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REPORT OF THE INDEPENDENT ACCOUNTANT

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

We have examined Microsoft PKI Services' management assertion that for its Certification Authority ("CA") operations in the United States of America and the European Union, throughout the period January 1, 2020 to April 30, 2020 for the CAs enumerated in Attachment B, Microsoft PKI Services has:

- disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in the applicable versions of its Microsoft PKI Services Certificate Policy and Certification Practice Statement enumerated in Attachment A

- maintained effective controls to provide reasonable assurance that:
  - Microsoft PKI Services' Certification Practice Statement is consistent with its Certificate Policy; and
  - Microsoft PKI Services provides its services in accordance with its Certificate Policy and Certification Practice Statement

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

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

based on the WebTrust Principles and Criteria for Certification Authorities v2.2. Microsoft PKI Services' management is responsible for its assertion. Our responsibility is to express an opinion on management's assertion, based on our examination.

The relative effectiveness and significance of specific controls at Microsoft 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.

Microsoft PKI Services does not escrow CA keys, does not provide subscriber key lifecycle management services, and does not provide certificate suspension services. Accordingly, our examination did not extend to controls that would address those criteria.

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.

Because of the nature and inherent limitations of controls, Microsoft PKI Services' ability to meet the aforementioned criteria may be affected. For example, controls may not prevent, or detect and correct, error, fraud, unauthorized access to systems and information, or failure to comply with internal and external policies or requirements. Also, the projection of any conclusions based on our findings to future periods is subject to the risk that changes may alter the validity of such conclusions.

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 the services of Microsoft PKI Services beyond those covered by the WebTrust Principles and Criteria for Certification Authorities v2.2 for CAs enumerated in Attachment B, nor the suitability of any of the services of Microsoft PKI Services for any customer's intended purpose.

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

The World Health Organization classified the COVID-19 outbreak as a pandemic in March 2020. Based on the rapid increase in exposure globally, the gravity or length of the impact of the COVID-19 outbreak cannot be estimated at this time.

BDO USA, LLP

June 29, 2020

Attachment A – Certification Practice Statement and Certificate Policy Versions In-Scope

Policy Name	Policy Version	Policy Date
Microsoft PKI Services Certificate Policy	Version 3.1.2	August 5, 2019
Microsoft PKI Services Certification Practice Statement	Version 3.1.3	August 5, 2019
Microsoft PKI Services Certification Practice Statement	Version 3.1.4	April 23, 2020

Attachment B – In-Scope CAs

Root CAs				
Common Name	**SHA2 Thumbprint**	**SPKI Hash**	**Valid From**	**Valid To**
Microsoft ECC Root Certificate Authority 2017	FEA1884AB3AEA6D0DBEDBE4B9CD9FEC8655116300A86A856488FC488BB4B44D2	35F53CE1264611E0 3340FE37E1EC7D4C C986C5613DCA70FD 04AA44545F2DAF28	7/26/2017	7/26/2042
	358DF39D764AF9E1B766E9C972DF352EE15CFAC227AF6AD1D70E8E4A6EDCBA02		12/18/2019	7/18/2042
Microsoft EV ECC Root Certificate Authority 2017	6AEA30BC02CA85AFCFEC2F65F60881893C926925FD0704BD8ADA3F0F6EDDB699	F26CDAA1C48E2D3 69EAF24993A424F8 290983AF7094A5BD E9C7D44341F2E2428	7/26/2017	7/26/2042
	DE1AF143FFA160CF5FA86ABFE577291633DC264DA12C863C5738BEA4AFBB2CDB		12/18/2019	7/18/2042
Microsoft EV RSA Root Certificate Authority 2017	DFB3C314740596AD5FB97960EF62AD7C1FCCEEAD16E74054652D1032E6F140EF	68AA635451D83962 167E88FB08F8678D 73AEC66FC5594621 37CFF9D1BC3D3871	7/26/2017	7/26/2042
	66960242DB2ED5906E113295F2454F33D6FB418C4C65E8166D43BE64D19BA4FA		12/18/2019	7/18/2042
Microsoft RSA Root Certificate Authority 2017	ECDD47B5ACBFA328211E1BFF54ADEAC95E6991E3C1D50E27B527E903208040A1	B2F7298B52BF2C3C AC4DDFE72DE4D68 2AC58957595982F2B 62301AF597C699C5	7/26/2017	7/26/2042
	C741F70F4B2A8D88BF2E71C14122EF53EF10EBA0CFA5E64CFA20F418853073E0		12/18/2019	7/18/2042

