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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 as enumerated in [Attachment B](#), DigiCert has:

- disclosed its S/MIME certificate lifecycle management business practices in the applicable versions of its DigiCert Certificate Policy (“CP”), DigiCert Certification Practice Statement (“CPS”) and DigiCert Certificate Policy and Certificate Practices Statement for Public Trust Store PKI Services (“CP/CPS”) enumerated in [Attachment A](#), including its commitment to provide S/MIME certificates in conformity with the CA/Browser Forum Requirements on its [repository](#), and provided such services in accordance with its disclosed practices
- maintained effective controls to provide reasonable assurance that:
 - the integrity of keys and S/MIME certificates it manages is established and protected throughout their lifecycles; and
 - S/MIME subscriber information is properly authenticated (for the registration activities performed by DigiCert)
- 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 - S/MIME Certificates v1.0.3](#).

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

Certification Authority’s Responsibilities

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 - S/MIME Certificates v1.0.3](#).

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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 judgement, 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 unauthorised access to systems and information, or failure to comply with internal and external policies or requirements. Also, the projection to the future of any conclusions based on our findings is subject to the risk that controls may become ineffective.

Independent Accountant's Opinion

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

This report does not include any representation as to the quality of 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 matter 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

Matter Topic		Matter Description
		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 #1898986 that it issued 89 S/MIME certificates that had incorrect values in their organizationIdentifier field.
		DigiCert disclosed in Mozilla Bug #1927506 that it misissued 70,204 S/MIME certificates for one (1) organization where the organizationIdentifier Registration Scheme was incorrectly formatted.
2	Certificate Revocation	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.

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 - S/MIME Certificates v1.0.3](#).

Use of the WebTrust Seal

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

BDO USA

November 27, 2024



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

Certificate Policy/Certificate Practice Statement¹

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

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 - IN-SCOPE CAs FOR S/MIME BASELINE REQUIREMENTS

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	7D05EBB682339F8C9451EE094EEBFEDA7953A114EDB2F44949452FAB7D2FC185	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
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Trusted Root G4	552F7BDCFA1A7AF9E6CE672017F4F12ABF77240C78E761AC203D1D9D20AC89988	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, O=WFA Hotspot 2.0, CN=Hotspot 2.0 Trust Root CA - 03	A3CC68595DFE7E86D8AD1772A8B5284ADD54ACE3B8A798DF47BCCAFB1FDB84DF	12/8/2013	12/8/2043



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 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=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 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



Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=Amazon, OU=Server CA 3B, CN=Amazon	ECC295B6DDCD084BA7179FB53BDD1D422CB6C0A8D94F154D4A5B17780B7279ED	7/16/2018	7/16/2028
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	F9690880819F06CDDC0B2F224B207F2AF6003FB57339B8679A160FA95208D62D	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=IT, O=Telecom Italia Trust Technologies S.r.l., OU=Digital Identity and Security, CN=Trust Technologies Global Client CA	AA6A2380A7E8254DAD4620AE0895DE74047F33F5268758DC727C4D280B384A50	8/24/2017	5/10/2025
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., 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 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 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	1E0A3AB993157717281D42ABF801EB64DEED500E4168CA706D6A71D8103C73A2	12/7/2011	12/7/2026
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, S=CA, L=Mountain View, O=Google, Inc., CN=Google CA1	438F473EBFC8884EF5D3E0D52D264CDBE56CA382D9EBFC689D77489409F55A6E	8/25/2015	8/25/2025
C=US, S=Minnesota, L=Minneapolis, O=Optum, CN=Optum Public Trust CA 1	253EC9732DF8874C3D54DA522C1711142C98C2CEA7664635152A89A03EE9364	4/28/2015	4/28/2025
C=US, O=Plex, Inc., CN=Plex Devices High Assurance CA	48A7C9C5A36734FC9E204D63CE6BBBCD9E21C1978604760CD8D30D6F4C67B67C	1/14/2015	1/14/2025



Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
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 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=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



Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
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=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=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=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 SMIME Europe RSA4096 SHA256 2023 CA1	2724D9D7B945BB253E379CE6CF4156775EE9AC7660E62D1384DD7B4A4E958FA	2/23/2023	2/22/2033



Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
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 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=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=Fannie Mae, CN=Fannie Mae Shared Online CA G2	28F7CD588FC5B0DF460DD4C678F9DC51077A0E89D38DCCBA09BC1AEE9D698C1	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=CH, O=Hitachi Energy Ltd, CN=Hitachi Energy Assured ID CA	8EAE34A01A9E7017FD4BCE8BA432A350A2A16561ABE0617CCE1A0D4B1E09EEC	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



Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=Honeywell International Inc., CN=Honeywell International Co-branded CA - G2	B78DFC942032C042CD45490E3B32433CA167067B330B52CB1453EA3AD5819080	9/25/2020	9/24/2030
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	81CB1E6BE7220B9DD767E7A665B6B8FAFAC2C5725919A0654EDD5C0FFAE5A59	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	965BD258388DDDD4EA7BAAF7754DF49F896CF02E15BE0925DE33B0038E9925F	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	1F9D2D44E84DC190F0A9A6DBB44D75C6FDDDBAB1C82985D09A6D9866BF746758B	5/8/2024	5/7/2034
C=US, O=Kyndryl, Inc., CN=Kyndryl Certification Authority G3	CCEBA05F97B2926C78BEB56AECC080736663AB26A83C12A00658011B2F6A2412	9/17/2024	9/16/2034
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=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	4708DD6D092D7FB5958F5B43501F6173FB9669EDB05AFD4BBCCDD2D5068D8D0	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=DE, O=OSRAM Continental GmbH, CN=OSRAM Continental Secure Email CA - G2	B5D61B50ACB993A27EF05D4324A04A671CEE7502E62BA5E9122CC2100BFD6CF	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	F7C25E1D01F743DD1F87CFE2E572E186647CD6FA95F2DD41F12AE36D6C083CF	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=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



Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
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	601EE30F57FDDFD8C7F051C7F379081F3DF893A61BA5BE518DC50F79F654CB6	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	261F131BEF55C14992A756D2DC3F1003EEEDAEEA7920E6059CD0ABB076AC494D6	6/5/2024	6/4/2034
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=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=Abbott Laboratories Inc., CN=Abbott Laboratories Secure Authentication CA	DB99A4F284CCF10B26DE7B7A5D651725B857CBC871EBB33028D67B55510EFC9	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 CA	199EE5800955DAE2CDA0626931C64391D6A88CCCB1F9F0B2EE80B667F581C06	7/12/2016	7/12/2026
C=US, O=DigiCert Inc, CN=DigiCert Cloud Services CA-1	2F6889961A7CA7067E8BA103C2CF9B9A924F8CA293F11178E23A1978D2F133D3	8/4/2015	8/4/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert SHA-2 RADIUS CA	524CF7331C4EE353EEB1ECD74E1F801A0F1F08DFA0322092F42205AFC3A17675	9/20/2016	9/20/2026
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



Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
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 Client CA G2	A449DBAB6D4C035FAAFD9D045891FE98ABD73D286268A8A83F854145551692E3	9/23/2019	9/23/2034
C=US, O=KMS Solutions, LLC, CN=DigiCert KMS Solutions LLC GCC High Email CA	4CBB63C9CD73883DBDAC9BAA662C356602FB30C4EE68B86642EA12AFBC71D367	2/14/2023	2/13/2033
C=PT, O=DigitalSign - Certificadora Digital SA, CN=DigitalSign CA - G7	FE7AA77C5DE2D1466852F6D9070A320BE3DA439C72D74F71C62697502DA5BFCF	11/3/2021	11/2/2031
C=US, O=National Geospatial-Intelligence Agency, CN=NGA CA G4	69F46822031ECDE9D85B563BAFC3915051B396986562F2DDF160075C29FB8DF0	2/27/2024	2/26/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site CA	D3533B732A518A6DA68EF266085E11DFD114C0EB0092CD43530A44D54B913ED1	2/9/2018	2/9/2030
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, 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	BA361260FF1D46031686305E082DE836D4A320466E0DE9E013F00CDEDDDD62317	9/23/2019	9/23/2034
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	7AA5398910F171FDC333FB7204D7C37AE5F1000E026335F728FDC49C8DBC394	7/24/2024	7/23/2034
C=GB, O=LMAX Limited, CN=LMAX Trust Services CA X2	ADB6F1297BC10F2C4150F26E6A94DA024DA60854AB5DCACED1C8486456838735	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=NCC Group, CN=NCC Group Secure Server CA G3	963056B0D941D9DBE27AC778053D85E43CC79F476AD34CFDD799C27E381840EB	7/30/2014	7/30/2029
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 EV CA	0A163600631BD66267FB7AEAD25C538B2B7D72AD6416A2BBD285F654BB642F6D	12/9/2014	12/9/2024
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert ECC Extended Validation Server CA	FDC8986CFAC4F35F1ACD517E0F61B879882AE076E2BA80B77BD3F0FE5CEFF8862	6/21/2016	6/21/2031
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=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., CN=DigiCert G5 SMIME ECC SHA384 2021 CA1	873DD73022087B9179FA060EF3D34381845A37E88A6A2BF20ECBAFDE8C3DB993	7/15/2021	7/14/2031



Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
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, 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 Server CA G4	6E8D952FDBABAD8DE3D61E094393739B5A47371A52BDCB2A3C2F8C43622F640F	8/1/2013	8/1/2028
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=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=US, O=Wi-Fi Alliance, CN=WFA Hotspot 2.0 Intermediate CA	AE0D0BA5AC3EEB823F5CA77331A99D7FDB2EC231D7CE47B7C208E3830E08A891	12/9/2013	12/9/2023
C=DE, O=DigiCert Deutschland GmbH, CN=DigiCert QuoVadis 1G3 ClientAuth RSA4096 SHA256 2023 CA1	FF961F3F4738037D4261612ADA93FDDF5ED00D4681C90B099C7F5E9F4B4AFFA3	10/26/2023	10/23/2033
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Japan Class 1 CA	5077797A1815E48287385898618908BD7ED182D03725F03B02F13BFFD6652F6A	4/15/2014	4/14/2024
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=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=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=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



Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
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=US, O=DigiCert Inc, OU=www.digicert.com, CN=Cybertrust Japan Issuing CA-1	87942388D29A46C06FE1E56AAB791594D0FB2E8EABF124048F130EEA9BEDD3FD	9/1/2016	9/1/2026



Timestamping 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., 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
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Trusted Root G4	4C913D04FB495DC36119552D6068F7B9891EFE40344E9E5C1E9132F65BAEFF7F	6/9/2022	11/9/2031



DIGICERT, INC. MANAGEMENT'S ASSERTION

DigiCert, Inc. ("DigiCert") operates the Certification Authority ("CA") services for its CAs as enumerated in [Attachment B](#) in scope for S/MIME Baseline Requirements and provides S/MIME CA services.

The management of DigiCert is responsible for establishing and maintaining effective controls over its S/MIME CA operations, including its S/MIME CA business practices disclosure on its [repository](#), S/MIME key lifecycle management controls, and S/MIME 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 Certification Authority 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 S/MIME CA services. Based on that assessment, in providing its S/MIME CA services in the locations as enumerated in [Attachment A](#), DigiCert has:

- disclosed its S/MIME certificate lifecycle management business practices in the applicable versions of its DigiCert Certificate Policy ("CP"), DigiCert Certification Practice Statement ("CPS") and DigiCert Certificate Policy and Certificate Practices Statement for Public Trust Store PKI Services ("CP/CPS") enumerated in [Attachment A](#), including its commitment to provide S/MIME certificates in conformity with the CA/Browser Forum Requirements on its [repository](#), and provided such services in accordance with its disclosed practices
- maintained effective controls to provide reasonable assurance that:
 - the integrity of keys and S/MIME certificates it manages is established and protected throughout their lifecycles; and
 - S/MIME subscriber information is properly authenticated (for the registration activities performed by DigiCert)
- 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 - S/MIME Certificates v1.0.3](#).



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
#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:

A stylized black ink signature of Jason Sabin.

