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REPORT OF THE INDEPENDENT ACCOUNTANT

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

## Scope

We have examined CommScope management's assertion that for its Certification Authority ("CA") operations at San Diego, California, and Horsham, Pennsylvania, in the United States of America, for its CAs enumerated in Attachment B, CommScope has:

- disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in the applicable versions of its CommScope Certificate Policy and Certification Practice Statement ("CP/CPS") enumerated in Attachment A
- maintained effective controls to provide reasonable assurance that CommScope provides its services in accordance with its CP/CPS
- maintained effective controls to provide reasonable assurance that:
  - o the integrity of keys and certificates it manages is established and protected throughout their lifecycles;
  - o the integrity of subscriber keys and certificates it manages is established and protected throughout their lifecycles; and
  - subscriber information is properly authenticated
- maintained effective controls to provide reasonable assurance that:
  - logical and physical access to CA systems and data is restricted to authorized individuals;
  - o the continuity of key and certificate management operations is maintained; and
  - CA systems development, maintenance, and operations are properly authorized and performed to maintain CA systems integrity

throughout the period July 1, 2023 to June 30, 2024 based on the WebTrust Principles and Criteria for Certification Authorities v2.2.2.

CommScope does not escrow its CA keys, does not provide subscriber key generation services, subscriber key storage and recovery services, or integrated circuit card lifecycle management for subscribers, and does not provide certificate suspension services. CommScope does not provide subordinate CA certificate lifecycle management services to third parties. Accordingly, our examination did not extend to controls that would address those criteria.

BDO USA refers to BDO USA, P.C., a Virginia professional corporation, also doing business in certain jurisdictions with an alternative identifying abbreviation, such as Corp. or P.S.C.

BDO USA, P.C. is the U.S. member of BDO International Limited, a UK company limited by guarantee, and forms part of the international BDO network of independent



#### Certification Authority's Responsibilities

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

## Independent Accountant's Responsibilities

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

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

The relative effectiveness and significance of specific controls at CommScope 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 CommScope's services other than its CA operations at San Diego, California, and Horsham, Pennsylvania, in the United States of America, nor the suitability of any of CommScope's services for any customer's intended purpose.



#### Other Matter

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

	Matter Topic	Matter Description
1	Certificate Content	CommScope disclosed in Mozilla Bug #1852404 that they had issued subscriber certificates which had not been entered into any CT logs, and were issued with empty SCTList extensions.
2	Certificate Revocation	CommScope disclosed in Mozilla Bug #1859812 that one of the test web pages with subscriber certificates that chained up to one of their publicly trusted roots had a certificate that was intended to be revoked, but was not.
3	Certificate Transparency Logging	CommScope disclosed in Mozilla Bug #1910512 that they had issued subscriber certificates which had not been entered into any CT logs.

While the CommScope assertion notes all issues disclosed on Bugzilla from July 1, 2023 through the date of this report, we have only noted those instances relevant to the CAs enumerated in <a href="https://doi.org/10.2023/nc.2023/

## Use of the WebTrust Seal

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

BDO USA

September 25, 2024



# ATTACHMENT A - CERTIFICATE POLICY/CERTIFICATION PRACTICE STATEMENT VERSIONS IN-SCOPE

Policy Name	Version	Effective Date
CommScope Certificate Policy and Certificate Practice Statement	Version 2.6	February 10, 2023
CommScope Certificate Policy and Certificate Practice Statement	Version 2.7	September 8, 2023
CommScope Certificate Policy and Certificate Practice Statement	Version 2.8	February 14, 2024



# ATTACHMENT B - IN SCOPE CA CERTIFICATES

Root CA Certificates				
CA Name	SHA2 Thumbprint	Valid From	Valid To	
CN = CommScope Public Trust RSA Root-01 O = CommScope C = US	02BDF96E2A45DD9BF18FC7E1DBDF21A0379BA3C9C2610344CFD8D606FEC1ED81	4/28/2021	4/28/2046	
CN = CommScope Public Trust RSA Root-02 O = CommScope C = US	FFE943D793424B4F7C440C1C3D648D5363F34B82DC87AA7A9F118FC5DEE101F1	4/28/2021	4/28/2046	
CN = CommScope Public Trust ECC Root-01 O = CommScope C = US	11437CDA7BB45E41365F45B39A38986B0DE00DEF348E0C7BB0873633800BC38B	4/28/2021	4/28/2046	
CN = CommScope Public Trust ECC Root-02 O = CommScope C = US	2FFB7F813BBBB3C89AB4E8162D0F16D71509A830CC9D73C262E5140875D1AD4A	4/28/2021	4/28/2046	

