053BCFD9DF65580FBCE14B2A7527C081803E1	3/25/2020	3/25/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert EV Code Signing CA (SHA2) G1	8A78B966C73D769040C1A81C32168CEF8B9B9E96ECC2D33CC4ABB5A0CF8C1C67	4/27/2018	4/27/2028
C=US, O=DigiCert Inc., CN=DigiCert One AATL CA	419507E46D6520ECEC453A0C2B5292A099431C35E8967A6D0EE573CAAB116C71	4/29/2021	4/28/2031
C=US, O=DigiCert, Inc., CN=DigiCert PKI Platform AATL CA	7E15A84E1A0927AED136C59A048AE48E63BA82EDAA9827892C105A9A89BDE659	3/11/2021	3/10/2031
C=US, O=DigiCert, Inc., CN=DigiCert PKI Platform C2 Shared Individual Subscriber CA	69713E3E4E6E5AF51E302E95EEC2771EB06B79E81C5462594932ACB4E8A28D1C	5/29/2019	5/29/2029
C=US, O=DigiCert, Inc., CN=DigiCert PKI Platform C2 Shared SMIME Individual Subscriber CA	55F3A359F0A26D72FF244C2EE396FD51BC2400EA250C91EFC355E2F8103C9939	6/4/2019	6/4/2029
C=US, O=DigiCert, Inc., CN=DigiCert PKI Platform Class 3 Shared SMIME Organization CA	7F755DC2B9EE99EB02D71CB1805059AAABB5EB3E8558DCA8C09A1D0DE258D767	5/29/2019	5/29/2029
C=US, O=DigiCert, Inc., CN=DigiCert Secure Auth CA3	4A5B67AE540E54E158B0976F82FCFBD70BBA5C63CA1A5826819810212732B646	3/31/2022	3/30/2032
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert SHA2 Assured ID Code Signing	4ADB819C250A2E183313405499D8735299C88F970A5019A27566B27E5818F41B	4/27/2018	4/27/2028
C=PT, O=DigitalSign - Certificadora Digital SA, CN=DigitalSign CA - G5	7AA50B4EACCB422A19EF8597A71D56CB8E6910CFA4DD9BDDFAB1EFE7BCB7801F	7/7/2021	7/6/2031
C=DE, O=Duerr IT Service GmbH, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=Duerr Group Global IT CA	B48CF36ABB49825C3B7C407866958C24085C938C60C7C1A48A18D00859CA348C	9/23/2019	9/23/2024
C=US, O=eGlobalCustody, CN=eGlobalCustody Public Issuer CA	1E1E62AE4F4721617A2CA0E3F7CA6D843AE7530151B9D8C19B5D07D4BDB33324	9/25/2020	9/24/2030
C=JP, O=Mitsubishi Electric Information Network Corporation, CN=Enterprise Premium Public CA	6D7B31B61ADB78EBC6A766296886209EA8E74F4600DAE47B78DA3F08BE79F4E5	3/13/2020	3/13/2030
C=JP, O=Mitsubishi Electric Information Network Corporation, CN=Enterprise Premium Public CA	4A45559AD89684BB439FCD2CC4C5EC0F92EE0692CD6B9763957DE31A2F467CCA	4/29/2020	4/29/2030

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=Fannie Mae, CN=Fannie Mae Shared Online CA G2	28F7CD588FC5B0DF460DD4C678F9DC51077A0E89D38DCCBA09BC1AEEE9D698C1	9/25/2020	9/24/2030
C=US, O=Fannie Mae, CN=Fannie Mae Shared Online CA G3	249CB0551F86DB117BD83E72C9B08B7314F78117843EC2A9D9DD89ABE1DF2C5E	8/31/2021	8/30/2031
C=US, O=FedEx Corporation, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=FedEx Public Online CA	AA942E512B4287D5BEEC85A1C5A81C2DDD136B3CC7065B6830F0685110530412	9/23/2019	9/23/2029
C=AU, O=Fuji Xerox Businessforce Pty. Limited, CN=Fuji Xerox Businessforce CA - G2	A12A8446C0E1E5CF4079642B31A0675ECFD1D09FAD2E4884591F380026D9EAEF	9/25/2020	9/24/2030
C=US, O=GE Aerospace, CN=GE Aerospace SMIME Issuing CA 1	A62553F0504B752EDB55E81973A0CE3D2462AB9F41A1D720716788F3617F78E7	10/11/2023	10/10/2033
C=US, O=General Electric Company, CN=GE SMIME Issuing CA 3	BDE2A6CEC1A1C04C2E423C1457949F180ED086E021BBF090556BE3CE6AD1863F	9/25/2020	9/24/2030
C=US, O=General Electric Company, CN=GE SMIME Issuing CA 4	1D5A72D631E13879A6F6F9F2E04FA94940D6D0AAA8A1542A736FE156BDBDE98E	4/24/2024	4/23/2034
C=DE, O=Giesecke+Devrient GmbH, CN=Giesecke and Devrient CA	0A4FF256B1A0A14BB81F318B64D47D6C36A4C3529F9C39299A47ED51A2B8EE52	3/11/2021	3/10/2031
C=DE, O=Henkel AG & Co. KGaA, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=Henkel Secure E-mail CA	7D89BA7764CFF6FE2EE9AD44838D56C5D57F3DD736F96068DE9B0A1710FB3D47	5/29/2019	5/29/2024
C=US, O=Hewlett Packard Enterprise Company, CN=Hewlett Packard Enterprise Collaboration CA G3	D5E2AAA678A3EC0D88415D9B6E2CB1B0D0CD5960C562B20913625EBDCB3A3F0C	9/11/2024	9/10/2034
C=US, O=Hewlett Packard Enterprise Company, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Hewlett Packard Enterprise Collaboration CA G21	B6E4C8D9D575A61404DE568E27BD6F3048D7B0F803065E2F6526260BDCA3D211	4/1/2019	4/1/2029
C=US, O=Hewlett Packard Enterprise Company, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Hewlett Packard Enterprise Collaboration CA G22	AB480D8F7D720A161C9671843EADEAAAABC5447EFD9EF8F3470874D927CCB861	4/1/2019	4/1/2029
C=CH, O=Hitachi Energy Ltd, CN=Hitachi Energy Assured ID CA	8EAEC34A01A9E7017FD4BCE8BA432A350A2A16561ABE0617CCE1A0D4B1E09EEC	9/14/2021	9/13/2026
C=CH, O=Hitachi Energy Ltd, CN=Hitachi Energy User ID CA	C92F438C530C39FFCA70F05B9AAFF45118D2C076DE44CF52DCEA755049B8100C	6/5/2024	6/4/2034
C=US, O=Honeywell International Inc., CN=Honeywell International Co-branded CA - G2	B78DFC942032C042CD45490E3B32433CA167067B330B52CB1453EA3AD5819080	9/25/2020	9/24/2030

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Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=Honeywell International Inc., CN=Honeywell International Co-branded QA CA - G2	55F064E2983EEB9AAA54229F8E35023ED10AC6BA19188B05C247BC0E79F85ACB	10/21/2020	10/20/2030
C=US, O=International Business Machines Corporation, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=IBM Certification Authority G4	60F53E603B0EFA71C6CC34B6E87C1145F70DC942C89F71763D90FE18E7AC589E	9/23/2019	9/23/2029
C=US, O=International Business Machines Corporation, CN=IBM Certification Authority G5	A9A0073F6BBA1509995DAF51991CCB1337C0DAA65099F9C1D108AA520285A7C5	4/24/2024	4/23/2034
C=US, O=International Business Machines Corporation, CN=IBM Certification Authority G6	C6CB9291A32B4937A19FCC72FD3A0B7F6EAF7397E45EA0B2D0FD27393E132B73	5/23/2024	5/22/2034
C=US, O=International Business Machines Corporation, CN=IBM Certification Authority G7	81CB1E6BE7220B9DD7676E7A665B6B8FAFAC2C5725919A0654EDD5C0FFAE5A59	8/8/2024	8/7/2034
C=IL, O=ITsMine LTD, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=ITsMine Document Signing CA	965BD258388DDDD4EA7BAAFB7754DF49F896CF02E15BE0925DE33B0038E9925F	8/5/2019	8/5/2029
C=SA, O=Johns Hopkins Aramco Healthcare, CN=Johns Hopkins Aramco Healthcare Issuing CA - G2	6E1A79CCA1FA4EBC380EAE3C8B58A999B2FE6D7E6F88CFB0A8FB6DE12D3A2583	9/10/2024	9/9/2034
C=SA, O=Johns Hopkins Aramco Healthcare, CN=Johns Hopkins Aramco Healthcare Issuing CA	C48FC3FF9EEA47057F827CFD63944701839CA2ACD809CDD04475956895C841CD	12/14/2021	12/13/2031
C=GB, O=Kainos Software Ltd, CN=KAINOS-PUBLIC-TRUST G2	15EA4560F517504F76AEDC836F287FA7BECB738D5C50793D23BC77D96F2AFA33	7/10/2024	7/9/2034
C=GB, O=Kainos Software Ltd, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=KAINOS-PUBLIC-TRUST	802E0B133D61441A0A6AF799DC5E4B260972990D6DCB87DC0ACFC585D9082610	11/26/2019	11/26/2029
C=US, O=KMS Solutions, LLC, CN=KMS Solutions LLC Email CA	A42AD4E053901C06BEF79F9A7A03DB0631C2B64F780EFAB753CFB2629EFB648D	11/10/2022	11/9/2032
C=US, O=Kyndryl, Inc., CN=Kyndryl Certification Authority G1	D83CD35EFE9C610529D4CB2E27229E4DE74A1A29573C24282E0C05C3B388BFAD	10/26/2021	10/25/2031
C=US, O=Kyndryl, Inc., CN=Kyndryl Certification Authority G2	1F9D2D44E84DC190F0A9A6DBB44D75C6FDDBAB1C82985D09A6D9866BF746758B	5/8/2024	5/7/2034
C=GB, O=LMAX Limited, CN=LMAX Trust Services CA R2	84F83527414D88C44BFD875A8521DD0C3BFC38190848DBC24914A22B24AFBC9C	8/17/2022	8/16/2037
C=GB, O=LMAX Limited, CN=LMAX Trust Services CA R2	303DB0C10906D93F45749447B63399B1739271DDC6DD045F5E0077D9A6F6BA94	3/20/2024	3/19/2034

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=GB, O=LMAX Limited, CN=LMAX Trust Services CA R3	70D29802ADD470C775BA7CBEC3BB5FFC473DD5096CBC4E59AF0B78D18A9A31D6	4/3/2024	4/2/2034
C=KW, O=M.H. Alshaya Co. WLL, CN=M.H. Alshaya Co. W.L.L. Public RSA User CA1	4B3EC62A1FC5155C5864CB3963D9F77B506C48A07AB50E97DCA928AAD77859E4	12/13/2023	12/12/2033
C=US, O=FAA, CN=NAIMES	78E69AD84C6464BC56C539C534FCC69CE709557EABB69390139B1AD9EC4A4207	9/1/2022	8/31/2032
C=SG, O=National University of Singapore, CN=National University of Singapore CA - G3	7C29A15B74F9171BE581630394B83791120EABCBA8B9387538BDF50F9D96EAFE	7/16/2020	7/16/2030
C=SG, O=National University of Singapore, CN=National University of Singapore CA - G4	F2395C85E1ECA37838BE939C1E7B60FDAF1BF09F680327489BC228865C02F670	5/15/2024	5/14/2034
C=US, O=NBCUNIVERSAL MEDIA, LLC, CN=NBCU SMIME CA 1	58048CAAE127A2071EA048CE646F5E9D97775ED8F0DD71BDB27C18B0A47CDEBC	3/8/2022	3/7/2032
C=AU, O=NBN Co Limited, CN=NBN CO Limited Public Issuing CA - G3	4708DD6D092D7FB5958F5B43501F6173FB9669EDB05AFD4BBCCDDD2D5068D8D0	6/9/2020	6/9/2030
C=AU, O=NBN Co Limited, CN=NBN Co Limited Public Issuing CA - G4	AA1EBE811133A605B78C12C5BE9AD15A818A45D4E51B0EC2F66DCB57E603E081	5/8/2024	5/7/2034
C=ZA, O=Nedbank Limited, OU=Digicert PKI Platform Individual Subscriber CA, CN=Nedbank Limited Public CA-2	F392F1416B914915D910F7A7289B0636019823F3828416F55DC3EB044E13DB91	8/3/2022	8/2/2032
C=ZA, O=Nedbank Limited, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=Nedbank Limited Public CA	4946337D3954305F36770EE8317F67CFEFF3943576828BF55C1538476B4A20D8	7/2/2019	5/12/2025
C=US, O=National Geospatial-Intelligence Agency, CN=NGA CA G3	357985D17EF02893AB63FE0EE4C464B8AD3A4B05EF72B27AE73D7258C8996FB8	2/5/2020	2/5/2025
C=DE, O=OSRAM Continental GmbH, CN=OSRAM Continental Secure Email CA - G2	B5D61B50ACB993A27EF05D4324A04A671CEE7502E62BA5E9122CC2100BFDF6CF	9/25/2020	9/24/2030
C=DE, O=OSRAM Continental GmbH, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=OSRAM Continental Secure Email CA	D87A91DAC26D64E3659507119E80B11BE37ADA87A8D6C01E4E175DBB32B1A0D3	11/26/2019	11/26/2029
C=GB, O=Oxford Nanopore Technologies Ltd, CN=Oxford Nanopore Public Issuing CA	F7C25E1D01F743DD1F87CEFE2E572E186647CD6FA95F2DD41F12AE36D6C083CF	7/15/2021	7/14/2031
C=QA, O=Qatar Rail, CN=Qatar Rail Issuing CA	B4B636DED84A7719149D63EAB51A370AF35CADA1A8E2BD1F738D4C026B4ADD5D	2/11/2021	2/10/2031
C=SA, O=Saudi Basic Industries Corporation (SABIC), CN=Saudi Basic Industries Corporation Issuing CA	3AB4DE79829AF704A1DD79B13892BBAE44B2770F88AE833450F5B1D33802F0C4	7/16/2020	7/16/2030
C=SA, O=Saudi Enaya Cooperative Insurance Company, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=Saudi Enaya Public Issuing CA	8F76367A7ADAE4642258E6586A2A9642A00F3ECBB1EB725F18B5E7AD3D95AED9	10/31/2019	10/31/2024

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=SA, O=Saudi Telecom Company, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=Saudi Telecom Company Email CA	E33076FFB5267DF419F72DE06C46E2C6CA44FF4383B5316CF7D6E628E98D9BFD	7/2/2019	7/2/2029
C=US, O=Fidelity National Information Services, Inc., OU=Class 2 Managed PKI Individual Subscriber CA, CN=SGN FISGLOBAL PUBLIC CA 2	15F06C6C39DB15F8C14EEFA6B793403F30C7EDDB8C99408DBE36FC3EE9D56913	7/19/2023	7/18/2033
C=US, O=Fidelity National Information Services, Inc., OU=Class 2 Managed PKI Individual Subscriber CA, CN=SGN FISGLOBAL PUBLIC CA	0AD6A7334A5A23C986980F6FECD25006B563A0B6F1BCAA65C0345BA2D96928D3	1/8/2019	1/8/2024
C=NL, O=Shell Information Technology International BV, CN=Shell Corporate Email CA	7A16D63926765A78E8E7666715E865F7A436E3EEE9A4DB71B66996B63448D203	4/14/2021	4/13/2031
C=US, O=Solenis LLC, OU=Class 2 DigiCert PKI Platform Individual Subscriber CA, CN=Solenis Public Online CA	0F3284B306AC422986C8F560EA46226FD8425519A6F61AA9C55AB508274B82D2	7/2/2019	7/2/2029
C=US, O=SRI International, CN=SRI International CA - G3	A6D9A37927349DE7464C8DA63F601CE55C214BEFD7B324679E64E1B30F75CEFF	1/27/2020	1/27/2030
C=US, O=SRI International, CN=SRI International CA - G4	4557EBFE931588FBA167038F3DC7A3B6B1FDBFE0F74B5CAA0B0DD3BDF5286E9F	6/5/2024	6/4/2034
C=CH, O=STMicroelectronics International N.V., CN=STMicroelectronics Public User CA1	CE15B88ECA32A371D0B51B3B04759055D6A8FF0C3D1A0D60488DF356DC050E55	4/29/2020	4/29/2030
C=CH, O=STMicroelectronics International N.V., CN=STMicroelectronics Public User CA2	10404ACA4342C813622AD6A9CC5601AEF8B6197BE2692D2FE7CE0C3AEB10ED2F	6/19/2024	6/18/2034
C=NO, O=Telenor Norge AS, CN=Telenor Norge AS Dealer G2 CA	9C33CB6A76596752A0C7E51C72D480CE7876C772794EBEE5841FA07035E6E8E0	4/29/2020	4/29/2030
C=NO, O=Telenor Norge AS, CN=Telenor Norge AS EDC CA G2	56D58B26F45BF3878AF4397016A96AF486E9895F66C5F3B73175120B3B4E4A48	4/29/2020	4/29/2030
C=NO, O=Telenor Norge AS, CN=Telenor Norge AS NF CA G2	5752C5FBDC03543F0CEC6CD294CD965D8D32C4EAA993D550F24491ECF9B73836	4/29/2020	4/29/2030
C=NO, O=Telenor Norge AS, CN=Telenor Norge AS OTL CA G2	70340886D08FE1B093158F11A4CC2B2AD45A67F402632A040E9067C6E447E4FE	4/29/2020	4/29/2030
C=NO, O=Telenor Norge AS, CN=Telenor Norge B2B2 CA	DDA4BE3F78C6D742B100146C26011B41752AEBB810C04588C3AF81F0D3451118	3/25/2020	3/25/2030
C=US, O=Thomson Reuters Special Services LLC, CN=Thomson Reuters Special Services CA - G2	B84D709820A8FEB41CE1872E237260B446F99BD3CC158F7738D9146B13FAE64E	3/25/2020	3/25/2030
C=IT, O=Trust Italia S.p.A., CN=Trust Italia Intermediate CA G2	02AF66C64A57A322DF7451B417E8DAD0B84DCC7EF2A8AB488992E35787B27B11	8/14/2024	8/13/2034

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=IT, O=Trust Italia S.p.A., CN=Trust Italia Intermediate CA	1D64D347A041AE7A4F9545047E3760D16ECF98360CDF7888A1CC23C2AFA3BC27	6/28/2021	6/27/2036
C=IT, O=Trust Italia S.p.A., CN=Trust Italia S.p.A. Class 1 - Public Trust CA	AA10D99FD120217012E67F225DB544CBBAEA13BB01F7B0B766520C13FA1A33FF	3/11/2021	3/10/2031
C=IT, O=Trust Italia S.p.A., CN=Trust Italia S.p.A. Class 2 - Public Trust CA	38CF02E361BC737A46DCF02DC1A5664936868267CBF8D4423488BD538EB76518	3/11/2021	3/10/2031
C=IT, O=Trust Italia S.p.A., CN=Trust Italia S.p.A. Mailbox Validated - Public Trust CA	601EE30F57FDDFD8C7F051C7F379081F3DF893A61BA5BE518DC50F7F9F654CB6	6/5/2024	6/4/2034
C=IT, O=Trust Italia S.p.A., CN=Trust Italia S.p.A. Sponsor Validated - Public Trust CA	261F131BEF55C14992A756D2DC3F1003EEEDAEA7920E6059CD0ABB076AC494D6	6/5/2024	6/4/2034
C=IT, O=Trust Italia S.p.A., CN=Trust Italia Shared Client Authentication Issuing CA	7A4697191E9D97412B755F56E2B369A32DDC68488AEB9226CFD03E322FEC539B	6/24/2021	6/23/2036
C=US, O=United Launch Alliance, LLC, CN=ULA CA - G5	818B703BC75A0E86692DE5F4477E8D8E085071E2435CB0FEA829CA9FEB72BA7C	10/11/2021	10/10/2031
C=US, O=United Launch Alliance, LLC, CN=ULA CA - G6	054B8B4242D6C216D97EBB401570F8519D9FEC2C3C01E022A3C5C0612B416F4A	9/4/2024	9/3/2034
C=US, O=VMware, Inc., CN=VMware Issuing SM	2996B56FE08307B04F8963B83F4AFAC25F47C34B33C25DB399F3A850D158C9F1	7/2/2020	7/2/2030
C=SE, O=Volvo Car Corporation AB, CN=Volvo Car Corporation CA	B1D29BE013CF27982AAAB694785A3E9F5A169A682F8B8D38677694670C428288	2/5/2020	2/5/2030
C=CH, O=World Intellectual Property Organization, OU=Class 2 Managed PKI Individual Subscriber CA, CN=WIPO CA - G4	16D809ED155C2AC7E9489E1A204116C9D16EFBE4C91F53369725A2B395535E28	1/29/2019	1/29/2024
C=CH, O=World Intellectual Property Organization, CN=WIPO CA - G5	ECB4DDD4C2CD5FB973C724315A1A2317773254623560FBA860804508538D466C	3/8/2022	3/7/2032
C=JP, O=ZIPAIR Tokyo, K.K., CN=ZIPAIR-Public-CA	7E882B1CC5439B7FB95A05943C5A8F40DAE75AADBB6B624C55EDD94624EFA0E3	3/25/2020	3/25/2025
C=JP, O=ZIPAIR Tokyo, K.K., CN=ZIPAIR-Public-CA-G2	3762B847AC53E454AF86A2ECC3E328B2696F370AECDA70C726B6A877FF266252	3/13/2024	3/12/2029
C=US, O=DigiCert Inc, CN=DigiCert Assured ID CA G3	634FDF26C994E76A2918D9EFC4CAB9C6FCB344EF642A79C89192BCDA0ED52F4C	8/1/2013	8/1/2028
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Assured ID Client CA G3	14FAFCA84BDB8B0EC32719272BE730FE18D6FC29301C5CF789400596EC429AFE	9/23/2019	9/23/2034
C=US, O=DigiCert, Inc., CN=DigiCert Assured ID G3 TLS ECC384 SHA384 2022 CA1	1C8846C406AC6294FAF0D32A5A14E79C841385A57F1159B61E9014605E37E5E9	3/3/2022	3/2/2032
C=US, O=DigiCert, Inc., CN=DigiCert G5 Code Signing ECC P256 SHA384 2022 CA1	C5EBBAF62A45DA6D2B4132F970DD281CFA1FE4F1CA86246B726A0EBDF77454CE	5/19/2022	5/18/2037
C=US, O=DigiCert, Inc., CN=DigiCert G5 Code Signing ECC P384 SHA384 2022 CA1	327F4DEAFFD4EAC5A863724E483033580AD68FC0373A4F4D20C7DBECDD25B5DD	5/19/2022	5/18/2037
C=US, O=DigiCert, Inc., CN=DigiCert G5 Code Signing Europe ECC P-384 SHA384 2023 CA1	18A15F14E6C625C40D46611C80A84E235369F5B97ABD6B851CCDB550E6A33555	2/14/2023	2/13/2038