11/27/2024

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Jason Sabin

Chief Information Security Officer



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

Certificate Policy/Certificate Practice Statement¹

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

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 - IN-SCOPE CAs FOR S/MIME BASELINE REQUIREMENTS

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	7D05EBB682339F8C9451EE094EEBFEEFA7953A114EDB2F44949452FAB7D2FC185	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
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Trusted Root G4	552F7BDCF1A7AF9E6CE672017F4F12ABF77240C78E761AC203D1D9D20AC89988	8/1/2013	1/15/2038



Root CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=DigiCert, Inc, OU=www.digicert.com, CN=DigiCert Universal Transition Root	AF0E363CAE6DF489F2976A284D12D4C33C94B135FA77F89E89298D7491E99974	12/8/2017	12/8/2037
C=US, O=WFA Hotspot 2.0, CN=Hotspot 2.0 Trust Root CA - 03	A3CC68595DFE7E86D8AD1772A8B5284ADD54ACE3B8A798DF47BCCAFB1FDB84DF	12/8/2013	12/8/2043
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=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 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



Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=Amazon, OU=Server CA 3B, CN=Amazon	ECC295B6DDCD084BA7179FB53BDD1D422CB6C0A8D94F154D4A5B17780B7279ED	7/16/2018	7/16/2028
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=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=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., 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	32D509B92CD803AB88177C62793BAEE4E2E2C4D9CBFAF8ECE344357C2B6957D32	2/7/2024	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 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	1E0A3AB993157717281D42ABF801EB64DEED500E4168CA706D6A71D8103C73A2	12/7/2011	12/7/2026
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, S=CA, L=Mountain View, O=Google, Inc., CN=Google CA1	438F473EBFC8884EF5D3E0D52D264CDBE56CA382D9EBFC689D77489409F55A6E	8/25/2015	8/25/2025
C=US, S=Minnesota, L=Minneapolis, O=Optum, CN=Optum Public Trust CA 1	253E3C9732DF8874C3D54DA522C1711142C98C2CEA7664635152A89A03EE9364	4/28/2015	4/28/2025



Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=Plex, Inc., CN=Plex Devices High Assurance CA	48A7C9C5A36734FC9E204D63CE6BBBCD9E21C1978604760CD8D30D6F4C67B67C	1/14/2015	1/14/2025
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 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	E1BE6BBB70F5A241E736FC44C6A2160BF6CE19B95EDD67BF7BE896E83778745	11/18/2014	11/18/2024
C=NL, S=Noord-Holland, L=Amsterdam, O=TERENA, CN=TERENA Personal CA 3 G3	C123F5AFACC9F9096809850355E5BF78CA9377348111B5167A964DDEDCC044DE9	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=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	912E37CAA496E53CD175C05D4334B4D060FBD0C69105AF82085CAF7AD4BBBD318	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



Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=AU, O=Attorney Generals Department, CN=Attorney Generals Department Public CA - G2	F4DC92DB2CD8B9158D011335A95BB61BD340ACE2E5BDC8816373ABC2D31D288	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=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=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



Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Assured ID Client CA G2	9E12D6E13DDD53A890A2B3A37423AE5E457731A7B34A153992F1EF1F5489A45E	9/23/2019	9/23/2034
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 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 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=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=Fannie Mae, CN=Fannie Mae Shared Online CA G2	28F7CD588FC5B0DF460DD4C678F9DC51077A0E89D38DCCBA09BC1AEED9D698C1	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



Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
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=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
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	965BD258388DDDD4EA7BAAF7754DF49F896CF02E15BE0925DE33B0038E9925F	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



Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
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	1F9D2D44E84DC190F0A9A6DBB44D75C6FDDAB1C82985D09A6D9866BF746758B	5/8/2024	5/7/2034
C=US, O=Kyndryl, Inc., CN=Kyndryl Certification Authority G3	CCEBA05F97B2926C78BEB56AECC080736663AB26A83C12A00658011B2F6A2412	9/17/2024	9/16/2034
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=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=NBNC Co Limited, CN=NBNC Co Limited Public Issuing CA - G3	4708DD6D092D7FB5958F5B43501F6173FB9669EDB05AFD4BBCCDD2D5068D8D0	6/9/2020	6/9/2030
C=AU, O=NBNC Co Limited, CN=NBNC Co Limited Public Issuing CA - G4	AA1EBE811133A605B78C12C5BE9AD15A818A45D4E51B0EC2F66DCB57E603E081	5/8/2024	5/7/2034
C=DE, O=OSRAM Continental GmbH, CN=OSRAM Continental Secure Email CA - G2	B5D61B50ACB993A27EF05D4324A04A671CEE7502E62BA5E9122CC2100BFD6CF	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=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=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	AA10D99FD120217012E67F225DB544CBBAAE13BB01F7B0B766520C13FA1A33FF	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	261F131BEF55C14992A756D2DC3F1003EEEDA7920E6059CD0ABB076AC494D6	6/5/2024	6/4/2034
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=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



