

INDEPENDENT ACCOUNTANT'S REPORT

To the management of Microsoft Public Key Infrastructure Services ("MS PKI Services"):

Scope

We have examined MS PKI Services management's [assertion](#) that for its Certification Authority ("CA") operations at locations enumerated in [Attachment B](#), for CAs as enumerated in [Attachment A](#), MS PKI Services has:

- maintained effective controls to provide reasonable assurance that it meets the Network and Certificate System Security Requirements as set forth by the CA/Browser Forum

throughout the period May 1, 2025 to April 30, 2026 based on the [WebTrust Principles and Criteria for Certification Authorities – Network Security, v1.7](#).

There are other CA hierarchies and PKI operations across Microsoft that are not managed by MS PKI services. These CA hierarchies and PKI operations are not in the scope of this examination, and this opinion does not extend to these services.

While the MS PKI Services management's [assertion](#) enumerates matters disclosed publicly on Mozilla's Bugzilla reporting system throughout the period May 1, 2025 to April 30, 2026, we noted that those matters were not relevant to the CAs enumerated in [Attachment A](#) and applicable to the [WebTrust Principles and Criteria for Certification Authorities – Network Security, v1.7](#).

Certification authority's responsibilities

MS PKI Services' 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 – Network Security, v1.7.

Practitioner's responsibilities

Our responsibility is to express an opinion, based on our examination. Our examination was conducted in accordance with AT-C Section 205, *Assertion-Based Examination Engagements*, established by the American Institute of Certified Public Accountants, and International Standard on Assurance Engagements ("ISAE") 3000, *Assurance Engagements Other Than Audits Or Reviews Of Historical Financial Information*. Those standards require that we plan and perform our 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.

Our independence and quality control

We are required to be independent and to meet other ethical responsibilities in accordance with the Code of Professional Conduct established by the American Institute of Certified Public Accountants ("AICPA") and Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board of Accountants' ("IESBA"). We have complied with those requirements. We applied the Statements on Quality Control Standards established by the AICPA and the International Standards on Quality Management issued by the International Auditing and Assurance Standards Board ("IAASB") and, accordingly, maintain a comprehensive system of quality control.

Relative effectiveness of controls

The relative effectiveness and significance of specific controls at MS PKI Services 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.

Opinion

In our opinion MS PKI Services' assertion, as referred to above, is fairly stated, in all material respects.

This report does not include any representation as to the quality of MS PKI Services' services other than its CA operations in the United States of America, and in Ireland, nor the suitability of any of MS PKI Services' services for any customer's intended purpose.

Use of the WebTrust seal

MS PKI Services' use of the WebTrust for Certification Authorities – Network Security 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.

A handwritten signature in black ink that reads "Deloitte & Touche LLP". The script is cursive and fluid, with the letters connected. The "D" is large and loops around, and the "LLP" is written in a slightly more upright but still cursive style.

Deloitte & Touche LLP

July 28, 2026

ATTACHMENT A

LIST OF IN SCOPE CAs

Root CAs	
1.	Microsoft ECC Root Certificate Authority 2017
2.	Microsoft RSA Root Certificate Authority 2017
3.	Microsoft TLS RSA Root G2
4.	Microsoft TLS ECC Root G2
Cross-signed CA Certificates	
3.	Microsoft TLS RSA Root G2
4.	Microsoft TLS ECC Root G2
5.	Microsoft Azure ECC TLS Issuing CA 01
6.	Microsoft Azure ECC TLS Issuing CA 02
7.	Microsoft Azure ECC TLS Issuing CA 05
8.	Microsoft Azure ECC TLS Issuing CA 06
9.	Microsoft Azure ECC TLS Issuing CA 03
10.	Microsoft Azure ECC TLS Issuing CA 04
11.	Microsoft Azure ECC TLS Issuing CA 07
12.	Microsoft Azure ECC TLS Issuing CA 08
13.	Microsoft Azure RSA TLS Issuing CA 03
14.	Microsoft Azure RSA TLS Issuing CA 04
15.	Microsoft Azure RSA TLS Issuing CA 07
16.	Microsoft Azure RSA TLS Issuing CA 08
17.	Microsoft Azure TLS Issuing CA 01
18.	Microsoft Azure TLS Issuing CA 02
19.	Microsoft Azure TLS Issuing CA 05
20.	Microsoft Azure TLS Issuing CA 06
21.	Microsoft TLS G1 ECC CA 01
22.	Microsoft TLS G1 ECC CA 02
23.	Microsoft TLS G1 RSA CA 01
24.	Microsoft TLS G1 RSA CA 02
25.	Microsoft TLS G1 RSA CA 03
26.	Microsoft TLS G1 RSA CA 04
Intermediate CA Certificates	
27.	Microsoft ECC TLS Issuing AOC CA 01
28.	Microsoft ECC TLS Issuing AOC CA 02
29.	Microsoft ECC TLS Issuing EOC CA 01
30.	Microsoft ECC TLS Issuing EOC CA 02
31.	Microsoft RSA TLS Issuing AOC CA 01
32.	Microsoft RSA TLS Issuing AOC CA 02
33.	Microsoft RSA TLS Issuing EOC CA 01
34.	Microsoft RSA TLS Issuing EOC CA 02
35.	Microsoft TLS G2 RSA CA OCSP 02
36.	Microsoft TLS G2 RSA CA OCSP 04
37.	Microsoft TLS G2 RSA CA OCSP 06
38.	Microsoft TLS G2 RSA CA OCSP 08
39.	Microsoft TLS G2 RSA CA OCSP 10
40.	Microsoft TLS G2 RSA CA OCSP 12
41.	Microsoft TLS G2 RSA CA OCSP 14
42.	Microsoft TLS G2 RSA CA OCSP 16
43.	Microsoft TLS G2 ECC CA OCSP 02
44.	Microsoft TLS G2 ECC CA OCSP 04
45.	Microsoft TLS G2 ECC CA OCSP 06
46.	Microsoft TLS G2 ECC CA OCSP 08