Active During the Period - Issuing and Intermediate CAs				
Common Name	**SHA2 Thumbprint**	**SPKI Hash**	**Valid From**	**Valid To**
Microsoft Azure ECC TLS Issuing CA 01	2CAEFBB55E70DF5A8985FE9BC10DD56A40C3DEDAB3DA1530A29682015C5B7C66	3993B1F49242DC9B120D28C55F6884037FC40FA80285ADCBD59ACE791368CB1F	1/17/2020	6/27/2024
Microsoft Azure ECC TLS Issuing CA 02	4EC439672A443401A66E27947CC3B5897F132B667F712CC1A37018A3CC85B16A	3A175427EC2BA4F46DA57E77B64CAA54B290A0DA5D0825AF7BC31041A4034360	1/17/2020	6/27/2024
Microsoft Azure ECC TLS Issuing CA 05	624D5576A652B2130768BFE84B965EEFFFD91603D25CD5F7155A7DC2789DAC38	934F4CCE6C2244F90F9A4A60994B69ACC93FB802D255E74D2ED7CE06408CBD71	1/17/2020	6/27/2024
Microsoft Azure ECC TLS Issuing CA 06	151A3E5969C6616EB637A8722B174CFD95387AACE78D57C3BD23F0CB3008186A	C818E7ADC99C529DA7CA50D15A742F48F46CA66866D5FFDF3AE2ABB0D89A49D0	1/17/2020	6/27/2024
Microsoft Azure TLS Issuing CA 01	0437AB2EC2C2B4890296C135034B21DB146434B8317EE703AA8AA943C5EA51AE	347C2EB1B0BBC3CE382734E6BC8448A3C34BEC3E92B484CAF69873160B498B4C	1/17/2020	6/27/2024
Microsoft Azure TLS Issuing CA 02	D39CE39FF6F449D4F3391EE2004D705EC22F99CFFCA40A88F85DB26454ADDBD1	CC0C1FC76885710E6F30E09CF6FB7E3172DD2E5D3C12AB8DB0E5A00C5D213B0F	1/17/2020	6/27/2024
Microsoft Azure TLS Issuing CA 05	AB3203B3EA2017D509726A1D82293EFFCB8C42CEB52C9AF1C0EEE96B5C02BCBA	E22E21D2337D3513ABD7128923E4D0D50FD921F5233CC5ED99652C0D1DCF8E2C	1/17/2020	6/27/2024
Microsoft Azure TLS Issuing CA 06	7DF4D3EF45798F8C4384FC702BA52A44CE7BD6298B141628D4ABABC7678F6467	5A5F0C158FBDCE28C61BC4201070802B97E103EC9D3D9C5A2D038576210FCF75	1/17/2020	6/27/2024