Subordinate CA Certificates			
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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=Abbott Laboratories Inc., CN=Abbott Laboratories Secure Authentication CA	DB99A4F284CCF10B26DE7B7A5D651725B857CBC871EBB33028D67B55510EFC9D	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 CA	199EE58009555DAE2CDA0626931C64391D6A88CCCB1F9F0B2EE80B667F581C06	7/12/2016	7/12/2026
C=US, O=DigiCert Inc, CN=DigiCert Cloud Services CA-1	2F6889961A7CA7067E8BA103C2CF9B9A924F8CA293F11178E23A1978D2F133D3	8/4/2015	8/4/2030
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert SHA-2 RADIUS CA	524CF7331C4EE353EEB1ECD74E1F801A0F1F08DFA0322092F42205AFC3A17675	9/20/2016	9/20/2026
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=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 Client CA G2	A449D8AB6D4C035FAAFD9D045891FE98ABD73D286268A8A83F854145551692E3	9/23/2019	9/23/2034
C=US, O=KMS Solutions, LLC, CN=DigiCert KMS Solutions LLC GCC High Email CA	4CBB63C9CD73883DBDAC9BAA662C356602FB30C4EE68B86642EA12AFBC71D367	2/14/2023	2/13/2033
C=PT, O=DigitalSign - Certificadora Digital SA, CN=DigitalSign CA - G7	FE7AA77C5DE2D1466852F6D9070A320BE3DA439C72D74F71C62697502DA5BFCF	11/3/2021	11/2/2031
C=US, O=National Geospatial-Intelligence Agency, CN=NGA CA G4	69F46822031ECDE9D85B563BAFC3915051B396986562F2DDF160075C29FB8DF0	2/27/2024	2/26/2029
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=Secure Site CA	D3533B732A518A6DA68EF266085E11DFD114C0EB0092CD43530A44D54B913ED1	2/9/2018	2/9/2030
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, 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	BA361260FF1D46031686305E082DE836D4A320466E0DE9E013F00CDEDD62317	9/23/2019	9/23/2034
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=GB, O=LMAX Limited, CN=LMAX Trust Services CA X2	ADB6F61297BC10F2C4150F26E6A94DA024DA60854AB5DCACED1C8486456838735	6/30/2022	6/29/2037



Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
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=NCC Group, CN=NCC Group Secure Server CA G3	963056B0D941D9DBE27AC778053D85E43CC79F476AD34CFDD799C27E381840EB	7/30/2014	7/30/2029
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 EV CA	0A163600631BD66267FB7AEAD25C538B2B7D72AD6416A2BBD285F654BB642F6D	12/9/2014	12/9/2024
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=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=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., 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, 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 Server CA G4	6E8D952FDBABAD8DE3D61E094393739B5A47371A52BDCB2A3C2F8C43622F640F	8/1/2013	8/1/2028
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=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=US, O=Wi-Fi Alliance, CN=WFA Hotspot 2.0 Intermediate CA	AE0D0BA5AC3EEB823F5CA77331A99D7FDB2EC231D7CE47B7C208E3830E08A891	12/9/2013	12/9/2023
C=DE, O=DigiCert Deutschland GmbH, CN=DigiCert QuoVadis 1G3 ClientAuth RSA4096 SHA256 2023 CA1	FF961F3F4738037D4261612ADA93FDFF5ED00D4681C90B099C7F5E9F4B4AFA3	10/26/2023	10/23/2033



Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
C=US, O=Symantec Corporation, OU=Symantec Trust Network, CN=Symantec Japan Class 1 CA	5077797A1815E48287385898618908BD7ED182D03725F03B02F13BFFD6652F6A	4/15/2014	4/14/2024
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=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=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=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=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=US, O=DigiCert Inc, OU=www.digicert.com, CN=Cybertrust Japan Issuing CA-1	87942388D29A46C06FE1E56AAB791594D0FB2E8EABF124048F130EEA9BEDD3FD	9/1/2016	9/1/2026