CA IDENTIFYING INFORMATION

CA #	Cert #	Subject	Issuer	Serial Number	Key Type	Hash Type	Not Before	Not After	Revoked Date	Extended Key Usage	Subject Key Identifier	SHA256 Fingerprint
1	1	C=US O=Microsoft Corporation CN=Microsoft ECC Root Certificate Authority 2017	C=US O=Microsoft Corporation CN=Microsoft ECC Root Certificate Authority 2017	66F23DAF87DE8BB14AEA0C573101C2EC	ECC	sha384ECDSA	12/18/2019 23:06	7/18/2042 23:16	N/A		C8CB997270520CF8E6BE20457292ACF4210ED35	358DF39D764AF9E1B766E9C972DF352EE15CFAC227AF6AD1D70E8E4A6EDCBA02
1	2	C=US S=Washington L=Redmond O=Microsoft Corporation CN=Microsoft ECC Root Certificate Authority 2017	C=US S=Washington L=Redmond O=Microsoft Corporation CN=Microsoft ECC Root Certificate Authority 2017	71767E8D58E4FC9649C63EFBCF3ABDA7	ECC	sha384ECDSA	7/26/2017s 22:22	7/26/2042 22:31	N/A		C8CB997270520CF8E6BE20457292ACF4210ED35	FEA1884AB3AEA6D0DBEDBE4B9CD9FEC8655116300A86A856488FC488BB4B44D2
2	1	C=US O=Microsoft Corporation CN=Microsoft RSA Root Certificate Authority 2017	C=US O=Microsoft Corporation CN=Microsoft RSA Root Certificate Authority 2017	1ED397095FD884B347701EAA8E7F45B3	RSA	sha384RSA	12/18/2019 22:51	7/18/2042 23:00	N/A		09CB597F86B2708F1AC339E3C0D9E9BFB84DB223	C741F70F4B2A8D88BF2E71C14122EF53EF10EBA0CFA5E64CFA20F418853073E0
2	2	C=US S=Washington L=Redmond O=Microsoft Corporation CN=Microsoft RSA Root Certificate Authority 2017	C=US S=Washington L=Redmond O=Microsoft Corporation CN=Microsoft RSA Root Certificate Authority 2017	29C87039F4DBFDB94DB8CA6CA792836B	RSA	sha384RSA	7/26/2017 22:07	7/26/2042 22:15	N/A		09CB597F86B2708F1AC339E3C0D9E9BFB84DB223	ECDD47B5ACBFA328211E1BFF54ADEAC95E6991E3C1D50E27B527E903208040A1
3	1	C=US, O=Microsoft Corporation, CN=Microsoft TLS RSA Root G2	C=US, O=Microsoft Corporation, CN=Microsoft TLS RSA Root G2	6486E3B269180FBF4040392E2E534B9B	RSA	sha384RSA	4/10/2025 18:36	4/10/2040 18:43	N/A		DE918648B7A1315931F14B5F07A9DC8879DAA876	6A170583DB584151E1C454EECA2A64CC5D8E484A5BD1156E720B4458654EE9E5
3	2	C=US, O=Microsoft Corporation, CN=Microsoft TLS RSA Root G2	C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Global Root G2	0B0C6B2C466917B04773C647D6A4FC0C8	RSA	sha384RSA	5/21/2025 00:00	6/19/2029 23:59	N/A	Server Authentication (1.3.6.1.5.5.7.3.1)	DE918648B7A1315931F14B5F07A9DC8879DAA876	DDCD1E8A20638D4AAFF7201B81D56452ACD2C759F1686BDC38F73DD15732BDC2
4	1	C=US, O=Microsoft Corporation, CN=Microsoft TLS ECC Root G2	C=US, O=Microsoft Corporation, CN=Microsoft TLS ECC Root G2	72E20228C5B2C1B04D25056E62E27679	ECC	sha384ECDSA	4/10/2025 20:52	4/10/2040 20:58	N/A		6FAB7EDAFF974372EC3B6777DE82613588474285	87755CFE88BD80D1099DCDED3EAE114BA976E664B3248EE3DC649E357F17E8A7
4	2	C=US, O=Microsoft Corporation, CN=Microsoft TLS ECC Root G2	C=US, O=DigiCert Inc, OU=www.digicert.com, CN=DigiCert Global Root G3	08D3C6D001F26CB5A23F0C7D6A73FFB6	ECC	sha384ECDSA	5/21/2025 00:00	6/19/2029 23:59	N/A	Server Authentication (1.3.6.1.5.5.7.3.1)	6FAB7EDAFF974372EC3B6777DE82613588474285	61799E3594F6FA6C9F619031E4A3C9F643FDA38C08370A4507E5709A21B1AB7
5	1	C=US O=Microsoft Corporation CN=Microsoft Azure ECC TLS Issuing CA 01	C=US O=DigiCert Inc OU=www.digicert.com CN=DigiCert Global Root G3	09DC42A5F574FF3A389EE06D5D4DE440	ECC	sha384ECDSA	8/12/2020 0:00	6/27/2024 23:59	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	AAFDD300DD7A2D5EF8A7A7731AA66A6C26C11BB6F	949D6B48761CA134AD3E7A8571186F580EE887F2C6B568B5140F4157F9D68DD
5	2	C=US O=Microsoft Corporation CN=Microsoft Azure ECC TLS Issuing CA 01	C=US O=Microsoft Corporation CN=Microsoft ECC Root Certificate Authority 2017	330000001AA9564F44321C54B900000000001A	ECC	sha384ECDSA	1/17/2020 20:28	6/27/2024 20:28	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	AAFDD300DD7A2D5EF8A7A7731AA66A6C26C11BB6F	2CAEFBB55E70DF5A8985FE9BC10DD56A40C3DEDAB3DA1530A29682015C5B7C66
6	1	C=US O=Microsoft Corporation CN=Microsoft Azure ECC TLS Issuing CA 02	C=US O=DigiCert Inc OU=www.digicert.com CN=DigiCert Global Root G3	0E8DBE5EA610E6CB8569C736F6D7004B	ECC	sha384ECDSA	8/12/2020 0:00	6/27/2024 23:59	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	9DE50E7737479E0933D990BE2A09C2127F4ED2A3	9C64A9A43E990E98F8CE8317B2D4C1C07FFE6E032DA8B86D60A69E2FF038F1F
6	2	C=US O=Microsoft Corporation CN=Microsoft Azure ECC TLS Issuing CA 02	C=US O=Microsoft Corporation CN=Microsoft ECC Root Certificate Authority 2017	330000001B498D6736ED5612C200000000001B	ECC	sha384ECDSA	1/17/2020 20:28	6/27/2024 20:28	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	9DE50E7737479E0933D990BE2A09C2127F4ED2A3	4EC439672A44301A66E27947CC3B5897F132B667F712CC1A37018A3CC85B16A
7	1	C=US O=Microsoft Corporation CN=Microsoft Azure ECC TLS Issuing CA 05	C=US O=DigiCert Inc OU=www.digicert.com CN=DigiCert Global Root G3	0CE59C30FD7A83532E2D0146B332F965	ECC	sha384ECDSA	8/12/2020 0:00	6/27/2024 23:59	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	55DFEE1E27ACF29E2B9E8039357956473ACEB310	003F71DC4820216575FC5AACFE3B1AEB76F72AEA5B8E8FCEFC80B9F517A4A612
7	2	C=US O=Microsoft Corporation CN=Microsoft Azure ECC TLS Issuing CA 05	C=US O=Microsoft Corporation CN=Microsoft ECC Root Certificate Authority 2017	330000001CC0D2A3CD78CF2C1000000000001C	ECC	sha384ECDSA	1/17/2020 20:28	6/27/2024 20:28	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	55DFEE1E27ACF29E2B9E8039357956473ACEB310	624D5576A652B2130768BF84B965EEFFFD91603D25CD57155A7DC2789DAC38
8	1	C=US O=Microsoft Corporation CN=Microsoft Azure ECC TLS Issuing CA 06	C=US O=DigiCert Inc OU=www.digicert.com CN=DigiCert Global Root G3	066E79CD7624C63130C77ABEB6A8B894	ECC	sha384ECDSA	8/12/2020 0:00	6/27/2024 23:59	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	1FCEC79D64535FB6FC9507AE95263351C127D926	2975BAB51D00D862D0E16EEDEF8306A759C65CD4B9F00DAF50ECDFCB4EC396E4