Revoked During Period - Issuing and Intermediate CAs				
Common Name	**SHA2 Thumbprint**	**SPKI Hash**	**Valid From**	**Valid To**
Microsoft Azure ECC TLS Issuing CA 01	349EA6A61BE292CBDB9E2C25351B0DBEFF323AB1A37E53AE256A84AFCA321894	3993B1F49242DC9B120D28C55F6884037FC40FA80285ADCBD59ACE791368CB1F	6/27/2019	6/27/2024
Microsoft Azure ECC TLS Issuing CA 02	07E265D6A24EAD2BA42ED90A54381F15919DADCE0082D70DC44EB26A357D0621	3A175427EC2BA4F46DA57E77B64CAA54B290A0DA5D0825AF7BC31041A4034360	6/27/2019	6/27/2024
Microsoft Azure ECC TLS Issuing CA 05	22DBF3D1B7E6C28105D493591B0180AA6B794CB7FD27D289EC920C74F7C6769A	934F4CCE6C2244F90F9A4A60994B69ACC93FB802D255E74D2ED7CE06408CBD71	6/27/2019	6/27/2024
Microsoft Azure ECC TLS Issuing CA 06	7067971C54988DDACCAB5B0C126414A1D17CF01E3D60F97F41BE9C06D1BD6ECE	C818E7ADC99C529DA7CA50D15A742F48F46CA66866D5FFDF3AE2ABB0D89A49D0	6/27/2019	6/27/2024
Microsoft TLS ECC Issuing CA 01	A383B4A775AB1DF5E3E88507001CCC35352F44BC82E46694453FBF50406B4F6C	A3642729B029153F4F11362A464F7E9D32D822D410F95A5C9F5C6B6D5C36A4D4	5/31/2018	5/31/2023
Microsoft TLS ECC Issuing CA 02	438D21B4BB0CEA3B7450A9447315B5A5451FF7D1E5B91F27A7EB3149566A5DB6	196098665C3C98836B0694B5526EF2DC91262256ACC42E84007F547E193C03AD	7/25/2019	5/14/2024
Microsoft TLS ECC Issuing CA 05	CA61A36F29960ACE59951F7CCEF46E1368FAAE5EB3D6C06284CAE56E0918D7F7	875B1351A7CC7C1A0B32F9E45FEFEFF7888609A55AB70CE89A907F631E1C72CF	5/31/2018	5/31/2023
Microsoft TLS ECC Issuing CA 06	1CC9E4F7A05717BC1FDCC05245A1F677E840C8B317E35D7765CC41450B813961	B26BB68BE1B9A56583D28996986BAF5E7F52056786836FDD25E09448759A2427	7/25/2019	5/14/2024
Microsoft TLS ECC EV Issuing CA 01	DBED47A27D2DF69AF759EAD788D33BDD7BEE79A33D3B762A7806FFCFB3A3ACB4	0A4243C23FEA86296E80FE08CD18A41C04644F851E8BCEE053BC3909F5B9A9A1	5/31/2018	5/31/2023

Revoked During Period - Issuing and Intermediate CAs				
Common Name	**SHA2 Thumbprint**	**SPKI Hash**	**Valid From**	**Valid To**
Microsoft TLS ECC EV Issuing CA 02	8D0C9827A6B044F0FF44EFFA154F4CFACCB1E82CDABCAAD0EF7225552F86EA25	6176FBD5F8D62FE4 B3073DD3BD5DFD0 28CD47A73D8E5BBA 6DC89D4A2434CCB02	7/25/2019	5/14/2024
Microsoft TLS ECC EV Issuing CA 05	664E415A2473015216BAEB56708271BCE20277E93B398C5332DDD8B94C808327	F631F7167F0DBA40 8B529E90AABAC5C3 D139FAE88EF9B0F79 6A807EFD5E98022	5/31/2018	5/31/2023
Microsoft TLS ECC EV Issuing CA 06	4B5EE4FA66A0A53AE31B8F359F2CDF5B607B8ADB8098AD68CBCC03A8641BB47D	10B8F5A60C23600C 7F78FD6B11CB0A9B DA0D329F88F784EE6 238FDA6CC776EFB	7/25/2019	5/14/2024
Microsoft TLS EV Issuing CA 01	4E8CF75CEC298A40011EC6F345A1B0801DAA7F13D4F6DF1F1C8807DC92D0D437	0EAAA2AA68794B27 C9722ABC5F3041F6 2D3D1E364A038852 21179AD937BA2B9	5/31/2018	5/31/2023
Microsoft TLS EV Issuing CA 02	233897AA0E4C3CC09BBE816AA90023498A909E0F53989455DBC6FEEC35E08CE5	EF0240256C6490A9 2298B5433664B334 FCCACA07AF805C63 B28B832E9631EFC7	7/25/2019	5/14/2024
Microsoft TLS EV Issuing CA 05	190EE6BE09B3C97C1167DFD7BB366FE40C066F188A6DEFB1E0655A3F700341B1	3A7EFCAD147A63CD 1AF903FEF7AACD20 6CEA3DCD3965EAF5 AA8C4133F4FE7915	5/31/2018	5/31/2023
Microsoft TLS EV Issuing CA 06	918410E5EFF9905737393889421F4145A273DB26A3871F462CB759130E45DD6E	C4471E473CD30DCB A87127BAC4F9F4A F6F6478E0C614F25CE 258BCADC293BD3B	7/25/2019	5/14/2024
Microsoft Azure TLS Issuing CA 01	66342CA7E05968238D9FB9FE494FEBB85C287570506E345CA23FA731174091E9	347C2EB1B0BBC3CE 382734E6BC8448A3 C34BEC3E92B484CA F69873160B498B4C	6/27/2019	6/27/2024
Microsoft Azure TLS Issuing CA 02	647EF2DFAFAC46D8FC9C873D7C4BABF3F1C032AE62B58D6DA7B21F92EB1CAE7D	CC0C1FC76885710E 6F30E09CF6FB7E317 2DD2E5D3C12AB8D B0E5A00C5D213B0F	6/27/2019	6/27/2024