Subordinate CA Certificates				
CA Name	SHA2 Thumbprint	Valid From	Valid To	
CN = CommScope Public Trust RSA Sub-CA-01-01 O = CommScope C = US	1380EED66B2C316612D5F6E7EF68C2D3460582FEA94E00C6C27595F91934E3D9	4/30/2021	4/30/2046	
CN = CommScope Public Trust RSA Sub-CA-01-02 O = CommScope C = US	0215311BC182D59718822B45DDF10213CE2661A93C3C2D203DEC6567DE44AE3C	4/30/2021	4/30/2046	
CN = CommScope Public Trust RSA Sub-CA-02-01 O = CommScope C = US	840E8DD1DFC9C0C50D29CA8512991CF2ED7DCDDF12410375FD0A5D47F8FBF576	4/30/2021	4/30/2046	
CN = CommScope Public Trust ECC Sub-CA-01-01 O = CommScope C = US	EB89D3087D76912D7616AC99C73BAEBAC1FB8E4835F8BA15B543F7344A4C57F1	4/30/2021	4/30/2046	
CN = CommScope Public Trust ECC Sub-CA-01-02 O = CommScope C = US	81473E1B18A688776881841B3AE160B2AD935CE9E8D5832B8A26256448DB7379	4/30/2021	4/30/2046	
CN = CommScope Public Trust ECC Sub-CA-02-01 O = CommScope C = US	598D21250DC4002FD7F1FC0EF530633D4B1687D8597C0A7A86FDB0E8D70A404B	4/30/2021	4/30/2046	



# COMMSCOPE, INC. MANAGEMENT'S ASSERTION

CommScope, Inc. ("CommScope") operates the Certification Authority ("CA") services for its CAs enumerated in <a href="Attachment B">Attachment B</a> and provides the following CA services:

- Subscriber registration
- Certificate renewal
- Certificate rekey
- Certificate issuance
- Certificate distribution
- Certificate revocation
- Certificate validation

The management of CommScope is responsible for establishing and maintaining effective controls over its CA operations, including its CA business practices disclosure on its <u>website</u>, CA business practices management, CA environmental controls, CA key lifecycle management controls, and 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 CommScope's CA operations. Furthermore, because of changes in conditions, the effectiveness of controls may vary over time.

CommScope management has assessed its disclosures of its certificate practices and controls over its CA services. Based on that assessment, in CommScope management's opinion, in providing its CA services at San Diego, California, and Horsham, Pennsylvania, in the United States of America, CommScope has:

- disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in the applicable versions of its CommScope Certificate Policy and Certification Practice Statement ("CP/CPS") enumerated in <u>Attachment A</u>
- maintained effective controls to provide reasonable assurance that it provides its services in accordance with its CP/CPS
- maintained effective controls to provide reasonable assurance that:
  - the integrity of keys and certificates it manages is established and protected throughout their lifecycles;
  - the integrity of subscriber keys and certificates it manages is established and protected throughout their lifecycles; and
  - o subscriber information is properly authenticated
- maintained effective controls to provide reasonable assurance that:
  - logical and physical access to CA systems and data is restricted to authorized individuals;



- o the continuity of key and certificate management operations is maintained; and
- CA systems development, maintenance, and operations are properly authorized and performed to maintain CA systems integrity

throughout the period July 1, 2023 to June 30, 2024 based on <u>WebTrust Principles and Criteria for Certification Authorities v2.2.2</u>, including the following:

#### **CA Business Practices Disclosure**

- Certificate Practice Statement (CPS)
- Certificate Policy (CP)

# **CA Business Practices Management**

- Certificate Policy (CP) Management
- Certification Practice Statement (CPS) Management

#### **CA Environmental Controls**

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

## **CA Lifecycle Management Controls**

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

## **Subscriber Key Lifecycle Management Controls**

• Requirements for Subscriber Key Management



## **Certificate Lifecycle Management Controls**

- Subscriber Registration
- Certificate Renewal
- Certificate Rekey
- Certificate Issuance
- Certificate Distribution
- Certificate Revocation
- Certificate Validation