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=DigiCert, Inc., CN=DigiCert G5 CS ECC SHA384 2021 CA1	EDAECE94C3C0F7C3239312EAAFB7F6D499410A55D0E008CB6A64779DAD3A1998	2/11/2021	2/10/2036
C=US, O=.NET Foundation, CN=.NET Foundation Projects Code Signing CA2	D60D2D02F83920E89C0063AECA7C4630642C80EB824FFE43D9A11C250E5F51B9	7/15/2021	7/14/2031
C=US, O=DigiCert, Inc., CN=DigiCert G5 Code Signing Europe RSA4096 SHA384 2023 CA1	061D67CC7000C1406A24B51F22BE26857100521710E7CD80BAA521E3675BA1AB	2/14/2023	2/13/2038
C=US, O=DigiCert, Inc., CN=DigiCert G5 Code Signing RSA4096 SHA256 2022 CA1	2DDE0BF74C225CE090EEB57F60A4C307E636B9B0DB20ECD362EEA49AB9AC46BC	5/19/2022	5/18/2037
C=US, O=DigiCert, Inc., CN=DigiCert G5 Code Signing RSA4096 SHA384 2022 CA1	F8D85D3FA345C654CF794DD3C8CE96866960505A170F7A057B5C5086208C9FA3	5/19/2022	5/18/2037
C=US, O=DigiCert, Inc., CN=DigiCert G5 CS RSA4096 SHA384 2021 CA1	26A9454579B138E765087276AF42C1C206C8B2ED0DE6639D1BA992626A797A91	2/11/2021	2/10/2036
C=US, O=DigiCert, Inc., CN=DigiCert G5 ECC SHA384 2021 CA1	4E1AB9F0122809E2A8E93133187AFAF26E71C9C3BF86971065D578FC4C08AF79	3/11/2021	3/10/2031
C=US, O=DigiCert, Inc., CN=DigiCert G5 ECC SHA384 2021 CA1	7A2311B472B99171164FFA0BCA3FA7AC9AC46D035657BFC1EA133095C9703933	4/14/2021	4/13/2031
C=US, O=Anne Arundel Medical Center, OU=AAMC Direct Messaging, CN=AAMC Direct Intermediate CA	BB1C01E884DD0919AB94D5AF5575CD6FEB71E560B2B58735A78B150A10D54BF3	5/28/2015	5/28/2025
C=US, O=Allina Health System, OU=Information Services, CN=Allina Health Connect HIE Intermediate CA	826C6AA610EF190BE2D7C03E22D032405B289804E3319E233C4C37FFBF305F1A	12/8/2015	12/8/2025
C=US, O=Abbott Laboratories Inc., CN=Abbott Laboratories Secure Authentication CA G2	2697ACB96A49BE2BFC5C06C393949F0D8E75106AD6D4C73E2DA172A90831A85A	1/21/2021	1/20/2031
C=US, O=Abbott Laboratories Inc., CN=Abbott Laboratories Secure Authentication CA G3	ABFD261AB3733480BF58616991FFE266B6DB315E226A32339702D6C0BE6B96F2	3/11/2021	3/10/2031
C=US, O=Abbott Laboratories Inc., CN=Abbott Laboratories Secure Authentication CA	DB99A4F284CCF10B26DE7B7A5D651725B857CBC871EBB33028D67B55510EFCD9	8/23/2016	8/23/2026
C=US, O=Abbott Laboratories Inc., CN=Abbott Laboratories Secure Server CA	6C69E201656440EB98CD0875764A1ED19015ED8C4427601ACA9C68AFA8973959	7/12/2016	7/12/2026
C=US, O=Cisco Systems, Inc., CN=Cisco Meraki CA2	CDBCBEF16E37237702FACC4B55D3AB92A17CFA17835E13377AA4D2BA0FD47A02	9/24/2020	7/12/2026
C=US, O=Cisco Systems, Inc., CN=Cisco Meraki CA	199EE58009555DAE2CDA0626931C64391D6A88CCCB1F9F0B2EE80B667F581C06	7/12/2016	7/12/2026
C=JP, O=Cybertrust Japan Co., Ltd., CN=Cybertrust Japan Secure Server CA	33D57359831F87754E6E755D6B5B56E7E71297DDDFEA1D6397086604280F6FFC	12/7/2016	12/7/2031
C=US, O=DigiCert Inc, CN=DigiCert Basic ECC CN CA G2	97C4B44316055F26A52A1F664CE385800A964A8552C99D2BCAFD618E6D8074A0	3/4/2020	3/4/2030
C=US, O=DigiCert Inc, CN=DigiCert Basic RSA CN CA G2	CB57B3FF2040CB269497625BC90FA9D7B4ED4938C6F60F42F69AFDF508AC2993	3/4/2020	3/4/2030

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=DigiCert Inc, CN=DigiCert Cloud Services CA-1	2F6889961A7CA7067E8BA103C2CF9B9A924F8CA293F11178E23A1978D2F133D3	8/4/2015	8/4/2030
C=US, O=DigiCert Inc, CN=DigiCert Cloud Services CA-1	5F88694615E4C61686E106B84C3338C6720C535F60D36F61282ED15E1977DD44	9/25/2020	9/24/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert CN RSA CA G1	03CE9BC71B91FDB7CB3C5235CAE0701CB486BBD628D4AADE5841FC5F0AA37A46	6/20/2019	6/20/2029
C=US, O=DigiCert Inc, CN=DigiCert Secure Site CN CA G3	6AF5C4EAC180289B94A77A5D231E3865FFE934F3E6A24BF487EB4E2BFD809A4B	3/13/2020	3/13/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Secure Site ECC CA-1	99935E20424535EC016F337B2BE68F1349DE66CCE4CA5AB367F8F3738215B833	2/15/2019	2/15/2029
C=US, O=DigiCert Inc, CN=DigiCert Secure Site ECC CN CA G3	00C0CBA95CBFE1E270814275F32B505D6E5916C2B6DA67FAF4DD309EE6E86CBE	3/13/2020	3/13/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Secure Site Korea ECC CA	EF9138993654DF92D2FB5860E28DE8818A9F49DB56ECB689A67A7FC2D5881DD2	3/25/2019	3/25/2029
C=US, O=DigiCert Inc, CN=DigiCert Secure Site Pro CN CA G3	A66C97AE59DFF9EA015E73C744EE5520745F101A395C497D19E1F168D39AFCD0	3/13/2020	3/13/2030
C=US, O=DigiCert Inc, CN=DigiCert Secure Site Pro ECC CN CA G3	985140919342239C89086B22DFCAA4508590B11A3DE0A423E25EBC3DDAF8910D	3/13/2020	3/13/2030
C=US, O=DigiCert Inc, CN=DigiCert SHA2 Secure Server CA	C1AD7778796D20BCA65C889A2655021156528BB62FF5FA43E1B8E5A83E3D2EAA	9/23/2020	9/22/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert SHA-2 RADIUS CA	524CF7331C4EE353EEB1ECD74E1F801A0F1F08DFA0322092F42205AFC3A17675	9/20/2016	9/20/2026
C=US, O=DigiCert Inc, CN=DigiCert TLS Hybrid ECC SHA384 2020 CA1	D79A2D5E03295C0E9FEAE36D021EBD5209700AB1A9E817A43F30FA3C66F78D21	9/23/2020	9/22/2030
C=US, O=DigiCert Inc, CN=DigiCert TLS Hybrid ECC SHA384 2020 CA1	F7A9A1B2FD964A3F2670BD668D561FB7C55D3AA9AB8391E7E169702DB8A3DBCF	4/14/2021	4/13/2031
C=US, O=DigiCert Inc, CN=DigiCert TLS RSA SHA256 2020 CA1	25768713D3B459F9382D2A594F85F34709FD2A8930731542A4146FFB246BEC69	9/24/2020	9/23/2030
C=US, O=DigiCert Inc, CN=DigiCert TLS RSA SHA256 2020 CA1	52274C57CE4DEE3B49DB7A7FF708C040F771898B3BE88725A86FB4430182FE14	4/14/2021	4/13/2031
C=US, O=DigiCert Inc, CN=DigiCert Trust Service CA	75AC8E41D9A7CC758D3998FE030F638CFD28855823DA4E9B56954CFBDE054EB6	3/4/2020	3/4/2030
C=US, O=DigiCert Inc, CN=DigiCert Trust Service ECC CA	F269AC00B410003F72DC628AFB3D950279630C7C5D0C82148A0FD24DF4DA4301	3/4/2020	3/4/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Encryption Everywhere DV TLS CA - G1	15EB0A75C673ABFBDCD2FAFC02823C91FE6CBC36E00788442C8754D72BEC3717	11/27/2017	11/27/2027
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Encryption Everywhere ECC DV TLS CA	1E4FC34D26E0793D559E322FE111F1E19A9D2E34BC25D3C427B032A48D2C5B6A	7/23/2019	7/23/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=GeoTrust CN RSA CA G1	23DDF08B22373D86158EB9C99FDB5366B19804560531372DD20DCE3FB766F56C	6/20/2019	6/20/2029

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Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=GeoTrust ECC CA 2018	D8E269A6EB08CBC337AD6578C72135787484C99D2FB08CCED029E806BE1040FC	11/6/2017	11/6/2027
C=US, O=DigiCert Inc, CN=GeoTrust ECC CN CA G2	7CAEEC680E6497FC5109073F83816E798F27F8968A2663C1C95711B548192E35	3/4/2020	3/4/2030
C=US, O=DigiCert Inc, CN=GeoTrust ECC CN CA G3	52DDE89FDD6F610473F9314C7A8B1AC442F8AA833AA5D773006FDA758C9FF1EC	6/9/2020	6/9/2030
C=US, O=DigiCert, Inc., CN=GeoTrust Global TLS RSA4096 SHA256 2022 CA1	A797108A05AD9328585FC0CB842FBD824FAC6510B8D7EB4FF47991EEE58AA924	5/4/2022	11/9/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=GeoTrust RSA CA 2018	8CC34E11C167045824ADE61C4907A6440EDB2C4398E99C112A859D661F8E2BC7	11/6/2017	11/6/2027
C=US, O=DigiCert Inc, CN=GeoTrust RSA CN CA G2	E3C24279DD6A337F881B1BC692E878F4A31AFE95851F208F94800B0C24D88C38	3/4/2020	3/4/2030
C=US, O=DigiCert Inc, CN=GeoTrust RSA CN CA G3	8A023C08E4A1AACC925B34C5C7965A8D0527565AEA130ABB915E508CD33AFB45	6/9/2020	6/9/2030
C=NL, O=SupremeSSL, OU=www.supremessl.com, CN=GeoTrust SupremeSSL 1 CA	354FCFC6162A0EE2205DBEF68931E78033ECE9D125E0824E49BAEBF82DFDD167	5/7/2019	5/7/2029
C=LV, O=EnVers Group SIA, CN=GoGetSSL Legacy TLS RSA2048 SHA256 2022 CA-1	C5EB54EB458E38183C70BF4BD1064D0CF557EA07EAA1CB305968E8A8A50733ED	6/23/2022	11/9/2031
C=US, O=Avalanche Cloud Corporation, CN=HydrantID SSL CA D1	A847544CC3CD54E855CA39780C2162431F5C8E327EC66D5A43CF266877BEC50F	3/4/2021	3/3/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=RapidSSL ECC CA 2018	A0D1523A0BF663550EB9081E9BDDEDA12814F9570B7697D95DF2EA53D4FF75E3	11/6/2017	11/6/2027
C=US, O=DigiCert, Inc., CN=RapidSSL Global TLS RSA4096 SHA256 2022 CA1	92A5F515AD35D3A27C490EDB135DE7044B1E399D608AC1ABE883FC82FB4B16BE	5/4/2022	11/9/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=RapidSSL RSA CA 2018	C790B47128447EC0B60F22BFCB795D71C326DD910EE12CBB4CC5A86191EB91BC	11/6/2017	11/6/2027
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site CA G2	F614AE2B101484F15F66F4DDA56EE6EB422728F179D94399EDE19AC1D85A8BD3	6/20/2019	6/20/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site CA	B26EB310F8FAF0EF5B0D0B71AA65EC050FA3ADE29134FB438AB6440288FA6E67	5/17/2018	5/17/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site Pro CA G2	02FED3BA2E6A7843A318A981BC847061FD282D9E8847FFA9F54D785B6B81D6F3	6/20/2019	6/20/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site Pro CA	BA6A0C1170E1C7323860749B5E7B0ED365975D8FC90740B15D70F843A2394942	4/27/2018	4/27/2028
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site Pro ECC CA G2	DA3BE2B6A6D9715C1295A42BE526E0001D10E5D7540F06E7631B34E644934848	6/20/2019	6/20/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site Pro ECC CA	A206644F57AFD10B94169498858981C16D633858CE0C88B57CF14FA2A92AACFD	4/27/2018	4/27/2028

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Thawte CN RSA CA G1	7867AAE905EB8D55635FFEBBBF8CF05A63B9B390665DE2367AC1073E92913728	6/20/2019	6/20/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Thawte ECC CA 2018	6E62CBE3E42A41C50405B3E2F1A44257683267856184AF9C02112070AC836936	11/6/2017	11/6/2027
C=US, O=DigiCert Inc, CN=Thawte ECC CN CA G2	58E89F4F70410DA00B41473CFA413FA0737ED2729F3ED77BE29A7F4705377147	3/13/2020	3/13/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Thawte RSA CA 2018	9A5EECEE9C7D898BD81DC3BF066DAF6AEFB8DB1C59676206D2BFDD682312C6F6	11/6/2017	11/6/2027
C=US, O=DigiCert Inc, CN=Thawte RSA CN CA G2	95141A355A5A2AA3E011221CAB9FE73810FDB5D88135864F03E4D852BD0BBEDB	3/13/2020	3/13/2030
C=CN, O=TrustAsia Technologies, Inc., CN=TrustAsia ECC OV TLS Pro CA G2	70357B9E56D3FB3C6C009C38C7181454C462908DFBCE6D54D60DFE1E506E14FD	6/20/2019	6/20/2029
C=CN, O=TrustAsia Technologies, Inc., CN=TrustAsia ECC OV TLS Pro CA G3	756AAB900E3F5C762734B6461FC32A9DD341EA1D4A04283409233C39787A867E	3/13/2020	3/13/2030
C=CN, O=TrustAsia Technologies, Inc., CN=TrustAsia ECC OV TLS Pro CA	F1CACA6AB2350A7668C13E41960908681DAFCC7E368DCB8D47FECF9631390481	4/27/2018	4/27/2028
C=CN, O=TrustAsia Technologies, Inc., CN=TrustAsia OV TLS Pro CA G2	DBDFA91ACC4DB8AD83FCC7978E35D62F6E32E55108273C8EC998E3133580D664	6/20/2019	6/20/2029
C=CN, O=TrustAsia Technologies, Inc., CN=TrustAsia OV TLS Pro CA G3	D0E8A51ACAAB9AF82767E2EF16543C2CC635551B5DE0DAE25D6AAC71E7862870	3/13/2020	3/13/2030
C=CN, O=TrustAsia Technologies, Inc., CN=TrustAsia OV TLS Pro CA	33E8A4ED48930760CE1AD7A2D44F079B22F660052753976109E6FC74752552BD	4/27/2018	4/27/2028
C=CN, O=TrustAsia Technologies, Inc., OU=Domain Validated SSL, CN=TrustAsia TLS ECC CA	68D0B2E8C85BF009B4DB39AC8B5E2FA8E1FD9FD1E5028704EA9288C7E472AAEB	12/8/2017	12/8/2027
C=CN, O=TrustAsia Technologies, Inc., OU=Domain Validated SSL, CN=TrustAsia TLS RSA CA	79F1F5AB697DEBF195F5B7DA65F95399682EDAEB80115B9D42A6AE5E2FA98802	12/8/2017	12/8/2027
C=AU, O=Verokey, CN=Verokey High Assurance Verified Business	2F0E385864D2DCA8AC7AE48164287BFE45126C6BCD92E91BB3DF1250C7B2DABA	3/17/2022	11/9/2031
C=AU, O=Verokey, CN=Verokey Secure Web	DBAF58DEBFBBA1DE8E04DCAE7A2C163B09D39E7E732E91DEA8655C2BD732AB00	3/17/2022	11/9/2031
C=AU, O=Verokey, CN=Verokey Verified Business	D6CC57B9260E9B012DFAC40A81BFC022B92D91FA49B7C45C59DF86702AAC2906	3/17/2022	11/9/2031
C=GR, O=Adacom S.A., CN=ADACOM Class 2 Public Trust CA G2	C1D5F777F98E6CC616EEE9A212F070990E818D06751CC2A86551FB4A9168E29D	9/14/2021	9/13/2031
C=GR, O=Adacom S.A., CN=ADACOM Class 2 Public Trust CA G3	11847D4866674DB8A00D0CD74EB2E13143E449B1AC3BB314A6257D796BAF3780	4/3/2024	4/2/2034
C=DE, O=CertCenter AG, OU=Domain Validated SSL, CN=AlwaysOnSSL TLS RSA CA G1	2A41BA819EB6125AF5CB4B8B0E9E954ECE798C2A7EE43DCDAF7D395987C4D552	11/2/2017	11/2/2027

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Subordinate CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
C=US, O=Apple Inc., CN=Apple Public Client RSA CA 1 - G1	BE13A5D2F5C78F440119D484C710427325EB10CEA9623EF6200CB11B04F650E1	12/12/2018	12/11/2030
C=US, O=Apple Inc., CN=Apple Public EV Server RSA CA 1 - G1	340CA5BA402D140B65A2C976E7AE8128A1505C29D190E0E034F59CCAE7A92BC2	4/29/2020	4/10/2030
C=US, O=Apple Inc., CN=Apple Public Server RSA CA 1 - G1	392583543B93B10E0506DE75D69399FCBBC1469C8DE396066C756088B92241DA	12/12/2018	12/11/2030
C=US, O=Bloomberg LP, CN=Bloomberg TLS CA	F5F1A8C04E5CF0FDB678DD279994463E48508C4349643B0D92CBFD7523F6C40A	3/30/2021	3/29/2031
C=US, O=Bloomberg LP, CN=Bloomberg TLS CA	440B37416F2DE852CA386150D611EC0AF31DD58D8A27F882815A7EA3EE6848EE	9/24/2020	9/23/2030
C=US, O=Cloudflare, Inc., CN=Cloudflare Inc RSA CA-3	9FB0385317FAB1C00541B274A6C82B7644DE7C7FD4BB5E335DE445FA0A96BFD9	7/10/2024	7/9/2029
C=US, O=CrowdStrike, Inc., CN=CrowdStrike Federal EV RSA CA G1	EDEDD0053CB844592E673EF2A081C15B38EE3ECBEB5856C9A4FE9B7169FAFFE7	8/15/2023	8/14/2033
C=US, O=DigiCert, Inc., CN=DigiCert Basic EV G2 TLS CN RSA4096 SHA256 2022 CA1	8534345E71F5450B6BD2758CEF8495547008A6E302AC8DAC625361CB24DC6BD5	12/15/2022	12/14/2032
C=US, O=DigiCert, Inc., CN=DigiCert Basic OV G2 TLS CN RSA4096 SHA256 2022 CA1	F16C99CDE19ED1ACE8B4FBC700E05E7EFF2116FD6A22427766B251C6E8BB3CE7	12/15/2022	12/14/2032
C=US, O=DigiCert Inc, CN=DigiCert EV RSA CA G2	9588EF74199E45ACEFCCCFC0C47010E9F2A37A1DD44C61A4E1C6B334DA5AF614	7/2/2020	7/2/2030
C=IE, O=DigiCert Ireland Limited, CN=DigiCert G2 TLS EU RSA4096 SHA384 2022 CA1	A4ADFC2917BB1451D312371D441ACDB686107FBC0B3156D5570E99E1121974FA	9/19/2022	9/18/2032
C=US, O=DigiCert Inc, CN=DigiCert Global CA G2	8FAC576439C9FD3EF153B51F9EDD0D381B5DF7B87559CEBECA04297DD44A639B	8/1/2013	8/1/2028
C=US, O=DigiCert, Inc., OU=www.digicert.com, CN=DigiCert Global CA-3 G2	9B2DD4FBEE941F6510F716C04969B364288927654617D1EF47D41B3289475D50	11/12/2019	11/12/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Global Client CA G2	A449DBAB6D4C035FAAFD9D045891FE98ABD73D286268A8A83F854145551692E3	9/23/2019	9/23/2034
C=US, O=DigiCert, Inc., CN=DigiCert Global G2 TLS EE+ RSA4096 SHA256 2022 CA1	B915B806A8B7BE2E3809F2E932996E7C10CC82691864A89606BD50080DC2EAB3	4/28/2022	4/27/2032
C=US, O=DigiCert Inc, CN=DigiCert Global G2 TLS RSA SHA256 2020 CA1	C8025F9FC65FDFC95B3CA8CC7867B9A587B5277973957917463FC813D0B625A9	3/30/2021	3/29/2031
C=US, O=DigiCert Inc, CN=DigiCert Global G2 TLS RSA SHA256 2020 CA1	1F8EB9E9A8E066CC5B3833E06B3129764B622639D5B163F600E1C79120BF3EED	9/24/2020	9/23/2030
C=US, O=KMS Solutions, LLC, CN=DigiCert KMS Solutions LLC GCC High Email CA	4CBB63C9CD73883DBDAC9BAA662C356602FB30C4EE68B86642EA12AFBC71D367	2/14/2023	2/13/2033
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site EV G2 TLS CN RSA4096 SHA256 2022 CA1	8FC89B7368A29129735677440476908711DA8F3F04C0AB6A61D6DE9D4EB4D1C2	12/15/2022	12/14/2032
C=JP, O=DigiCert Japan G.K., OU=www.digicert.co.jp, CN=DigiCert Secure Site Japan CA	AD14A68BEC949E84F6063419D63465D137C2ADD3E3A85E00E9E3EE82E5B4018F	11/20/2018	11/20/2028

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Secure Site Korea CA	6555D661D37F2494A23C2D5F83479E78051B6DE76A147B506D6BEA2882B4D066	11/20/2018	11/20/2028
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site OV G2 TLS CN RSA4096 SHA256 2022 CA1	7CD6CDD25EEE2512AAF1419AFD44C146C43AA1093D5A60D4ED39EFBDDA815AD4	12/15/2022	12/14/2032
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site Pro EV G2 TLS CN RSA4096 SHA256 2022 CA1	B480E11A6BD0C2BC538B1C7DB1C63B40694E5DEDD93752D082D9FD422FCB3FBD	12/15/2022	12/14/2032
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site Pro G2 TLS CN RSA4096 SHA256 2022 CA1	826EBD90E946C25D3DF05ABFB911AC0A426C7A9A063B7224464710BEC5A58CE1	12/15/2022	12/14/2032
C=PT, O=DigitalSign - Certificadora Digital SA, CN=DigitalSign CA - G7	FE7AA77C5DE2D1466852F6D9070A320BE3DA439C72D74F71C62697502DA5BFCF	11/3/2021	11/2/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Encryption Everywhere DV TLS CA - G2	B1AC8CFB181B9C9354E1775FCBDFCFE7898C5CC9A17D76315B57C112EEE55234	11/27/2017	11/27/2027
C=JP, O=Mitsubishi Electric Information Network Corporation, CN=Enterprise Premium Public CA	DF025DCE2A36411BE5EB6590C161EFD2652EC2B3F70D5C651F90D023C46F3A00	6/9/2020	6/9/2030
C=FR, O=Gandi SAS, CN=GandiCert	3337D4E4B4EF6A94F04915D2E86B1F8F47A3C83667DA2519D9B95AE7270AFFE1	4/17/2024	4/16/2034
C=US, O=DigiCert, Inc., CN=GeoTrust EV G2 TLS CN RSA4096 SHA256 2022 CA1	6FE24FBFFBBFFBDC3BE69A472DBF75EF30CACF8AEA319F3893654C91BAB91143	12/15/2022	12/14/2032
C=US, O=DigiCert Inc, CN=GeoTrust EV RSA CA G2	2D140F20B8A96E2B4D2F1CC5ACA5E5A1E7DC56A7491E510906960F38D2D21AEF	7/2/2020	7/2/2030
C=US, O=DigiCert, Inc., CN=GeoTrust G2 TLS CN RSA4096 SHA256 2022 CA1	05DC9EDC0FDDFA975A1432EF806EC780078B5362AD45AF76DB15C907630DB25D	12/15/2022	12/14/2032
C=IE, O=DigiCert Ireland Limited, CN=GeoTrust Global G2 TLS EUR RSA4096 SHA384 2023 CA1	9E7E310303EDA686FCC5F55F7506895B15FF05C780EEEADEAB9D016DB672F3BA	6/14/2023	6/13/2033
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=GeoTrust TLS RSA CA G1	C06E307F7CFC1D32FA72A4C033C87B90019AF216F0775D64978A2ECA6C8A230E	11/2/2017	11/2/2027
C=LV, O=EnVers Group SIA, CN=GoGetSSL G2 TLS RSA4096 SHA256 2022 CA-1	8AADF068A1B7C04B3E346F7C97FD9619FFF14ECC6C82C2F15594B9732F3F3E72	6/23/2022	6/22/2032
C=CH, O=Hostpoint AG, OU=Domain Validated SSL, CN=Hostpoint TLS RSA CA	F7FBDEB82BE99D41CDCA419FC91859D3E5286C076204E0E903D678BB213ED89B	11/2/2017	11/2/2027
C=JP, O=DigiCert Japan G.K., CN=Individual Certificate Issuance Service CA	1C8DF080957A9B79F31D090297B047DCD6B541CBC0A83FDFF0674A2004BFCDA6	3/11/2021	3/10/2036
C=DE, O=Legacy Technologies GmbH, CN=Legacy Technologies Intermediate	1032C6001ED664A0CD343B138BCB6860E2111011C3D5F06540F5BE41147812A5	7/2/2020	7/2/2030
C=US, O=Microsoft Corporation, CN=Microsoft Azure RSA TLS Issuing CA 03	9D1BC5D2DD75BF8B64F35E7F919E2546C225BE888C1A8CBE82C0E9579234A7ED	6/8/2023	8/25/2026
C=US, O=Microsoft Corporation, CN=Microsoft Azure RSA TLS Issuing CA 04	33F9731BE910A66DC6ACD07D9D9CA212EE8D0A9A5C78C8BF3E89BB74DF8FB936	6/8/2023	8/25/2026