Timestamping 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., 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
C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Trusted Root G4	4C913D04FB495DC36119552D6068F7B9891EFE40344E9E5C1E9132F65BAEFF7F	6/9/2022	11/9/2031

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 S/MIME certificate lifecycle management business 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”) enumerated in [Attachment A](#), including its commitment to provide S/MIME certificates in conformity with the CA/Browser Forum Requirements on its [repository](#), and provided such services in accordance with its disclosed practices.
- maintained effective controls to provide reasonable assurance that:
 - the integrity of keys and S/MIME certificates it manages is established and protected throughout their lifecycles; and
 - S/MIME subscriber information is properly authenticated (for the registration activities performed by DigiCert)
- 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 - S/MIME Certificates v1.0.3](#).

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



Certification Authority's Responsibilities

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 - S/MIME Certificates v1.0.3](#).

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 matter 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.

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 - S/MIME Certificates v1.0.3](#).

Use of the WebTrust Seal

DigiCert's use of the WebTrust for Certification Authorities - S/MIME Certificates constitutes a symbolic representation of the contents of this report and it is not intended, nor should it be construed, to update this report or provide any additional assurance.

BDO USA

November 27, 2024



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

Certificate Policy/Certificate Practice Statement¹

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

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 Signing ECC P384 Root G4 O = QuoVadis Trustlink B.V. C = NL	771535D43D4633BD307EB7B8A3966B5DF00707C088089920080C1AE6D3CB0F68	3/16/2023	3/9/2048
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 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	83FDD82FD9DAE3B21EEBD33CF46251D746F0D6102B683150DD7B98AD8E4BB9F8	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 1 G3 O = QuoVadis Limited C = BM	8A866FD1B276B57E578E921C65828A2BED58E9F2F288054134B7F1F4BFC9CC74	1/12/2012	1/12/2042
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 = QuoVadis Europe Advanced CA G2 O = QuoVadis Trustlink Deutschland GmbH C = DE	EBCD0C73FE44B60E25789419C07B0B234B3F586E092316FB2CBDA39C223224A3	7/22/2020	7/20/2030
CN = QuoVadis Swiss Advanced CA G4 O = QuoVadis Trustlink Schweiz AG C = CH	085A74D4683D0FCCDE44677CFA579B732C9CE2DA6921AD3FE70F814EE7C0BF52	7/22/2020	7/20/2030
CN = BEKB - BCBE Issuing CA G2 OU = Issuing Certification Authority O = Berner Kantonalbank AG C = CH	474D298059F15BC5319B4A94D38AAFADB627CC09513FCD9362CD89C2F9B6221	2/7/2023	11/24/2031
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 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 = itsme Sign Issuing CA G2x O = DigiCert Europe Belgium B.V. C = BE	B965A4354E7E1FFEDD1F947F13B065819B3A53C6889DC643E1D0D4C514AB68AE	10/5/2020	10/3/2030
CN = QuoVadis Swiss Regulated CA G3 O = QuoVadis TrustLink Schweiz AG C = CH	726FB1F3D9FBFE0B4043004A27A43CF65CB214363B093034FC4185C86C9D8B0D	7/27/2020	7/25/2028
CN = QuoVadis Issuing CA G5 O = QuoVadis Limited C = BM	08204C52ADDA97A6FDEF702F6CEB4B94E578F8FC1C301C9D5136AB381CFA7D9	10/7/2019	10/4/2029

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 = BT Class 2 DigiCert PKI Platform CA O = British Telecommunications plc C = GB	843782303040BFB33576766E1700696DE0FC14887BE293D7265EB59ECE4ED9CC	8/6/2019	6/6/2031
CN = HydrantID Client ICA G2 O = HydrantID (Avalanche Cloud Corporation) C = US	5286AE1C558A81537CD9870F749D96EFABC2D2BA393DF818DFE95EA7CE6450A7	10/7/2019	10/4/2029
CN = QuoVadis Enterprise Trust CA 3 G3 O = QuoVadis Limited C = BM	DA5462526A0C2E9852A86186B025390158759CDCA6AE21F09F713CA6ACDD1F1	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 = 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 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

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 = 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
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 as enumerated in [Attachment B](#) in scope for S/MIME Baseline Requirements and provides S/MIME CA services.

