



## REPORT OF THE INDEPENDENT ACCOUNTANT

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

We have examined the assertions by the management of [DigiCert](#) and [VeriSign, Inc.](#) ("Verisign"), an independent service organization that provides datacenter hosting services to DigiCert, that for its Thawte Certification Authority ("CA") operations at Mountain View, California, USA; New Castle, Delaware, USA; Melbourne, Australia; Sydney, Australia; Cape Town, South Africa; Dublin, Ireland; Sapporo, Japan; and Kawasaki-shi, Japan, throughout the period November 1, 2017 to October 31, 2018 for its CAs as enumerated in [Attachment B](#), DigiCert has

- disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in the applicable versions of its DigiCert Certificate Policy for Symantec Trust Network (STN) and DigiCert Certification Practices Statement for Thawte enumerated in [Attachment A](#)
- maintained effective controls to provide reasonable assurance that:
  - DigiCert's Certification Practice Statement is consistent with its Certificate Policy; and
  - DigiCert 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;
  - the integrity of subscriber keys and certificates it manages is established and protected throughout their lifecycles;
  - subscriber information is properly authenticated (for the registration activities performed by DigiCert); and
  - subordinate CA certificate requests are accurate, authenticated, and approved
- maintained effective controls to provide reasonable assurance that:
  - logical and physical access to CA systems and data is restricted to authorized individuals;
  - the continuity of key and certificate management operations is maintained; and
  - CA systems development, maintenance, and operations are properly authorized and performed to maintain CA systems integrity

based on the [WebTrust Principles and Criteria for Certification Authorities v2.1](#). DigiCert's and Verisign's management are responsible for their respective assertions. Our responsibility is to express an opinion on managements' assertions, based on our examination.



The relative effectiveness and significance of specific controls at DigiCert and Verisign and their effect on assessments of control risks 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.

DigiCert does not escrow its CA keys, does not provide subscriber key lifecycle management controls, 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 managements' assertions are fairly stated, in all material respects. An examination involves performing procedures to obtain evidence about managements' assertions. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risks of material misstatement of managements' assertions, 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, DigiCert's and Verisign's 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 DigiCert's and Verisign's management assertions, as referred to above, are fairly stated, in all material respects.

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

Matter Topic		Matter Description
1	Disaster Recovery	DigiCert does not have documented disaster recovery procedures specific to the handling of offline CA operations and no test was conducted to determine the capabilities to recover offline CA operations from the secondary facility.

This report does not include any representation as to the quality of DigiCert's or Verisign's services other than its Thawte CA operations at Mountain View, California, USA; New Castle, Delaware, USA; Melbourne, Australia; Sydney, Australia; Cape Town, South Africa; Dublin, Ireland; Sapporo, Japan; and Kawasaki-shi, Japan, nor the suitability of any of DigiCert's or Verisign's services for any customer's intended purpose.



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

*BDO USA, LLP*

St. Louis, Missouri  
January 29, 2019



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

Policy Name	Version	Date
<a href="#">DigiCert Certification Practices Statement for Thawte</a>	3.7.19	September 11, 2018
thawte Certification Practice Statement	3.7.18	September 8, 2017
<a href="#">DigiCert Certificate Policy for Symantec Trust Network (STN)</a>	2.9	September 11, 2018
Symantec Trust Network (STN) Certificate Policy	2.8.24	September 8, 2017