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

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

Bug ID	Summary	Opened	Closed	Resolution
1852404	CommScope: Empty SCT extensions in certificates	9/09/2023	9/22/2023	FIXED
1859812	CommScope: Certificate not revoked as it was supposed to be	10/18/2023	3/6/2024	FIXED
<u>1901578</u>	CommScope: Certificates were issued in which third-party web-based tools were used during validation.	6/10/2024	7/28/2024	FIXED
1904399	CommScope: OCSP responses contain issuer certificate	6/24/2024	8/17/2024	INVALID
<u>1904402</u>	CommScope: Incomplete Incident Report	6/24/2024		OPEN
1910512	CommScope: Certificates not logged in CT logs as stated in CP/CPS	7/29/2024		OPEN

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9/25/2024

Craig Coogan

VP and General Manager, CommScope



# ATTACHMENT A - CERTIFICATE POLICY/CERTIFICATION PRACTICE STATEMENT VERSIONS IN-SCOPE

Policy Name	Version	Effective Date
CommScope Certificate Policy and Certificate Practice Statement	Version 2.6	February 10, 2023
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Root CA Certificates				
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CN = CommScope Public Trust RSA Root-01 O = CommScope C = US	02BDF96E2A45DD9BF18FC7E1DBDF21A0379BA3C9C2610344CFD8D606FEC1ED81	4/28/2021	4/28/2046	
CN = CommScope Public Trust RSA Root-02 O = CommScope C = US	FFE943D793424B4F7C440C1C3D648D5363F34B82DC87AA7A9F118FC5DEE101F1	4/28/2021	4/28/2046	
CN = CommScope Public Trust ECC Root-01 O = CommScope C = US	11437CDA7BB45E41365F45B39A38986B0DE00DEF348E0C7BB0873633800BC38B	4/28/2021	4/28/2046	
CN = CommScope Public Trust ECC Root-02 O = CommScope C = US	2FFB7F813BBBB3C89AB4E8162D0F16D71509A830CC9D73C262E5140875D1AD4A	4/28/2021	4/28/2046	

Subordinate CA Certificates				
CA Name	SHA2 Thumbprint	Valid From	Valid To	
CN = CommScope Public Trust RSA Sub-CA-01-01 O = CommScope C = US	1380EED66B2C316612D5F6E7EF68C2D3460582FEA94E00C6C27595F91934E3D9	4/30/2021	4/30/2046	
CN = CommScope Public Trust RSA Sub-CA-01-02 O = CommScope C = US	0215311BC182D59718822B45DDF10213CE2661A93C3C2D203DEC6567DE44AE3C	4/30/2021	4/30/2046	
CN = CommScope Public Trust RSA Sub-CA-02-01 O = CommScope C = US	840E8DD1DFC9C0C50D29CA8512991CF2ED7DCDDF12410375FD0A5D47F8FBF576	4/30/2021	4/30/2046	
CN = CommScope Public Trust ECC Sub-CA-01-01 O = CommScope C = US	EB89D3087D76912D7616AC99C73BAEBAC1FB8E4835F8BA15B543F7344A4C57F1	4/30/2021	4/30/2046	
CN = CommScope Public Trust ECC Sub-CA-01-02 O = CommScope C = US	81473E1B18A688776881841B3AE160B2AD935CE9E8D5832B8A26256448DB7379	4/30/2021	4/30/2046	
CN = CommScope Public Trust ECC Sub-CA-02-01 O = CommScope C = US	598D21250DC4002FD7F1FC0EF530633D4B1687D8597C0A7A86FDB0E8D70A404B	4/30/2021	4/30/2046	



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## REPORT OF THE INDEPENDENT ACCOUNTANT

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

## Scope

We have examined CommScope management's <u>assertion</u> that for its Certification Authority ("CA") operations at San Diego, California, and Horsham, Pennsylvania, in the United States of America, for its CA enumerated in <u>Attachment B</u>, CommScope has:

- disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in the applicable versions of its CommScope Certificate Policy and Certification Practice Statement ("CP/CPS") enumerated in Attachment A
- maintained effective controls to provide reasonable assurance that CommScope provides its services in accordance with its CP/CPS
- maintained effective controls to provide reasonable assurance that:
  - the integrity of keys and certificates it manages is established and protected throughout their lifecycles;
  - the integrity of subscriber keys and certificates it manages is established and protected throughout their lifecycles; and
  - subscriber information is properly authenticated (for the registration activities performed by CommScope)
- maintained effective controls to provide reasonable assurance that:
  - logical and physical access to CA systems and data is restricted to authorized individuals;
  - o the continuity of key and certificate management operations is maintained; and
  - CA systems development, maintenance, and operations are properly authorized and performed to maintain CA systems integrity

throughout the period July 1, 2023 to June 30, 2024 based on the <u>WebTrust Principles and Criteria for Certification Authorities v2.2.2</u>.