8	2	C=US O=Microsoft Corporation CN=Microsoft Azure ECC TLS Issuing CA 06	C=US O=Microsoft Corporation CN=Microsoft ECC Root Certificate Authority 2017	330000001D0913C309DA3F05A600000000001D	ECC	sha384ECDSA	1/17/2020 20:28	6/27/2024 20:28	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	1FCEC79D64535FB6FC9507AE95263351C127D926	151A3E5969C6616EB637A8722B174CFD95387AAACE78D57C3BD23F0CB3008186A
9	1	C=US O=Microsoft Corporation CN=Microsoft Azure ECC TLS Issuing CA 03	C=US O=Microsoft Corporation CN=Microsoft ECC Root Certificate Authority 2017	33000000322A2579B5E698BC0000000000033	ECC	sha384ECDSA	5/25/2023 23:47	5/25/2028 23:47	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	72E096A151EA300C58B5F519AB9A7CCD9755102E	2EC9A58A68B60F81E5F8662F7645743CE1EDCE06AF686C775431F7BBB69ABD4
9	2	C = US O = Microsoft Corporation CN = Microsoft Azure ECC TLS Issuing CA 03	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G3	01529EE8368F0B5D72BA433E2D8EA62D	ECC	sha384ECDSA	6/7/2023 17:00	8/25/2026 16:59	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	72E096A151EA300C58B5F519AB9A7CCD9755102E	B8D27139C5302C63D903F570F173AD40C60C974B9EBE292C90FFCCAB5D6FA54E
9	3	C = US O = Microsoft Corporation CN = Microsoft Azure ECC TLS Issuing CA 03	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G3	0E001F888F7EB98A8EFCFBAC8D22F173	ECC	sha384ECDSA	6/1/2023 00:00	8/25/2026 23:59	6/6/2023 17:02	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	72E096A151EA300C58B5F519AB9A7CCD9755102E	AF790CAFCD0E9AEADC88D535612952B2D660DAE9AA0C709467AD18B913C5E0B7
10	1	C=US O=Microsoft Corporation CN=Microsoft Azure ECC TLS Issuing CA 04	C=US O=Microsoft Corporation CN=Microsoft ECC Root Certificate Authority 2017	33000000322164AEDAB61F509D0000000000032	ECC	sha384ECDSA	5/25/2023 23:47	5/25/2028 23:47	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	35F1E7113268E6B2C8DA71E670F3E83CB80E071B	4D0F5DA23B099209B048E1871B4BB1C4B4E812E3FA0249BB8D19E00FFA9E91BC
10	2	C=US O=Microsoft Corporation CN=Microsoft Azure ECC TLS Issuing CA 04	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G3	02393D48D702425A7CB41C000B0ED7CA	ECC	sha384ECDSA	6/7/2023 17:00	8/25/2026 16:59	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	35F1E7113268E6B2C8DA71E670F3E83CB80E071B	7A3AE4F12920D5A8129BE1183FBEC4370EF10B8B3AD41EAE4A58D5385AA94D33
10	3	C=US O=Microsoft Corporation CN=Microsoft Azure ECC TLS Issuing CA 04	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G3	0A06BECDD2AB134B6FEF42B867A138EB2	ECC	sha384ECDSA	6/1/2023 00:00	8/25/2026 23:59	6/6/2023 17:03	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	35F1E7113268E6B2C8DA71E670F3E83CB80E071B	FFE11B73AD27C296CD9BEFD0BC4EDE0AB8E2688ECE3A8847A1C85DEC9C530E07
11	1	C=US O=Microsoft Corporation CN=Microsoft Azure ECC TLS Issuing CA 07	C=US O=Microsoft Corporation CN=Microsoft ECC Root Certificate Authority 2017	3300000034C732435DB22A0A2B0000000000034	ECC	sha384ECDSA	5/25/2023 23:48	5/25/2028 23:48	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	C35EAC4076C0064DE32B9499306073349829C651	BD3816423553ED993FA44A02F5562470COCFB0D3B00532E3526A4A3AEC87522F
11	2	C=US O=Microsoft Corporation CN=Microsoft Azure ECC TLS Issuing CA 07	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G3	0F1F157582CDCD33734BDC5FCD941A33	ECC	sha384ECDSA	6/7/2023 17:00	8/25/2026 16:59	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	C35EAC4076C0064DE32B9499306073349829C651	BE23414A42E74886E7C72A861BA2DDDA0175ED829223D894C5D272651FC0C189
11	3	C=US O=Microsoft Corporation CN=Microsoft Azure ECC TLS Issuing CA 07	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G3	03A9AD57B415ED4F5027FC293FDF9948	ECC	sha384ECDSA	6/1/2023 00:00	8/25/2026 23:59	6/6/2023 17:04	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	C35EAC4076C0064DE32B9499306073349829C651	D59BEE8525BF9AEFFD44E8A61BDC519A5582668B8E09E6CF92C45C6E6E7316AE
12	1	C=US O=Microsoft Corporation CN=Microsoft Azure ECC TLS Issuing CA 08	C=US O=Microsoft Corporation CN=Microsoft ECC Root Certificate Authority 2017	3300000031526979844798BB8B0000000000031	ECC	sha384ECDSA	5/25/2023 23:47	5/25/2028 23:47	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	AD541D035471C62F5ED65B1858CE6E24C5D6A20A	2C99B917B7A068578F7EFB4FB8E60B9CB5A0E73BF300E0E1DC112E5654C5AE52
12	2	C=US O=Microsoft Corporation CN=Microsoft Azure ECC TLS Issuing CA 08	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G3	0EF2E5D83681520255E92C608FBC2FF4	ECC	sha384ECDSA	6/7/2023 17:00	8/25/2026 16:59	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	AD541D035471C62F5ED65B1858CE6E24C5D6A20A	89AADE767B7BA3F8DDE8E9E74A2FCBBEA40D57155F7E1F2259C88835601FAED
12	3	C=US O=Microsoft Corporation CN=Microsoft Azure ECC TLS Issuing CA 08	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G3	0E9AB506722B783463F10BBB17542230	ECC	sha384ECDSA	6/1/2023 00:00	8/25/2026 23:59	6/6/2023 17:02	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	AD541D035471C62F5ED65B1858CE6E24C5D6A20A	CDAE3E94571D2E9D439A06606E96B0A0EB38299EC01F1D5BB9A748C018CC2C3
13	1	C=US O=Microsoft Corporation CN=Microsoft Azure RSA TLS Issuing CA 03	C=US O=Microsoft Corporation CN=Microsoft RSA Root Certificate Authority 2017	330000003968EA517D8A7E30CE0000000000039	RSA	sha384RSA	5/25/2023 23:49	5/25/2028 23:49	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	FE09714055051044D8A48175B89E1AE94A0688C8	3D3F4B440F933FFD269565EDA9E20E8DF863C9CBE3651D3B476C5B4F4AF5CE28
13	2	C=US O=Microsoft Corporation CN=Microsoft Azure RSA TLS Issuing CA 03	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G2	05196526449A5E3D1A38748F5DCFEBCC	RSA	sha384RSA	6/7/2023 17:00	8/25/2026 16:59	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	FE09714055051044D8A48175B89E1AE94A0688C8	9D1BC5D2DD75BF8B64F35E7F919E2546C225BE888C1A8CBE82C0E9579234A7ED