## Attachment B - List of CAs In-Scope

Root CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=thawte, Inc., OU=Certification Services Division, OU=(c) 2006 thawte, Inc. - For authorized use only, CN=thawte Primary Root CA	344ED55720D5EDEC49F4 2FCE37DB2B6D	91:C6:D6:EE:3E:8A:C8:63:84 :E5:48:C2:99:29:5C:75:6C:8 1:7B:81	8D:72:2F:81:A9:C1:13:C0:79 :1D:F1:36:A2:96:6D:B2:6C:9 5:0A:97:1D:B4:6B:41:99:F4: EA:54:B7:8B:FB:9F
C=US, O=thawte, Inc., OU=(c) 2007 thawte, Inc. - For authorized use only, CN=thawte Primary Root CA - G2	35FC265CD9844FC93D26 3D579BAED756	AA:DB:BC:22:23:8F:C4:01:A1 :27:BB:38:DD:F4:1D:DB:08:9 E:F0:12	A4:31:0D:50:AF:18:A6:44:71 :90:37:2A:86:AF:AF:8B:95:1 F:FB:43:1D:83:7F:1E:56:88: B4:59:71:ED:15:57
C=ZA, ST=Western Cape, L=Durbanville, O=Thawte, OU=Thawte Certification, CN=Thawte Timestamping CA	00	BE:36:A4:56:2F:B2:EE:05:DB :B3:D3:23:23:AD:F4:45:08:4 E:D6:56	6B:6C:1E:01:F5:90:F5:AF:C5 :FC:F8:5C:D0:B9:39:68:84:0 4:86:59:FC:2C:6D:11:70:D6: 8B:04:52:16:C3:FD
C=US, O=thawte, Inc., OU=Certification Services Division, OU=(c) 2008 thawte, Inc. - For authorized use only, CN=thawte Primary Root CA - G3	600197B746A7EAB4B49A D64B2FF790FB	F1:8B:53:8D:1B:E9:03:B6:A6 :F0:56:43:5B:17:15:89:CA:F 3:6B:F2	4B:03:F4:58:07:AD:70:F2:1B :FC:2C:AE:71:C9:FD:E4:60:4 C:06:4C:F5:FF:B6:86:BA:E5: DB:AA:D7:FD:D3:4C

Cross Signed CAs				
Issuer	Subject	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=thawte, Inc., OU=Certification Services Division, OU=(c) 2008 thawte, Inc. - For authorized use only, CN=thawte Primary Root CA - G3	C=US, O=DigiCert, Inc, OU=www.digicert.com, CN=thawte Primary G3 Transition Root	2CEODDA0A50D5 8F1B98B9CD051A 70F75	4D:90:53:2C:6F:82:28 :03:AF:39:52:93:50:2 1:8A:14:48:E8:7F:E2	85:74:3A:EA:6A:97:C1: 34:45:E0:82:4C:2E:1F: E5:02:B9:7A:DD:12:4A :97:EF:51:20:FE:07:F5 :58:12:FC:33
C=US, O=thawte, Inc., OU=Certification Services Division, OU=(c) 2006 thawte, Inc. - For authorized use only, CN=thawte Primary Root CA	C=US, O=DigiCert, Inc, OU=www.digicert.com, CN=thawte Primary Transition Root	06776FBA09F6D3 4694325ECB0D26 7472	A4:E4:11:DE:0A:FD:61 :97:76:40:F9:D8:69:2 0:C5:E7:0E:B5:0A:E3	DB:A1:09:77:10:F3:C6: 29:94:3C:23:DC:75:03: AC:82:B9:14:28:25:EF: 04:9F:1C:26:53:8D:B3: 6B:48:05:49

Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=Symantec Corporation, CN=Symantec Time Stamping Services CA - G2	7E93EBFB7CC64E59EA4B 9A77D406FC3B	6C:07:45:3F:FD:DA:08:B8:37 :07:C0:9B:82:FB:3D:15:F3:5 3:36:B1	06:25:FE:E1:A8:0D:7B:89:7A :97:12:24:9C:2F:55:FF:39:1D :66:61:DB:D8:B8:7F:9B:E6:F 2:52:D8:8C:ED:95
C=US, O=Thawte, Inc., CN=Thawte Code Signing CA - G2	47974D7873A5BCAB0D2 FB370192FCE5E	80:8D:62:64:2B:7D:1C:4A:9A :83:FD:66:7F:7A:2A:9D:24:3 F:B1:C7	AF:84:0C:A2:B9:DF:B7:76:BF :81:AA:94:C4:01:BC:44:0C:5 2:E5:C5:90:C4:36:07:A1:3D: 66:80:D8:3E:33:49
C=US, O=thawte, Inc., CN=thawte ECC EV SSL CA	1FF2FCBC6326AABD286 693991F43EC21	E9:2B:D8:99:36:8C:0F:41:67 :82:A5:BE:8D:F2:B9:75:66:A 8:3F:6B	EA:D6:2F:42:BB:36:9D:D4:3C :F6:13:1A:C2:D8:D7:2E:4F:9 F:EE:85:E6:9D:45:DA:AF:FE: 32:6A:AC:2A:46:F1