Revoked During Period - Issuing and Intermediate CAs				
Common Name	**SHA2 Thumbprint**	**SPKI Hash**	**Valid From**	**Valid To**
Microsoft Azure TLS Issuing CA 05	C82AB0028E22101A813F02A80AD7114BDE3EC4E7E66D37F5681A6DC1E141223B	E22E21D2337D3513 ABD7128923E4D0D5 0FD921F5233CC5ED 99652C0D1DCF8E2C	6/27/2019	6/27/2024
Microsoft Azure TLS Issuing CA 06	41830FE41CA1C0BEB2CD319EF4A2D2FD1D2164086509CA4CF90670B0CD0A6A6C	5A5F0C158FBDCE28 C61BC4201070802B9 7E103EC9D3D9C5A 2D038576210FCF75	6/27/2019	6/27/2024
Microsoft TLS Issuing CA 01	F6BE0E24C9BB74DB7674261E7404D7A39D0C1862708B8A0A49D184D8B0C9B914	94D5253277CA4580 E71554AAB7167D8D8 1C242C1FDFE3E7A 8B28DCD5F8F2D9A3	5/31/2018	5/31/2023
Microsoft TLS Issuing CA 02	43BD5BB8C7926D34494B29D50E2D6E457116478A3E5566240856B9DF90513F8B	079A9336D0803DB7 DB00B243F10094CC5 B3077657A3AEBE9 0CD08E317E219B19	7/25/2019	5/14/2024
Microsoft TLS Issuing CA 03	2625F98AA5A186DAA55AC7B6CFA7A9C28D99F6EDE830F1317E7FED350EA18B9D	4235345DA557DAC9 621521F6E5597F1E15 E9064C132414E49 49FA7978FFA203F	7/25/2019	5/14/2024
Microsoft TLS Issuing CA 05	4BC9FE53CE532690216E157C76C77155793C9BE895D9F6718EA3D3D1FD694ABA	798D4BE7636539A5 59BAA70BECC6CE767 8FA386D2899163D C6A7F30D959FE5EA	5/31/2018	5/31/2023
Microsoft TLS Issuing CA 06	E42E2A45F090034EEBB057A76E5AF10D5B49D3F6F9AC40D2F73B6DB6FF0C3497	A28F389AE7AAF72F DC1A1D131B9AD341 36EE93CDB30FA932 A3ABFE9A93A7EFCE	7/25/2019	5/14/2024
Microsoft TLS Issuing CA 07	BF6045C106C411AF1E0BA0081056C668E0C0F80380A52DE931267C955B7AE67C	887365EC5E5B97D6 A9A601A78D0DD5CD 7605D60A380E6A9 B5D9CDA70CABEF256	7/25/2019	5/14/2024

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MICROSOFT PUBLIC KEY INFRASTRUTURE SERVICES' MANAGEMENT ASSERTION

Microsoft Public Key Infrastructure ("PKI") Services operates the Certification Authority ("CA") services for the CAs enumerated in Attachment B, and provides the following CA services:

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

The management of Microsoft PKI Services is responsible for establishing and maintaining effective controls over its CA operations, including its CA business practices disclosure on its repository, CA business practices management, CA environmental controls, CA key lifecycle management controls, certificate lifecycle management controls, and subordinate CA certificate lifecycle management controls. These controls contain monitoring mechanisms, and actions are taken to correct deficiencies identified.