CA #	Cert #	Subject	Issuer	Serial Number	Key Type	Hash Type	Not Before	Not After	Revoked Date	Extended Key Usage	Subject Key Identifier	SHA256 Fingerprint
13	3	C=US O=Microsoft Corporation CN=Microsoft Azure RSA TLS Issuing CA 03	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G2	0D75EDB5BF815E355A7DDCE1870E760F	RSA	sha384RSA	6/1/2023 00:00	8/25/2026 23:59	6/6/2023 16:58	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	FE09714055051044D8A48175B89E1AE94A0688C8	35A2357D1C93E12ADF2109FE4087DC2DE25516E39D5D9F72E85F73C5C680DDC7
14	1	C=US O=Microsoft Corporation CN=Microsoft Azure RSA TLS Issuing CA 04	C=US O=Microsoft Corporation CN=Microsoft RSA Root Certificate Authority 2017	33000003CD7CB44EE579961D00000000003C	RSA	sha384RSA	5/25/2023 23:49	5/25/2028 23:49	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	3B70D153E976259D60A8CA660FC69BAE6F54166A	FD39FFC48F148354262162A2F55DD46DC2564CFC1499309AD53F09C10981DCCA
14	2	C=US O=Microsoft Corporation CN=Microsoft Azure RSA TLS Issuing CA 04	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G2	09F96EC295555F24749EAF1E5DCED49D	RSA	sha384RSA	6/7/2023 17:00	8/25/2026 16:59	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	3B70D153E976259D60A8CA660FC69BAE6F54166A	33F9731BE910A66DC6ACD07D9D9CA212EE8D0A9A5C78C8BF3E89B874DF8FB936
14	3	C=US O=Microsoft Corporation CN=Microsoft Azure RSA TLS Issuing CA 04	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G2	0FF735DB59DE63193F0FA7079099C96A	RSA	sha384RSA	6/1/2023 00:00	8/25/2026 23:59	6/6/2023 16:59	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	3B70D153E976259D60A8CA660FC69BAE6F54166A	5C6D57933992E9D88B6C43C266CD8E269439F510B30AA84E35A32832ECA240F
15	1	C=US O=Microsoft Corporation CN=Microsoft Azure RSA TLS Issuing CA 07	C=US O=Microsoft Corporation CN=Microsoft RSA Root Certificate Authority 2017	33000003BF980B0C83783431700000000003B	RSA	sha384RSA	5/25/2023 23:49	5/25/2028 23:49	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	CE15163BEA02A3A66BDAD92BFDE58C52BE7A50A8	FBB7926A451BADF516BE518614A776E325E29819908796D807F59320F918EE2
15	2	C=US O=Microsoft Corporation CN=Microsoft Azure RSA TLS Issuing CA 07	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G2	0A43A9509B01352F899579EC7208BA50	RSA	sha384RSA	6/7/2023 17:00	8/25/2026 16:59	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	CE15163BEA02A3A66BDAD92BFDE58C52BE7A50A8	724247794951C93F3E41711617E95CE143263E3196C345A1DA78F6639749EC03
15	3	C=US O=Microsoft Corporation CN=Microsoft Azure RSA TLS Issuing CA 07	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G2	0B9E5E59E54105FE2FF42DEE1C9F9938	RSA	sha384RSA	6/1/2023 00:00	8/25/2026 23:59	6/6/2023 17:00	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	CE15163BEA02A3A66BDAD92BFDE58C52BE7A50A8	54F020151A90182095D4F84448DF4911EA683E7F4283E3EB1FF50FF1D78FD2E
16	1	C=US O=Microsoft Corporation CN=Microsoft Azure RSA TLS Issuing CA 08	C=US O=Microsoft Corporation CN=Microsoft RSA Root Certificate Authority 2017	33000003A5DC2FFC321C16D9800000000003A	RSA	sha384RSA	5/25/2023 23:49	5/25/2028 23:49	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	F67E2FBD80A34AB2705BEDF9A1FD8EDCA618007	CFDD061FCD4CFF3BB9E133264CA7FDE45CA49B70CFAA977AE0DC422B4330A8C1
16	2	C=US O=Microsoft Corporation CN=Microsoft Azure RSA TLS Issuing CA 08	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G2	0EFB7E547EDFOFF1069AEE57696D7BA0	RSA	sha384RSA	6/7/2023 17:00	8/25/2026 16:59	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	F67E2FBD80A34AB2705BEDF9A1FD8EDCA618007	511C1C41CB7EB2A10078C32C82F17925BA786DE46C633921D038E7409E15A5EA
16	3	C=US O=Microsoft Corporation CN=Microsoft Azure RSA TLS Issuing CA 08	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G2	0133380EA444E519D557DC516EDCB120	RSA	sha384RSA	6/1/2023 00:00	8/25/2026 23:59	6/6/2023 17:01	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	F67E2FBD80A34AB2705BEDF9A1FD8EDCA618007	04E385FA49454BA99020DFAAA78A97C5B37E212763D03C648FB11F0999F9FD1F
17	1	C=US O=Microsoft Corporation CN=Microsoft Azure TLS Issuing CA 01	C=US O=DigiCert Inc OU=www.digicert.com CN=DigiCert Global Root G2	0AAFA6C5CA63C45141EA3BE1F7C75317	RSA	sha384RSA	7/29/2020 12:30	6/27/2024 23:59	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	0F205DD7A15795DB92CF2BD0C7C27704CE728076	24C7299864E0A2A6964F551C0E8DF2461532FA8C48E4DBBB6080716691F190E5
17	2	C=US O=Microsoft Corporation CN=Microsoft Azure TLS Issuing CA 01	C=US O=Microsoft Corporation CN=Microsoft RSA Root Certificate Authority 2017	330000001DBE9496F3DB888DE700000000001D	RSA	sha384RSA	1/17/2020 20:22	6/27/2024 20:22	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	0F205DD7A15795DB92CF2BD0C7C27704CE728076	0437AB2EC2C2B4890296C135034B21DB146434B8317EE703AA8AA943C5EA51AE
18	1	C=US O=Microsoft Corporation CN=Microsoft Azure TLS Issuing CA 02	C=US O=DigiCert Inc OU=www.digicert.com CN=DigiCert Global Root G2	0C6AE97CCED599838690A00A9EA53214	RSA	sha384RSA	7/29/2020 12:30	6/27/2024 23:59	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	00AB91FC216226979AA8791B61419060A96267FD	15A98761EBE011554DA3A46D206B0812CB2EB69AE87AAA11A6DD4C884ED5142A
18	2	C=US O=Microsoft Corporation CN=Microsoft Azure TLS Issuing CA 02	C=US O=Microsoft Corporation CN=Microsoft RSA Root Certificate Authority 2017	330000001EC6749F058517B4D000000000001E	RSA	sha384RSA	1/17/2020 20:22	6/27/2024 20:22	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	00AB91FC216226979AA8791B61419060A96267FD	D39CE39FF6F449D4F3391EE2004D705EC22F99CFFCA40A88F85DB26454ADDBD1
19	1	C=US O=Microsoft Corporation CN=Microsoft Azure TLS Issuing CA 05	C=US O=DigiCert Inc OU=www.digicert.com CN=DigiCert Global Root G2	0D78EDE97D8209967A52631B8BDD188D	RSA	sha384RSA	7/29/2020 12:30	6/27/2024 23:59	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	C7B29C7F1CE3B85AEFE9681AA85D94C126526A68	D6831BA43607F5AC19778D627531562AF55145F191CAB5EFAFA0E0005442B302
19	2	C=US O=Microsoft Corporation CN=Microsoft Azure TLS Issuing CA 05	C=US O=Microsoft Corporation CN=Microsoft RSA Root Certificate Authority 2017	330000001F9F1FA2043BC28DB900000000001F	RSA	sha384RSA	1/17/2020 20:22	6/27/2024 20:22	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	C7B29C7F1CE3B85AEFE9681AA85D94C126526A68	AB3203B3EA2017D509726A1D82293E9FFC8C42CEB52C9AF1C0EE96B5C02BCBA
20	1	C=US O=Microsoft Corporation CN=Microsoft Azure TLS Issuing CA 06	C=US O=DigiCert Inc OU=www.digicert.com CN=DigiCert Global Root G2	02E79171FB8021E93FE2D983834C50C0	RSA	sha384RSA	7/29/2020 12:30	6/27/2024 23:59	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	D5C1673AC2A39DF477525B59123829E65568BBA5	48FF8B494668C752304B48BFEB18758987DEF6582E5F09B921F4B60BB3D6A8DD
20	2	C=US O=Microsoft Corporation CN=Microsoft Azure TLS Issuing CA 06	C=US O=Microsoft Corporation CN=Microsoft RSA Root Certificate Authority 2017	3300000020A2F1491A37FBD31F0000000000020	RSA	sha384RSA	1/17/2020 20:22	6/27/2024 20:22	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	D5C1673AC2A39DF477525B59123829E65568BBA5	7DF4D3EF45798F8C4384FC702BA52A44CE7BD6298B141628D4ABABC7678F6467
21	1	C=US O=Microsoft Corporation CN=Microsoft TLS G1 ECC CA 01	C=US O=Microsoft Corporation CN=Microsoft RSA Root Certificate Authority 2017	330000003D136DEBEF4C351D12000000000003D	ECC	sha384ECDSA	8/28/2025 9:50	8/28/2030 9:50	N/A	Server Authentication (1.3.6.1.5.5.7.3.1)	7CAAC9A9DDD1AFD8F4D24161572F4BF8D36E5D0E	2B5F1CA6E115D42112224720694D73BA50CA9B5C64E9DA2529B8F4AAF38DF384
21	2	C = US, O = Microsoft Corporation, CN = Microsoft TLS G1 ECC CA 01	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G3	0778A9033B5EC969FF4F5B6285952F54	ECC	sha384ECDSA	12/23/2025 00:00	6/15/2026 23:59	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	7CAAC9A9DDD1AFD8F4D24161572F4BF8D36E5D0E	CAF00842A72F9696E53C29F2C5E7A1B9D71A3E2F0C31D8B940694D59DCCEF643
21	3	C = US, O = Microsoft Corporation, CN = Microsoft TLS G1 ECC CA 01	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G3	0950BBDE2B07B8BFA44EB03D8174E5A8	ECC	sha384ECDSA	12/18/2025 00:00	6/15/2026 23:59	12/23/2025 18:19	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	D2D101768A55F51FE426B4F9E03734525FA7A585	E01233CBC292EF6D2476E1D22588510FE9F86BF65DFD8E6A9BF93B325FAA6E29
21	4	C = US, O = Microsoft Corporation, CN = Microsoft TLS G1 ECC CA 01	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G3	0C3D2F09209D76D81B29FCB3EEA66C06	ECC	sha384ECDSA	9/17/2025 00:00	4/15/2029 23:59	1/12/2026 18:29	Server Authentication (1.3.6.1.5.5.7.3.1)	7CAAC9A9DDD1AFD8F4D24161572F4BF8D36E5D0E	39C492D06ED1150D35FCEACF0DF28D0FB61BBA072A34AA4E824D68E339A7EB23
22	1	C=US O=Microsoft Corporation CN=Microsoft TLS G1 ECC CA 02	C=US O=Microsoft Corporation CN=Microsoft RSA Root Certificate Authority 2017	330000003C7D4B4D2574A8858B00000000003C	ECC	sha384ECDSA	8/28/2025 9:50	8/28/2030 9:50	N/A	Server Authentication (1.3.6.1.5.5.7.3.1)	5B381B7EAC1CC5B335DC4D1A6612B3215FA54CC7	C8201D6406020821C0085E525CF826983BBD143F074935F440FB3BF980A2F90A
22	2	C = US, O = Microsoft Corporation, CN = Microsoft TLS G1 ECC CA 02	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G3	049A2554F88B66EF2B9838855FFBAF0A	ECC	sha384ECDSA	12/23/2025 00:00	6/15/2026 23:59	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	5B381B7EAC1CC5B335DC4D1A6612B3215FA54CC7	C772865E6F9E0A778B08E86444A21FB6547F7A05E169CCFC58FEA05317E0F5F69
22	3	C = US, O = Microsoft Corporation, CN = Microsoft TLS G1 ECC CA 02	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G3	05022B8F0977569D822CB0B4B74D5555	ECC	sha384ECDSA	9/17/2025 00:00	4/15/2029 23:59	1/12/2026 18:30	Server Authentication (1.3.6.1.5.5.7.3.1)	5B381B7EAC1CC5B335DC4D1A6612B3215FA54CC7	3BFBA894D8573CF5501E87273833172EE3B2184FFFFD9B95A3906FC4DD3ADA50
23	1	C=US O=Microsoft Corporation CN=Microsoft TLS G1 RSA CA 01	C=US O=Microsoft Corporation CN=Microsoft RSA Root Certificate Authority 2017	3300000044E807BA6918AB9AE4000000000044	RSA	sha384RSA	8/28/2025 9:51	8/28/2030 9:51	N/A	Server Authentication (1.3.6.1.5.5.7.3.1)	20BBF2198EA4C672B4AAC904416F559AA69F3D0F	79DBA0721F6DC1AD8EDC3DC27518702F970044188928BF7E8842A04531424F73
23	2	C = US, O = Microsoft Corporation, CN = Microsoft TLS G1 RSA CA 01	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G2	0756A78B1EBAD43408B905304D9CB97C	RSA	sha384RSA	12/23/2025 00:00	6/15/2026 23:59	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	20BBF2198EA4C672B4AAC904416F559AA69F3D0F	374CAA84721816A4F3801300ED6CE5D64F1554F9178D940B4E7306BC93D2B72E
23	3	C = US, O = Microsoft Corporation, CN = Microsoft TLS G1 RSA CA 01	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G2	01A66577E2755575D4EDDA5F06E741D1	RSA	sha384RSA	9/17/2025 00:00	4/15/2029 23:59	1/12/2026 18:31	Server Authentication (1.3.6.1.5.5.7.3.1)	20BBF2198EA4C672B4AAC904416F559AA69F3D0F	3ED3F8679802E0ABEEDB388A901DAF619B6F2B34F6926DCCFF2139517351178
24	1	C=US O=Microsoft Corporation CN=Microsoft TLS G1 RSA CA 02	C=US O=Microsoft Corporation CN=Microsoft RSA Root Certificate Authority 2017	330000004538FFDCDACA3EFD32000000000045	RSA	sha384RSA	8/28/2025 9:51	8/28/2030 9:51	N/A	Server Authentication (1.3.6.1.5.5.7.3.1)	C3D4063CD31A48109032358628D3948C712AD7AF	04396B0ED932A93150457013D839077784BFB143EA900B6A4990FCA139CBD4D1
24	2	C = US, O = Microsoft Corporation, CN = Microsoft TLS G1 RSA CA 02	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G2	037004DBDB89FFA03F90816821A5991E	RSA	sha384RSA	12/23/2025 00:00	6/15/2026 23:59	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	C3D4063CD31A48109032358628D3948C712AD7AF	D3A843D4DC92EB5DF127E646C2F50EE803452747D8C9C6D4FDB9F7CB2060C5B7