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

CommScope does not escrow its CA keys, provide subscriber key recovery, provide integrated circuit card lifecycle management for subscribers, or certificate suspension services. CommScope does not provide subordinate CA certificate lifecycle management services to third-parties. Accordingly, our examination did not extend to controls that would address those criteria.

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#### Certification Authority's Responsibilities

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

#### 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 CommScope 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 CommScope's services other than its CA operations at San Diego, California, and Horsham, Pennsylvania, in the United States of America, nor the suitability of any of CommScope's services for any customer's intended purpose.

#### Other Matter



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

	Matter Topic	Matter Description	
1	Audit Logging	For one (1) out of one (1) new onboarded organizations selected for testing, CommScope did not retain vetting evidence that corporate contacts did not appear on the Miller Smiles List and that the client's FRN number was verified in the Federal Communications Commission website.	

# Use of the WebTrust Seal

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

BDO USA

September 25, 2024



# ATTACHMENT A - CERTIFICATE POLICY/CERTIFICATION PRACTICE STATEMENT VERSIONS IN-SCOPE

Policy Name	Version	Effective Date
CommScope Certificate Policy and Certificate Practice Statement	Version 2.6	February 10, 2023
CommScope Certificate Policy and Certificate Practice Statement	Version 2.7	September 8, 2023
CommScope Certificate Policy and Certificate Practice Statement	Version 2.8	February 14, 2024



# ATTACHMENT B - IN-SCOPE CA CERTIFICATES

# CableLabs CA Certificates

Issuing CA Subject DN	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint	Valid From	Valid To
CN = CableLabs Mfg CA OU = CA00001 - G4 L = Louisville S = Colorado O = CableLabs C = US	39 cc 8b 0b 7d 37 3c 79 c0 b1 2d 3b 8d 17 9a d2	e9 16 d1 9b ea 35 e2 11 1a bc 2d 32 98 a4 66 d0 a8 79 73 dc	90 a0 65 a5 0a 3e d9 59 a1 be 6f b8 2a b4 51 6d ba 62 67 37 2d c9 49 a4 b3 85 51 44 0f a1 34 d1	5/14/2018	5/14/2038
CN = CableLabs Mfg CA OU = CA00006 - G4 L = Louisville S = Colorado O = CableLabs C = US	64 3c b8 c7 75 5e 70 26 ff a7 69 05 f0 e9 02 75	6e 97 87 be 7c 0b a0 b4 63 5b 15 70 cd 5f c1 53 24 cc 97 1b	bc 6a 87 2d c8 77 38 03 73 6c 8c 9f d1 8c 42 8a 67 a5 3e fe 82 b6 3a 71 4c 0d f0 86 79 4a 6d 30	5/14/2018	5/14/2038
CN = CableLabs Device Certification Authority OU = Device CA03 - G4 O = CableLabs C = US	14 80 41 3d 21 fe be 8d 24 c5 74 a8 2c 4a fd 83	da d6 51 ef d5 61 80 98 dc 21 29 a2 bf 5a 34 7e 6f ab b0 59	cd d0 91 67 3a 15 ae 00 96 6f 8c b0 e5 38 0d 10 4d 91 65 61 42 05 a6 61 7c 2e 1e ea 4f 06 4e 39	11/5/2018	11/5/2053
CN = CableLabs Mfg CA OU = CA00008 - G3 L = Louisville S = Colorado O = CableLabs C = US	4a 8f 82 e7 d0 71 47 c7 3a b3 5d 92 08 ab 56 d8	61 bc ff 46 44 65 81 8b 70 14 07 41 1b f9 3a a3 55 0b fe 47	cf 9d 53 db a3 eb 8b d9 a2 2c 9f b6 1a 24 3d ab c9 06 43 37 0d d2 e1 12 c5 9e 98 e4 bb ed 8d b0	11/5/2018	11/5/2038
CN = CableLabs Device Certification Authority OU = Device CA07 O = CableLabs C = US	3d 2a 18 30 72 7f 49 28 1a da 83 89 d3 6b 4a 3b	69 a1 c5 d0 cd bc f8 d4 47 31 63 7c e5 40 54 19 e6 08 82 fd	c2 5a 88 de 2b 39 3b f7 68 2d a5 73 bc 5a 99 0d e4 f9 dd 86 9f ae 27 8a 9d b0 f8 32 38 7c e6 11	2/21/2023	2/21/2053