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

Microsoft PKI Services management has assessed its disclosures of its certificate practices and controls over its CA services. Based on that assessment, in Microsoft PKI Services management's opinion, in providing its CA services in the United States of America and the European Union, throughout the period January 1, 2020 to April 30, 2020, Microsoft PKI Services has:

- disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in the applicable versions of its Microsoft PKI Services Certificate Policy and Certification Practice Statement enumerated in Attachment A

- maintained effective controls to provide reasonable assurance that:
  - Microsoft PKI Services' Certification Practice Statement is consistent with its Certificate Policy; and
  - Microsoft PKI Services provides its services in accordance with its Certificate Policy and Certification Practice Statement

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

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- 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

based on the WebTrust Principles and Criteria for Certification Authorities v2.2, including the following:

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

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

CA Environmental Controls
- Security Management
- Asset Classification and Management
- Personnel Security
- Physical & Environmental Security
- Operations Management
- System Access Management
- System Development and Maintenance
- Business Continuity Management
- Monitoring and Compliance
- Audit Logging

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

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

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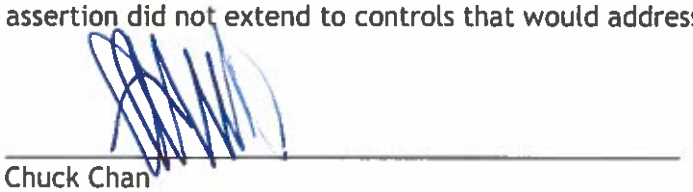
- Certificate Revocation
- Certificate Validation

Subordinate CA Certificate Lifecycle Management Controls

- Subordinate CA Certificate Lifecycle Management

Microsoft PKI Services did not escrow CA keys, does not provide any subscriber key lifecycle management services, and does not provide certificate suspension services. Accordingly, our assertion did not extend to controls that would address those criteria.



Chuck Chan
Corporate Vice President, Engineering Security & Release Services

Raza Syed
Distinguished Engineer, Product Release & Security Services

June 29, 2020

Attachment A - Certification Practice Statement and Certificate Policy Versions In-Scope

Policy Name	Policy Version	Policy Date
Microsoft PKI Services Certificate Policy	Version 3.1.2	August 5, 2019
Microsoft PKI Services Certification Practice Statement	Version 3.1.3	August 5, 2019
Microsoft PKI Services Certification Practice Statement	Version 3.1.4	April 23, 2020

Microsoft

Attachment B - In-Scope CAs

Root CAs				
Common Name	**SHA2 Thumbprint**	**SPKI Hash**	**Valid From**	**Valid To**
Microsoft ECC Root Certificate Authority 2017	FEA1884AB3AEA6D0DBEDBE4B9CD9FEC8655116300A86A856488FC488BB4B44D2	35F53CE1264611E0 3340FE37E1EC7D4C C986C5613DCA70FD 04AA44545F2DAF28	7/26/2017	7/26/2042
	358DF39D764AF9E1B766E9C972DF352EE15CFAC227AF6AD1D70E8E4A6EDCBA02		12/18/2019	7/18/2042
Microsoft EV ECC Root Certificate Authority 2017	6AEA30BC02CA85AFCFEC2F65F60881893C926925FD0704BD8ADA3F0F6EDDB699	F26CDAA1C48E2D3 69EAF24993A424F8 290983AF7094A5BD E9C7D44341F2E2428	7/26/2017	7/26/2042
	DE1AF143FFA160CF5FA86ABFE577291633DC264DA12C863C5738BEA4AFBB2CDB		12/18/2019	7/18/2042
Microsoft EV RSA Root Certificate Authority 2017	DFB3C314740596AD5FB97960EF62AD7C1FCCEEAD16E74054652D1032E6F140EF	68AA635451D83962 167E88FB08F8678D 73AEC66FC5594621 37CFF9D1BC3D3871	7/26/2017	7/26/2042
	66960242DB2ED5906E113295F2454F33D6FB418C4C65E8166D43BE64D19BA4FA		12/18/2019	7/18/2042
Microsoft RSA Root Certificate Authority 2017	ECDD47B5ACBFA328211E1BFF54ADEAC95E6991E3C1D50E27B527E903208040A1	B2F7298B52BF2C3C AC4DDFE72DE4D68 2AC58957595982F2B 62301AF597C699C5	7/26/2017	7/26/2042
	C741F70F4B2A8D88BF2E71C14122EF53EF10EBA0CFA5E64CFA20F418853073E0		12/18/2019	7/18/2042