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=Microsoft Corporation, CN=Microsoft Azure RSA TLS Issuing CA 07	724247794951C93F3E41711617E95CE143263E3196C345A1DA78F6639749EC03	6/8/2023	8/25/2026
C=US, O=Microsoft Corporation, CN=Microsoft Azure RSA TLS Issuing CA 08	511C1C41CB7EB2A10078C32C82F17925BA786DE46C633921D038E7409E15A5EA	6/8/2023	8/25/2026
C=US, O=Microsoft Corporation, CN=Microsoft Azure TLS Issuing CA 01	24C7299864E0A2A6964F551C0E8DF2461532FA8C48E4DBBB6080716691F190E5	7/29/2020	6/27/2024
C=US, O=Microsoft Corporation, CN=Microsoft Azure TLS Issuing CA 02	15A98761EBE011554DA3A46D206B0812CB2EB69AE87AAA11A6DD4CB84ED5142A	7/29/2020	6/27/2024
C=US, O=Microsoft Corporation, CN=Microsoft Azure TLS Issuing CA 05	D6831BA43607F5AC19778D627531562AF55145F191CAB5EFAFA0E0005442B302	7/29/2020	6/27/2024
C=US, O=Microsoft Corporation, CN=Microsoft Azure TLS Issuing CA 06	48FF8B494668C752304B48BFE818758987DEF6582E5F09B921F4B60BB3D6A8DD	7/29/2020	6/27/2024
C=US, O=Microsoft Corporation, CN=MSFT RS256 CA-1	F5D4CAD53B3F2EF39810DA6D3CD5FF7663F4ABB87738827CCECAFF6FCC3EAFC4	4/28/2022	4/27/2032
C=US, O=National Geospatial-Intelligence Agency, CN=NGA CA G4	69F46822031ECDE9D85B563BAFC3915051B396986562F2DDF160075C29FB8DF0	2/27/2024	2/26/2029
C=US, O=Oracle Corporation, OU=Organization Validated SSL, CN=Oracle TLS RSA CA G1	319896E3954D510DA3A4B75387E8C870B3BC2C3228D8550916EBE9ABDCB7F921	11/2/2017	11/2/2027
C=NL, O=PerfectSSL, CN=PerfectSSL	6B40D3DBAAD68BE6E804E32085F7837CEE08B7C4FA6A990B36227A6DCFF0873B	4/17/2024	4/16/2034
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=RapidSSL TLS RSA CA G1	4422E963EE53CD58CC9F85CD40BF5FFEC0095FDF1A154535661C1C06BCADC69B	11/2/2017	11/2/2027
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site CA	D3533B732A518A6DA68EF266085E11DFD114C0EB0092CD43530A44D54B913ED1	2/9/2018	2/9/2030
C=DE, O=STRATO AG, OU=Domain Validated SSL, CN=STRATO TLS RSA CA	A8AD1C25CC580B2131FCC6FC6D6513746F38EA99BD162C81B5C5393495175B18	11/2/2017	11/2/2027
C=US, O=DigiCert Inc, CN=Thawte EV RSA CA G2	3286691412F30ECE5C065FD62F4392A4762D1E778815338359DF390299FBD61EF	7/2/2020	7/2/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Thawte Partner CA	635AF6889F49060FE0E7BABC0F23314FB118F3B18243DD17F47D8647A69684B1	11/20/2018	11/20/2028
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Thawte TLS RSA CA G1	4BCC5E234FE81EDE4EAF883AA19C31335B0B26E85E066B9945E4CB6153EB20C2	11/2/2017	11/2/2027
C=NL, O=Trust Provider B.V., OU=Domain Validated SSL, CN=Trust Provider B.V. TLS RSA CA G1	009871C3A4C607311E5AE92F01095F9BF76100B8794AB0A9A5210E6794C8607C	11/2/2017	11/2/2027
C=NL, O=Trust Provider B.V., CN=Trust Provider B.V. TLS RSA EV CA G2	B23A29C312A7A80B0FE6B4E71B909CAE92AD649E88766E56C9EE8E1D7C013945	2/21/2020	2/21/2030
C=CN, O=TrustAsia Technologies, Inc., OU=Domain Validated SSL, CN=TrustAsia TLS RSA CA G8	036A18F5F0EB9DD5EE02B7854DF5C33845601D8939CFB7B607F69D142C01D909	11/2/2017	11/2/2027

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=AU, O=Verokey, CN=Verokey High Assurance Verified Business SHA256	A542DE4E6ECD35ABEB009EB5D5EC3887EC4371794BCF25CEEAE0E1881C51D5DD	7/24/2024	7/23/2034
C=AU, O=Verokey, CN=Verokey Secure Web G2	5EE5AAD704A8B698883F4029720C8FA1CB79C9FA3463CC24340629EBE6C5A62B	3/17/2022	3/16/2032
C=AU, O=Verokey, CN=Verokey Verified Business G2	7EDBE6F8C49A1E3988CAADD438B72F07B6AF9CE751CF5835163161D63CAE4DDF	3/17/2022	3/16/2032
C=AU, O=Verokey, CN=Verokey Verified Business SHA256	B10ED8C2C76C7C99FC175B23B8E78F3F0C15D197DF3AA2C87FF29E92414711E9	7/24/2024	7/23/2034
C=US, O=Vitalwerks Internet Solutions, LLC, CN=Vitalwerks Internet Solutions, No-IP TLS ICA	2AE0626F9A43EDB2B0A22D410EB06C482EF982563A717A247287C504D79BF980	2/23/2023	2/22/2033
C=US, O=Wells Fargo & Company, OU=Organization Validated TLS, CN=Wells Fargo Public Trust Certification Authority 01 G2	CF7CFA4F9DBCCBCA6D20EFDEBEAD4E173B34E76BDA1EB1E619F44E06E95FC208	11/15/2017	11/15/2027
C=DE, O=CertCenter AG, OU=Domain Validated SSL, CN=AlwaysOnSSL TLS ECC CA G1	BD193C475E4E67938BEF34122B98B558A2882E7ED94369A6CB011320EF15623C	11/2/2017	11/2/2027
CN=Apple IST CA 8 - G1, O=Apple Inc., C=US	8711EE539E74213F5F412EB4A18A98C3B58DA620B4D43E75B0542AFC39FC6033	12/12/2018	6/8/2031
CN=Apple IST CA 8 - G1, OU=Certification Authority, O=Apple Inc., C=US	9218BAB94E7D5D1F81D62D0FC23E31C8BBCBEE3545D1D7E9D3FD29B30BC188C8	12/21/2018	6/8/2031
C=US, O=Apple Inc., CN=Apple Public EV Server ECC CA 1 - G1	2585928D2C5BFD952E025BD12E27C6776224CF752EC362D3031CDD49351844D4	4/29/2020	4/10/2030
C=US, O=Apple Inc., CN=Apple Public Server ECC CA 1 - G1	2AF988F26F6EF0DAB9055697F0941FB4E5C42247CA982826895EF29985D30CD6	12/12/2018	12/11/2030
C=US, O=Cloudflare, Inc., CN=Cloudflare Inc ECC CA-4	7EB5F4AAAC39B3A7835D76F722A473F9B4911E4A3691DE78B3C2973595764EA2	7/10/2024	7/9/2029
C=JP, O=Cybertrust Japan Co., Ltd., CN=Cybertrust Japan ECC EV CA	92E3770B1EB44F84C2F2CB0097C2FD7126BD212B41C2610E78DDFD8946761738	8/24/2017	8/24/2032
C=JP, O=Cybertrust Japan Co., Ltd., CN=Cybertrust Japan Secure Server ECC CA	C3683F7D91754219DADA4E8DC30E4B18BD3928B53D3AB93D07384BC5871CE355	7/13/2017	7/13/2032
C=US, O=DigiCert, Inc., CN=DigiCert Basic EV G3 TLS CN ECC P-384 SHA384 2022 CA1	1CA57EF159812BFBE2D8106F6152E51DDD0A5A4C9489CD097595B797CB37843E	12/20/2022	12/19/2032
C=US, O=DigiCert, Inc., CN=DigiCert Basic OV G3 TLS CN ECC P-384 SHA384 2022 CA1	B5528F4A43957E1ABBE08C4EBF2D8ACF4C2C1914D6354117492C8C3FE033FD97	12/20/2022	12/19/2032
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Extended Validation CA G3	7C0912E5DE8478BB86E8EA46BA5AE65DC3870BCEFCBC2F46795EEECF648CFBE7	11/11/2015	11/11/2030
C=US, O=DigiCert, Inc., OU=www.digicert.com, CN=DigiCert Extended Validation CA-3 G3	DA7E5778F62F87655B8FD24A89E651E57329DC9C0765A71158CE56443CA44E95	11/12/2019	11/12/2029

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=IE, O=DigiCert Ireland Limited, CN=DigiCert G3 TLS EU ECC P-384 SHA384 2022 CA1	F0F573763C616F762AA6AB927CBDE789FA8EF4E69AF8A27EC63C62EEF329ECA1	9/19/2022	9/18/2032
C=US, O=DigiCert Inc, CN=DigiCert Global CA G3	F7541CF69D1DE1AC953ABC1FAD6F7807A34EDFE9E12C11E66A195930C23AD6C6	8/1/2013	8/1/2028
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Global Client CA G3	BA361260FF1D46031686305E082DE836D4A320466E0DE9E013F00CDEDDD62317	9/23/2019	9/23/2034
C=US, O=DigiCert, Inc., CN=DigiCert Global G3 Code Signing ECC P256 SHA384 2021 CA1	DDF122E12D2BE604BEEF8A4A55C5EB802E19D5B8D8E1AF994580BD92F4A179E3	7/28/2021	7/27/2036
C=US, O=DigiCert, Inc., CN=DigiCert Global G3 Code Signing ECC SHA384 2021 CA1	35769D41EF436A4D63DDB00AB11C6CE968989FCDD829E7018F5DB90AC4BD3CD0	4/29/2021	4/28/2036
C=US, O=DigiCert, Inc., CN=DigiCert Global G3 Code Signing Europe ECC P-384 SHA384 2023 CA1	5903EE782F4FA2072EDCC94B8CC3DE6AE4AB27B3A079259262 89467D5501F371	2/14/2023	2/13/2033
C=US, O=DigiCert, Inc., CN=DigiCert Global G3 mPKI SMIME ECC P384 SHA384 2023 CA1	EB46C072E983B1F6F1E34C397CF7064E77D921ED82E913A27224668FE8C25901	8/30/2023	8/29/2033
C=US, O=DigiCert, Inc., CN=DigiCert Global G3 SMIME ECC P384 SHA384 2024 CA 1	7AA5398910F171FDC333FB7204D7C37AE5F10000E026335F728FDC49C8DBC394	7/24/2024	7/23/2034
C=US, O=DigiCert Inc, CN=DigiCert Global G3 TLS ECC SHA384 2020 CA1	338EDB04FB8BEAF07A10749E7F4E538DE0715DAFB6478D58063FB7C8BDB0C30D	9/24/2020	9/23/2030
C=US, O=DigiCert Inc, CN=DigiCert Global G3 TLS ECC SHA384 2020 CA1	699ED65BDD3D5E790776D165EA7A325B7AEAF419647921A92FF28BB0680D72BA	3/30/2021	3/29/2031
C=US, O=DigiCert Inc, CN=DigiCert Global G3 TLS ECC SHA384 2020 CA1	0587D6BD2819587AB90FB596480A5793BD9F7506A3EACE73F5EAB366017FE259	4/14/2021	4/13/2031
C=US, O=DigiCert, Inc., CN=DigiCert Global G3 TLS EE+ ECC384 SHA384 2022 CA1	15E77C59404015659EE26F92561F007AAF53986A27926F0E707585C2A7F301B8	4/28/2022	4/27/2032
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site EV G3 TLS CN ECC P-384 SHA384 2022 CA1	943BC406B0B45ACF88413045227265703F1AC8B21D6FBC2B8CBDE59D7CE51B81	12/20/2022	12/19/2032
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site OV G3 TLS CN ECC P-384 SHA384 2022 CA1	38D530FB170053617E47AA6CEFF21C2DB43C9D96741AF1584566072091474BB3	12/20/2022	12/19/2032
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site Pro EV G3 TLS CN ECC P-384 SHA384 2022 CA1	95F6B9230F27FB5FC0CB29443DBE7300168B5992C7558F3F63D4352F32B8C9CB	12/20/2022	12/19/2032
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site Pro G3 TLS CN ECC P-384 SHA384 2022 CA1	34CDC67D88D25217ADC8A25348E114CBEC63148391CFA475D382874695202D2C	12/20/2022	12/19/2032
C=US, O=DigiCert, Inc., CN=Encryption Everywhere G3 TLS ECC P384 SHA384 2023 CA1	DA1F7CBF322E55CC082276F8519147DFA1E80CBAF7D5799FF771358832ED1712	2/2/2023	2/1/2033
C=US, O=DigiCert, Inc., CN=GeoTrust EV G3 TLS CN ECC P-384 SHA384 2022 CA1	02F40238BA372E9DF51D7540E04EDFEDAB5439323F9A02DF5B38C074CA7D406E	12/20/2022	12/19/2032

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=DigiCert, Inc., CN=GeoTrust G3 TLS CN ECC P-384 SHA384 2022 CA1	662871C80F4E0FD219EA69AAFC4D28AD7B41E9381560BEE787848D4EEF1CBF24	12/20/2022	12/19/2032
C=IE, O=DigiCert Ireland Limited, CN=GeoTrust Global G3 TLS EUR ECC P384 SHA384 2023 CA1	57E0B33504DBAF6F29A095CB8A297A4ABEC121CE11640EFAFC17594098F6CAA9	6/14/2023	6/13/2033
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=GeoTrust TLS ECC CA G1	A838405EBB03F5DFD8D4A9572AE6E0E3F356EC4EC134375A59DB7B195DC3EC44	11/2/2017	11/2/2027
C=LV, O=EnVers Group SIA, CN=GoGetSSL G3 TLS ECC P-384 SHA384 2022 CA-1	7E687FA866802535C3AFC393939376D4BF0FD753D9421719A8AA91A4FF305AD2	6/23/2022	6/22/2032
C=GB, O=LMAX Limited, CN=LMAX Trust Services CA X2	ADBF61297BC10F2C4150F26E6A94DA024DA60854AB5DCACED1C8486456838735	6/30/2022	6/29/2037
C=GB, O=LMAX Limited, CN=LMAX Trust Services CA X2	24AE529BED1387750B11152E34054EA8A0BDC05F037BA908869F2ADD2464CAF9	3/20/2024	3/19/2034
C=GB, O=LMAX Limited, CN=LMAX Trust Services CA X3	51D6C9A0CE4146768E730A5AD77BCA863949FA0D74108FF9B6AD48FC35DE0DE9	4/3/2024	4/2/2034
C=US, O=Microsoft Corporation, CN=Microsoft Azure ECC TLS Issuing CA 01	949D6B4B761CA134AD3E7A8571186F580EE887F2C6B568B5140F4157F98D68DD	8/12/2020	6/27/2024
C=US, O=Microsoft Corporation, CN=Microsoft Azure ECC TLS Issuing CA 02	9C64A9A43E990E98FBCE8317B2D4C1C07FFE6E032DA8BB6D60A696E2FF038F1F	8/12/2020	6/27/2024
C=US, O=Microsoft Corporation, CN=Microsoft Azure ECC TLS Issuing CA 03	BBD27139C5302C63D903F570F173AD4DC06C974B9EBE292C90FFCCAB5D6FA54E	6/8/2023	8/25/2026
C=US, O=Microsoft Corporation, CN=Microsoft Azure ECC TLS Issuing CA 04	7A3AE4F12920D5A8129BE1183FBEC4370EF10B8B3AD41EAE4A58D5385AA94D33	6/8/2023	8/25/2026
C=US, O=Microsoft Corporation, CN=Microsoft Azure ECC TLS Issuing CA 05	003F71DC4820216575FC5AACFE3B1AEB76F72AEA5B8E8FCEFC80B9F517A4A612	8/12/2020	6/27/2024
C=US, O=Microsoft Corporation, CN=Microsoft Azure ECC TLS Issuing CA 06	2975BAB51D00D862D0E16EEDEF8306A759C65CD4B9F00DAF50ECDFCB4EC396E4	8/12/2020	6/27/2024
C=US, O=Microsoft Corporation, CN=Microsoft Azure ECC TLS Issuing CA 07	BE23414A42E74886E7C72A861BA2DDDA0175ED829223D894C5D272651FC0C189	6/8/2023	8/25/2026
C=US, O=Microsoft Corporation, CN=Microsoft Azure ECC TLS Issuing CA 08	89AADE767B7BA43F8DDE8E9E74A2FCBBEA40D57155F7E1F2259C88835601FAED	6/8/2023	8/25/2026
C=US, O=NCC Group, CN=NCC Group Secure Server CA G3	963056B0D941D9DBE27AC778053D85E43CC79F476AD34CFDD799C27E381840EB	7/30/2014	7/30/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=RapidSSL TLS ECC CA G1	FC16D53203BD9187D69CC99D2DA551076B4DCB298140D6751F7A012966C99FDD	11/2/2017	11/2/2027
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Thawte TLS ECC CA G1	AE82201F565E0439B7F4AD689327594EB974A4F781B1A6CBFED59BD382317F13	11/2/2017	11/2/2027
C=CN, O=TrustAsia Technologies, Inc., OU=Domain Validated SSL, CN=TrustAsia TLS ECC CA G9	877F24CE70F4A3047E4EA70BEC1BC31BE9B6533ADFF3A393FF9BFB3C81029446	11/2/2017	11/2/2027

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=AU, O=Verokey, CN=Verokey High Assurance Verified Business ECC	34263E9424D819B94BCFA87E69DD9EF43205D4E2DE84A53497314063D822969B	3/17/2022	3/16/2032
C=AU, O=Verokey, CN=Verokey Secure Web ECC	BCFD2614E42D63C59691C3CE8BEC792DE2FCE89CED4F9C460D0A848573074FCB	3/17/2022	3/16/2032
C=AU, O=Verokey, CN=Verokey Verified Business ECC	F1ED3B35C92FA5DAAAA3DD45F99EBA3B823A2FB1C24A89CED1699D95E02564A2	3/17/2022	3/16/2032
C=US, O=.NET Foundation, CN=.NET Foundation Projects Code Signing CA	024F162B1D09F6A0868C38B4C8B4257C1EEA6C5A31589416D520CF1624917EB3	4/27/2018	4/27/2028
C=US, O=Abbott Laboratories Inc., CN=Abbott Laboratories Secure Code Signing CA	5F1A82C09CBAE239D4E3F0704C970755547E53E3CF290F9479FE7E98665FEF0F	6/7/2016	6/7/2026
C=US, O=Aetna Inc, CN=Aetna Inc. Secure CA2	DDCBB4F3051D6E601310EB0E46B5BB99C5E8B99F7A539E367A987DEA030E318E	9/24/2020	12/9/2024
C=US, O=Aetna Inc, CN=Aetna Inc. Secure CA2	5D28761CBF304EAFCD127B34D614FE179AC7744F1552AF1C31298425AD05A275	12/9/2014	12/9/2024
C=US, O=Aetna Inc, CN=Aetna Inc. Secure CA2	428B87B8061A79ABA75877FD0383ADB831A1459B86BC408CE7D8D17B295B75BB	3/30/2021	3/29/2025
C=US, O=Aetna Inc, CN=Aetna Inc. Secure EV CA2	1DDFDDF883E3945B2CB24FA5B83788379C5AB058422AB979DF66C77473988687	12/8/2017	12/8/2027
C=US, O=Aetna Inc, CN=Aetna Inc. Secure EV CA	A1448A015E1399C5A891812F0E88C6D847B221D21F9326A6626BA43A0EB612D9	9/24/2020	12/9/2024
C=US, O=Aetna Inc, CN=Aetna Inc. Secure EV CA	0A163600631BD66267FB7AEAD25C538B2B7D72AD6416A2BBD285F654BB642F6D	12/9/2014	12/9/2024
C=US, O=Aetna Inc, CN=Aetna Inc. Secure EV CA	8B6CCC3BE92F0121E6494AC704BF0B9B9CEBBA2E363C8E8122D90984D3EBF386	3/30/2021	3/29/2025
C=US, O=Apple Inc., CN=Apple Public EV Server RSA CA 2 - G1	D6EF3E09EBE0D9370E51F5C09A532B3AC70D3CE822253F9FC84C28E9BFA550D5	4/29/2020	4/10/2030
C=US, O=Apple Inc., CN=Apple Public EV Server RSA CA 3 - G1	E881D3B83C3BC694D7D99F92DE83B2BFF5C6EE2D9871A446DEA107D6397565FC	7/15/2021	4/10/2030
C=US, O=CrowdStrike, Inc., CN=CrowdStrike Global EV CA G2	5EBD9874E6B88DA38F4A7B9566CE5D4DF05E0C224D94986AD8CC5EBA004A0C04	3/4/2021	3/3/2031
C=US, O=CrowdStrike, Inc., CN=CrowdStrike Global EV CA G2	9ED1EDEA95AA5B72B513A3E41A1BA0D2EFB14CEC88891E34D00495C95556605C	3/30/2021	3/29/2031
C=US, O=CrowdStrike, Inc., CN=CrowdStrike Global EV CA	8CD728F9C3391BA4360A10C66CA484C807651D6207F10633669ED8881FE91BF5	2/21/2020	11/9/2031
C=US, O=CrowdStrike, Inc., CN=CrowdStrike Global EV CA	86B109232C19EC514F8CB26788E65090293F96DD8D2942017A33035AB225D5FB	3/30/2021	3/29/2031
C=JP, O=Cybertrust Japan Co., Ltd., CN=Cybertrust Japan Extended Validation Server CA	0E10BDDEE7512DBD79EBF0B4F48FEED7C83C2BD3DD81765565F4FF110B7BFA42	12/7/2016	12/7/2031
C=US, O=DigiCert Inc, CN=DigiCert Basic EV ECC CN CA G2	D619F3257B98756D28811D3CEE9ADAD8BCAE1B4367BBB0C73F6B5E558FBA4563	3/4/2020	3/4/2030
C=US, O=DigiCert Inc, CN=DigiCert Basic EV RSA CN CA G2	B41A4864F0D4EC4EA632D01B3E7F232775E55E22B3BFD8642EE1292280D0E47A	3/4/2020	3/4/2030