CA #	Cert #	Subject	Issuer	Serial Number	Key Type	Hash Type	Not Before	Not After	Revoked Date	Extended Key Usage	Subject Key Identifier	SHA256 Fingerprint
24	3	C = US, O = Microsoft Corporation, CN = Microsoft TLS G1 RSA CA 02	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G2	01A66577E275557D4EDDA5F06E741D1	RSA	sha384RSA	9/17/2025 00:00	4/15/2029 23:59	1/12/2026 18:32	Server Authentication (1.3.6.1.5.5.7.3.1)	C3D4063CD31A48109032358628D3948C712AD7AF	64FE47E1256083CDAA1FE17AB2D32965919FAD9CFE063A45A85F62487F88047E
25	1	C=US O=Microsoft Corporation CN=Microsoft TLS G1 RSA CA 03	C=US O=Microsoft Corporation CN=Microsoft RSA Root Certificate Authority 2017	33000000465C83326B083F339E000000000046	RSA	sha384RSA	8/28/2025 9:51	8/28/2030 9:51	N/A	Server Authentication (1.3.6.1.5.5.7.3.1)	BCCBC8BC0D5623C1E6AFCA87D56B7ACEC662CCEB	8797D4D4A3473CA1D86A279BED9639937B27C52F3CDA0B6009D6958C373BDDEBB
25	2	C = US, O = Microsoft Corporation, CN = Microsoft TLS G1 RSA CA 03	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G2	0FCAA57DD2227BC2F0FFCDBECB45A53	RSA	sha384RSA	12/23/2025 00:00	6/15/2026 23:59	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	BCCBC8BC0D5623C1E6AFCA87D56B7ACEC662CCEB	6A9A2AF2D7FAACE5E2817E8398827A1406BEE711DDB718E7B559577AA4C12B5F
25	3	C = US, O = Microsoft Corporation, CN = Microsoft TLS G1 RSA CA 03	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G2	0EAB72B62946450C62DE692C8265048A	RSA	sha384RSA	9/17/2025 00:00	4/15/2029 23:59	1/12/2026 18:33	Server Authentication (1.3.6.1.5.5.7.3.1)	BCCBC8BC0D5623C1E6AFCA87D56B7ACEC662CCEB	DED374DC72904DCCAFB7DCD8429D45A6AADAB8028FD7C70CB1A08D53FE0CCC6E
26	1	C=US O=Microsoft Corporation CN=Microsoft TLS G1 RSA CA 04	C=US O=Microsoft Corporation CN=Microsoft RSA Root Certificate Authority 2017	33000000477A82567E021DB115000000000047	RSA	sha384RSA	8/28/2025 9:51	8/28/2030 9:51	N/A	Server Authentication (1.3.6.1.5.5.7.3.1)	B5C26D72E38147DEC0DDA671E4557788A535DC9F	2765F456AA084CC2BA015C44D42EC783F2BF6E706C9132E8A6EFD3C800F32D93
26	2	C = US, O = Microsoft Corporation, CN = Microsoft TLS G1 RSA CA 04	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G2	0A173E50576F5B7BDD10DFACFF0D7842	RSA	sha384RSA	12/23/2025 00:00	6/15/2026 23:59	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	B5C26D72E38147DEC0DDA671E4557788A535DC9F	41D989FF321395E82049C2E95ABCBD79C6CC207B62F9F18274BDE2C72F8341D6
26	3	C = US, O = Microsoft Corporation, CN = Microsoft TLS G1 RSA CA 04	C = US, O = DigiCert Inc, OU = www.digicert.com, CN = DigiCert Global Root G2	0C40B9C958224B341C912C34C5742135	RSA	sha384RSA	9/17/2025 00:00	4/15/2029 23:59	1/12/2026 18:33	Server Authentication (1.3.6.1.5.5.7.3.1)	B5C26D72E38147DEC0DDA671E4557788A535DC9F	6EC85CD93E5A7B4CAE58818CB0296A80B3B23AC8D7268E48882E53700F1544A8
27	1	C=US O=Microsoft Corporation CN=Microsoft ECC TLS Issuing AOC CA 01	C=US O=Microsoft Corporation CN=Microsoft ECC Root Certificate Authority 2017	33000000282BFD23E7D1ADD707000000000028	ECC	sha384ECDSA	6/24/2021 19:58	6/24/2021 19:58	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	3158B9CE511B7CD1AA03C0EBED365DC29DD389E1	5C64B1731A8138DEA7D11C9AE8622891F945EBA46825E7ABFE4754FOA6011AF8
28	1	C=US O=Microsoft Corporation CN=Microsoft ECC TLS Issuing AOC CA 02	C=US O=Microsoft Corporation CN=Microsoft ECC Root Certificate Authority 2017	33000000290F8A6222EF6A5695000000000029	ECC	sha384ECDSA	6/24/2021 19:58	6/24/2021 19:58	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	DEDCD76C239943EAACEDC8B71D1858803648BDF4	808CA1ABBBFE2FF1A9AC71887DDA71FF6FCA6C3B5224827F547515A4D9F7AF209
29	1	C=US O=Microsoft Corporation CN=Microsoft ECC TLS Issuing EOC CA 01	C=US O=Microsoft Corporation CN=Microsoft ECC Root Certificate Authority 2017	330000002AD006485FDACBFEB000000000002A	ECC	sha384ECDSA	6/24/2021 19:58	6/24/2021 19:58	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	BB1CEDD08871A9CABFCB935F7179223578C69ACA	2769381532D96183ED39BDC4E323F3C520FB6EACF3BDA3022239DDFC44C8380
30	1	C=US O=Microsoft Corporation CN=Microsoft ECC TLS Issuing EOC CA 02	C=US O=Microsoft Corporation CN=Microsoft ECC Root Certificate Authority 2017	330000002BE6902838672B6679000000000002B	ECC	sha384ECDSA	6/24/2021 19:58	6/24/2021 19:58	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	BFD832342BA1953BB4B5D4B9402D724A9C1A0086	659C0F902D6059FBD1FCA528839F20604B80C74364E58F9D48A2291F813ED82D
31	1	C=US O=Microsoft Corporation CN=Microsoft RSA TLS Issuing AOC CA 01	C=US O=Microsoft Corporation CN=Microsoft RSA Root Certificate Authority 2017	330000002FFAF06F6697E2469C000000000002F	RSA	sha384RSA	6/24/2021 20:57	6/24/2021 20:57	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	EB4C317C3D3F32B883D7C5DB7BDAE478DA9C1457	481E582A206A7D7040CCDA17CF25D349785A2AB94ED7552AB254DCD38B032ECO
32	1	C=US O=Microsoft Corporation CN=Microsoft RSA TLS Issuing AOC CA 02	C=US O=Microsoft Corporation CN=Microsoft RSA Root Certificate Authority 2017	3300000030C756CC88F5C1E7EB0000000000030	RSA	sha384RSA	6/24/2021 20:57	6/24/2021 20:57	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	8A96C2810D578A42CE30F9B8C19DOC1E53A64FE5	D77C45C1587731C4632C19D6F3C9FE832626615C879EA053664A4B26EB2293EC
33	1	C=US O=Microsoft Corporation CN=Microsoft RSA TLS Issuing EOC CA 01	C=US O=Microsoft Corporation CN=Microsoft RSA Root Certificate Authority 2017	33000000310C4914B18C8F339A00000000000031	RSA	sha384RSA	6/24/2021 20:57	6/24/2021 20:57	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	73087893F9D5A99CA3777E113474F453271B783	5EA3857EACD4C7CA5ACBCA9C4627E26F3072038D191A29D4C3F9464B2E5F00C6
34	1	C=US O=Microsoft Corporation CN=Microsoft RSA TLS Issuing EOC CA 02	C=US O=Microsoft Corporation CN=Microsoft RSA Root Certificate Authority 2017	3300000032444D7521341496A900000000000032	RSA	sha384RSA	6/24/2021 20:57	6/24/2021 20:57	N/A	Server Authentication (1.3.6.1.5.5.7.3.1), Client Authentication (1.3.6.1.5.5.7.3.2)	C984963873A62E4B186A6D44D594A37D34A6C7F7	4D558C4ABEB7D37FAB57E573ACCE83133E36212C864E003FBCB30B5FC248B011