Active During the Period - Issuing and Intermediate CAs				
Common Name	**SHA2 Thumbprint**	**SPKI Hash**	**Valid From**	**Valid To**
Microsoft Azure ECC TLS Issuing CA 01	2CAEFBB55E70DF5A8985FE9BC10DD56A40C3DEDAB3DA1530A29682015C5B7C66	3993B1F49242DC9B 120D28C55F688403 7FC40FA80285ADCB D59ACE791368CB1F	1/17/2020	6/27/2024
Microsoft Azure ECC TLS Issuing CA 02	4EC439672A443401A66E27947CC3B5897F132B667F712CC1A37018A3CC85B16A	3A175427EC2BA4F4 6DA57E77B64CAA5 4B290A0DA5D0825AF 7BC31041A4034360	1/17/2020	6/27/2024
Microsoft Azure ECC TLS Issuing CA 05	624D5576A652B2130768BFE84B965EEFFFD91603D25CD5F7155A7DC2789DAC38	934F4CCE6C2244F9 0F9A4A60994B69AC C93FB802D255E74D 2ED7CE06408CBD71	1/17/2020	6/27/2024
Microsoft Azure ECC TLS Issuing CA 06	151A3E5969C6616EB637A8722B174CFD95387AACE78D57C3BD23F0CB3008186A	C818E7ADC99C529D A7CA50D15A742F48 F46CA66866D5FFDF 3AE2ABB0D89A49D0	1/17/2020	6/27/2024
Microsoft Azure TLS Issuing CA 01	0437AB2EC2C2B4890296C135034B21DB146434B8317EE703AA8AA943C5EA51AE	347C2EB1B0BBC3CE 382734E6BC8448A3 C34BEC3E92B484CA F69873160B498B4C	1/17/2020	6/27/2024
Microsoft Azure TLS Issuing CA 02	D39CE39FF6F449D4F3391EE2004D705EC22F99CFFCA40A88F85DB26454ADDBD1	CC0C1FC76885710E 6F30E09CF6FB7E317 2DD2E5D3C12AB8D B0E5A00C5D213B0F	1/17/2020	6/27/2024
Microsoft Azure TLS Issuing CA 05	AB3203B3EA2017D509726A1D82293EFFCB8C42CEB52C9AF1C0EEE96B5C02BC8A	E22E21D2337D3513 ABD7128923E4D0D5 0FD921F5233CC5ED 99652C0D1DCF8E2C	1/17/2020	6/27/2024
Microsoft Azure TLS Issuing CA 06	7DF4D3EF45798F8C4384FC702BA52A44CE7BD6298B141628D4ABABC7678F6467	5A5F0C158FBDCE28 C61BC4201070802B9 7E103EC9D3D9C5A 2D038576210FCF75	1/17/2020	6/27/2024