C=US, O=thawte, Inc., CN=thawte EV Code Signing CA	779A2BE6DEEDA2BFB90 2CA8E3668B9AF	B1:7E:FE:36:89:24:DF:F5:0A :91:9C:58:A6:A8:6E:F1:81:F A:C5:6E	F3:76:F6:E5:BF:66:0F:6B:ED :B7:68:DC:D1:30:3E:AD:D4:A 9:6F:2E:D7:A9:77:17:E8:78:F A:E6:BB:59:59:FA
C=US, O=thawte, Inc., CN=thawte EV SSL CA - G2	05237150E67BDD38F33E F53CD211313F	19:73:F3:07:35:9B:C9:61:03: 03:57:90:BF:75:DD:91:51:E8 :3F:99	37:F6:BD:9B:EE:0C:74:F6:08 :DD:47:4B:56:A7:2F:81:83:0 7:7D:FC:26:62:AF:79:BF:E3: D4:FA:BC:F0:B1:C4
C=US, O=thawte, Inc., CN=thawte EV SSL CA - G3	5D72FB337620F64C7280 DBE91281FF6A	68:06:0C:A0:74:FF:36:C7:E8 :1B:0B:33:8D:7E:83:76:79:0 E:DO:20	1A:99:01:9F:9D:41:2A:64:45 :47:49:ED:AA:8E:7D:C4:66:7 3:D6:44:DF:3C:E1:5C:C6:55: 73:5E:A0:DF:86:FE
C=US, O=thawte, Inc., CN=thawte Extended Validation SHA256 SSL CA	0A489E88537E8AA6454D 6E2C4B2AEB20	14:B4:AC:F9:44:34:F7:D0:76 :8D:3E:E4:8D:18:8E:FD:0C:2 9:13:7A	79:20:B8:E1:8D:2F:C1:2D:81 :C2:FA:B9:0A:63:B1:B5:2A:B 3:29:CE:7C:D1:CB:7C:A0:94: CD:F9:D6:00:F4:92
C=US, O=thawte, Inc., CN=thawte SHA256 Code Signing CA	71A0B73695DDB1AFC23 B2B9A18EE54CB	D0:0C:FD:BF:46:C9:8A:83:8B :C1:0D:C4:E0:97:AE:01:52:C 4:61:BC	C4:D1:8E:0A:58:E4:EF:FD:17 :ED:77:C8:40:B6:13:EF:15:F 5:51:07:6E:A9:2C:2B:77:F6: 60:9A:6C:25:57:C7
C=US, O=thawte, Inc., CN=thawte SHA256 Code Signing CA - G2	0BF3CC63CF04304D47C 3B587049FA807	F3:75:9A:4E:54:48:BA:CD:B7 :85:62:32:84:61:04:58:44:21 :6E:B7	F7:6F:0D:8A:D3:30:AC:FD:4C :5B:D0:5A:58:A1:CF:15:5D:E 0:0B:E2:C9:8F:4E:78:99:BE: 24:E8:0A:2A:BC:BF
C=US, O=thawte, Inc., CN=thawte SHA256 SSL CA	36349E18C99C2669B656 2E6CE5AD7132	67:D1:47:D5:DA:B7:F2:8D:66 :3C:A5:B7:A9:56:8F:08:74:2 7:B9:F7	3F:3A:F9:C9:CC:2C:75:99:EF :8F:6D:D7:CA:51:6C:FC:17:9 7:D7:D1:20:02:25:4F:3B:FD: 0D:4D:0F:E9:DE:86
C=US, O=Thawte, Inc., CN=Thawte SSL CA	4D5F2C3408B24C20CD6 D507E244DC9EC	73:E4:26:86:65:7A:EC:E3:54: FB:F6:85:71:23:61:65:8F:2F: 43:57	08:55:41:4A:F5:F5:FD:7E:26: 4F:8B:00:2A:39:CC:ED:67:E5 :95:2E:89:B6:1B:68:0C:C8:4 7:BA:A3:49:44:DE
C=US, O=thawte, Inc., CN=thawte SSL CA - G2	1687D6886DE230068523 3DBF11BF6597	2E:A7:1C:36:7D:17:8C:84:3F :D2:1D:B4:FD:B6:30:BA:54:A 2:0D:C5	B7:A8:AF:2A:4A:43:F0:A8:6B :15:60:4D:E6:46:12:09:C9:C D:76:89:4D:8B:07:48:BC:99: D9:A7:97:01:3B:B0
C=US, O=Thawte, Inc., OU=Domain Validated SSL, CN=Thawte DV SSL CA	7610128A17B682BB3A1F 9D1A9A35C092	3C:A9:58:F3:E7:D6:83:7E:1C :1A:CF:8B:0F:6A:2E:6D:48:7 D:67:62	D2:57:38:31:FA:53:76:B1:C7 :DC:0D:BB:0E:F5:88:13:E9:0 7:06:18:FA:5A:21:E1:3F:5E:9 F:2B:65:E0:A3:20
C=US, O=thawte, Inc., OU=Domain Validated SSL, CN=thawte DV SSL CA - G2	2C69E12F6A670BD99DD 20F919EF09E51	4C:03:68:21:E4:34:13:B6:63: B0:6D:CF:01:4C:E9:0D:50:34 :7F:99	9F:25:11:A2:3E:70:D9:5F:B6 :27:98:50:8A:67:6C:C3:89:6 4:10:09:36:A6:E6:D3:CA:E7: 71:54:C0:29:0F:02
C=US, O=thawte, Inc., OU=Domain Validated SSL, CN=thawte DV SSL SHA256 CA	3E23345AED2C0A517B26 DED4801D10AA	50:F1:25:EF:CA:24:28:FF:17: D2:04:B8:9E:52:64:50:9A:28 :3D:A7	53:7C:5C:80:72:36:3E:14:7C :84:D2:1D:0D:22:48:B6:B9:9 A:9A:8A:43:31:16:59:83:5E: C3:39:26:DA:28:60