# WinnForum Insta CA certificate

Issuing CA Subject DN	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint	Valid From	Valid To
CN = WInnForum RSA	65 ce	46 b5 55 c2 b5 ce 7e 00 79	b4 39 85 12 de 76 e7 08	6/25/2018	6/25/2048
CBSD Mfr CA		ba cb 93 f3 0d ac a5 c0 0e	38 98 c1 cf 71 12 50 97 5d		
OU = RSA CBSD Mfr		9e b2	a4 64 8c 5e ae 50 f6 90 20		
CA0002			c4 9c 32 1a fd d3		
O = ARRIS Group, Inc.					
C = US					

# WinnForum CommScope CA certificates

Root CA Subject DN	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint	Valid From	Valid To
CN = WInnForum ECC	63 77 52 f4 74	99 ea d1 ac 2c f8 26 e7 40	76 b7 ce 8a 8b 22 ca 90	11/21/2019	11/21/2069
Root CA	96 a0 41 cb f7	71 50 74 ce 46 85 18 3c 6b	60 98 ef 31 23 09 f2 8e 04		
OU = ECC Root CA0004	ca 4a 1e 6c 24	b5 5b	c0 d5 cd 0a ed 17 fe 46		
O = WInnForum	d4 83 84 23 80		00 84 6f 90 fa 21 7b		
C = US					
CN=WInnForum RSA Root	73 64 da e9 e5	13 83 e8 58 c1 11 cd 51 00	e5 dd 57 ac b0 ed 9b 80	11/21/2019	11/21/2069
CA	39 13 19 75 ba	97 47 a8 cc d3 57 49 63 6c	2f 75 79 95 a2 8f 02 bc 6a		
OU=RSA Root CA0004	ba 91 9c c1 4f	63 88	5f f2 db 76 86 ee c5 1f 0c		
O=WInnForum	2b 2e be 4c 71		fe 08 f2 33 58 72		
C=US					

Issuing CA Subject DN	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint	Valid From	Valid To
CN = WInnForum RSA SAS	06 49 3b 8d 0e	d8 59 ca 91 eb 76 f3 ee a8	4b d0 57 16 5a 8c c0 90	11/21/2019	11/21/2049
Provider CA	16 62 75 07 4a	a2 fd 41 fe c7 f9 78 6b f5	7d bc d5 56 3e 65 2f 9a ca		
OU = RSA SAS Provider	0f f4 61 96 76	16 9c	bf 11 36 5d f4 3e e1 64 9f		
CA0001	00 7f dd a3 d6		9c 34 4d 68 cd 3b		
O = ARRIS Solutions, Inc.					
C = US					
CN = WInnForum RSA	5b 00 d6 a0 a2	d6 d4 47 e0 aa 19 0b 1c a7	e5 5b 56 e8 35 96 a2 54	11/21/2019	11/21/2049
Professional Installer CA	f0 c7 74 a7 f4	78 6f fd 2f de b4 0d ae 84	2e 2d b5 38 65 21 de 83		
OU = RSA Professional	df a9 6e 9c cb	85 ce	e3 77 8b 46 9b b5 86 4d		
Installer CA0001	fc 62 9b 06 20		d0 fe cc 73 8f 69 73 bd		
O = ARRIS Solutions, Inc.					
C = US					



Issuing CA Subject DN	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint	Valid From	Valid To
CN = WInnForum RSA CBSD Mfr CA	3a 5e c4 a5 7e c8 50 4d 25 4c	25 61 62 49 3f 1d e3 24 a0 90 fd fd f5 d9 4f a9 4b 49	ff e9 de b8 01 68 e4 b3 48 54 0b 87 ff 8b 03 ea ef e7	11/21/2019	11/21/2049
OU = RSA CBSD Mfr	69 43 06 79 7e	17 ac	2b ad 8c 4e c0 0b 3c 43		
CA0001	fd 21 73 8a 1f		19 a0 16 cb d8 6a		
O = ARRIS Solutions, Inc. C = US					
CN = WInnForum RSA	4a 6a 5e ce 1e	66 3a 6f c1 d1 e1 52 e1 f4	8e 80 bd b0 f9 ca 81 35 bf	8/6/2020	8/6/2050
Domain Proxy CA	1d a8 a4 09 b6	de a0 5c 9c ae bc 60 a1 be	7b d0 1b ba 77 d0 00 bc		
OU = RSA Domain Proxy CA0001	07 6e 5d 0d f1 84 fb 48 ce d1	42 3e	b8 88 af 3b 38 f7 85 5a 9f 86 a4 11 d6 83 b9		
O = ARRIS Solutions, Inc.					
C = US					