35	1	C=US O=Microsoft Corporation CN=Microsoft TLS G2 RSA CA OCSP 02	C=US O=Microsoft Corporation CN=Microsoft TLS RSA Root G2	330000000C4964A16F44203B22000000000000C	RSA	Sha384RSA	8/1/2025 1:03	6/3/2029 1:03	N/A	Server Authentication (1.3.6.1.5.5.7.3.1)	B82F33A67C514F7F1F2DD5C8154238A4B20E8F2F	EA7A25255D111FC3CE4CB8FABE3ADF9C27BBE6DB203F955066BAB4C5A71F3D08
35	2	C=US O=Microsoft Corporation CN=Microsoft TLS G2 RSA CA OCSP 02	C=US O=Microsoft Corporation CN=Microsoft TLS RSA Root G2	330000000674997E55D8C5020D0000000000006	RSA	Sha384RSA	6/26/2025 21:23	6/3/2029 21:23	7/2/2025 00:00	Server Authentication (1.3.6.1.5.5.7.3.1)	B82F33A67C514F7F1F2DD5C8154238A4B20E8F2F	E4F93B694981068A6E07ADD2AFE050464B82F9276B96A3ECF59817DDB6E1085
36	1	C=US O=Microsoft Corporation CN=Microsoft TLS G2 RSA CA OCSP 04	C=US O=Microsoft Corporation CN=Microsoft TLS RSA Root G2	330000000B1E35667D4A9B5580000000000000B	RSA	Sha384RSA	8/1/2025 1:02	6/3/2029 1:02	N/A	Server Authentication (1.3.6.1.5.5.7.3.1)	540CBCEC18F77DF103E284BE34644467CF751F65	AC8EA9F2874FD368A3E778B1A0B165EE898DB9B9687C17EDCDC76908AB58C82C
36	2	C=US O=Microsoft Corporation CN=Microsoft TLS G2 RSA CA OCSP 04	C=US O=Microsoft Corporation CN=Microsoft TLS RSA Root G2	33000000050717B5EE99E2F4DF0000000000005	RSA	Sha384RSA	6/26/2025 21:23	6/3/2029 21:23	7/2/2025 0:00	Server Authentication (1.3.6.1.5.5.7.3.1)	540CBCEC18F77DF103E284BE34644467CF751F65	870A6F0B649FA5781A27710F50FBEC1C5027E7B7DE000BE9D20D02C6791896AC8
37	1	C=US O=Microsoft Corporation CN=Microsoft TLS G2 RSA CA OCSP 06	C=US O=Microsoft Corporation CN=Microsoft TLS RSA Root G2	330000000DEF69CD2D72237356000000000000D	RSA	Sha384RSA	8/1/2025 1:03	6/3/2029 1:03	N/A	Server Authentication (1.3.6.1.5.5.7.3.1)	0C5D6B8CD4A34016034342401E03F500583EBA845	16B74B335C6F9801CFC499E39CC292F6D13C5191BE87126226403819DA4AD213
37	2	C=US O=Microsoft Corporation CN=Microsoft TLS G2 RSA CA OCSP 06	C=US O=Microsoft Corporation CN=Microsoft TLS RSA Root G2	330000000710F17E5773D03D870000000000007	RSA	Sha384RSA	6/26/2025 21:23	6/3/2029 21:23	7/2/2025 00:00	Server Authentication (1.3.6.1.5.5.7.3.1)	0C5D6B8CD4A34016034342401E03F500583EBA845	016CB2A68F7B7D96311306DB9648FA798C2C40BE1574AD12891549C99F41082E
38	1	C=US O=Microsoft Corporation CN=Microsoft TLS G2 RSA CA OCSP 08	C=US O=Microsoft Corporation CN=Microsoft TLS RSA Root G2	3300000011F100A7EB05EBA1000000000000011	RSA	Sha384RSA	8/14/2025 4:03	6/3/2029 4:03	N/A	Server Authentication (1.3.6.1.5.5.7.3.1)	0FB23280ED7F8A9C008438E6D8D7F6708577ED7A	885451307A4ABF298BB28ADD793EC7826629B057ECA79E6F51DC51F42CD64A2D
39	1	C=US O=Microsoft Corporation CN=Microsoft TLS G2 RSA CA OCSP 10	C=US O=Microsoft Corporation CN=Microsoft TLS RSA Root G2	330000000F33206537EE42AE4F000000000000F	RSA	Sha384RSA	8/1/2025 1:03	6/3/2029 1:03	N/A	Server Authentication (1.3.6.1.5.5.7.3.1)	D04C83D18E712E3D34B1FF9B792C8E74D4E27806	6EBFF927297A5B3AAF5EAE672252C36A5158473FA5BBF0E29508D5528358F83B
39	2	C=US O=Microsoft Corporation CN=Microsoft TLS G2 RSA CA OCSP 10	C=US O=Microsoft Corporation CN=Microsoft TLS RSA Root G2	3300000008710CE4EAF0BCC488000000000008	RSA	Sha384RSA	6/26/2025 21:23	6/3/2029 21:23	7/2/2025 00:00	Server Authentication (1.3.6.1.5.5.7.3.1)	D04C83D18E712E3D34B1FF9B792C8E74D4E27806	ECF249379AOC083CACE54EC906AE4550ECC634DA4A8262FEA7083ECB9E13FC39
40	1	C=US O=Microsoft Corporation CN=Microsoft TLS G2 RSA CA OCSP 12	C=US O=Microsoft Corporation CN=Microsoft TLS RSA Root G2	33000000107D59860FD64D72430000000000010	RSA	Sha384RSA	8/14/2025 4:03	6/3/2029 4:03	N/A	Server Authentication (1.3.6.1.5.5.7.3.1)	31A5A58943EFC7AC31153E487AE306C6E9EDBC2A	D9280DDA01FCDFE208955CC77BEF27C3909C0A05D2C2E427D8B33C3BE5889C
41	1	C=US O=Microsoft Corporation CN=Microsoft TLS G2 RSA CA OCSP 14	C=US O=Microsoft Corporation CN=Microsoft TLS RSA Root G2	33000000127E739347E75BE1A10000000000012	RSA	Sha384RSA	8/14/2025 4:03	6/3/2029 4:03	N/A	Server Authentication (1.3.6.1.5.5.7.3.1)	5268F4FA1256E3F6D842AF300B40B83923F5F72B	B2ABE84672548695C111FF9A9D6D8D55EABABF2FC311D02ECF8A93CD7FCE361
42	1	C=US O=Microsoft Corporation CN=Microsoft TLS G2 RSA CA OCSP 16	C=US O=Microsoft Corporation CN=Microsoft TLS RSA Root G2	330000000E42938F25DC51A99B000000000000E	RSA	Sha384RSA	8/1/2025 1:03	6/3/2029 1:03	N/A	Server Authentication (1.3.6.1.5.5.7.3.1)	0639F056D1ED90C836A3A00F94FE6294A7E6FC37	38D895F5105BC2545822C17A2444F4B0EA3D298D2C15A38296AA7295A3D85CE9
42	2	C=US O=Microsoft Corporation CN=Microsoft TLS G2 RSA CA OCSP 16	C=US O=Microsoft Corporation CN=Microsoft TLS RSA Root G2	33000000092799CF18B020C53F0000000000009	RSA	Sha384RSA	6/26/2026 21:23	6/3/2029 21:23	7/2/2025 00:00	Server Authentication (1.3.6.1.5.5.7.3.1)	0639F056D1ED90C836A3A00F94FE6294A7E6FC37	1D959F28A67BE6DCF5ED1E393AB92CEBE24DE22B4F12BBC2C4F01C044AF9955
43	1	C=US O=Microsoft Corporation CN=Microsoft TLS G2 ECC CA OCSP 02	C=US O=Microsoft Corporation CN=Microsoft TLS ECC Root G2	3300000005516A21C89814CCF70000000000005	ECC	sha384ECDSA	8/1/2025 1:02	6/3/2029 1:02	N/A	Server Authentication (1.3.6.1.5.5.7.3.1)	E51FC46A0936E2AFE1646EBDFC68E9EDC5D02A74	8A7B34C8E82EFB3B5B416671230729FAD2E26279383FB2993ED2920BD6E21241
44	1	C=US O=Microsoft Corporation CN=Microsoft TLS G2 ECC CA OCSP 04	C=US O=Microsoft Corporation CN=Microsoft TLS ECC Root G2	3300000008D690FF489D9C4D70000000000008	ECC	sha384ECDSA	8/14/2025 4:03	6/3/2029 4:03	N/A	Server Authentication (1.3.6.1.5.5.7.3.1)	A449ADEE0230A58B836C37982AF03C4EE2ADB1B2	36A52BC5A51CA90DF18A1BAFF92982301582A54C2BBE4F8D618D96D2E830A501
45	1	C=US O=Microsoft Corporation CN=Microsoft TLS G2 ECC CA OCSP 06	C=US O=Microsoft Corporation CN=Microsoft TLS ECC Root G2	33000000066FA24C31C3956FAB0000000000006	ECC	sha384ECDSA	8/1/2025 1:02	6/3/2029 1:02	N/A	Server Authentication (1.3.6.1.5.5.7.3.1)	389B2CE59C4F9DC21461EAEE944108D70494BEA58	27B122BC1DBE12C88B1ACBEB3C3030BD8CCF4DE724EC8E82266513D0797C097A
46	1	C=US O=Microsoft Corporation CN=Microsoft TLS G2 ECC CA OCSP 08	C=US O=Microsoft Corporation CN=Microsoft TLS ECC Root G2	3300000007737DEB49D007DC640000000000007	ECC	sha384ECDSA	8/14/2025 4:03	6/3/2029 4:03	N/A	Server Authentication (1.3.6.1.5.5.7.3.1)	C3A5B3FC6CD19B84884FE69291F7BEF6E50AE205	C72C4B58522EE034B49A26EE822BC4D67C8D348756C5BB373B6A2D7B821A97B0