The management of DigiCert is responsible for establishing and maintaining effective controls over its S/MIME CA operations, including its S/MIME CA business practices disclosure on its [repository](#), S/MIME key lifecycle management controls, and S/MIME 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 Certification Authority 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 S/MIME CA services. Based on that assessment, in providing its S/MIME CA services in the locations in the Netherlands, Switzerland, the United States, Ireland, Belgium and Germany, DigiCert has:

- disclosed its S/MIME certificate lifecycle management business 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") enumerated in [Attachment A](#), including its commitment to provide S/MIME certificates in conformity with the CA/Browser Forum Requirements on its [repository](#), and provided such services in accordance with its disclosed practices
- maintained effective controls to provide reasonable assurance that:
 - the integrity of keys and S/MIME certificates it manages is established and protected throughout their lifecycles; and
 - S/MIME subscriber information is properly authenticated (for the registration activities performed by DigiCert)
- 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 - S/MIME Certificates v1.0.3](#).



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

DigiCert Ireland Limited

DocuSigned by:



11/27/2024

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Jason Sabin

Chief Technology Officer



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

Certificate Policy/Certificate Practice Statement¹

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

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 Signing ECC P384 Root G4 O = QuoVadis Trustlink B.V. C = NL	771535D43D4633BD307EB7B8A3966B5DF00707C088089920080C1AE6D3CB0F68	3/16/2023	3/9/2048
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 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	83FDD8B2FD9DAE3B21EEBD33CF46251D746F0D6102B683150DD7B98AD8E4BB9F8	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 1 G3 O = QuoVadis Limited C = BM	8A866FD1B276B57E578E921C65828A2BED58E9F2F288054134B7F1F4BFC9CC74	1/12/2012	1/12/2042
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 = QuoVadis Europe Advanced CA G2 O = QuoVadis Trustlink Deutschland GmbH C = DE	EBCD0C73FE44B60E25789419C07B0B234B3F586E092316FB2CBDA39C223224A3	7/22/2020	7/20/2030
CN = QuoVadis Swiss Advanced CA G4 O = QuoVadis Trustlink Schweiz AG C = CH	085A74D4683D0FCCDE44677CFA579B732C9CE2DA6921AD3FE70F814EE7C0BF52	7/22/2020	7/20/2030
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 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 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 = itsme Sign Issuing CA G2x O = DigiCert Europe Belgium B.V. C = BE	B965A4354E7E1FFEDD1F947F13B065819B3A53C6889DC643E1D0D4C514AB68AE	10/5/2020	10/3/2030



Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
CN = QuoVadis Swiss Regulated CA G3 O = QuoVadis TrustLink Schweiz AG C = CH	726FB1F3D9FBFE0B4043004A27A43CF65CB214363B093034FC4185C86C9D8B0D	7/27/2020	7/25/2028
CN = QuoVadis Issuing CA G5 O = QuoVadis Limited C = BM	08204C52ADDA97A6FDEF702F6CEB4B94E578F8FC1C301C9D5136AB381CFA7D9	10/7/2019	10/4/2029
CN = QuoVadis Enterprise Trust CA 1 G4 O = QuoVadis Trustlink B.V. C = NL	597623E05FD1B591711194EB190590F903A2B73F74CD5E8F787EC528033DAB7F	7/23/2020	7/20/2035
CN = BT Class 2 DigiCert PKI Platform CA O = British Telecommunications plc C = GB	843782303040BFB33576766E1700696DE0FC14887BE293D7265EB59ECE4ED9CC	8/6/2019	6/6/2031
CN = HydrantID Client ICA G2 O = HydrantID (Avalanche Cloud Corporation) C = US	5286AE1C558A81537CD9870F749D96EFABC2D2BA393DF818DFE95EA7CE6450A7	10/7/2019	10/4/2029
CN = QuoVadis Enterprise Trust CA 3 G3 O = QuoVadis Limited C = BM	DA5462526A0C2E9852A86186B025390158759CDCA6AE21F09F713CA6ACDD1F1	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 = 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 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



Subordinate CA Certificates			
Subject DN	SHA2 Thumbprint	Valid From	Valid To
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 = 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	AA0E83B4AE0036679703D1603BC7E63A08046A033AE4B9F465838ADC85C61ED	1/28/2020	1/27/2030
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 = 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