# **CSA IoT Matter CA Certificates**

Root CA Subject DN	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint	Valid From	Valid To
CN = CommScope Technologies LLC Matter PAA		fc 7e 5c 5c f4 7f 37 7f 49 b6 15 db 01 2c 36 9c 35 cf 76 9d	07 de 36 6a 41 fe 51 71 58 eb 7f 65 02 ff 53 27 6e 75 a0 bc 46 dc 1e 30 2f f6 53 a0 f4 75 d0 21	3/27/2023	6/5/2079



## COMMSCOPE, INC. MANAGEMENT'S ASSERTION

CommScope, Inc. ("CommScope") operates the Certification Authority ("CA") services for its CAs enumerated in <a href="Attachment B">Attachment B</a>, and provides the following CA services:

- Subscriber registration
- Certificate renewal
- Certificate rekey
- Certificate issuance
- Certificate distribution
- Certificate revocation
- Certificate validation
- Subscriber key generation

The management of CommScope is responsible for establishing and maintaining effective controls over its CA operations, including the CA business practices disclosure on its <u>website</u>, CA business practices management, CA environmental controls, CA key lifecycle management controls, subscriber key lifecycle management controls, and 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 CommScope's CA operations. Furthermore, because of changes in conditions, the effectiveness of controls may vary over time.

CommScope management has assessed its disclosures of its certificate practices and controls over its CA services. Based on that assessment, in CommScope management's opinion, in providing its CA services at San Diego, California, and Horsham, Pennsylvania, in the United States of America, CommScope has:

- disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in the applicable versions of its CommScope Certificate Policy and Certification Practice Statement ("CP/CPS") enumerated in <u>Attachment A</u>
- maintained effective controls to provide reasonable assurance that CommScope provides its services in accordance its CP/CPS
- maintained effective controls to provide reasonable assurance that:
  - the integrity of keys and certificates it manages is established and protected throughout their lifecycles;
  - the integrity of subscriber keys and certificates it manages is established and protected throughout their lifecycles; and
  - subscriber information is properly authenticated (for the registration activities performed by CommScope)
- maintained effective controls to provide reasonable assurance that:
  - logical and physical access to CA systems and data is restricted to authorized individuals;



- o the continuity of key and certificate management operations is maintained; and
- CA systems development, maintenance, and operations are properly authorized and performed to maintain CA systems integrity

throughout the period July 1, 2023 to June 30, 2024 based on the <u>WebTrust Principles and Criteria for Certification Authorities v2.2.2</u>, including the following:

#### **CA Business Practices Disclosure**

- Certificate Practice Statement (CPS)
- Certificate Policy (CP)

## **CA Business Practices Management**

- Certificate Policy (CP) Management
- Certification Practice Statement (CPS) Management

#### **CA Environmental Controls**

- Security Management
- Asset Classification and Management
- Personnel Security
- Physical and Environmental Security
- Operations Management
- System Access Management
- Systems Development, Maintenance, and Change Management
- Disaster Recovery, Backups, and 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

## Subscriber Key Lifecycle Management Controls

- CA-Provided Subscriber Key Generation Services
- Requirements for Subscriber Key Management



# **Certificate Lifecycle Management Controls**

- Subscriber Registration
- Certificate Renewal
- Certificate Rekey
- Certificate Issuance
- Certificate Distribution
- Certificate Revocation
- Certificate Validation

CommScope does not escrow its CA keys, provide subscriber key recovery, provide integrated circuit card lifecycle management for subscribers, or certificate suspension services. CommScope does not provide subordinate CA certificate lifecycle management services to third parties. Accordingly, our assertion does not extend to controls that would address those criteria.