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Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert CN RSA EV CA G1	B131905CC7221270613B529AC9E786AA230ABFE154A0ACBE452BC350BD1EFE4B	6/20/2019	6/20/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert ECC Extended Validation Server CA	FDC8986CFAC4F35F1ACD517E0F61B879882AE076E2BA80B77BD3F0FE5CEF8862	6/21/2016	6/21/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert EV Code Signing CA (SHA2)	C7460B0EDDA1B44C8E2164B234EBECC3962A6A37A936B74A6E7D46682938F084	4/18/2012	4/18/2027
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert EV Code Signing CA	376377FD1FAF4B8A5B1472647A70B941039A62D74CFE99447E48616F8D63A978	4/18/2012	4/18/2027
C=US, O=DigiCert Inc, CN=DigiCert High Assurance CA-3b	4E30F8004C18D3D798EC5A7734346B5A5EBE8D54423CE98257FC57735A6F738D	5/28/2020	11/9/2031
C=US, O=DigiCert Inc, CN=DigiCert High Assurance CA-3b	28506E33F55A6072115F3E04C9BDBF5AF5312CA8FC132508B97AC99FEE0516E8	3/30/2021	3/29/2031
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert High Assurance Code Signing CA-1	BEAF46D0FF62645F56BE11830DDEFC663379619F337E85713491C83AE179481D	2/10/2011	2/10/2026
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert High Assurance Code Signing CA-1	007D2C8B15786232BAC0EAA31F60AAE06DC572921BAD0D46C77107D8C2DCA4B3	2/11/2011	2/10/2026
C=US, O=DigiCert, Inc., CN=DigiCert High Assurance TLS Hybrid ECC SHA256 2020 CA1	5D270CB4EFF587AD6CD17CB2B60D9084A153D77D2AA79A2CB3DB1DDB904684F5	3/30/2021	3/29/2031
C=US, O=DigiCert, Inc., CN=DigiCert High Assurance TLS Hybrid ECC SHA256 2020 CA1	74EAB573DA7DB195097BE0E90F334934C7A4C89E8083759DB4333A00EDD243D9	12/17/2020	12/16/2030
C=US, O=DigiCert, Inc., CN=DigiCert High Assurance TLS RSA SHA256 2020 CA1	9BFED3D9DC95236BCFFCB35D4B120DB0E3867F62B1FD015A928DA0B303966683	12/17/2020	12/16/2030
C=US, O=DigiCert, Inc., CN=DigiCert High Assurance TLS RSA SHA256 2020 CA1	495E6624A15340C4C74AB86037748AD62D1EF4F14E7C81AB7CDB629BE1404757	3/30/2021	3/29/2031
C=US, O=DigiCert Inc, CN=DigiCert High Assurance Trust Service ECC EV CA	E9529B428FB67390BC6455D79BA2434E816C54FE4F359930CB709DB256FDDF94	3/4/2020	3/4/2030
C=US, O=DigiCert Inc, CN=DigiCert High Assurance Trust Service EV CA	72D0F7CBF4529B80C34A7CBB438BD1D0E1FC26E80E59CBD4FD7314FCDDF0E994	3/4/2020	3/4/2030
C=US, O=DigiCert Inc, CN=DigiCert Secure Site EV CN CA G3	139AC36BD85398BBBB4588687C20DC36827D03A5F42AADF87F02BECC4BE9BFC2	3/13/2020	3/13/2030
C=US, O=DigiCert Inc, CN=DigiCert Secure Site EV ECC CN CA G3	A4B2B47545559F5FFFB7CDDA7A1220E62FB74D1B7A9A4D4DACB2B2A839CE7456	3/13/2020	3/13/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Secure Site Korea EV CA	C022D5CEAA275F2A6268FA79AC35653B3A730DEFA41F9CD8817D6D159BD33097	3/25/2019	3/25/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Secure Site Korea EV ECC CA	B0505BF2947F0807ABAE2D42C19343EAF08D1DDE3F8745B0589A57362792E470	3/25/2019	3/25/2029
C=US, O=DigiCert Inc, CN=DigiCert Secure Site Pro EV CN CA G3	B75AEE9836FEFBC446F288A2970B84FC60AAF9EFBD2CB9F82F7581790DE4B8DC	3/13/2020	3/13/2030

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C=US, O=DigiCert Inc, CN=DigiCert Secure Site Pro EV ECC CN CA G3	BC91379A21E7BDE11B455BF1D511863331682805A4A353A8EE258F7A03706C664	3/13/2020	3/13/2030
C=US, O=DigiCert, Inc., OU=www.digicert.com, CN=DigiCert SHA2 Extended Validation Server CA-3	085A0714524DF7AE9919A6F597884439E12A533E61552D29D6A18C35096FC548	11/12/2019	11/12/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert SHA2 Extended Validation Server CA	403E062A2653059113285BAF80A0D4AE422C848C9F78FAD01FC94BC5B87FEF1A	10/22/2013	10/22/2028
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert SHA2 High Assurance Code Signing CA	C51B83A0DE49A201A5FBE947032C04702F8CA7C2D02ADF28B73D42C8ACD1C362	10/22/2013	10/22/2028
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert SHA2 High Assurance Server CA	19400BE5B7A31FB733917700789D2F0A2471C0C9D506C0E504C06C16D7CB17C0	10/22/2013	10/22/2028
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=GeoTrust EV CN RSA G1	C87CE03AFFB5DE6319C219971F2ED2D8F6F5389E2D53B22DD2C562A5C9827FC0	6/20/2019	6/20/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=GeoTrust EV ECC CA 2018	BF3558F877E89D27DAA60DA9671676570DFBEB215D84AC5A37122D6776B78F6E	11/6/2017	11/6/2027
C=US, O=DigiCert Inc, CN=GeoTrust EV ECC CN CA G2	FC01B58FC78B9C59211784C2E25BF1D012A1E23F337218847A62EB4145EE4AB6	3/4/2020	3/4/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=GeoTrust EV RSA CA 2018	185C0AE470423B9D4678A7C1055B5B48D90705505B794E215C063851336981F4	11/6/2017	11/6/2027
C=US, O=DigiCert Inc, CN=GeoTrust EV RSA CN CA G2	8937E90E1495C9A78EFB18182D43FDC73FCD292AB6347A12B9077DE878530E62	3/4/2020	3/4/2030
C=NL, O=SupremeSSL, OU=www.supremessl.com, CN=GeoTrust SupremeSSL EV 1 CA	0FB6CE80909D19AFEE6A88C959E9E9AA6466715BCE05C6449FEB530A086DAF14	5/7/2019	5/7/2029
C=NL, O=SupremeSSL, OU=www.supremessl.com, CN=GeoTrust SupremeSSL EV 1 ECC CA	2FBA8FE915415049AA942857CB53137FFD3D9E5A47B27B5782DAB9B4DA7D624D	5/7/2019	5/7/2029
C=US, O=Avalanche Cloud Corporation, CN=HydrantID EV SSL CA D1	F9D4A6C011E9C6A8F5A4CF7ED0416869C7238EF93A56161EA6CA3D8B41716097	3/30/2021	3/29/2031
C=US, O=Avalanche Cloud Corporation, CN=HydrantID EV SSL CA D1	863472EC79DB54077114DADE720CE1F7B41A233748FC6773FA86520F0B9AAA21	3/4/2021	3/3/2031
C=US, O=NCC Group, CN=NCC Group Secure Server CA G2	6075DA5CECD15D6584C5560322D5C09FC2199E52DEA7921D91040AA75248672E	7/30/2014	7/30/2029
C=US, O=Plex, Inc., CN=Plex Devices High Assurance CA2	50D3D71FC0CD7E36ADAE32221FEFBE8CC29B2676BA326C09B8FA1B24DBE75514	5/19/2015	5/19/2025
C=US, O=Plex, Inc., CN=Plex Devices High Assurance CA3	FB6060848440AA4594FE8109741EFAB40C56732B26C67C36D6DC945BB2FE13CF	9/24/2020	5/19/2025

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Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=Plex, Inc., CN=Plex Devices High Assurance CA3	1316ED42A849217D51CFB4DE1A1418A8D3A77902FB305D3024F72D4636B82FF0	3/30/2021	3/29/2025
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site Extended Validation CA G2	B6EB4F8AD197073FE5203F8FCEBFD5C509CDE9CA3AA65EC59D203831424192D4	6/20/2019	6/20/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site Extended Validation CA	1A8D790AF9B2B34D7DD6AF61B5AA4CF1380B86095CBAC2BCAB35BD566D0180C3	4/27/2018	4/27/2028
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site Pro Extended Validation CA G2	40D69920EA05456FA0117DE608B8A8013790B542097E343EC1CBCE2DFB9713B0	6/20/2019	6/20/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site Pro Extended Validation CA	3883E6DE4917A46B594ECC2D2AC6A95D43E7EAA8E089A91F9BC104FF16DF8DE6	4/27/2018	4/27/2028
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site Pro Extended Validation ECC CA G2	70DC86F9F7750B74B1DEC8CD352EC25837C36E640F7148E08464EF5901E5A589	6/20/2019	6/20/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site Pro Extended Validation ECC CA	C3804DE51E8C17052220AE1CAD3D383E54D5B7DC28843C42F0DBD9913C1E8658	4/27/2018	4/27/2028
C=NL, S=Noord-Holland, L=Amsterdam, O=TERENA, CN=TERENA SSL High Assurance CA 3	BE6A0D9E1D115F2293F6ABF11B3EC8E882E24426EEEB09AAA503597993E77A25	11/18/2014	11/18/2024
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Thawte CN RSA EV CA G1	ADA188F830C313F6046488EC341F1ED4AF793C6DC28C58600445DFBEB4163746	6/20/2019	6/20/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Thawte EV ECC CA 2018	F74C3B2C7E455D654D9EE5AAA712789CCB267B961C1A1CE48A69C860CD193678	11/6/2017	11/6/2027
C=US, O=DigiCert Inc, CN=Thawte EV ECC CN CA G2	EA1F3BFB4D3296B467D4B582559D6518D676D5AFC7D1C24BE80252F79191046F	3/13/2020	3/13/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Thawte EV RSA CA 2018	93569B26AA535E3E07C891C6BD2FA9DC0939C24DB4B3726AD8531EDB17C497CA	11/6/2017	11/6/2027
C=US, O=DigiCert Inc, CN=Thawte EV RSA CN CA G2	69919D820EDF582ADBCF8E092A9284D901772EE2B419EA9DE1F5872C791FC6FA	3/13/2020	3/13/2030
C=CN, O=TrustAsia Technologies, Inc., CN=TrustAsia ECC EV TLS Pro CA G2	C0DD060FF8CE556F35683D564E0E66B2907178808693F83F3AA642326BF6D0C8	6/20/2019	6/20/2029
C=CN, O=TrustAsia Technologies, Inc., CN=TrustAsia ECC EV TLS Pro CA G3	8D83D69FA615AA2683B13D7894482C542B0BCF18BB92D30F015FB42471AFBB66	3/13/2020	3/13/2030
C=CN, O=TrustAsia Technologies, Inc., CN=TrustAsia ECC EV TLS Pro CA	2DAAC6FDFAC16C548C53FF1198254D7E937761D22A1E7CC5C1A9462E971461F5	4/27/2018	4/27/2028
C=CN, O=TrustAsia Technologies, Inc., CN=TrustAsia EV TLS Pro CA G2	0D51B6CDCF34A9F22144787F3FD920DC8800FB60490BFC8D289A1953E0FBDA4D	6/20/2019	6/20/2029
C=CN, O=TrustAsia Technologies, Inc., CN=TrustAsia EV TLS Pro CA G3	9DB0A20C305541E15E818A880D06579876A9C901B8EECD968482C58D9BA7F0A7	3/13/2020	3/13/2030

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C=CN, O=TrustAsia Technologies, Inc., CN=TrustAsia EV TLS Pro CA	4AFFE4FEF39464D1788C660AF591D5E601B261C4811DF0A3DD9D61CAFE8E5ED8	4/27/2018	4/27/2028
C=GB, O=TRUSTCUBES LIMITED, identified-organization=223013701, legal_entity_identifier=984500505FE80CD0NE58, OU=www.trustcubes.com, CN=TrustCubes ICA G1	2106CC7907C64B8A5DA2FC338EE94DFFF10EF711DEDBB4FC694EE092EC532B1D	7/18/2018	7/18/2028
C=CN, O=WoSign CA Limited, CN=WoSign EV Code Signing Pro CA	F6DFDED61FF88EF10B9E6DCFBCE0F1615E05866CEBAFCD6D48AEE80132C70347	5/23/2017	5/23/2027
C=CN, O=WoSign CA Limited, CN=WoSign EV SSL Pro CA	891EE2E23282E5076C9AE9047DE8EA900E066F81D6DCD9B843C59078B0F105BC	5/23/2017	5/23/2027
C=CN, O=WoSign CA Limited, CN=WoSign OV SSL Pro CA	AA61C2927DC89DB225CA9A17D600373D058F696D86D10E2BD7B5E8F44A97EED1	5/23/2017	5/23/2027
C=CN, O=WoTrus CA Limited, CN=WoTrus EV SSL Pro CA	070531383CCD100D3E9CD964DB07AA5E845A0686F2EAE3BC8A627B182057B1F1	2/9/2018	2/9/2028
C=CN, O=WoTrus CA Limited, CN=WoTrus OV SSL Pro CA	09033FE23996FE4A59C4C0F523D2560E31DFE4C17D8EA1403D429A971F4BD65A	2/9/2018	2/9/2028
C=US, O=DigiCert, Inc., CN=DigiCert G5 RSA4096 SHA384 2021 CA1	C68B6C455593E7CE57383A736517CA46FE86641E46BDFB25C12E41E17DE53B59	3/11/2021	3/10/2031
C=US, O=DigiCert, Inc., CN=DigiCert G5 RSA4096 SHA384 2021 CA1	A11C3BC528FFE2BCEC915A5B3437D4269AD74156E0166B47A1D5F141735104FD	4/14/2021	4/13/2031
C=US, O=DigiCert, Inc., CN=DigiCert G5 SMIME ECC SHA384 2021 CA1	873DD73022087B9179FA060EF3D34381845A37E88A6A2BF20ECBAFDE8C3DB993	7/15/2021	7/14/2031
C=US, O=DigiCert, Inc., CN=DigiCert G5 SMIME RSA4096 SHA384 2021 CA1	58A5988F1BEB2558FB4C168B97AE748E448C974FD51CB521818BBA9FC6CB1B7B	7/15/2021	7/14/2031
C=US, O=DigiCert, Inc., CN=DigiCert Basic EV G5 TLS CN ECC P-384 SHA384 2022 CA1	FDB76E78A450C0F3AF093D5186C3B28A1280567A0EC531CA5977FF4E616B35E3	1/19/2023	1/18/2033
C=US, O=DigiCert, Inc., CN=DigiCert Basic OV G5 TLS CN ECC P-384 SHA384 2022 CA1	1D75A0B37B4AE11E883C97D3FF0DC5D84D93FE129C12DD78086C4A78DAF3F709	1/19/2023	1/18/2033
C=US, O=DigiCert, Inc., CN=DigiCert G5 TLS CN ECC P-384 SHA384 2022 CA1	915EC8DCC237FA932CB0245A996FF3A711550A464214FD7512F225AA608061C8	7/12/2022	7/11/2032
C=US, O=DigiCert, Inc., CN=DigiCert G5 TLS ECC SHA384 2021 CA1	E5A1C1919E3BEAEE5935A8485DDCE0E3F01A2618DB0F0793B3DB3D9AC2D967C7	2/11/2021	2/10/2031
C=US, O=DigiCert, Inc., CN=DigiCert G5 TLS ECC SHA384 2021 CA1	97A073957C5812725757672F222690655A1407D71011EDFC8B2FADC5128911DA	4/14/2021	4/13/2031
C=IE, O=DigiCert Ireland Limited, CN=DigiCert G5 TLS EU ECC P-384 SHA384 2022 CA1	2C171064DBFA280A1F294F72E2A1FC24C86111B23723DB9375D3004B27E7B33B	9/19/2022	9/18/2032
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site EV G5 TLS CN ECC P-384 SHA384 2022 CA1	49C1F25A88B5B15A80C1A2DA11589111C5AD8E222104FDC49022FD6AEF1CF54D	1/19/2023	1/18/2033

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site OV G5 TLS CN ECC P-384 SHA384 2022 CA1	9E561A4B486076C219F3C95387BF11670D72F6C4F0DCD9BBB47F59F5C142EF88	1/19/2023	1/18/2033
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site Pro EV G5 TLS CN ECC P-384 SHA384 2022 CA1	290E698939A24F7B63AB14D0490DE92BEBEF6C1C2D3BE717F3775B71C1AB626D	1/19/2023	1/18/2033
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site Pro G5 TLS CN ECC P-384 SHA384 2022 CA1	D43B3FBC2E6715B33D3D7037200FA9D4181F97492C44DBEBA8FBAE9680D64CD0	1/19/2023	1/18/2033
C=US, O=DigiCert, Inc., CN=Encryption Everywhere G5 TLS ECC P-384 SHA384 2022 CA1	AD7F57AA3FC5EAF4310224A4750A97CD879DE1989D4B86AB08B7A28373BCB489	11/3/2022	11/2/2032
C=US, O=DigiCert, Inc., CN=GeoTrust EV G5 TLS CN ECC P-384 SHA384 2022 CA1	07F55A105E886D191FBD2253283E77B1FC1CCDCC9F26A3E6C7E69706A7593FEF	1/19/2023	1/18/2033
C=US, O=DigiCert, Inc., CN=GeoTrust G5 TLS CN ECC P-384 SHA384 2022 CA1	E43BAAD78B78F9EEA6903E56F456DEC24BD9648C13AE02E2DE17A1F84F3D0807	7/12/2022	7/11/2032
C=US, O=DigiCert, Inc., CN=GeoTrust G5 TLS EC P-384 SHA384 2022 CA1	72F104084DB7914BD8AFE6E347B9257ED4C1D7FC71D3F1E51F3CF47B739B386A	5/26/2022	5/25/2032
C=US, O=DigiCert, Inc., CN=GeoTrust G5 TLS ECC P-384 SHA384 2022 CA2	66E795550B16497E7CF4566EC63B56660F28DBD551C357C526FBB0D7620A8112	7/28/2022	7/27/2032
C=US, O=DigiCert, Inc., CN=RapidSSL G5 TLS ECC P-384 SHA384 2022 CA1	D2A3D4ED9C05964F4A0984381933C5AB1E93E4A0BA7FCDD60940946D68BD6262	6/2/2022	6/1/2032
C=US, O=DigiCert, Inc., CN=Thawte G5 TLS CN ECC P-384 SHA384 2022 CA1	D604F0148A25D93BAB577D38705CBAAE2C4477DE7EB51D86A0F6B26584013D7A	7/12/2022	7/11/2032
C=US, O=DigiCert, Inc., CN=Thawte G5 TLS EC P-384 SHA384 2022 CA1	7F4E38B8B22F91DAF46ED5856D6E7F1180296FB152C026473C6328519D2AC99A	5/26/2022	5/25/2032
C=US, O=DigiCert, Inc., CN=Thawte G5 TLS ECC P-384 SHA384 2022 CA2	0215DB7E22D36D0E7535A12691A9EC0DC7F43D83AB580C0709711C1E7A9B55EC	7/28/2022	7/27/2032
C=US, O=CrowdStrike, Inc., CN=CrowdStrike TLS RSA CA G5	E5BFCED9D216EBA7DA3634819FB534FB9CEBA1ECF9E6379ED83583D2EB177C1B	5/1/2024	4/30/2034
C=US, O=DigiCert, Inc., CN=DigiCert Basic EV G5 TLS CN RSA4096 SHA384 2022 CA1	7BAD1EBDE38C5226B5CE118E386775FAFBC4C8A545598D965CD01E97491DEF8F	1/12/2023	1/11/2033
C=US, O=DigiCert, Inc., CN=DigiCert Basic OV G5 TLS CN RSA4096 SHA384 2022 CA1	AFED062E87DF98182AD9BEF7EB13C0E2F2B6698AB4E3F33932A10E286E024E9D	1/12/2023	1/11/2033
C=US, O=DigiCert, Inc., CN=DigiCert G5 TLS CN RSA4096 SHA384 2022 CA1	AB7EF705B0B8DB2291C2BC8DC9F69AD8345A3CC543DB8CDC49A8B419282DEA22	7/12/2022	7/11/2032
C=IE, O=DigiCert Ireland Limited, CN=DigiCert G5 TLS EU RSA4096 SHA384 2022 CA1	4D27EF6357BC929783575C0C8C9340B67FBEFC045FDC263B8C88362E6D3ADB6F	9/15/2022	9/14/2032
C=US, O=DigiCert, Inc., CN=DigiCert G5 TLS RSA4096 SHA384 2021 CA1	EF9296036A6D7C986C8D59DB936093E78E85C70AEDB4FE7A54DDCAA821031C72	2/11/2021	2/10/2031

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=DigiCert, Inc., CN=DigiCert G5 TLS RSA4096 SHA384 2021 CA1	C6270A150691FBE190D831F5139BDFEECF7B298B4FA0CA17306A69D7E91E7BA2	4/14/2021	4/13/2031
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site EV G5 TLS CN RSA4096 SHA384 2022 CA1	65248FA866C854908D0DB045F88CDABC9452553B982AECE6B0D845866B426B7F	1/12/2023	1/11/2033
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site OV G5 TLS CN RSA4096 SHA384 2022 CA1	5534127F056498B4CF1C967365B1DC2D44F33109ABCFA6454F25BEE4F2B65481	1/12/2023	1/11/2033
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site Pro EV G5 TLS CN RSA4096 SHA384 2022 CA1	7A3839D4B8790B197440C94DA687DCEB1A5AC07D936F81ACF40B163364B0A951	1/12/2023	1/11/2033
C=US, O=DigiCert, Inc., CN=DigiCert Secure Site Pro G5 TLS CN RSA4096 SHA384 2022 CA1	AAA627EEDAC466DBC4C7750C87D999588AB4B03E74B9BFDCDA2902DD36DAE0F8	1/12/2023	1/11/2033
C=US, O=DigiCert, Inc., CN=Encryption Everywhere G5 TLS RSA4096 SHA384 2022 CA1	654BF73B2639091FA18F296755B704959F52F67FDF7A65AAF1C315441201A09D	11/3/2022	11/2/2032
C=US, O=DigiCert, Inc., CN=GeoTrust EV G5 TLS CN RSA4096 SHA384 2022 CA1	25026FEBE5324EEACA89376B13EDB96991594112C311120D579364E3CC0442F4	1/12/2023	1/11/2033
C=US, O=DigiCert, Inc., CN=GeoTrust G5 TLS CN RSA4096 SHA384 2022 CA1	2B6D199F7E35C8C67E0BBA829F92991CF31466265E11FA30BD19FC5B6C36151C	7/12/2022	7/11/2032
C=US, O=DigiCert, Inc., CN=GeoTrust G5 TLS RSA4096 SHA384 2022 CA1	0030C68C53FC05237FCC7AB6017D81FEBBA06315526C57F7E72907C87B982B61	5/26/2022	5/25/2032
C=US, O=DigiCert, Inc., CN=RapidSSL G5 TLS RSA4096 SHA384 2022 CA1	BB320985266F61C5D182724F15CEC428A698ED71262B4E097CB11AED8A41AAE6	6/2/2022	6/1/2032
C=US, O=Tesla, Inc., CN=Tesla China Public RSA TLS Issuing CA 2024	7754CAB7C25AD2605A681E3A04187C1E3B3A46F188A8247DC86E02A0FC336F91	3/13/2024	3/12/2034
C=US, O=Tesla, Inc., CN=Tesla Public RSA TLS Issuing CA 2024	32952030B947D80858A87425788518BDF6D94A631D55E20117585C89EBB29197	3/13/2024	3/12/2034
C=US, O=DigiCert, Inc., CN=Thawte G5 TLS CN RSA4096 SHA384 2022 CA1	1E89E3D2702D3F1735DCE7DA99561600534A06454A94874D0780D0443CAF4151	7/12/2022	7/11/2032
C=US, O=DigiCert, Inc., CN=Thawte G5 TLS RSA4096 SHA384 2022 CA1	48569C4FABFF4E3AA22E0E19613E90DA89AA2EE2469B0718695437F5384EDC4C	5/26/2022	5/25/2032
C=US, O=DigiCert, Inc, OU=www.digicert.com, CN=DigiCert Transition Issuing CA G3	25B66390DD425867EC0DE58A6B198F5985BE58A43A4605E1A0B8C6F35B92D7EE	12/8/2017	12/8/2027
C=US, O=Abbott Laboratories Inc., CN=Abbott Laboratories Secure Code Signing CA - G2	481E80747EC14339A968C374B8BDF3FFA6EBB1F38A09E7D01360DE265BE7B90C	11/19/2021	11/18/2036
C=US, O=Government of the District of Columbia, OU=Office of the Chief Technology Officer, CN=DC Government SHA2 EV Intermediate CA	F12241EE34C03A608D34DBC0EA465E1BD1AA13091554F9D4D086253FF3CE83D4	7/13/2017	7/13/2027
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert EV Server CA G4	710024B37BD9F0E1537C18A4C20F9A31C4B485D1248C643F20B4C00F3716BA85	1/17/2017	1/17/2032