Revoked During Period - Issuing and Intermediate CAs				
Common Name	**SHA2 Thumbprint**	**SPKI Hash**	**Valid From**	**Valid To**
Microsoft Azure ECC TLS Issuing CA 01	349EA6A61BE292CBDB9E2C25351B0DBEFF323AB1A37E53AE256A84AFCA321894	3993B1F49242DC9B 120D28C55F688403 7FC40FA80285ADCB D59ACE791368CB1F	6/27/2019	6/27/2024
Microsoft Azure ECC TLS Issuing CA 02	07E265D6A24EAD2BA42ED90A54381F15919DADCE0082D70DC44EB26A357D0621	3A175427EC2BA4F4 6DA57E77B64CAA54 B290A0DA5D0825AF 7BC31041A4034360	6/27/2019	6/27/2024
Microsoft Azure ECC TLS Issuing CA 05	22DBF3D1B7E6C28105D493591B0180AA6B794CB7FD27D289EC920C74F7C6769A	934F4CCE6C2244F9 0F9A4A60994B69AC C93FB802D255E74D2 ED7CE06408CBD71	6/27/2019	6/27/2024
Microsoft Azure ECC TLS Issuing CA 06	7067971C54988DDACCAB5B0C126414A1D17CF01E3D60F97F41BE9C06D1BD6ECE	C818E7ADC99C529D A7CA50D15A742F48 F46CA66866D5FFDF3 AE2ABB0D89A49D0	6/27/2019	6/27/2024
Microsoft TLS ECC Issuing CA 01	A383B4A775AB1DF5E3E88507001CCC35352F44BC82E46694453FBF50406B4F6C	A3642729B029153F 4F11362A464F7E9D3 2D822D410F95A5C9F 5C6B6D5C36A4D4	5/31/2018	5/31/2023
Microsoft TLS ECC Issuing CA 02	438D21B4BB0CEA3B7450A9447315B5A5451FF7D1E5B91F27A7EB3149566A5DB6	196098665C3C9883 6B0694B5526EF2DC9 1262256ACC42E8400 7F547E193C03AD	7/25/2019	5/14/2024
Microsoft TLS ECC Issuing CA 05	CA61A36F29960ACE59951F7CCEF46E1368FAAE5EB3D6C06284CAE56E0918D7F7	875B1351A7CC7C1A 0B32F9E45FEFEFF7 888609A55AB70CE8 9A907F631E1C72CF	5/31/2018	5/31/2023
Microsoft TLS ECC Issuing CA 06	1CC9E4F7A05717BC1FDCC0524SA1F677E840C8B317E35D7765CC41450B813961	B26BB68BE1B9A565 83D289969868AF5E 7F52056786836FDD 25E09448759A2427	7/25/2019	5/14/2024
Microsoft TLS ECC EV Issuing CA 01	DBED47A27D2DF69AF759EAD788D33BDD7BEE79A33D3B762A7806FFCFB3A3ACB4	0A4243C23FEA8629 6E80FE08CD18A41C 04644F851E8BCEE0 53BC3909F5B9A9A1	5/31/2018	5/31/2023

Revoked During Period - Issuing and Intermediate CAs				
Common Name	**SHA2 Thumbprint**	**SPKI Hash**	**Valid From**	**Valid To**
Microsoft TLS ECC EV Issuing CA 02	8D0C9827A6B044F0FF44EFFA154F4CFACCB1E82CDABCAAD0EF7225552F86EA25	6176FBD5F8D62FE4 B3073DD3BD5DFD0 28CD47A73D8E5B8A 6DC89D4A2434CCB02	7/25/2019	5/14/2024
Microsoft TLS ECC EV Issuing CA 05	664E415A2473015216BAEB56708271BCE20277E93B398C5332DDD8B94C808327	F631F7167F0DBA40 8B529E90AABAC5C3 D139FAE88EF9B0F79 6A807EFD5E98022	5/31/2018	5/31/2023
Microsoft TLS ECC EV Issuing CA 06	4B5EE4FA66A0A53AE31B8F359F2CDF5B607B8AD88098AD68CBCC03A8641BB47D	10B8F5A60C23600C 7F78FD6B11CB0A9B DA0D329F88F784EE6 238FDA6CC776EFB	7/25/2019	5/14/2024
Microsoft TLS EV Issuing CA 01	4E8CF75CEC298A40011EC6F345A1B0801DAA7F13D4F6DF1F1C8807DC92D0D437	0EAAA2AA68794B27 C9722A8C5F3041F6 2D3D1E364A038852 21179AD937BA2B9	5/31/2018	5/31/2023
Microsoft TLS EV Issuing CA 02	233897AA0E4C3CC09BBE816AA90023498A909E0F53989455DBC6FEEC35E08CE5	EF0240256C6490A9 2298B5433664B334 FCCACA07AF805C63 B28B832E9631EFC7	7/25/2019	5/14/2024
Microsoft TLS EV Issuing CA 05	190EE6BE09B3C97C1167DFD7BB366FE40C066F188A6DEFB1E0655A3F700341B1	3A7EFCAD147A63CD 1AF903FEF7AACD20 6CEA3DCD3965EAF5 AA8C4133F4FE7915	5/31/2018	5/31/2023
Microsoft TLS EV Issuing CA 06	918410E5EFF9905737393889421F4145A273DB26A3871F462CB759130E45DD6E	C4471E473CD30DCB A87127BAC4F9F4A F6F6478E0C614F25CE 258BCADC293BD3B	7/25/2019	5/14/2024
Microsoft Azure TLS Issuing CA 01	66342CA7E05968238D9FB9FE494FEBB85C2875705O6E345CA23FA731174091E9	347C2EB1B0BBC3CE 382734E6BC8448A3 C34BEC3E92B484CA F69873160B498B4C	6/27/2019	6/27/2024
Microsoft Azure TLS Issuing CA 02	647EF2DFAFAC46D8FC9C873D7C4BABF3F1C032AE62B58D6DA7B21F92EB1CAE7D	CC0C1FC76885710E 6F30E09CF6FB7E317 2DD2E5D3C12AB8D B0E5A00C5D213B0F	6/27/2019	6/27/2024