Craig P Coogan
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9/25/2024

Craig Coogan

VP and General Manager, CommScope



# ATTACHMENT A - CERTIFICATE POLICY/CERTIFICATION PRACTICE STATEMENT VERSIONS IN-SCOPE

Policy Name	Version	Effective Date
CommScope Certificate Policy and Certificate Practice Statement	Version 2.6	February 10, 2023
CommScope Certificate Policy and Certificate Practice Statement	Version 2.7	September 8, 2023
CommScope Certificate Policy and Certificate Practice Statement	Version 2.8	February 14, 2024



# ATTACHMENT B - IN-SCOPE CA CERTIFICATES

# **CableLabs CA Certificates**

Issuing CA Subject DN	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint	Valid From	Valid To
CN = CableLabs Mfg CA OU = CA00001 - G4 L = Louisville S = Colorado O = CableLabs C = US	39 cc 8b 0b 7d 37 3c 79 c0 b1 2d 3b 8d 17 9a d2	e9 16 d1 9b ea 35 e2 11 1a bc 2d 32 98 a4 66 d0 a8 79 73 dc	90 a0 65 a5 0a 3e d9 59 a1 be 6f b8 2a b4 51 6d ba 62 67 37 2d c9 49 a4 b3 85 51 44 0f a1 34 d1	5/14/2018	5/14/2038
CN = CableLabs Mfg CA OU = CA00006 - G4 L = Louisville S = Colorado O = CableLabs C = US	64 3c b8 c7 75 5e 70 26 ff a7 69 05 f0 e9 02 75	6e 97 87 be 7c 0b a0 b4 63 5b 15 70 cd 5f c1 53 24 cc 97 1b	bc 6a 87 2d c8 77 38 03 73 6c 8c 9f d1 8c 42 8a 67 a5 3e fe 82 b6 3a 71 4c 0d f0 86 79 4a 6d 30	5/14/2018	5/14/2038
CN = CableLabs Device Certification Authority OU = Device CA03 - G4 O = CableLabs C = US	14 80 41 3d 21 fe be 8d 24 c5 74 a8 2c 4a fd 83	da d6 51 ef d5 61 80 98 dc 21 29 a2 bf 5a 34 7e 6f ab b0 59	cd d0 91 67 3a 15 ae 00 96 6f 8c b0 e5 38 0d 10 4d 91 65 61 42 05 a6 61 7c 2e 1e ea 4f 06 4e 39	11/5/2018	11/5/2053
CN = CableLabs Mfg CA OU = CA00008 - G3 L = Louisville S = Colorado O = CableLabs C = US	4a 8f 82 e7 d0 71 47 c7 3a b3 5d 92 08 ab 56 d8	61 bc ff 46 44 65 81 8b 70 14 07 41 1b f9 3a a3 55 0b fe 47	cf 9d 53 db a3 eb 8b d9 a2 2c 9f b6 1a 24 3d ab c9 06 43 37 0d d2 e1 12 c5 9e 98 e4 bb ed 8d b0	11/5/2018	11/5/2038
CN = CableLabs Device Certification Authority OU = Device CA07 O = CableLabs C = US	3d 2a 18 30 72 7f 49 28 1a da 83 89 d3 6b 4a 3b	69 a1 c5 d0 cd bc f8 d4 47 31 63 7c e5 40 54 19 e6 08 82 fd	c2 5a 88 de 2b 39 3b f7 68 2d a5 73 bc 5a 99 0d e4 f9 dd 86 9f ae 27 8a 9d b0 f8 32 38 7c e6 11	2/21/2023	2/21/2053



# WinnForum Insta CA certificate

Issuing CA Subject DN	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint	Valid From	Valid To
CN = WInnForum RSA CBSD Mfr CA OU = RSA CBSD Mfr CA0002 O = ARRIS Group, Inc. C = US	65 ce	46 b5 55 c2 b5 ce 7e 00 79 ba cb 93 f3 0d ac a5 c0 0e 9e b2	b4 39 85 12 de 76 e7 08 38 98 c1 cf 71 12 50 97 5d a4 64 8c 5e ae 50 f6 90 20 c4 9c 32 1a fd d3	6/25/2018	6/25/2048