ATTACHMENT B

LIST OF MS PKI SERVICES' LOCATIONS IN-SCOPE

#	Location Name	Location Type	Location	In-Scope for Physical and Environmental Control Testing
1	Corporate headquarters and office spaces	Main office	United States of America	No
2	Online CA hosting 1	Datacenter 1	United States of America	Yes
3	Online CA hosting 2	Datacenter 2	Ireland	Yes
4	Offline CA hosting 1	Primary offline CA facility	United States of America	Yes
5	Offline CA hosting 2	Disaster recovery / secondary offline CA facility	United States of America	Yes
6	Secure storage 1	Secure storage for online CAs and offline CAs	United States of America	Yes
7	Secure storage 2	Cold storage for online and offline CAs	United States of America	Yes
8	Secure storage 3	Disaster recovery / secondary storage for offline CAs	United States of America	Yes
9	Secure storage 4	Third-party cold storage for offline CAs	United States of America	Yes
10	Secure storage 5	Secure storage for online CAs and offline CAs	Ireland	Yes

MICROSOFT PUBLIC KEY INFRASTRUCTURE SERVICES MANAGEMENT'S ASSERTION

Microsoft Public Key Infrastructure Services ("MS PKI Services") operates the Certification Authority ("CA") services as enumerated in [Attachment A](#).