Revoked During Period - Issuing and Intermediate CAs				
Common Name	**SHA2 Thumbprint**	**SPKI Hash**	**Valid From**	**Valid To**
Microsoft Azure TLS Issuing CA 05	C82AB0028E22101A813F02A80AD7114BDE3EC4E7E66D37F5681A6DC1E141223B	E22E21D2337D3513 ABD7128923E4D0D5 0FD921F5233CC5ED 99652C0D1DCF8E2C	6/27/2019	6/27/2024
Microsoft Azure TLS Issuing CA 06	41830FE41CA1C0BEB2CD319EF4A2D2FD1D2164086509CA4CF90670B0CD0A6A6C	5A5F0C158FBDCE28 C61BC420107080 2B97E103EC9D3D9C5A 2D038576210FCF75	6/27/2019	6/27/2024
Microsoft TLS Issuing CA 01	F6BE0E24C9BB74DB7674261E7404D7A39D0C1862708B8A0A49D184D8B0C9B914	94D5253277CA4580 E71554AAB7167D8D8 1C242C1FDFE3E7A 8B28DCD5F8F2D9A3	5/31/2018	5/31/2023
Microsoft TLS Issuing CA 02	43BD5BB8C7926D34494B29D50E2D6E457116478A3E556624085689DF90513F8B	079A9336D0803DB7 DB00B243F10094CC5 B3077657A3AEBE9 0CD08E317E219B19	7/25/2019	5/14/2024
Microsoft TLS Issuing CA 03	2625F98AA5A186DAA55AC7B6CFA7A9C28D99F6EDE830F1317E7FED350EA18B9D	4235345DA557DAC9 621521F6E5597F1E15 E9064C132414E49 49FA7978FFA203F	7/25/2019	5/14/2024
Microsoft TLS Issuing CA 05	4BC9FE53CE532690216E157C76C77155793C9BE895D9F6718EA3D3D1FD694ABA	798D4BE7636539A5 59BAA70BECC6CE767 8FA386D2899163D C6A7F30D959FE5EA	5/31/2018	5/31/2023
Microsoft TLS Issuing CA 06	E42E2A45F090034EEBB057A76E5AF10D5B49D3F6F9AC40D2F73B6DB6FF0C3497	A28F389AE7AAF72F DC1A1D131B9AD341 36EE93CDB30FA932 A3ABFE9A93A7EFCE	7/25/2019	5/14/2024
Microsoft TLS Issuing CA 07	BF6045C106C411AF1E0BA0081056C668E0C0F80380A52DE931267C955B7AE67C	887365EC5E5B97D6 A9A601A78D0DD5CD 7605D60A380E6A9 B5D9CDA70CABEF256	7/25/2019	5/14/2024