Subordinate CA Certificates			
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C=US, O=DigiCert, Inc., CN=DigiCert Trusted G4 AATL RSA4096 SHA384 2022 CA1	D149AF9F74029C8DBD957022BE03707F110DB1E1D0E55DDA11376A8F766D367E	7/21/2022	7/20/2032
C=US, O=DigiCert, Inc., CN=DigiCert Trusted G4 Code Signing Europe RSA4096 SHA256 2023 CA1	E2612327EAF98AF9423EFEA184368E19BF9798D7DCEE0C5CF8E792C8893ED9F0	2/14/2023	2/13/2033
C=US, O=DigiCert, Inc., CN=DigiCert Trusted G4 Code Signing Europe RSA4096 SHA384 2023 CA1	086528D3B9FDB2577D82790E48A003DE74D74E4D8CBC44765F6F924A9D3FFB82	2/14/2023	2/13/2033
C=US, O=DigiCert, Inc., CN=DigiCert Trusted G4 Code Signing RSA4096 SHA256 2021 CA1	47818F36F1DBA7D4F2A29360DB710E9BD75E3B13613618AAD45C01A10626523A	7/28/2021	7/27/2036
C=US, O=DigiCert, Inc., CN=DigiCert Trusted G4 Code Signing RSA4096 SHA384 2021 CA1	46011EDE1C147EB2BC731A539B7C047B7EE93E48B9D3C3BA710CE132BBDFAC6B	4/29/2021	4/28/2036
C=US, O=DigiCert Inc, CN=DigiCert Trusted G4 TLS RSA SHA384 2020 CA1	4F35C6B9C100905FF25BB01C0A20EBE335BCEEF249CE9FFA1E11E062ED66FCD1	9/24/2020	9/23/2030
C=US, O=DigiCert Inc, CN=DigiCert Trusted G4 TLS RSA SHA384 2020 CA1	1E29690F957F64BA9C3658A31055751AACD4B440A9589DFA1D780FE07069DB52	3/30/2021	3/29/2031
C=US, O=DigiCert Inc, CN=DigiCert Trusted Server CA G4	6E8D952FDBABAD8DE3D61E094393739B5A47371A52BDCB2A3C2F8C43622F640F	8/1/2013	8/1/2028
C=DE, O=Deutsche Kreditbank AG, CN=DKB CA 1O1	0E5B8040B3AB60A50D2D5FB11E19AEB2E45B564B335B79D773D42B81D8219C75	2/4/2021	2/3/2031
C=DE, O=Deutsche Kreditbank AG, CN=DKB CA 1O1	D889A2641F5DF941353817C87A5CD0D9CDACED3886240BFBD937329E94D3A45B	3/30/2021	3/29/2031
C=LV, O=EnVers Group SIA, CN=GoGetSSL G4 CS RSA4096 SHA256 2022 CA-1	D5B54EBE9373F451FF0AE7CD6BC6A1FB2BD03EE9C54AB4CA019ACFC14B6E50D6	6/23/2022	6/22/2032
C=DE, O=Henkel AG & Co. KGaA, CN=Henkel Secure E-mail CA G2	0872E14A4E2B7B1BA0DE0B785493E0F4B25E2E584A3F3462F0A1901CB7BBE5F0	5/10/2023	5/9/2033
C=DE, O=Henkel AG & Co. KGaA, CN=Henkel Secure E-mail CA G3	CA365E4C288118297CDC78B4DC01734E2B7A3CAB2CDFED6A2DB7788D3AA39A7C	5/23/2024	5/22/2034
C=US, O=NCC Group, CN=NCC Group Secure Server CA G4	B7DFDC27E5FF9F35EFEC9F4BC532C35F727789B69C90A0489B40247299D97038	7/30/2014	7/30/2029
C=US, O=Riverbed Technology, Inc., CN=Riverbed Certificate Issuer - G2	8EF3DB3C6DD26AE8B6DF5087FDAFE023092CC524F8E0271A45FE9416AEF43854	12/7/2021	12/6/2036
C=US, O=Riverbed Technology, Inc., CN=RVBD ENG Certificate Issuer - G2	AB422C705556BB41DB8663FFBF288B91E16B06EBCEBF5BAD1095B4FACB38FE39	12/7/2021	12/6/2036
C=DE, O=Uniper IT GmbH, CN=Uniper SE SMIME CA	43067D5EF78F7276DF9B23855BF54E8DDB7DEF0D8B79A365573D05627F0A6638	6/29/2023	6/28/2033
C=DE, O=Uniper IT GmbH, CN=Uniper SMIME CA G2	5828E5B8E043088CC15F16753F90D143212A875D1662757A7858D510228F0F3F	5/15/2024	5/14/2034
C=AU, O=Verokey, CN=Verokey High Assurance Secure Code EV	E03E9D15D653BCA7181522B98CBA4311E509FB81BF4FA646DDFA569B001C8E63	3/17/2022	3/16/2037

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=AU, O=Verokey, CN=Verokey High Assurance Verified Business G2	BE89264A58313012B749603C9BEBC3CD7914DB716A49E5E0EA97E43A3883A5DF	3/17/2022	3/16/2032
C=AU, O=Verokey, CN=Verokey Secure Code	3877D964C1983E41940D849D3ABB5EF0C8CA07D430B0DA779067E29FB700797E	3/17/2022	3/16/2037
C=AU, O=Verokey, CN=Verokey Secure Web G3	CB01BEAC6315F30EB675B19CA08DC249E73867B0DAFAB5A5C30631A2372B2E65	7/24/2024	7/23/2034
C=US, O=DigiCert, Inc., CN=DigiCert Verified Mark Europe RSA4096 SHA256 2023 CA1	80EC7C231BEF5810B27F0EC8B4A46D1A7C45CF1C71C483471A28151BEB65B882	3/8/2023	3/7/2038
C=US, O=DigiCert, Inc., CN=DigiCert Verified Mark RSA4096 SHA256 2021 CA1	0F2024A1F5AB051C55369D7353E55255BED427E3EBD6D7C59A212D38361B930A	7/1/2021	6/30/2036
CN=Apple IST CA 8 - G1, OU=Certification Authority, O=Apple Inc., C=US	A4FE7C7F15155F3F0AEF7AAA83CF6E06DEB97CA3F909DF920AC1490882D488ED	6/9/2016	6/8/2031
C=US, O=DigiCert, Inc, OU=www.digicert.com, CN=GeoTrust Primary Issuing CA	F7A84E24E8E0D891548747 21C5B641F48A1EF0FF3B198F53BE021DB53F097BD0	12/8/2017	12/8/2027
C=US, O=Wi-Fi Alliance, CN=WFA Hotspot 2.0 Intermediate CA	AE0D0BA5AC3EEB823F5CA77331A99D7FDB2EC231D7CE47B7C208E3830E08A891	12/9/2013	12/9/2023
C=US, O=Wi-Fi Alliance, CN=WFA Hotspot 2.0 Intermediate CA	FEA342D00D1A355CF51569EF7E0F617ABB0F22D6D1E73DAA11DCB4D407975543	11/25/2013	11/25/2023
C=BE, oid_2.5.4.97=NTRBE-0537698318, O=QuoVadis Trustlink BVBA, CN=QuoVadis Belgium Issuing CA G2	AA0E83B4AE0036679703D1603BC7E63A080464A033AE4B9F465838ADC85C61ED	1/28/2020	1/27/2030
C=NL, oid_2.5.4.97=NTRNL-30237459, O=QuoVadis Trustlink B.V., CN=QuoVadis EU Issuing Certification Authority G4	1D24222B5EEC71FE99BE9D700FA5FF72312DB3EB0FCB4A4F3BCC135DA36C1355	10/7/2019	10/6/2029
C=CH, O=Health Info Net AG, oid_2.5.4.97=NTRCH-CHE-103.489.218, CN=HIN Health Info G3 CH RSA4096 SHA256 2023 CA1	8F474B18C4E49CD8488F950CA17F2AAA7F869C1BBD8E60379AC8A26EBF8EE350	10/25/2023	6/6/2031
C=CH, oid_2.5.4.97=NTRCH-CHE-103.489.218, O=Health Info Net AG, CN=HIN Health Info Net CA G2	3645E0F05E195BE8ECD456E518C8C23C1BB259CD6CF4691F29C744AEF0C11FDD	5/12/2017	5/10/2027
C=CH, O=Berner Kantonalbank AG, OU=Issuing Certification Authority, CN=BEKB BCBE G3 SMIME CH RSA4096 SHA256 2023 CA1	174ED245170A592A7985436B9F590A3E96C134807C4AFDA872BC7E09A49855ED	9/25/2023	9/23/2031
C=DE, O=DigiCert Deutschland GmbH, CN=DigiCert QuoVadis 1G3 ClientAuth RSA4096 SHA256 2023 CA1	FF961F3F4738037D4261612ADA93FDFF5ED00D4681C90B099C7F5E9F4B4AFFA3	10/26/2023	10/23/2033
C=BE, O=DigiCert Europe Belgium B.V., oid_2.5.4.97=NTRBE-0537698318, CN=DigiCert QuoVadis G3 Qualified BE itsme RIV RSA4096 256 2023 CA1	A610AD2025ED0AA84259EBB9289E828267D35082430CBFB5562F3066DEBC2E88	3/14/2023	3/11/2032

![DigiCert logo]

Subordinate CA Certificates			
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C=BE, O=DigiCert Europe Belgium B.V., oid_2.5.4.97=NTRBE-0537698318, CN=DigiCert QuoVadis G3 Qualified BE itsme RSA4096 SHA256 2023 CA1	C0EE0CCED463096DF07D27257AF79C986FF92B678F669C109FFF570F32AB433F	3/14/2023	3/11/2032
C=BE, O=DigiCert Europe Belgium B.V., oid_2.5.4.97=NTRBE-0537698318, CN=DigiCert QuoVadis G3 Qualified BE RSA4096 SHA256 2023 CA1	2CB07880B4E584F366E083791511BB48812FF5164C5BA3BBB3C1688AA456B13C	3/14/2023	3/11/2032
C=CH, O=QuoVadis Trustlink Schweiz AG, oid_2.5.4.97=NTRCH-CHE-112.210.349, CN=DigiCert QuoVadis G3 Qualified CH Reg RSA4096 SHA256 2023 CA1	A9462BF3D725EDF669FF392113E5270E3DE79DB820D792581F07AB4B0ED75064	3/14/2023	3/12/2031
C=CH, O=QuoVadis Trustlink Schweiz AG, oid_2.5.4.97=NTRCH-CHE-112.210.349, CN=DigiCert QuoVadis G3 Qualified CH Reg SP RSA4096 SHA256 2023 CA1	8C44440AA473191A540EC01B17413DE6A904D64D79BB8B30E6D1FC1ADA798F51	3/14/2023	3/12/2031
C=NL, O=QuoVadis Trustlink B.V., oid_2.5.4.97=NTRNL-30237459, CN=DigiCert QuoVadis G3 Qualified Europe RSA4096 SHA256 2023 CA1	B36425F1491B2EE08EC87B69C23EA6A76EBF769C4C34FE3798A4CB9A1990E070	3/14/2023	3/11/2032
C=IE, O=DigiCert Ireland Limited, CN=DigiCert QuoVadis G3 SMIME RSA4096 SHA384 2023 CA1	3C980210C4F0803388C4D9FA9699E19F88FA3B96B3CF68D675808876747A678A	7/27/2023	7/24/2033
C=NL, O=QuoVadis Trustlink B.V., oid_2.5.4.97=NTRNL-30237459, CN=DigiCert QuoVadis G3 TS Europe ECC P256 SHA256 2023 CA1	CE49790DCEB21562949C5270BB02C0F34C7B3861D85F98D1069E20453C426BC5	3/14/2023	3/11/2032
C=NL, O=QuoVadis Trustlink B.V., oid_2.5.4.97=NTRNL-30237459, CN=DigiCert QuoVadis G3 TS Europe RSA4096 SHA256 2023 CA1	8CD1E1AFA9F976519AA252A0C4568B22092A5773D7E2B4631D19DE2B39ABFA3B	3/14/2023	3/11/2032
C=US, O=DigiCert, Inc, CN=DigiCert QuoVadis TLS ICA QV Root CA 1 G3	C42A4D8C0904BB211906F43B441BBBC9B5A003BA3611879FD34AE576F7C2F764	1/6/2021	1/4/2031
C=BE, O=DigiCert Europe Belgium B.V., CN=itsme Sign Issuing CA G2	0B7AF5EB38D90B83C893410EC6714601A4EF6EC5C32B9D1D9AD54FBD38E18AEA	8/31/2020	8/29/2030
C=BE, O=DigiCert Europe Belgium B.V., CN=itsme Sign Issuing CA G2x	B965A4354E7E1FFEDD1F947F13B065819B3A53C6889DC643E1D0D4C514AB68AE	10/5/2020	10/3/2030
C=BE, O=DigiCert Europe Belgium B.V., oid_2.5.4.97=NTRBE-0537698318, CN=QuoVadis Belgium Issuing CA G4	3516BDAB7F57115A7AEB2EBF9C521EF00F04AD891501979BE1EFBF4493409669	8/12/2020	8/10/2029

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=BM, O=QuoVadis Limited, CN=QuoVadis Enterprise Trust CA 1 G3	0531C86F785958939FDC539924D395D1EFA409364E6827D3AB9876311FFB27B0	6/6/2016	6/6/2031
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis Enterprise Trust CA 1 G4	597623E05FD1B591711194EB190590F903A2B73F74CD5E8F787EC528033DAB7F	7/23/2020	7/20/2035
C=NL, O=QuoVadis Trustlink B.V., oid_2.5.4.97=NTRNL-30237459, CN=QuoVadis EU Issuing Certification Authority G6	19B74B7E41CA73465832838A14EB432C4826F1B15DEF42B90AAE9F8FAB8B79B3	8/12/2020	8/10/2029
C=DE, O=QuoVadis Trustlink Deutschland GmbH, CN=QuoVadis Europe Advanced CA G2	EBCD0C73FE44B60E25789419C07B0B234B3F586E092316FB2CBDA39C223224A3	7/22/2020	7/20/2030
C=BM, O=QuoVadis Limited, CN=QuoVadis Issuing CA G5	08204C52ADDAA97A6FDEF702F6CEB4B94E578F8FC1C301C9D5136AB381CFA7D9	10/7/2019	10/4/2029
C=BM, O=QuoVadis Limited, CN=QuoVadis RCA1G3 TLS CA	18BB70EFDA3F91438115C9EB4F333EB4EC68354571E6949195A0A91C9E6FBCD8	10/21/2020	10/19/2030
C=CH, O=QuoVadis Trustlink Schweiz AG, CN=QuoVadis Swiss Advanced CA G4	085A74D4683D0FCCDE44677CFA579B732C9CE2DA6921AD3FE70F814EE7C0BF52	7/22/2020	7/20/2030
C=CH, O=QuoVadis Trustlink Schweiz AG, oid_2.5.4.97=NTRCH-CHE-112.210.349, CN=QuoVadis Swiss Regulated CA G2x	941B8AEE4BCF1EFEB0475FB279FDDDCF37FC5B20F64E842CD9DA0770B157E84D	11/27/2019	11/24/2029
C=CH, O=QuoVadis TrustLink Schweiz AG, CN=QuoVadis Swiss Regulated CA G3	726FB1F3D9FBFE0B4043004A27A43CF65CB214363B093034FC4185C86C9D8B0D	7/27/2020	7/25/2028
C=NL, oid_2.5.4.97=NTRNL-30237459, O=QuoVadis Trustlink B.V., CN=QuoVadis Time-Stamping Authority CA G1	D2BA0BFEC43FA7803860CDE6B3377421B1F563EC124B51D908415B0E937323E6	11/20/2018	11/17/2028
C=NL, O=QuoVadis Trustlink B.V., oid_2.5.4.97=NTRNL-30237459, CN=QuoVadis Time-Stamping Authority CA G2	B9583D4E090E8A6B1B5FD3FD079ABAD2B1EC326E183A4B763473E2ACE04E43CD	10/1/2021	9/29/2031
C=IE, O=DigiCert Ireland Limited, CN=DigiCert QuoVadis 2G3 TLS RSA4096 SHA384 2023 CA1	9163F1910D4944BE32D0D224A79F9FA6B4036E9098795AC81D3DD14CE4FF24D2	12/12/2023	12/11/2033
C=NL, O=QuoVadis Trustlink B.V., oid_2.5.4.97=NTRNL-30237459, CN=DigiCert QuoVadis G3 Qualified TLS RSA4096 SHA256 2023 CA1	FE3CBED838D30BAB900184C1F21A4B27D3211CB5C9257D7E985C2AE43AC6A89F	3/14/2023	3/11/2033
C=US, O=DigiCert, Inc., CN=DigiCert QV EV TLS ICA G1	6A7B2AA3414039A663D5D8BBAB8256A3979A84C332BF5E1EE8F6D0E0ADA84668	3/16/2020	3/14/2030
C=US, O=DigiCert, Inc., CN=DigiCert QV TLS ICA G1	93E33AF7DA3030530D090C9C55762CADE7EAE943F834349D1057A90EB67F306B	3/16/2020	3/14/2030
C=BM, O=QuoVadis Limited, CN=QuoVadis Enterprise Trust CA 2 G3	B6F6559BBCE0A2CC91E507B5D7319E32487EDAE28A063BC73B6405E6C44665B6	9/22/2020	6/6/2031
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis Enterprise Trust CA 2 G4	1E356823FE40C0EAAC29F9ED5463B7B2DB1C088B63EBB05876A2E631C1087798	7/23/2020	7/20/2035

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis Europe EV SSL CA G1	CB6666B32BFF2EFEDCC4187DF149A6D34A5D10B7165B9CFF2A67C0E311AEEED7	7/20/2020	7/18/2030
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis Europe SSL CA G2	B1AAE1BCD555E8A3D1E3DDA8EC84E757C552655344CE3FEEBBAF98E895DBEDAC	7/22/2020	7/20/2030
C=BM, O=QuoVadis Limited, CN=QuoVadis Global SSL ICA G3	161EE5386329B28A27FF405736552A621D5A844A43811E3623E52EEFA0BA840A	11/3/2021	11/2/2026
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis Qualified Web ICA G2	7FEB9374EAB08D392717C647436DAE06176A24C010607FDA1CCE5E5F0106B472	7/22/2020	7/20/2030
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis Qualified Web ICA G3	3F225BDBCD788CE924870CAF92F814B7C6FF4EDABABAD93F1D3A9177252CF1D1	8/28/2020	8/26/2030
C=US, O=DigiCert, Inc, CN=DigiCert QuoVadis TLS ICA QuoVadis Root CA 2	673E8FEEB1168277D0153111D20ED38E9DA51F440BE7FD50B218540937741A48	1/6/2021	1/4/2031
C=US, O=HydrantID (Avalanche Cloud Corporation), CN=HydrantID EV SSL CA G2	60388B773D33E9141648613F36B9149F015A114378BACF3E3694864FFDA426EC	7/21/2020	7/19/2030
C=US, O=HydrantID (Avalanche Cloud Corporation), CN=HydrantID SSL CA G3	AA57F482CBC516B4D10CA4097DD90D99F5AA727D207090D07DA9C36998ABB9AD	9/29/2020	9/27/2030
C=US, O=HydrantID (Avalanche Cloud Corporation), CN=HydrantID SSL ICA G2	9C6D08933201407FBF2B12540B67CC0E4C9666F132E1504762A717CBAE8F3FD6	12/17/2013	12/17/2023
C=US, O=HydrantID (Avalanche Cloud Corporation), CN=HydrantID SSL ICA G2	01453F645CD91E233B7484827F23F8A573FD641029EA8A6BFE549EF4ED8B323D	1/14/2021	12/17/2023
C=BM, O=QuoVadis Limited, CN=QuoVadis Code Signing CA G1	DA0AFAF15CD300E34B520FB78A4FA68EB42C4601E939B903E0B1D71DF5965BFF	5/30/2014	5/30/2024
C=BM, O=QuoVadis Limited, CN=QuoVadis Global SSL ICA G2	E5CD0DD44E1120C79415C84F5369D79AE04F047E80DC0856351AABC232056CA5	5/25/2022	5/24/2027
C=BM, O=QuoVadis Limited, CN=QuoVadis Grid ICA G2	278ECF211E2518E9DD9913AFC583EEB3127C8184BCBEEDAAD7BD64E89E8C4310	9/22/2020	5/23/2026
C=DE, O=Fiducia & GAD IT AG, CN=VR IDENT EV SSL CA 2020	D33A847F640377BE0AE1A429153A07E87C8827FA4840B5158BCDCB85E10A453A	7/22/2020	7/20/2030
C=DE, O=Fiducia & GAD IT AG, CN=VR IDENT SSL CA 2020	347D18DCCC2EFC51A920E7A7FBB07BFBDA35613681F82DCA5C4C72BB0C83C035	7/22/2020	7/20/2030
C=US, O=DigiCert, Inc, CN=DigiCert QuoVadis TLS ICA QV Root CA 3 G3	728E4BD2B399840E9D437AF975B0198910B4129B7AB708CB5C0B445D3B04D999	1/6/2021	1/4/2031
C=US, O=HydrantID (Avalanche Cloud Corporation), CN=HydrantID Client ICA G2	5286AE1C558A81537CD9870F749D96EFABC2D2BA393DF818DFE95EA7CE6450A7	10/7/2019	10/4/2029
C=BM, O=QuoVadis Limited, CN=QuoVadis Enterprise Trust CA 3 G3	DA5462526A0C2E9852A86186B025390158759CDCA6AE21F09F713CA6ACCDD1F1	6/6/2016	6/6/2031
C=NL, O=QuoVadis Trustlink B.V., CN=QuoVadis Enterprise Trust CA 3 G4	31EFF7DF4DDEB71CBDFB08B5C7FC9604A93600251E8917D6960C32BF4C0B5A77	7/23/2020	7/20/2035
C=BM, O=QuoVadis Limited, CN=QuoVadis RCA3G3 TLS CA	ECC0D17AC3263AC6A164DCDB08F82D07E93FCEA723F66B88B06EEBA9678DF2BB	10/21/2020	10/19/2030

Subordinate CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
C=CH, O=Berner Kantonalbank AG, OU=Issuing Certification Authority, CN=BEKB - BCBE Issuing CA G2	B399EFE42C01A05BDC38978447A78E950467793FB11C1B6B426C419A0FC73911	10/10/2013	10/10/2023
C=US, O=DigiCert, Inc, CN=DigiCert QuoVadis TLS ICA QV Root CA 3	D8CC89C6AA6B7452881907927C81E66DA01A7598CF7674E4E2E133F16546D5F0	1/6/2021	1/4/2031
C=BM, O=QuoVadis Limited, CN=QuoVadis RCA3G1 TLS CA	3A66E648212E6321F94D9EABCC92C052E679D992C99AD4596A4E7B85ADCEE5DE	10/21/2020	10/19/2030
C=IE, O=DigiCert Ireland Limited, CN=DigiCert QuoVadis G4 SMIME ECC P384 SHA384 2023 CA1	D80AB934DED2B399A781F270005393D5162A2707B2A007C39A27C740F1E5CE26	12/5/2023	3/13/2033
C=IE, O=DigiCert Ireland Limited, CN=DigiCert QuoVadis G4 SMIME ECC P384 SHA384 2023 CA1	E117CBC55073D91A61E7636FE46184AB8726466A338C2DF109E8A284DE551650	3/16/2023	3/13/2033
C=IE, O=DigiCert Ireland Limited, CN=DigiCert QuoVadis G4 SMIME RSA4096 SHA384 2023 CA1	E234809774CD0125626EA578E36F35740959B61B7790582DFE7828730F818546	12/5/2023	3/13/2033
C=IE, O=DigiCert Ireland Limited, CN=DigiCert QuoVadis G4 SMIME RSA4096 SHA384 2023 CA1	369AE7BD4D9E9E698A6F731D5AC19936AB3859431A502497357FE93ACF01982D	3/16/2023	3/13/2033
C=IE, O=DigiCert Ireland Limited, CN=DigiCert QuoVadis G4 TLS ECC P384 SHA384 2023 CA1	0CAB7DBD736B1BFBE8E63ABE2DD55D64A0805140386DA05FC6E28D4FCF81B9B6	3/16/2023	3/13/2033
C=IE, O=DigiCert Ireland Limited, CN=DigiCert QuoVadis G4 TLS RSA4096 SHA384 2023 CA1	3E8FC16AADA8FCB6F51CA4848BB15F8ABE8DD807F9CEAA4C6CCBE9864F6CE9DE	3/16/2023	3/13/2033
C=NL, O=QuoVadis Trustlink B.V., unknown_2.5.4.97=NTRNL-30237459, CN=DigiCert QuoVadis PKIoverheid Burger CA - 2023	66388EE649CBE920FD949FA9B77E2AA45B5DEC4120B8FFAB371B0C9C5E38C1C1	3/20/2023	11/12/2028
C=NL, O=QuoVadis Trustlink B.V., oid_2.5.4.97=NTRNL-30237459, CN=QuoVadis PKIoverheid Burger CA - 2021	3AC3DB2C474FC34FE8011C5A01F622824C6F8B11076F56192AC701DAE3D70534	2/25/2021	11/12/2028
C=NL, O=QuoVadis Trustlink B.V., unknown_2.5.4.97=NTRNL-30237459, CN=DigiCert QuoVadis PKIoverheid Organisatie Persoon CA - 2023	C8C77ECF368D73214D50D88384464339E6F8E59F34B47E39E7965F4E5787CF1D	3/20/2023	11/12/2028
C=NL, O=QuoVadis Trustlink B.V., unknown_2.5.4.97=NTRNL-30237459, CN=QuoVadis PKIoverheid Organisatie Persoon CA - 2022	56521521E7EA27EAAE33F0095D5B871CDA3AF4A80A62E08594CBAD6EF2806307	1/27/2022	11/12/2028
C=NL, O=QuoVadis Trustlink B.V., oid_2.5.4.97=NTRNL-30237459, CN=QuoVadis PKIoverheid Organisatie Persoon CA - G3	15073C6BBDC74699A88518C27A57C956E5E23D6CA9619E521A468C7873DE4F8A	11/3/2016	11/12/2028