WinnForum CommScope CA certificates

Root CA Subject DN	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint	Valid From	Valid To
CN = WInnForum ECC	63 77 52 f4 74	99 ea d1 ac 2c f8 26 e7 40	76 b7 ce 8a 8b 22 ca 90	11/21/2019	11/21/2069
Root CA	96 a0 41 cb f7	71 50 74 ce 46 85 18 3c 6b	60 98 ef 31 23 09 f2 8e 04		
OU = ECC Root CA0004	ca 4a 1e 6c 24	b5 5b	c0 d5 cd 0a ed 17 fe 46		
O = WInnForum	d4 83 84 23 80		00 84 6f 90 fa 21 7b		
C = US					
CN=WInnForum RSA Root	73 64 da e9 e5	13 83 e8 58 c1 11 cd 51 00	e5 dd 57 ac b0 ed 9b 80	11/21/2019	11/21/2069
CA	39 13 19 75 ba	97 47 a8 cc d3 57 49 63 6c	2f 75 79 95 a2 8f 02 bc 6a		
OU=RSA Root CA0004	ba 91 9c c1 4f	63 88	5f f2 db 76 86 ee c5 1f 0c		
O=WInnForum	2b 2e be 4c 71		fe 08 f2 33 58 72		
C=US					

Issuing CA Subject DN	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint	Valid From	Valid To
CN = WInnForum RSA SAS	06 49 3b 8d 0e	d8 59 ca 91 eb 76 f3 ee a8	4b d0 57 16 5a 8c c0 90	11/21/2019	11/21/2049
Provider CA	16 62 75 07 4a	a2 fd 41 fe c7 f9 78 6b f5	7d bc d5 56 3e 65 2f 9a ca		
OU = RSA SAS Provider	0f f4 61 96 76	16 9c	bf 11 36 5d f4 3e e1 64 9f		
CA0001	00 7f dd a3 d6		9c 34 4d 68 cd 3b		
O = ARRIS Solutions, Inc.					
C = US					
CN = WInnForum RSA	5b 00 d6 a0 a2	d6 d4 47 e0 aa 19 0b 1c a7	e5 5b 56 e8 35 96 a2 54	11/21/2019	11/21/2049
Professional Installer CA	f0 c7 74 a7 f4	78 6f fd 2f de b4 0d ae 84	2e 2d b5 38 65 21 de 83		
OU = RSA Professional	df a9 6e 9c cb	85 ce	e3 77 8b 46 9b b5 86 4d		
Installer CA0001	fc 62 9b 06 20		d0 fe cc 73 8f 69 73 bd		
O = ARRIS Solutions, Inc.					
C = US					



Issuing CA Subject DN	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint	Valid From	Valid To
CN = WInnForum RSA	3a 5e c4 a5 7e	25 61 62 49 3f 1d e3 24 a0	ff e9 de b8 01 68 e4 b3 48	11/21/2019	11/21/2049
CBSD Mfr CA	c8 50 4d 25 4c	90 fd fd f5 d9 4f a9 4b 49	54 0b 87 ff 8b 03 ea ef e7		
OU = RSA CBSD Mfr	69 43 06 79 7e	17 ac	2b ad 8c 4e c0 0b 3c 43		
CA0001	fd 21 73 8a 1f		19 a0 16 cb d8 6a		
O = ARRIS Solutions, Inc.					
C = US					
CN = WInnForum RSA	4a 6a 5e ce 1e	66 3a 6f c1 d1 e1 52 e1 f4	8e 80 bd b0 f9 ca 81 35 bf	8/6/2020	8/6/2050
Domain Proxy CA	1d a8 a4 09 b6	de a0 5c 9c ae bc 60 a1 be	7b d0 1b ba 77 d0 00 bc		
OU = RSA Domain Proxy	07 6e 5d 0d f1	42 3e	b8 88 af 3b 38 f7 85 5a 9f		
CA0001	84 fb 48 ce d1		86 a4 11 d6 83 b9		
O = ARRIS Solutions, Inc.					
C = US					

# **CSA IoT Matter CA Certificates**

Root CA Subject DN	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint	Valid From	Valid To
CN = CommScope Technologies LLC Matter PAA	5c 21 a8 f6 46 fa 20 0b 93 6d cf be d0 83 48 2a 84 4d 76 69	fc 7e 5c 5c f4 7f 37 7f 49 b6 15 db 01 2c 36 9c 35 cf 76 9d	07 de 36 6a 41 fe 51 71 58 eb 7f 65 02 ff 53 27 6e 75 a0 bc 46 dc 1e 30 2f f6 53 a0 f4 75 d0 21	3/27/2023	6/5/2079