The management of MS PKI Services is responsible for establishing and maintaining effective controls over its CA operations, including its network and certificate security system 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 MS PKI Services' CA operations. Furthermore, because of changes in conditions, the effectiveness of controls may vary over time.

MS PKI Services management has assessed its controls over its CA services. Based on that assessment, in providing its Certification Authority (CA) services at locations enumerated in [Attachment B](#), MS PKI Services has:

- maintained effective controls to provide reasonable assurance that it meets the Network and Certificate System Security Requirements as set forth by the CA/Browser Forum

throughout the period May 1, 2025, to April 30, 2026 based on the [WebTrust Principles and Criteria for Certification Authorities – Network Security, v1.7](#).

MS PKI Services has disclosed the following matters publicly on Mozilla's Bugzilla reporting system.

Sr.	Bugzilla ID	Bugzilla Title	Created On	Resolved On	Status
1	1962829	Microsoft PKI Services: Policy document bug	April 28, 2025	April 25, 2026	Resolved
2	1962830	Microsoft PKI Services: Subscriber certificate change made that was not compliant with CPS	April 28, 2025	June 20, 2025	Resolved
3	1965612	Microsoft PKI Services: Failure to Revoke in 5 Days for 1962829	May 9, 2025	May 4, 2026	Resolved
4	1970968	Microsoft PKI Services: Incorrect Revocation Reason Code	June 6, 2025	July 8, 2025	Resolved
5	1974592	Microsoft PKI Services: Pre-Sign Linting Validation did not occur in ICA creation	June 28, 2025	August 30, 2025	Resolved
6	1979475	Microsoft PKI Services: End Entity Certificate Mis-issuance against CPS (BasicConstraints)	July 28, 2025	January 20, 2026	Resolved
7	1990801	Microsoft: improper disclosure of CRL	September 26, 2025	November 3, 2025	Resolved
8	1999850	Microsoft PKI Services: OSCP Non-Compliance	November 13, 2025	July 1, 2026	Resolved
9	2007221	Microsoft PKI Services: Improper Disclosure of CRL	December 19, 2025	March 2, 2026	Resolved
10	2008847	Microsoft PKI Services: Sample Site Certificates expired	January 7, 2026	February 16, 2026	Resolved
11	2009539	Microsoft PKI Services: Improper Disclosure of CRLs – IDP – Existing CAs	January 10, 2026	February 16, 2026	Resolved
12	2009541	Microsoft PKI Services: Failure to report within 72 hrs - Sample Site Certs Expired	January 10, 2026	February 11, 2026	Resolved
13	2009542	Microsoft PKI Services: Improper Disclosure of CRLs – IDP – New CAs	January 10, 2026	February 16, 2026	Resolved
14	2009543	Microsoft PKI Services: Improper Disclosure of CRLs – Does Not Match CA Subject	January 10, 2026	February 9, 2026	Resolved
15	2009545	Microsoft PKI Services: Improper Disclosure of CRLs – Protocol Scheme	January 10, 2026	February 11, 2026	Resolved

Sr.	Bugzilla ID	Bugzilla Title	Created On	Resolved On	Status
16	<u>2021175</u>	Microsoft PKI Services: Failure to update action item status within 3 days	March 5, 2026	April 3, 2026	Resolved
17	<u>2026452</u>	Microsoft PKI Services: Failure to publish Full Incident Report for Bugzilla 2021175 within 14 days	March 26, 2026	April 22, 2026	Resolved
18	<u>2026453</u>	Microsoft PKI Services: Failure to report Bugzilla 2026452 within 72 hrs	March 26, 2026	April 22, 2026	Resolved
19	<u>2034251</u>	Microsoft PKI Services: Failure to Update Full Incident Report within 14 days of discovering new root cause	April 23, 2026	May 13, 2026	Resolved

Microsoft Public Key Infrastructure Services
July 28, 2026

ATTACHMENT A

LIST OF IN SCOPE CAs

Root CAs	
1.	Microsoft ECC Root Certificate Authority 2017
2.	Microsoft RSA Root Certificate Authority 2017
3.	Microsoft TLS RSA Root G2
4.	Microsoft TLS ECC Root G2
Cross-signed CA Certificates	
3.	Microsoft TLS RSA Root G2
4.	Microsoft TLS ECC Root G2
5.	Microsoft Azure ECC TLS Issuing CA 01
6.	Microsoft Azure ECC TLS Issuing CA 02
7.	Microsoft Azure ECC TLS Issuing CA 05
8.	Microsoft Azure ECC TLS Issuing CA 06
9.	Microsoft Azure ECC TLS Issuing CA 03
10.	Microsoft Azure ECC TLS Issuing CA 04
11.	Microsoft Azure ECC TLS Issuing CA 07
12.	Microsoft Azure ECC TLS Issuing CA 08
13.	Microsoft Azure RSA TLS Issuing CA 03
14.	Microsoft Azure RSA TLS Issuing CA 04
15.	Microsoft Azure RSA TLS Issuing CA 07
16.	Microsoft Azure RSA TLS Issuing CA 08
17.	Microsoft Azure TLS Issuing CA 01
18.	Microsoft Azure TLS Issuing CA 02
19.	Microsoft Azure TLS Issuing CA 05
20.	Microsoft Azure TLS Issuing CA 06
21.	Microsoft TLS G1 ECC CA 01
22.	Microsoft TLS G1 ECC CA 02
23.	Microsoft TLS G1 RSA CA 01
24.	Microsoft TLS G1 RSA CA 02
25.	Microsoft TLS G1 RSA CA 03
26.	Microsoft TLS G1 RSA CA 04
Intermediate CA Certificates	
27.	Microsoft ECC TLS Issuing AOC CA 01
28.	Microsoft ECC TLS Issuing AOC CA 02
29.	Microsoft ECC TLS Issuing EOC CA 01
30.	Microsoft ECC TLS Issuing EOC CA 02
31.	Microsoft RSA TLS Issuing AOC CA 01
32.	Microsoft RSA TLS Issuing AOC CA 02
33.	Microsoft RSA TLS Issuing EOC CA 01
34.	Microsoft RSA TLS Issuing EOC CA 02
35.	Microsoft TLS G2 RSA CA OCSP 02
36.	Microsoft TLS G2 RSA CA OCSP 04
37.	Microsoft TLS G2 RSA CA OCSP 06
38.	Microsoft TLS G2 RSA CA OCSP 08
39.	Microsoft TLS G2 RSA CA OCSP 10
40.	Microsoft TLS G2 RSA CA OCSP 12
41.	Microsoft TLS G2 RSA CA OCSP 14
42.	Microsoft TLS G2 RSA CA OCSP 16
43.	Microsoft TLS G2 ECC CA OCSP 02
44.	Microsoft TLS G2 ECC CA OCSP 04
45.	Microsoft TLS G2 ECC CA OCSP 06
46.	Microsoft TLS G2 ECC CA OCSP 08

ATTACHMENT B

LIST OF MS PKI SERVICES' LOCATIONS IN-SCOPE

#	Location Name	Location Type	Location	In-Scope for Physical and Environmental Control Testing
1	Corporate headquarters and office spaces	Main office	United States of America	No
2	Online CA hosting 1	Datacenter 1	United States of America	Yes
3	Online CA hosting 2	Datacenter 2	Ireland	Yes
4	Offline CA hosting 1	Primary offline CA facility	United States of America	Yes
5	Offline CA hosting 2	Disaster recovery / secondary offline CA facility	United States of America	Yes
6	Secure storage 1	Secure storage for online CAs and offline CAs	United States of America	Yes
7	Secure storage 2	Cold storage for online and offline CAs	United States of America	Yes
8	Secure storage 3	Disaster recovery / secondary storage for offline CAs	United States of America	Yes
9	Secure storage 4	Third-party cold storage for offline CAs	United States of America	Yes
10	Secure storage 5	Secure storage for online CAs and offline CAs	Ireland	Yes