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=NL, O=QuoVadis Trustlink B.V., unknown_2.5.4.97=NTRNL-30237459, CN=QuoVadis PKIoverheid Organisatie Services CA - 2022	B0D9AFDA74163609E4EAB017EEE4CE0B235AEEF7D68C06F86E74C6387999B2B7	1/27/2022	11/12/2028
C=NL, O=QuoVadis Trustlink B.V., oid_2.5.4.97=NTRNL-30237459, CN=QuoVadis PKIoverheid Organisatie Services CA - G3	BECFDE124CEDD344D925CB55EDDA662D9A9C0688FA9A0870CE3DBB6DA4313E4E	11/3/2016	11/12/2028
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Japan Class 1 CA	5077797A1815E482287385898618908BD7ED182D03725F03B02F13BFFD6652F6A	4/15/2014	4/14/2024
C=AU, O=Attorney Generals Department, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Attorney Generals Department Public CA	CEF711147D8B0A1DC5200B8383BED23C1D294F2F89EBFE179D2501EA5E24AB8A	7/21/2015	7/20/2025
C=US, O=Fannie Mae, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Fannie Mae Shared Online CA	D39495B310669DC6BFF57D547C53E3FF9E7B452BB609272C981F514CCA0B146F	12/20/2016	12/19/2026
C=US, O=General Electric Company, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=GE SMIME Issuing CA 2.1	2D53B8177062E4C7CEA79EEBF62BFA52A5B18BC9B89483597E5714E4E9B52315	7/16/2015	7/15/2025
C=US, O=General Electric Company, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=GE SMIME Issuing CA 2.1	6BE39EC9E02D54008A7A716DD35A3D2F0A1FD8F8F34DAE235446150C6F48BC7E	7/16/2015	7/15/2025
C=AU, O=NBN Co Limited, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=NBN Co Limited Public Issuing CA - G2	758F496C9928A3C67E0D50D03D2E2CAAFF733D427E57AB5FEE7D5AC4153C4071	2/10/2015	2/9/2025
C=ZA, O=Nedbank Limited, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Nedbank Limited Public CA	267D014C81E6D02ED5898306B64D7B5EA91BAF9DB3183CF3BC64C25D2B35CAE6	9/10/2015	9/9/2025
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 2 Signing RSA Intermediate CA	66F7B0147C09F9DA79E63800A96F649DA7E59757F876F08126D07E8FB8542488	1/22/2015	1/21/2030
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Japan Class 2 CA	AB62A0A1DE53BA06E771438E5D0526D3D8B0235330C65AA4BF80D855908E2DC4	4/15/2014	4/14/2024
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Japan Class 2 CA	8C82B76FCA9CED6A0C6A7B3141CCB585EC941921EC0B33D956CB29071851C7D9	4/15/2014	4/14/2024

Subordinate CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
C=US, O=United Launch Alliance, LLC, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=ULA CA - G3	232AD338F64E3FC71048E1D6CCC96EA6FD5782274AA96FD618F5425087BA2FFE	8/31/2017	8/30/2027
C=US, O=Veritas Technologies LLC, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Veritas Technologies LLC Class 2 Employee CA	1AB7DCA7F8B28027F2B71FBBA8CB87162FE112C47AC4D09638C8EA01915A177D	9/10/2015	9/9/2025
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 2 Individual Signing RSA CA	4E74475D2C33E1DD4732306B79712B5EE6997C2DBDF596CC8BD1362163DAA4F4	1/22/2015	1/20/2035
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 2 Individual Signing RSA CA	8B9218D93DB5377CFE7D5923E7016D379D446F0019C47B9B4EA737AEDF86A558	1/22/2015	1/20/2030
C=US, O=DigiCert, Inc., CN=DigiCert TLS ICA SYMC PCA3-G4	B1D1244218C903B64EBF42150C5FD891EB5B663CE6F20DD12E8352DD7D1E6693	1/8/2021	1/7/2031
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 ECC 256 bit EV CA - G3	4B2CBA18EFBCE6C3C4A80AAABC952337000CD9346B768D062412A2DED846EDC9	1/7/2016	1/6/2026
C=US, O=DigiCert, Inc., CN=DigiCert TLS ICA SYMC PCA3-G6	FDB351BDA2D821C3DFBB924A12D90D6DC760D5F6200144529E502E467BBF9ECC	1/8/2021	1/7/2031
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 EV SSL CA - G4	31862233620E789330CC893E8B5E66705331B8B88B0ED30A44574D9E0A71C4F1	1/7/2016	1/6/2026
C=US, O=Symantec Corporation, OU=Windows Phone Enterprise Applications, CN=Symantec Enterprise Mobile CA for Microsoft - G2	65E5B094657AA1D7161BA5710F024FE8DDF21ADB6270A20BAE0814183AA85370	5/24/2017	3/13/2032
C=JP, O=Astellas Pharma Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Astellas Global SMIME CA - G2	B2ED9A6D9B6C48DD1494EE0CD4802179F6208C7F75894DE2607E16573BE464AE	4/15/2014	10/22/2022
C=JP, O=Symantec Japan, Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Class2 Individual Certificate Service CA	9268449725E5DE18F8A76548BBEC1F8C845B17387590E1855BFFCA5B02CF6C28	1/22/2015	4/13/2024
C=JP, O=DAIICHI SANKYO COMPANY, LIMITED, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=DAIICHI SANKYO COMPANY Public CA - G2	68361FD0131D79AC91C9939F3E5479CA32E2BE419A7CF519E026F992234509EE	4/15/2014	8/27/2022

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=DigiCert, Inc, OU=www.digicert.com, CN=thawte Primary Issuing CA G3	F6CF5D6FF850D14DB082CC9CF7C056BC60E36B1E54F1CCA3E24BDF393948978D	12/8/2017	12/8/2027
C=US, O=DigiCert, Inc, OU=www.digicert.com, CN=thawte Primary Issuing CA	9A9FC39029ABE132D674D032D199CB8431AAC878DABCE6E9E1AECB81EC99F4CC	12/8/2017	12/8/2027
C=IT, O=Monte Titoli S.P.A., CN=Monte Titoli Public Trust CA G2	6405BB14292E08C440E28186E24F20DB0B4DF93F13D57C4847EA30EA558044B3	8/20/2024	8/12/2034
C=IT, O=Monte Titoli S.P.A., CN=Monte Titoli Public Trust CA	561FB017C53FE711EA356164B3A486E60C369267BA0FBF1B5A6C839AE26EFA7E	7/7/2021	7/6/2031
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Persona Not Validated, CN=Symantec Class 1 Individual Subscriber CA - G5	42A5FBCA2D6AA262FF62333AB78699CE1E4BF1CF5F49F806FD324CBE5BB62CF4	10/1/2015	9/30/2025
C=ZA, O=Absa Bank Limited, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Absa Bank Limited Public CA	02302C4CF831335C9DD145DF91A8C1C703008FD234215D0E187895092BD81AD4	6/8/2017	6/7/2027
C=US, O=Computer Sciences Corporation, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=AGC Public CA	5E71C746D45EBCFD6D2DCE4A2DABCCD9335E3AD8D63B349989341911ECD70E88	11/11/2014	11/10/2024
C=US, O=APX Inc, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=APX Public CA	8B1C10711C007BE2ABF9BF6C79CE5EBD5F8EAC36D50037228237AEFB236BF2A91	4/4/2014	4/3/2024
C=AU, O=ASCIANO EXECUTIVE SERVICES PTY LTD, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Asciano CA	5FC7C6E19AF873E0941D7C6AB344D3E6E4F73DD67693FADFA2DA9C6438AC1A1A	11/3/2015	11/2/2025
C=US, O=ATT Services Inc, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=ATT Services Inc Email Certificates CA - G2	AE7A31EB7007A6F64237387343C083D11950F1D6D546EDDAD8B5AA3DAC30B70C	3/3/2016	3/2/2026
C=US, O=Blue Cross and Blue Shield of Florida, Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Blue Cross and Blue Shield of Florida CA G3	BBCA83E909A956AA38BA04EA5FC6A6A13F99495DA1E23981BE5BEDE03970450A	5/3/2016	5/2/2026
C=US, O=Blue Cross and Blue Shield of Florida, Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Blue Cross Blue Shield of Florida CA G3	30C955BBF62B0E73573DDD9564A51235ED40B3B5BBDD5E9B5561D64F96AD65D6	5/5/2016	5/4/2026

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=Brown Brothers Harriman & Co., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Brown Brothers Harriman G3 CA	B3FAEBD9495096D2C5B26CE20D7DE785DFF83CEA63BF9BC6605BC08B89996224	6/10/2014	6/9/2024
O=CertiSur S.A., OU=Symantec Trust Network, CN=CertiSur Class 2 CA - G3	041E70B7DDDD0F2F90F285C4C71E0E20533312A10773794A21B5791EC8755958	8/18/2015	8/17/2025
C=US, O=City of New York, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=City of New York Office of the Actuary - G2	A3E2E9FDC693C7536CD3A9ABC8E09705C113DD391635C6239BBFF21DA258C96F	6/11/2015	6/10/2025
C=US, O=HP Inc, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Collaboration Certification Authority	B864FF6DE0CB1BEAF6AA5C68DB8769C91F18E1721E22AC3ECDD91C0889D77078	6/11/2015	6/10/2025
C=PE, O=Cosapi Data S.A., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Cosapi Data Public CA - G2	AFCD78EBA95C0801A2FEBAE6F695D469AF346215C5A3E554F161D23C4BB40F91	5/12/2016	5/11/2026
C=US, O=eGlobalCustody, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=eGlobalCustody G3 CA	2DE8DD6BE750435D703D60CF87D203AF12D1E0F2960691888F47546EED9087D6	6/10/2014	6/9/2024
C=DE, O=Heuer und Partner - Rechtsanwälte mbB, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Feddersen Heuer Public CA	A402AA0AE53F484A07BF4E35B55D1274127650AD6145E243B719330B92B2A10A	1/5/2016	1/4/2026
C=AU, O=Fuji Xerox Businessforce Pty. Limited, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Fuji Xerox Businessforce CA - G2	92587CDC27A5C019B413AA94D21944AC8562E8DAA8C78AEA17C623D1B77714DE	6/4/2015	6/3/2025
C=US, O=General Electric Company, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=GE Enterprise SMIME CA 2.1	5C854634778E6DDC076ABAA36E5B8F4F45140578BD3A45AF09B7F23C34F032AD	6/16/2015	6/15/2025
C=US, O=Hewlett Packard Enterprise Company, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Hewlett Packard Enterprise Collaboration CA	2EAA4251B3FFDD3AE904833A08B7FE1E7717C17082455C07F6F6DA902CBAC5D0	3/17/2015	3/16/2025
C=US, O=International Business Machines Corporation, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=IBM Certification Authority G3	CB16C58F10AFFDA46A0FC05BF49F0B707C579EC52E3527EEBA0448F9B8C16E99	11/10/2016	11/9/2026

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=DE, O=LfA Foerderbank Bayern, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=LfA Foerderbank Bayern - G2	315AC96789B49D48A1C420F32F9A4A73F4871AF75A4CA53CF41CE3FB3E2E76FC	6/16/2015	6/15/2025
C=SG, O=National University of Singapore, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=National University of Singapore CA - G2	438BA9C85C9A8C5506ACD1146ADA068B777A32FA2C78A6D4AB57241174881AB2	9/18/2014	9/17/2024
C=FI, O=Nokia Solutions and Networks, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Nokia Solutions and Networks CA	0B5F13974CEB577E1CC39DFFADF616FCF0C17ECA6747201AEBA6AF3BC20CE4F4	10/10/2013	10/9/2023
C=ID, O=PT Astra Daihatsu Motor, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=PT Astra Daihatsu Motor CA	9FF4EC074FE370818B15ABA1BBDCB0A4DBE3F8420A993A7B5176BCC7FB4E4EAD	5/31/2016	5/30/2026
C=DE, O=RWE Dea AG, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=RWE Dea AG CA	7FC6CAB96C16C850F457DCBBFB893539EA2664395F2409693789F41BFD64714E	12/11/2014	12/10/2024
C=US, O=State Street Bank and Trust Company, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=State Street Bank and Trust - Global Markets CA	2C68D776FFD51155D98957A66043F896E2BC69CB1943570389350057A2C70616	7/10/2015	7/9/2025
C=AU, O=Sydney Trains, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Sydney Trains CA	BD80A335B5EBB7279960E0B5802257C256062895F33D3DCBC0B7CB7199DFA75F	11/24/2015	11/23/2025
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Symantec Class 2 Employee CA - G3	2F320624CC3EBC01796080BEDEB5B2ED916F02A0AE5F537EDC4766BC455659DD	1/6/2015	1/5/2025
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Symantec Class 2 MPKI Individual Subscriber CA - G3	A67582B9277224D98010272117156D283136B29FD2F33031781F604EB807970D7	11/15/2016	11/14/2026
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Symantec Class 2 MPKI Individual Subscriber CA - G3	E79BACE9FF58B8EE6D3BD94AE8ADB13DF42DFD86B3701BFF8EDFF5C4E84BAE91	11/15/2016	11/14/2026

Subordinate CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Symantec Class 2 Shared Intermediate Certificate Authority - G2	68E63395029061641385B8AFF77F6D66F2D1FD87A821630D27EC3645C9FE235D	4/23/2015	4/22/2025
C=NO, O=Telenor Norge AS, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Telenor Norge AS EDC CA - G2	BC8EB15B0FEE05D953758E1D2C29A9E7D1E1B5AFD5659AB95E981F6F75BD1D71	9/3/2015	9/2/2025
C=NO, O=Telenor Norge AS, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Telenor Norge AS NF CA - G2	22261C8F0BCD85571AF2F801C47712E6C16DCAE3C7DFC4CD2451D9C538B349D1	9/3/2015	9/2/2025
C=NO, O=Telenor Norge AS, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Telenor Norge AS Test EDC CA - G2	26661F230442332E5F8F109C05A3FAA3EA339C29D22B07B8D1A048C693FA1F0C	9/3/2015	9/2/2025
C=NO, O=Telenor Norge AS, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Telenor Norge AS Test NF CA - G2	597D5A286729E73A324E5665CEE4B97FDD5A9FD14EBA4B903319A16CFC946680	9/3/2015	9/2/2025
C=MU, O=The Mauritius Commercial Bank Limited, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=The Mauritius Commercial Bank Limited CA	0A646FDC704F494A67739A7E99FD74955BB0AF1ABA622CEFE000B39557C5FC81	9/30/2014	9/29/2024
C=US, O=Thomson Reuters Holdings Inc., OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Thomson Reuters - LEDO CA	F5DF7A85240E93C602EE9C6F77C2B126C7A37CED8F34DD714B82C47F31F3544D	12/20/2016	12/19/2026
C=US, O=Thomson Reuters Special Services LLC, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Thomson Reuters Special Services CA	BFC05BC249D92B892CE288A0E85F0E96BB9150F741719D9B73EB41EB89D49241	3/5/2015	3/4/2025
C=US, O=United Launch Alliance, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=ULA CA - G2	4A84F84E880F3D96C3BFBA2AED67B0EE300FBEE0A4A90D736EF738A089FD6B17	4/25/2017	4/24/2027

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=University of Houston, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=University of Houston CA - G2	69FF03E05230DFD61E4D6F6DD6662808C65A85CBE8FEA5E43FBF387128E8B4F4	6/18/2015	6/17/2025
C=US, O=Voya Financial, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Voya Public Issuing CA1	63B7404D57FE17FD7E32DAC98D934EC98AB69F64D03389987193657A64364BE60	3/4/2016	3/3/2026
C=US, O=Yaana Technologies, LLC, OU=Symantec Trust Network, OU=Class 2 Managed PKI Individual Subscriber CA, CN=Yaana	7C73C0E9D52BC63E713110DA4705C7CECCB4D49F1F5FED0B6D1A707E63A4E31C	1/6/2015	1/5/2025
C=US, O=DigiCert, Inc., CN=DigiCert TLS ICA Universal 2021	23EE12A8DA9D38549C54A32BC1E4A18BAF1570488107D169EBD734DFDA330B0E	1/12/2021	1/11/2031
C=US, O=DigiCert, Inc., OU=www.digicert.com, CN=DigiCert TLS ICA VRSN Universal	BA5B6E5DFEBDAE1C80BD72790BC85BCC6538AB4613023DA706CE826415F5E5B3	1/17/2019	1/16/2029
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Domain Validated SSL, CN=Symantec Basic DV SSL CA - G2	DFF583E3A1ED35E57D95104817AD823C055FB9071CD400435B5FC74E692081DB	6/7/2016	6/6/2026
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 Extended Validation Code Signing CA - G3	C267DC115D57DD0226279B346DF1953DD2C07A85CB48A0D899FD5724F5AF681F	5/12/2016	5/11/2026
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Class 3 SHA256 Code Signing CA - G2	2042E38FC57388F1DB3222C7AB5BE11C6EDB7E454BF45487AE44FF2D6A2B7645	7/22/2014	7/21/2024
C=US, O=Symantec Corporation, OU=Symantec Trust Network, OU=Universal Root Managed PKI Individual Subscriber CA, CN=Symantec Shared Individual Email Certificate Authority	B7021BCF346E8502B1275F80057F3B97467AC8B8A761608340ECF8484EC3848C	8/22/2017	8/21/2027
C=CN, O=TrustAsia Technologies, Inc., OU=Symantec Trust Network, OU=Domain Validated SSL, CN=TrustAsia DV SSL CA - G6	B90E17AB4B8778B10F9F28CBAA7664DE2EE3D66E1AFC574D168EDD24A10339FF	8/11/2016	8/10/2026
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Cybertrust Japan Issuing CA-1	87942388D29A46C06FE1E56AAB791594D0FB2E8EABF124048F130EEA9BEDD3FD	9/1/2016	9/1/2026
C=US, O=DigiCert, Inc., CN=DigiCert Omni TLS RSA4096 SHA256 2022 CA1	632ABAFBCDD7E86A19EDCB404332A9003A0478D75D58D86AAA776570B1D874E9	8/1/2022	7/31/2032

Tel: 314-889-1100   101 S Hanley Rd, Suite 800
Fax: 314-889-1101   St. Louis, MO 63105
www.bdo.com

REPORT OF THE INDEPENDENT ACCOUNTANT

To the management of DigiCert Ireland Limited ("DigiCert" or "QuoVadis"):

Scope

We have examined DigiCert management's assertion, that for its Certification Authority ("CA") operations in the locations in the Netherlands, Switzerland, the United States, Ireland, Belgium and Germany, for its CAs enumerated in Attachment B, DigiCert has:

- disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in the applicable versions of its QuoVadis Root CA 1 G3 / QuoVadis Root CA 3 / QuoVadis Root CA 3 G3 Certificate Policy/Certificate Practice Statement ("Root CA 3 CP/CPS"), QuoVadis Root CA 2 and Root CA 2 G3 Certification Policy/ Certification Practice Statement ("Root CA 2 CP/CPS") and DigiCert Europe/QuoVadis Certificate Policy/Certification Practices Statement ("QV CP/CPS") as enumerated in Attachment A

- maintained effective controls to provide reasonable assurance that DigiCert provides its services in accordance with applicable version of its Root CA 3 CP/CPS, Root CA 2 CP/CPS and QV CP/CPS as enumerated in Attachment A

- maintained effective controls to provide reasonable assurance that:
  - o the integrity of keys and certificates it manages is established and protected throughout their lifecycles;
  - o the integrity of subscriber keys and certificates it manages is established and protected throughout their lifecycles;
  - o subscriber information is properly authenticated (for the registration activities performed by DigiCert); and
  - o subordinate CA certificate requests are accurate, authenticated, and approved

- maintained effective controls to provide reasonable assurance that:
  - o logical and physical access to CA systems and data is restricted to authorized individuals;
  - o the continuity of key and certificate management operations is maintained; and
  - o CA systems development, maintenance, and operations are properly authorized and performed to maintain CA systems integrity

throughout the period September 1, 2023 to August 31, 2024, based on the WebTrust Principles and Criteria for Certification Authorities v2.2.2.

DigiCert does not escrow its CA keys, does not provide subscriber key generation services, subscriber key storage and recovery services, integrated circuit card lifecycle management

services and does not provide certificate suspension services. Accordingly, our examination did not extend to controls that would address those criteria.

Certification Authority's Responsibilities

DigiCert's management is responsible for its assertion, including the fairness of its presentation, and the provision of its described services in accordance with the WebTrust Principles and Criteria for Certification Authorities v2.2.2.

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 DigiCert 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 unauthorized 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 DigiCert's services other than its CA operations in the locations in the Netherlands, Switzerland, the United States, Ireland, Belgium and Germany, nor the suitability of any of DigiCert's services for any customer's intended purpose.

Other Matters

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

	Matter Topic	Matter Description
1	Certificate Content	DigiCert disclosed in Mozilla Bug #1853463 that it misissued two (2) S/MIME certificates with a non-compliant organisationIdentifier.
		DigiCert disclosed in Mozilla Bug #1888016 that it issued one (1) EV SSL certificate with no CPS URI in the Certificate Policies extension.
2	Physical Access Termination	DigiCert disclosed in Mozilla Bug #1918467 that during the engagement period, one (1) trusted role employee did not have their data center access disabled within 24 hours of termination.
3	Systems Development, Maintenance, and Change Management	DigiCert did not have systematic controls in place to provide reasonable assurance that unauthorized system changes could not be made by a single approver administrator in the legacy Certificate System, Trustlink.
		DigiCert did not have monitoring in place to continuously monitor, detect and alert personnel to any unauthorized modifications to the legacy Certificate System, Trustlink.

While the DigiCert assertion notes all issues disclosed on Bugzilla from September 1, 2023 through the date of this report, we have only noted those instances relevant to the CAs enumerated in Attachment B and applicable to the WebTrust Principles and Criteria for Certification Authorities v2.2.2.

Use of the WebTrust Seal

DigiCert's use of the WebTrust for Certification Authorities 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 to provide any additional assurance.

BDO USA

November 27, 2024

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

Certificate Policy/Certificate Practice Statement[1]

Policy Name	Version	Effective Date
DigiCert Europe / QuoVadis Certificate Policy/Certification Practices Statement	5.2	March 1, 2024
DigiCert Europe / QuoVadis Certificate Policy/Certification Practices Statement	5.1	December 15, 2023
DigiCert Europe / QuoVadis Certificate Policy/Certification Practices Statement	5.0	November 22, 2023

Root CA and Root CA 3 Certificate Policy/Certificate Practice Statement

Policy Name	Version	Effective Date
QuoVadis Root CA 1 G3 / QuoVadis Root CA 3 / QuoVadis Root CA 3 G3 Certificate Policy/Certificate Practice Statement	4.43	August 1, 2023

Root CA 2 Certificate Policy/Certification Practice Statements

Policy Name	Version	Effective Date
QuoVadis Root CA 2 and Root CA 2 G3 Certification Policy/ Certification Practice Statement	2.21	June 9, 2023

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[1] Effective November 22, 2023, the QuoVadis Root CA 1 G3 / QuoVadis Root CA 3 / QuoVadis Root CA 3 G3 Certificate Policy/Certificate Practice Statement and QuoVadis Root CA 2 and Root CA 2 G3 Certification Policy/ Certification Practice Statement combined into the DigiCert Europe / QuoVadis Certificate Policy/Certification Practices Statement.

ATTACHMENT B - LIST OF CAs IN SCOPE

Root CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
CN = QuoVadis Root CA 1 G3 O = QuoVadis Limited C = BM	8A866FD1B276B57E578E921C65828A2BED58E9F2F288054134B7F1F4BFC9CC74	1/12/2012	1/12/2042
CN = QuoVadis Client RSA 4096 Root G4 O = QuoVadis Trustlink B.V. C = NL	80AC91FA891C79723A61ABC77F86E19905A92DA27E51695CA0C0B66C1C039BF2	3/16/2023	3/9/2048
CN = QuoVadis Client ECC P384 Root G4 O = QuoVadis Trustlink B.V. C = NL	D3C07AC44BD8FF1975BC62F1C7E9840EA8E188A4BA51133B8C4EFF05E34A2729	3/16/2023	3/9/2048
CN = QuoVadis Signing ECC P384 Root G4 O = QuoVadis Trustlink B.V. C = NL	771535D43D4633BD307EB7B8A3966B5DF00707C088089920080C1AE6D3CB0F68	3/16/2023	3/9/2048
CN = QuoVadis Signing RSA 4096 Root G4 O = QuoVadis Trustlink B.V. C = NL	9F8E6DB31E740285E0C2C2DEB09E442BDD4E74BDEEAE2962BC82D1ECB9F39855	3/16/2023	3/9/2048
CN = QuoVadis SMIME ECC P384 Root G4 O = QuoVadis Trustlink B.V. C = NL	83FDDB2FD9DAE3B21EEBD33CF46251D746F0D6102B683150DD7B98AD8E4BB9F8	3/16/2023	3/9/2048
CN = QuoVadis SMIME RSA 4096 Root G4 O = QuoVadis Trustlink B.V. C = NL	5232A304AA4A10CFE6C47842EA3381CB31D619E24F58126D534CD50C5CE7845D	3/16/2023	3/9/2048
CN = QuoVadis TLS ECC P384 Root G4 O = QuoVadis Trustlink B.V. C = NL	6E1FD3AE0D2D477C8F5EE5F335CC5B6356872654E5356A73D8C0A30A17C252A2	3/16/2023	3/9/2048
CN = QuoVadis TLS RSA 4096 Root G4 O = QuoVadis Trustlink B.V. C = NL	C8A2D38A24F5AC302D8A08EBD38923D9A750B49220F092E82D1C53249E1533D0	3/16/2023	3/9/2048
CN = QuoVadis Root CA 2 O = QuoVadis Limited C = BM	85A0DD7DD720ADB7FF05F83D542B209DC7FF4528F7D677B18389FEA5E5C49E86	11/24/2006	11/24/2031
CN = QuoVadis Root CA 2 G3 O = QuoVadis Limited C = BM	8FE4FB0AF93A4D0D67DB0BEBB23E37C71BF325DCBCDD240EA04DAF58B47E1840	1/12/2012	1/12/2042
CN = QuoVadis Root CA 3 O = QuoVadis Limited C = BM	18F1FC7F205DF8ADDDEB7FE007DD57E3AF375A9C4D8D73546BF4F1FED1E18D35	11/24/2006	11/24/2031
CN = QuoVadis Root CA 3 G3 O = QuoVadis Limited C = BM	88EF81DE202EB018452E43F864725CEA5FBD1FC2D9D205730709C5D8B8690F46	1/12/2012	1/12/2042

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
CN = HydrantID EV SSL CA G2 O = HydrantID (Avalanche Cloud Corporation) C = US	60388B773D33E9141648613F36B9149F015A114378BACF3E3694864FFDA426EC	7/21/2020	7/19/2030
CN = HydrantID SSL CA G3 O = HydrantID (Avalanche Cloud Corporation) C = US	AA57F482CBC516B4D10CA4097DD90D99F5AA727D207090D07DA9C36998ABB9AD	9/29/2020	9/27/2030
CN = QuoVadis Grid ICA G2 O = QuoVadis Limited C = BM	278ECF211E2518E9DD9913AFC583EEB3127C8184BCBEEDAAD7BD64E89E8C4310	9/22/2020	5/23/2026
CN = itsme Sign Issuing CA G2x O = DigiCert Europe Belgium B.V. C = BE	B965A4354E7E1FFEDD1F947F13B065819B3A53C6889DC643E1D0D4C514AB68AE	10/5/2020	10/3/2030
CN = QuoVadis Qualified Web ICA G2 O = QuoVadis Trustlink B.V. C = NL	7FEB9374EAB08D392717C647436DAE06176A24C010607FDA1CCE5E5F0106B472	7/22/2020	7/20/2030
CN = QuoVadis Global SSL ICA G2 O = QuoVadis Limited C = BM	F67C23EF7BF7412809DB6B1DD3D44A08D3754D99CABA6A13F7A05C7249089C89	9/22/2020	6/1/2023
CN = VR IDENT EV SSL CA 2020 O = Fiducia & GAD IT AG C = DE	D33A847F640377BE0AE1A429153A07E87C8827FA4840B5158BCDCB85E10A453A	7/22/2020	7/20/2030
CN = QuoVadis Swiss Regulated CA G3 O = QuoVadis TrustLink Schweiz AG C = CH	726FB1F3D9FBFE0B4043004A27A43CF65CB214363B093034FC4185C86C9D8B0D	7/27/2020	7/25/2028
CN = QuoVadis Europe Advanced CA G2 O = QuoVadis Trustlink Deutschland GmbH C = DE	EBCD0C73FE44B60E25789419C07B0B234B3F586E092316FB2CBDA39C223224A3	7/22/2020	7/20/2030
CN = QuoVadis RCA1G3 TLS CA O = QuoVadis Limited C = BM	18BB70EFDA3F91438115C9EB4F333EB4EC68354571E6949195A0A91C9E6FBCD8	10/21/2020	10/19/2030
CN = DigiCert QV EV TLS ICA G1 O = DigiCert, Inc. C = US	6A7B2AA3414039A663D5D8BBAB8256A3979A84C332BF5E1EE8F6D0E0ADA84668	3/16/2020	3/14/2030
CN = QuoVadis Issuing CA G5 O = QuoVadis Limited C = BM	08204C52ADDAA97A6FDEF702F6CEB4B94E578F8FC1C301C9D5136AB381CFA7D9	10/7/2019	10/4/2029
CN = QuoVadis RCA3G3 TLS CA O = QuoVadis Limited C = BM	ECC0D17AC3263AC6A164DCDB08F82D07E93FCEA723F66B88B06EEBA9678DF2BB	10/21/2020	10/19/2030
CN = QuoVadis Enterprise Trust CA 1 G4 O = QuoVadis Trustlink B.V. C = NL	597623E05FD1B591711194EB190590F903A2B73F74CD5E8F787EC528033DAB7F	7/23/2020	7/20/2035
CN = QuoVadis Europe SSL CA G2 O = QuoVadis Trustlink B.V. C = NL	B1AAE1BCD555E8A3D1E3DDA8EC84E757C552655344CE3FEEBBAF98E895DBEDAC	7/22/2020	7/20/2030

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
CN = QuoVadis RCA3G1 TLS CA O = QuoVadis Limited C = BM	3A66E648212E6321F94D9EABCC92C052E679D992C99AD4596A4E7B85ADCEE5DE	10/21/2020	10/19/2030
CN = QuoVadis Qualified Web ICA G3 O = QuoVadis Trustlink B.V. C = NL	3F225BDBCD788CE924870CAF92F814B7C6FF4EDABABAD93F1D3A9177252CF1D1	8/28/2020	8/26/2030
CN = BT Class 2 DigiCert PKI Platform CA O = British Telecommunications plc C = GB	843782303040BFB33576766E1700696DE0FC14887BE293D7265EB59ECE4ED9CC	8/6/2019	6/6/2031
CN = QuoVadis Time-Stamping Authority CA G1 O = QuoVadis Trustlink B.V. 2.5.4.97 = NTRNL-30237459 C = NL	D2BA0BFEC43FA7803860CDE6B3377421B1F563EC124B51D908415B0E937323E6	11/20/2018	11/17/2028
CN = HydrantID Client ICA G2 O = HydrantID (Avalanche Cloud Corporation) C = US	5286AE1C558A81537CD9870F749D96EFABC2D2BA393DF818DFE95EA7CE6450A7	10/7/2019	10/4/2029
CN = DigiCert QV TLS ICA G1 O = DigiCert, Inc. C = US	93E33AF7DA3030530D090C9C55762CADE7EAE943F834349D1057A90EB67F306B	3/16/2020	3/14/2030
CN = QuoVadis Enterprise Trust CA 3 G3 O = QuoVadis Limited C = BM	DA5462526A0C2E9852A86186B025390158759CDCA6AE21F09F713CA6ACCDD1F1	6/6/2016	6/6/2031
CN = QuoVadis Enterprise Trust CA 1 G3 O = QuoVadis Limited C = BM	0531C86F785958939FDC539924D395D1EFA409364E6827D3AB9876311FFB27B0	6/6/2016	6/6/2031
CN = QuoVadis Belgium Issuing CA G4 2.5.4.97 = NTRBE-0537698318 O = DigiCert Europe Belgium B.V. C = BE	3516BDAB7F57115A7AEB2EBF9C521EF00F04AD891501979BE1EFBF4493409669	8/12/2020	8/10/2029
CN = QuoVadis Europe EV SSL CA G1 O = QuoVadis Trustlink B.V. C = NL	CB6666B32BFF2EFEDCC4187DF149A6D34A5D10B7165B9CFF2A67C0E311AEEED7	7/20/2020	7/18/2030
CN = VR IDENT SSL CA 2020 O = Fiducia & GAD IT AG C = DE	347D18DCCC2EFC51A920E7A7FBB07BFBDA35613681F82DCA5C4C72BB0C83C035	7/22/2020	7/20/2030
CN = QuoVadis Enterprise Trust CA 2 G4 O = QuoVadis Trustlink B.V. C = NL	1E356823FE40C0EAAC29F9ED5463B7B2DB1C088B63EBB05876A2E631C1087798	7/23/2020	7/20/2035
CN = itsme Sign Issuing CA G2 O = DigiCert Europe Belgium B.V. C = BE	0B7AF5EB38D90B83C893410EC6714601A4EF6EC5C32B9D1D9AD54FBD38E18AEA	8/31/2020	8/29/2030
CN = QuoVadis Enterprise Trust CA 3 G4 O = QuoVadis Trustlink B.V. C = NL	31EFF7DF4DDEB71CBDFB08B5C7FC9604A93600251E8917D6960C32BF4C0B5A77	7/23/2020	7/20/2035

Subordinate CA Certificates

Subject DN	SHA2 Thumbprint	Valid From	Valid To
CN = QuoVadis Code Signing CA G1 O = QuoVadis Limited C = BM	DA0AFAF15CD300E34B520FB78A4FA68EB42C4601E939B903E0B1D71DF5965BFF	5/30/2014	5/30/2024
CN = QuoVadis Swiss Regulated CA G2x 2.5.4.97 = NTRCH-CHE-112.210.349 O = QuoVadis Trustlink Schweiz AG C = CH	941B8AEE4BCF1EFEB0475FB279FDDDCF37FC5B20F64E842CD9DA0770B157E84D	11/27/2019	11/24/2029
CN = QuoVadis Enterprise Trust CA 2 G3 O = QuoVadis Limited C = BM	B6F6559BBCE0A2CC91E507B5D7319E32487EDAE28A063BC73B6405E6C44665B6	9/22/2020	6/6/2031
CN = QuoVadis EU Issuing Certification Authority G4 O = QuoVadis Trustlink B.V. 2.5.4.97 = NTRNL-30237459 C = NL	1D24222B5EEC71FE99BE9D700FA5FF72312DB3EB0FCB4A4F3BCC135DA36C1355	10/7/2019	10/6/2029
CN = BEKB - BCBE Issuing CA G2 OU = Issuing Certification Authority O = Berner Kantonalbank AG C = CH	B399EFE42C01A05BDC38978447A78E950467793FB11C1B6B426C419A0FC73911	10/10/2013	10/10/2023
CN = QuoVadis EU Issuing Certification Authority G6 2.5.4.97 = NTRNL-30237459 O = QuoVadis Trustlink B.V. C = NL	19B74B7E41CA73465832838A14EB432C4826F1B15DEF42B90AAE9F8FAB8B79B3	8/12/2020	8/10/2029
CN = QuoVadis Swiss Advanced CA G4 O = QuoVadis Trustlink Schweiz AG C = CH	085A74D4683D0FCCDE44677CFA579B732C9CE2DA6921AD3FE70F814EE7C0BF52	7/22/2020	7/20/2030
CN = HIN Health Info Net CA G2 O = Health Info Net AG 2.5.4.97 = NTRCH-CHE-103.489.218 C = CH	3645E0F05E195BE8ECD456E518C8C23C1BB259CD6CF4691F29C744AEF0C11FDD	5/12/2017	5/10/2027
CN = QuoVadis Belgium Issuing CA G2 O = QuoVadis Trustlink BVBA 2.5.4.97 = NTRBE-0537698318 C = BE	AA0E83B4AE0036679703D1603BC7E63A080464A033AE4B9F465838ADC85C61ED	1/28/2020	1/27/2030
CN = HydrantID SSL ICA G2 O = HydrantID (Avalanche Cloud Corporation) C = US	9C6D08933201407FBF2B12540B67CC0E4C9666F132E1504762A717CBAE8F3FD6	12/17/2013	12/17/2023
CN = HydrantID SSL ICA G2 O = QuoVadis Limited C = BM	01453F645CD91E233B7484827F23F8A573FD641029EA8A6BFE549EF4ED8B323D	1/14/2021	12/17/2023
CN = QuoVadis Global SSL ICA G3 O = QuoVadis Limited C = BM	161EE5386329B28A27FF405736552A621D5A844A43811E3623E52EEFA0BA840A	11/3/2021	11/2/2026

Subordinate CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
CN = QuoVadis Time-Stamping Authority CA G2 O = QuoVadis Limited C = CH	B9583D4E090E8A6B1B5FD3FD079ABAD2B1EC326E183A4B763473E2ACE04E43CD	10/1/2021	9/29/2031
CN=QuoVadis Global SSL ICA G2 O=QuoVadis Limited C=BM	E5CD0DD44E1120C79415C84F5369D79AE04F047E80DC0856351AABC232056CA5	5/25/2022	5/24/2027
CN = DigiCert QuoVadis G4 TLS ECC P384 SHA384 2023 CA1 O = DigiCert Ireland Limited C = IE	0CAB7DBD736B1BFBE8E63ABE2DD55D64A0805140386DA05FC6E28D4FCF81B9B6	3/16/2023	3/13/2033
CN = BEKB - BCBE Issuing CA G2 OU = Issuing Certification Authority O = Berner Kantonalbank AG C = CH	474D298059F15BC5319B4A94D38AAFADBF627CC09513FCD9362CD89C2F9B6221	2/7/2023	11/24/2031
CN = DigiCert QuoVadis G3 TS Europe RSA4096 SHA256 2023 CA1 2.5.4.97 = NTRNL-30237459 O = QuoVadis Trustlink B.V. C = NL	8CD1E1AFA9F976519AA252A0C4568B22092A5773D7E2B4631D19DE2B39ABFA3B	3/14/2023	3/11/2032
CN = DigiCert QuoVadis G3 TS Europe ECC P256 SHA256 2023 CA1 2.5.4.97 = NTRNL-30237459 O = QuoVadis Trustlink B.V. C = NL	CE49790DCEB21562949C5270BB02C0F34C7B3861D85F98D1069E20453C426BC5	3/14/2023	3/11/2032
CN = DigiCert QuoVadis G3 Qualified TLS RSA4096 SHA256 2023 CA1 2.5.4.97 = NTRNL-30237459 O = QuoVadis Trustlink B.V. C = NL	FE3CBED838D30BAB900184C1F21A4B27D3211CB5C9257D7E985C2AE43AC6A89F	3/14/2023	3/11/2033
CN = DigiCert QuoVadis G3 Qualified Europe RSA4096 SHA256 2023 CA1 2.5.4.97 = NTRNL-30237459 O = QuoVadis Trustlink B.V. C = NL	B36425F1491B2EE08EC87B69C23EA6A76EBF769C4C34FE3798A4CB9A1990E070	3/14/2023	3/11/2032
CN = DigiCert QuoVadis G3 Qualified CH Reg SP RSA4096 SHA256 2023 CA1 2.5.4.97 = NTRCH-CHE-112.210.349 O = QuoVadis Trustlink Schweiz AG C = CH	8C44440AA473191A540EC01B17413DE6A904D64D79BB8B30E6D1FC1ADA798F51	3/14/2023	3/12/2031
CN = DigiCert QuoVadis G3 Qualified CH Reg RSA4096 SHA256 2023 CA1 2.5.4.97 = NTRCH-CHE-112.210.349 O = QuoVadis Trustlink Schweiz AG C = CH	A9462BF3D725EDF669FF392113E5270E3DE79DB820D792581F07AB4B0ED75064	3/14/2023	3/12/2031

Subordinate CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
CN = DigiCert QuoVadis G3 Qualified BE RSA4096 SHA256 2023 CA1 2.5.4.97 = NTRBE-0537698318 O = DigiCert Europe Belgium B.V. C = BE	2CB07880B4E584F366E083791511BB48812FF5164C5BA3BBB3C1688AA456B13C	3/14/2023	3/11/2032
CN = DigiCert QuoVadis G3 Qualified BE itsme RSA4096 SHA256 2023 CA1 2.5.4.97 = NTRBE-0537698318 O = DigiCert Europe Belgium B.V. C = BE	C0EE0CCED463096DF07D27257AF79C986FF92B678F669C109FFF570F32AB433F	3/14/2023	3/11/2032
CN = DigiCert QuoVadis G3 Qualified BE itsme RIV RSA4096 256 2023 CA1 2.5.4.97 = NTRBE-0537698318 O = DigiCert Europe Belgium B.V. C = BE	A610AD2025ED0AA84259EBB9289E828267D35082430CBFB5562F3066DEBC2E88	3/14/2023	3/11/2032
CN = DigiCert QuoVadis G3 SMIME RSA4096 SHA384 2023 CA1 O = DigiCert Ireland Limited C = IE	3C980210C4F0803388C4D9FA9699E19F88FA3B96B3CF68D675808876747A678A	7/27/2023	7/24/2033
CN = BEKB BCBE G3 SMIME CH RSA4096 SHA256 2023 CA1 OU = Issuing Certification Authority O = Berner Kantonalbank AG C = CH	174ED245170A592A7985436B9F590A3E96C134807C4AFDA872BC7E09A49855ED	9/25/2023	9/23/2031
CN = DigiCert QuoVadis G4 TLS RSA4096 SHA384 2023 CA1 O = DigiCert Ireland Limited C = IE	3E8FC16AADA8FCB6F51CA4848BB15F8ABE8DD807F9CEAA4C6CCBE9864F6CE9DE	3/16/2023	3/13/2033
CN = DigiCert QuoVadis G4 SMIME RSA4096 SHA384 2023 CA1 O = DigiCert Ireland Limited C = IE	E234809774CD0125626EA578E36F35740959B61B7790582DFE7828730F818546	12/5/2023	3/13/2033
CN = DigiCert QuoVadis G4 SMIME ECC P384 SHA384 2023 CA1 O = DigiCert Ireland Limited C = IE	D80AB934DED2B399A781F270005393D5162A2707B2A007C39A27C740F1E5CE26	12/5/2023	3/13/2033
CN = DigiCert QuoVadis G4 SMIME RSA4096 SHA384 2023 CA1 O = DigiCert Ireland Limited C = IE	369AE7BD4D9E9E698A6F731D5AC19936AB3859431A502497357FE93ACF01982D	3/16/2023	3/13/2033
CN = DigiCert QuoVadis G4 SMIME ECC P384 SHA384 2023 CA1 O = DigiCert Ireland Limited C = IE	E117CBC55073D91A61E7636FE46184AB8726466A338C2DF109E8A284DE551650	3/16/2023	3/13/2033

Subordinate CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
CN = DigiCert QuoVadis G4 TLS ECC P384 SHA384 2023 CA1 O = DigiCert Ireland Limited C = IE	35A5B2730439D225E04080412EC01031F22F3902B84670E7B44F699F9701F050	3/16/2023	3/13/2033
CN = QuoVadis Private TLS ECC P384 Root G4 O = QuoVadis Trustlink B.V. C = NL	B421FEE95C6D9F034E89CF51E92F4A54EB9ECC15757008179F9EF0A417B76317	3/16/2023	3/9/2048
CN = QuoVadis Private TLS RSA 4096 Root G4 O = QuoVadis Trustlink B.V. C = NL	A20FE0B76EED3D700661E24EE8619C08BF989716A50CE911C2CEA354A9CFBF8B	3/16/2023	3/9/2048

DIGICERT IRELAND LIMITED MANAGEMENT'S ASSERTION

DigiCert Ireland Limited ("DigiCert" or "QuoVadis") operates the Certification Authority ("CA") services for its CAs enumerated in Attachment B and provides the following CA services:

- Subscriber registration
- Certificate renewal
- Certificate rekey
- Certificate issuance
- Certificate distribution
- Certificate revocation
- Certificate validation
- Subordinate CA certification and cross-certification

The management of DigiCert is responsible for establishing and maintaining effective controls over its CA operations, including its CA business practices disclosure on its repository, CA business practices management, CA environmental controls, CA key lifecycle management controls, subscriber key lifecycle management controls, certificate lifecycle management controls, and subordinate CA 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 DigiCert's CA operations. Furthermore, because of changes in conditions, the effectiveness of controls may vary over time.

DigiCert management has assessed its disclosures of its certificate practices and controls over its CA services. Based on that assessment, in DigiCert management's opinion, in providing its CA services in the locations in the Netherlands, Switzerland, the United States, Ireland, Belgium and Germany, DigiCert has:

- disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in the applicable versions of its QuoVadis Root CA 1 G3 / QuoVadis Root CA 3 / QuoVadis Root CA 3 G3 Certificate Policy/Certificate Practice Statement ("Root CA 3 CP/CPS"), QuoVadis Root CA 2 and Root CA 2 G3 Certification Policy/ Certification Practice Statement ("Root CA 2 CP/CPS") and DigiCert Europe/QuoVadis Certificate Policy/Certification Practices Statement ("QV CP/CPS") as enumerated in Attachment A

- maintained effective controls to provide reasonable assurance that DigiCert provides its services in accordance with applicable version of its Root CA 3 CP/CPS, Root CA 2 CP/CPS and QV CP/CPS as enumerated in Attachment A

- maintained effective controls to provide reasonable assurance that:

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- o the integrity of keys and certificates it manages is established and protected throughout their lifecycles;
- o the integrity of subscriber keys and certificates it manages is established and protected throughout their lifecycles;
- o subscriber information is properly authenticated (for the registration activities performed by DigiCert); and
- o subordinate CA certificate requests are accurate, authenticated, and approved

- maintained effective controls to provide reasonable assurance that:
  - o logical and physical access to CA systems and data is restricted to authorized individuals;
  - o the continuity of key and certificate management operations is maintained; and
  - o CA systems development, maintenance, and operations are properly authorized and performed to maintain CA systems integrity

throughout the period September 1, 2023 to August 31, 2024, based on WebTrust Principles and Criteria for Certification Authorities v2.2.2, including the following:

CA Business Practices Disclosure
- Certificate Practice Statement (CPS)

CA Business Practices Management
- Certification Practice Statement Management

CA Environmental Controls
- Security Management
- Asset Classification and Management
- Personnel Security
- Physical and Environmental Security
- Operations Management
- System Access Management
- System Development, Maintenance, and Change Management
- Disaster Recovery, Backups, and Business Continuity Management
- Monitoring and Compliance
- Audit Logging

CA Lifecycle Management Controls
- CA Key Generation
- CA Key Storage, Backup, and Recovery
- CA Public Key Distribution
- CA Key Usage
- CA Key Archival
- CA Key Destruction
- CA Key Compromise
- CA Cryptographic Hardware Lifecycle Management

- CA Key Transportation
- CA Key Migration

Subscriber Key Lifecycle Management Controls
- Requirements for Subscriber Key Management

Certificate Lifecycle Management Controls
- Subscriber Registration
- Certificate Renewal
- Certificate Rekey
- Certificate Issuance
- Certificate Distribution
- Certificate Revocation
- Certificate Validation

Subordinate CA Certificate and Cross Certificate Lifecycle Management Controls
- Subordinate CA Certificate and Cross Certificate Lifecycle Management

DigiCert does not escrow its CA keys, does not provide subscriber key generation services, subscriber key storage and recovery services, integrated circuit card lifecycle management services and does not provide certificate suspension services. Accordingly, our assertion does not extend to controls that would address those criteria.

DigiCert has disclosed the following matters publicly Mozilla's Bugzilla platform. These matters were included below due to being open during the period September 1, 2023 through the date of this report.

Bug ID	Summary	Opened	Closed	Resolution
#1853463	DigiCert: SMIME certificates issued inconsistent with BR's	9/15/2023	10/12/2023	Fixed
#1888016	DigiCert: Failure to include CPS URI in 1 certificate	3/26/2024	6/5/2024	Fixed
#1918467	QuoVadis: Findings in 2024 ETSI Audit of QuoVadis Qualified Web ICA G2	9/11/2024	10/7/2024	Fixed

In addition to the matters noted above form the Mozzilla Bugzilla platform, DigiCert noted the following matter and actions taken after the end of the engagement period.

Matter Topic		Matter Description
1	Systems Development, Maintenance, and Change Management	DigiCert did not have systematic controls in place to provide reasonable assurance that unauthorized system changes could not be made by a single approver administrator in the legacy Certificate System, Trustlink. After the conclusion of the period, DigiCert performed a review of all code changes deployed through the code management tool. DigiCert did not identify any unauthorized changes.
		DigiCert did not have monitoring in place to continuously monitor, detect and alert personnel to any unauthorized modifications to the legacy Certificate System, Trustlink. After the conclusion of the period, DigiCert implemented branch protection rules in the code management tool.

DigiCert Ireland Limited

DocuSigned by:

1E5E181D62CF40D...
_____   11/27/2024

Jason Sabin
Chief Technology Officer

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

Certificate Policy/Certificate Practice Statement[1]

Policy Name	Version	Effective Date
DigiCert Europe / QuoVadis Certificate Policy/Certification Practices Statement	5.2	March 1, 2024
DigiCert Europe / QuoVadis Certificate Policy/Certification Practices Statement	5.1	December 15, 2023
DigiCert Europe / QuoVadis Certificate Policy/Certification Practices Statement	5.0	November 22, 2023

Root CA and Root CA 3 Certificate Policy/Certificate Practice Statement

Policy Name	Version	Effective Date
QuoVadis Root CA 1 G3 / QuoVadis Root CA 3 / QuoVadis Root CA 3 G3 Certificate Policy/Certificate Practice Statement	4.43	August 1, 2023

Root CA 2 Certificate Policy/Certification Practice Statements

Policy Name	Version	Effective Date
QuoVadis Root CA 2 and Root CA 2 G3 Certification Policy/ Certification Practice Statement	2.21	June 9, 2023

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[1] Effective November 22, 2023, the QuoVadis Root CA 1 G3 / QuoVadis Root CA 3 / QuoVadis Root CA 3 G3 Certificate Policy/Certificate Practice Statement and QuoVadis Root CA 2 and Root CA 2 G3 Certification Policy/ Certification Practice Statement combined into the DigiCert Europe / QuoVadis Certificate Policy/Certification Practices Statement

ATTACHMENT B - LIST OF CAs IN SCOPE

Root CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
CN = QuoVadis Root CA 1 G3 O = QuoVadis Limited C = BM	8A866FD1B276B57E578E921C65828A2BED58E9F2F288054134B7F1F4BFC9CC74	1/12/2012	1/12/2042
CN = QuoVadis Client RSA 4096 Root G4 O = QuoVadis Trustlink B.V. C = NL	80AC91FA891C79723A61ABC77F86E19905A92DA27E51695CA0C0B66C1C039BF2	3/16/2023	3/9/2048
CN = QuoVadis Client ECC P384 Root G4 O = QuoVadis Trustlink B.V. C = NL	D3C07AC44BD8FF1975BC62F1C7E9840EA8E188A4BA51133B8C4EFF05E34A2729	3/16/2023	3/9/2048
CN = QuoVadis Signing ECC P384 Root G4 O = QuoVadis Trustlink B.V. C = NL	771535D43D4633BD307EB7B8A3966B5DF00707C088089920080C1AE6D3CB0F68	3/16/2023	3/9/2048
CN = QuoVadis Signing RSA 4096 Root G4 O = QuoVadis Trustlink B.V. C = NL	9F8E6DB31E740285E0C2C2DEB09E442BDD4E74BDEEAE2962BC82D1ECB9F39855	3/16/2023	3/9/2048
CN = QuoVadis SMIME ECC P384 Root G4 O = QuoVadis Trustlink B.V. C = NL	83FDDB2FD9DAE3B21EEBD33CF46251D746F0D6102B683150DD7B98AD8E4BB9F8	3/16/2023	3/9/2048
CN = QuoVadis SMIME RSA 4096 Root G4 O = QuoVadis Trustlink B.V. C = NL	5232A304AA4A10CFE6C47842EA3381CB31D619E24F58126D534CD50C5CE7845D	3/16/2023	3/9/2048
CN = QuoVadis TLS ECC P384 Root G4 O = QuoVadis Trustlink B.V. C = NL	6E1FD3AE0D2D477C8F5EE5F335CC5B6356872654E5356A73D8C0A30A17C252A2	3/16/2023	3/9/2048
CN = QuoVadis TLS RSA 4096 Root G4 O = QuoVadis Trustlink B.V. C = NL	C8A2D38A24F5AC302D8A08EBD38923D9A750B49220F092E82D1C53249E1533D0	3/16/2023	3/9/2048
CN = QuoVadis Root CA 2 O = QuoVadis Limited C = BM	85A0DD7DD720ADB7FF05F83D542B209DC7FF4528F7D677B18389FEA5E5C49E86	11/24/2006	11/24/2031
CN = QuoVadis Root CA 2 G3 O = QuoVadis Limited C = BM	8FE4FB0AF93A4D0D67DB0BEBB23E37C71BF325DCBCDD240EA04DAF58B47E1840	1/12/2012	1/12/2042
CN = QuoVadis Root CA 3 O = QuoVadis Limited C = BM	18F1FC7F205DF8ADDDEB7FE007DD57E3AF375A9C4D8D73546BF4F1FED1E18D35	11/24/2006	11/24/2031

Root CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
CN = QuoVadis Root CA 3 G3 O = QuoVadis Limited C = BM	88EF81DE202EB018452E43F864725CEA5FBD1FC2D9D205730709C5D8B8690F46	1/12/2012	1/12/2042

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
CN = HydrantID EV SSL CA G2 O = HydrantID (Avalanche Cloud Corporation) C = US	60388B773D33E9141648613F36B9149F015A114378BACF3E3694864FFDA426EC	7/21/2020	7/19/2030
CN = HydrantID SSL CA G3 O = HydrantID (Avalanche Cloud Corporation) C = US	AA57F482CBC516B4D10CA4097DD90D99F5AA727D207090D07DA9C36998ABB9AD	9/29/2020	9/27/2030
CN = QuoVadis Grid ICA G2 O = QuoVadis Limited C = BM	278ECF211E2518E9DD9913AFC583EEB3127C8184BCBEEDAAD7BD64E89E8C4310	9/22/2020	5/23/2026
CN = itsme Sign Issuing CA G2x O = DigiCert Europe Belgium B.V. C = BE	B965A4354E7E1FFEDD1F947F13B065819B3A53C6889DC643E1D0D4C514AB68AE	10/5/2020	10/3/2030
CN = QuoVadis Qualified Web ICA G2 O = QuoVadis Trustlink B.V. C = NL	7FEB9374EAB08D392717C647436DAE06176A24C010607FDA1CCE5E5F0106B472	7/22/2020	7/20/2030
CN = QuoVadis Global SSL ICA G2 O = QuoVadis Limited C = BM	F67C23EF7BF7412809DB6B1DD3D44A08D3754D99CABA6A13F7A05C7249089C89	9/22/2020	6/1/2023
CN = VR IDENT EV SSL CA 2020 O = Fiducia & GAD IT AG C = DE	D33A847F640377BE0AE1A429153A07E87C8827FA4840B5158BCDCB85E10A453A	7/22/2020	7/20/2030
CN = QuoVadis Swiss Regulated CA G3 O = QuoVadis TrustLink Schweiz AG C = CH	726FB1F3D9FBFE0B4043004A27A43CF65CB214363B093034FC4185C86C9D8B0D	7/27/2020	7/25/2028
CN = QuoVadis Europe Advanced CA G2 O = QuoVadis Trustlink Deutschland GmbH C = DE	EBCD0C73FE44B60E25789419C07B0B234B3F586E092316FB2CBDA39C223224A3	7/22/2020	7/20/2030
CN = QuoVadis RCA1G3 TLS CA O = QuoVadis Limited C = BM	18BB70EFDA3F91438115C9EB4F333EB4EC68354571E6949195A0A91C9E6FBCD8	10/21/2020	10/19/2030
CN = DigiCert QV EV TLS ICA G1 O = DigiCert, Inc. C = US	6A7B2AA3414039A663D5D8BBAB8256A3979A84C332BF5E1EE8F6D0E0ADA84668	3/16/2020	3/14/2030
CN = QuoVadis Issuing CA G5 O = QuoVadis Limited C = BM	08204C52ADDAA97A6FDEF702F6CEB4B94E578F8FC1C301C9D5136AB381CFA7D9	10/7/2019	10/4/2029
CN = QuoVadis RCA3G3 TLS CA O = QuoVadis Limited C = BM	ECC0D17AC3263AC6A164DCDB08F82D07E93FCEA723F66B88B06EEBA9678DF2BB	10/21/2020	10/19/2030

Docusign Envelope ID: 7AC5BC16-E355-4F6E-8763-32F5B896A58A

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
CN = QuoVadis Enterprise Trust CA 1 G4 O = QuoVadis Trustlink B.V. C = NL	597623E05FD1B591711194EB190590F903A2B73F74CD5E8F787EC528033DAB7F	7/23/2020	7/20/2035
CN = QuoVadis Europe SSL CA G2 O = QuoVadis Trustlink B.V. C = NL	B1AAE1BCD555E8A3D1E3DDA8EC84E757C552655344CE3FEEBBAF98E895DBEDAC	7/22/2020	7/20/2030
CN = QuoVadis RCA3G1 TLS CA O = QuoVadis Limited C = BM	3A66E648212E6321F94D9EABCC92C052E679D992C99AD4596A4E7B85ADCEE5DE	10/21/2020	10/19/2030
CN = QuoVadis Qualified Web ICA G3 O = QuoVadis Trustlink B.V. C = NL	3F225BDBCD788CE924870CAF92F814B7C6FF4EDABABAD93F1D3A9177252CF1D1	8/28/2020	8/26/2030
CN = BT Class 2 DigiCert PKI Platform CA O = British Telecommunications plc C = GB	843782303040BFB33576766E1700696DE0FC14887BE293D7265EB59ECE4ED9CC	8/6/2019	6/6/2031
CN = QuoVadis Time-Stamping Authority CA G1 O = QuoVadis Trustlink B.V. 2.5.4.97 = NTRNL-30237459 C = NL	D2BA0BFEC43FA7803860CDE6B3377421B1F563EC124B51D908415B0E937323E6	11/20/2018	11/17/2028
CN = HydrantID Client ICA G2 O = HydrantID (Avalanche Cloud Corporation) C = US	5286AE1C558A81537CD9870F749D96EFABC2D2BA393DF818DFE95EA7CE6450A7	10/7/2019	10/4/2029
CN = DigiCert QV TLS ICA G1 O = DigiCert, Inc. C = US	93E33AF7DA3030530D090C9C55762CADE7EAE943F834349D1057A90EB67F306B	3/16/2020	3/14/2030
CN = QuoVadis Enterprise Trust CA 3 G3 O = QuoVadis Limited C = BM	DA5462526A0C2E9852A86186B025390158759CDCA6AE21F09F713CA6ACCDD1F1	6/6/2016	6/6/2031
CN = QuoVadis Enterprise Trust CA 1 G3 O = QuoVadis Limited C = BM	0531C86F785958939FDC539924D395D1EFA409364E6827D3AB9876311FFB27B0	6/6/2016	6/6/2031
CN = QuoVadis Belgium Issuing CA G4 2.5.4.97 = NTRBE-0537698318 O = DigiCert Europe Belgium B.V. C = BE	3516BDAB7F57115A7AEB2EBF9C521EF00F04AD891501979BE1EFBF4493409669	8/12/2020	8/10/2029
CN = QuoVadis Europe EV SSL CA G1 O = QuoVadis Trustlink B.V. C = NL	CB6666B32BFF2EFEDCC4187DF149A6D34A5D10B7165B9CFF2A67C0E311AEEED7	7/20/2020	7/18/2030

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Subordinate CA Certificates			
Subject DN	**SHA2 Thumbprint**	**Valid From**	**Valid To**
CN = VR IDENT SSL CA 2020 O = Fiducia & GAD IT AG C = DE	347D18DCCC2EFC51A920E7A7FBB07BFBDA35613681F82DCA5C4C72BB0C83C035	7/22/2020	7/20/2030
CN = QuoVadis Enterprise Trust CA 2 G4 O = QuoVadis Trustlink B.V. C = NL	1E356823FE40C0EAAC29F9ED5463B7B2DB1C088B63EBB05876A2E631C1087798	7/23/2020	7/20/2035
CN = itsme Sign Issuing CA G2 O = DigiCert Europe Belgium B.V. C = BE	0B7AF5EB38D90B83C893410EC6714601A4EF6EC5C32B9D1D9AD54FBD38E18AEA	8/31/2020	8/29/2030
CN = QuoVadis Enterprise Trust CA 3 G4 O = QuoVadis Trustlink B.V. C = NL	31EFF7DF4DDEB71CBDFB08B5C7FC9604A93600251E8917D6960C32BF4C0B5A77	7/23/2020	7/20/2035
CN = QuoVadis Code Signing CA G1 O = QuoVadis Limited C = BM	DA0AFAF15CD300E34B520FB78A4FA68EB42C4601E939B903E0B1D71DF5965BFF	5/30/2014	5/30/2024
CN = QuoVadis Swiss Regulated CA G2x 2.5.4.97 = NTRCH-CHE-112.210.349 O = QuoVadis Trustlink Schweiz AG C = CH	941B8AEE4BCF1EFEB0475FB279FDDDCF37FC5B20F64E842CD9DA0770B157E84D	11/27/2019	11/24/2029
CN = QuoVadis Enterprise Trust CA 2 G3 O = QuoVadis Limited C = BM	B6F6559BBCE0A2CC91E507B5D7319E32487EDAE28A063BC73B6405E6C44665B6	9/22/2020	6/6/2031
CN = QuoVadis EU Issuing Certification Authority G4 O = QuoVadis Trustlink B.V. 2.5.4.97 = NTRNL-30237459 C = NL	1D24222B5EEC71FE99BE9D700FA5FF72312DB3EB0FCB4A4F3BCC135DA36C1355	10/7/2019	10/6/2029
CN = BEKB - BCBE Issuing CA G2 OU = Issuing Certification Authority O = Berner Kantonalbank AG C = CH	B399EFE42C01A05BDC38978447A78E950467793FB11C1B6B426C419A0FC73911	10/10/2013	10/10/2023
CN = QuoVadis EU Issuing Certification Authority G6 2.5.4.97 = NTRNL-30237459 O = QuoVadis Trustlink B.V. C = NL	19B74B7E41CA73465832838A14EB432C4826F1B15DEF42B90AAE9F8FAB8B79B3	8/12/2020	8/10/2029
CN = QuoVadis Swiss Advanced CA G4 O = QuoVadis Trustlink Schweiz AG C = CH	085A74D4683D0FCCDE44677CFA579B732C9CE2DA6921AD3FE70F814EE7C0BF52	7/22/2020	7/20/2030

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
CN = HIN Health Info Net CA G2 O = Health Info Net AG 2.5.4.97 = NTRCH-CHE-103.489.218 C = CH	3645E0F05E195BE8ECD456E518C8C23C1BB259CD6CF4691F29C744AEF0C11FDD	5/12/2017	5/10/2027
CN = QuoVadis Belgium Issuing CA G2 O = QuoVadis Trustlink BVBA 2.5.4.97 = NTRBE-0537698318 C = BE	AA0E83B4AE0036679703D1603BC7E63A080464A033AE4B9F465838ADC85C61ED	1/28/2020	1/27/2030
CN = HydrantID SSL ICA G2 O = HydrantID (Avalanche Cloud Corporation) C = US	9C6D08933201407FBF2B12540B67CC0E4C9666F132E1504762A717CBAE8F3FD6	12/17/2013	12/17/2023
CN = HydrantID SSL ICA G2 O = QuoVadis Limited C = BM	01453F645CD91E233B7484827F23F8A573FD641029EA8A6BFE549EF4ED8B323D	1/14/2021	12/17/2023
CN = QuoVadis Global SSL ICA G3 O = QuoVadis Limited C = BM	161EE5386329B28A27FF405736552A621D5A844A43811E3623E52EEFA0BA840A	11/3/2021	11/2/2026
CN = QuoVadis Time-Stamping Authority CA G2 O = QuoVadis Limited C = CH	B9583D4E090E8A6B1B5FD3FD079ABAD2B1EC326E183A4B763473E2ACE04E43CD	10/1/2021	9/29/2031
CN=QuoVadis Global SSL ICA G2 O=QuoVadis Limited C=BM	E5CD0DD44E1120C79415C84F5369D79AE04F047E80DC0856351AABC232056CA5	5/25/2022	5/24/2027
CN = DigiCert QuoVadis G4 TLS ECC P384 SHA384 2023 CA1 O = DigiCert Ireland Limited C = IE	0CAB7DBD736B1BFBE8E63ABE2DD55D64A0805140386DA05FC6E28D4FCF81B9B6	3/16/2023	3/13/2033
CN = BEKB - BCBE Issuing CA G2 OU = Issuing Certification Authority O = Berner Kantonalbank AG C = CH	474D298059F15BC5319B4A94D38AAFADBF627CC09513FCD9362CD89C2F9B6221	2/7/2023	11/24/2031
CN = DigiCert QuoVadis G3 TS Europe RSA4096 SHA256 2023 CA1 2.5.4.97 = NTRNL-30237459 O = QuoVadis Trustlink B.V. C = NL	8CD1E1AFA9F976519AA252A0C4568B22092A5773D7E2B4631D19DE2B39ABFA3B	3/14/2023	3/11/2032

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
CN = DigiCert QuoVadis G3 TS Europe ECC P256 SHA256 2023 CA1 2.5.4.97 = NTRNL-30237459 O = QuoVadis Trustlink B.V. C = NL	CE49790DCEB21562949C5270BB02C0F34C7B3861D85F98D1069E20453C426BC5	3/14/2023	3/11/2032
CN = DigiCert QuoVadis G3 Qualified TLS RSA4096 SHA256 2023 CA1 2.5.4.97 = NTRNL-30237459 O = QuoVadis Trustlink B.V. C = NL	FE3CBED838D30BAB900184C1F21A4B27D3211CB5C9257D7E985C2AE43AC6A89F	3/14/2023	3/11/2033
CN = DigiCert QuoVadis G3 Qualified Europe RSA4096 SHA256 2023 CA1 2.5.4.97 = NTRNL-30237459 O = QuoVadis Trustlink B.V. C = NL	B36425F1491B2EE08EC87B69C23EA6A76EBF769C4C34FE3798A4CB9A1990E070	3/14/2023	3/11/2032
CN = DigiCert QuoVadis G3 Qualified CH Reg SP RSA4096 SHA256 2023 CA1 2.5.4.97 = NTRCH-CHE-112.210.349 O = QuoVadis Trustlink Schweiz AG C = CH	8C44440AA473191A540EC01B17413DE6A904D64D79BB8B30E6D1FC1ADA798F51	3/14/2023	3/12/2031
CN = DigiCert QuoVadis G3 Qualified CH Reg RSA4096 SHA256 2023 CA1 2.5.4.97 = NTRCH-CHE-112.210.349 O = QuoVadis Trustlink Schweiz AG C = CH	A9462BF3D725EDF669FF392113E5270E3DE79DB820D792581F07AB4B0ED75064	3/14/2023	3/12/2031
CN = DigiCert QuoVadis G3 Qualified BE RSA4096 SHA256 2023 CA1 2.5.4.97 = NTRBE-0537698318 O = DigiCert Europe Belgium B.V. C = BE	2CB07880B4E584F366E083791511BB48812FF5164C5BA3BBB3C1688AA456B13C	3/14/2023	3/11/2032
CN = DigiCert QuoVadis G3 Qualified BE itsme RSA4096 SHA256 2023 CA1 2.5.4.97 = NTRBE-0537698318 O = DigiCert Europe Belgium B.V. C = BE	C0EE0CCED463096DF07D27257AF79C986FF92B678F669C109FFF570F32AB433F	3/14/2023	3/11/2032
CN = DigiCert QuoVadis G3 Qualified BE itsme RIV RSA4096 256 2023 CA1 2.5.4.97 = NTRBE-0537698318 O = DigiCert Europe Belgium B.V. C = BE	A610AD2025ED0AA84259EBB9289E828267D35082430CBFB5562F3066DEBC2E88	3/14/2023	3/11/2032

Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
CN = DigiCert QuoVadis G3 SMIME RSA4096 SHA384 2023 CA1 O = DigiCert Ireland Limited C = IE	3C980210C4F0803388C4D9FA9699E19F88FA3B96B3CF68D675808876747A678A	7/27/2023	7/24/2033
CN = BEKB BCBE G3 SMIME CH RSA4096 SHA256 2023 CA1 OU = Issuing Certification Authority O = Berner Kantonalbank AG C = CH	174ED245170A592A7985436B9F590A3E96C134807C4AFDA872BC7E09A49855ED	9/25/2023	9/23/2031
CN = DigiCert QuoVadis G4 TLS RSA4096 SHA384 2023 CA1 O = DigiCert Ireland Limited C = IE	3E8FC16AADA8FCB6F51CA4848BB15F8ABE8DD807F9CEAA4C6CCBE9864F6CE9DE	3/16/2023	3/13/2033
CN = DigiCert QuoVadis G4 SMIME RSA4096 SHA384 2023 CA1 O = DigiCert Ireland Limited C = IE	E234809774CD0125626EA578E36F35740959B61B7790582DFE7828730F818546	12/5/2023	3/13/2033
CN = DigiCert QuoVadis G4 SMIME ECC P384 SHA384 2023 CA1 O = DigiCert Ireland Limited C = IE	D80AB934DED2B399A781F270005393D5162A2707B2A007C39A27C740F1E5CE26	12/5/2023	3/13/2033
CN = DigiCert QuoVadis G4 SMIME RSA4096 SHA384 2023 CA1 O = DigiCert Ireland Limited C = IE	369AE7BD4D9E9E698A6F731D5AC19936AB3859431A502497357FE93ACF01982D	3/16/2023	3/13/2033
CN = DigiCert QuoVadis G4 SMIME ECC P384 SHA384 2023 CA1 O = DigiCert Ireland Limited C = IE	E117CBC55073D91A61E7636FE46184AB8726466A338C2DF109E8A284DE551650	3/16/2023	3/13/2033
CN = DigiCert QuoVadis G4 TLS ECC P384 SHA384 2023 CA1 O = DigiCert Ireland Limited C = IE	35A5B2730439D225E04080412EC01031F22F3902B84670E7B44F699F9701F050	3/16/2023	3/13/2033
CN = QuoVadis Private TLS ECC P384 Root G4 O = QuoVadis Trustlink B.V. C = NL	B421FEE95C6D9F034E89CF51E92F4A54EB9ECC15757008179F9EF0A417B76317	3/16/2023	3/9/2048
CN = QuoVadis Private TLS RSA 4096 Root G4 O = QuoVadis Trustlink B.V. C = NL	A20FE0B76EED3D700661E24EE8619C08BF989716A50CE911C2CEA354A9CFBF8B	3/16/2023	3/9/2048