## DIGICERT, INC. MANAGEMENT'S ASSERTION

DigiCert Corporation ("DigiCert") operates the Thawte Certification Authority (CA) services for its CAs as enumerated in [Attachment B](#) and provides the following CA services:

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

The management of DigiCert is responsible for establishing and maintaining controls over its CA operations, including its CA business practices disclosure on its [website](#), CA business practices management, CA environmental controls, CA key lifecycle management controls, subscriber key lifecycle management controls, certificate lifecycle management controls, and subordinate CA certificate lifecycle management controls. These controls contain monitoring mechanisms, and actions are taken to correct deficiencies identified.

There are inherent limitations in any controls, including the possibility of human error, and the circumvention or overriding of controls. Accordingly, even effective controls can only provide reasonable assurance with respect to DigiCert's Thawte Certification Authority operations. Furthermore, because of changes in conditions, the effectiveness of controls may vary over time.

DigiCert management has assessed its disclosures of its certificate practices and controls over its CA services. Based on that assessment, in DigiCert management's opinion, in providing its CA services at Mountain View, California, USA; New Castle, Delaware, USA; Melbourne, Australia; Sydney, Australia; Cape Town, South Africa; Dublin, Ireland; Sapporo, Japan; and Kawasaki-shi, Japan throughout the period November 1, 2017 to October 31, 2018, DigiCert has:

- disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in the applicable versions of its DigiCert Certificate Policy for Symantec Trust Network (STN) and DigiCert Certification Practices Statement for Thawte enumerated in [Attachment A](#)
- maintained effective controls to provide reasonable assurance that:
  - DigiCert's Certification Practice Statement is consistent with its Certificate Policy; and
  - DigiCert 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;
  - the integrity of subscriber 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 [WebTrust Principles and Criteria for Certification Authorities v2.1](#), including the following:

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

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

#### **CA Business Practices Management**

- Certificate Policy Management
- Certification Practice Statement Management
- CP and CPS Consistency

#### **CA Environmental Controls**

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

#### **CA Lifecycle Management Controls**

- CA Key Generation
- CA Key Storage, Backup, and Recovery





- CA Public Key Distribution
- CA Key Usage
- CA Key Archival
- CA Key Destruction
- CA Key Compromise
- CA Cryptographic Hardware Lifecycle Management
- CA Key Transportation
- CA Key Migration

#### **Certificate Lifecycle Management Controls**

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

#### **Subordinate CA Certificate Lifecycle Management Controls**

- Subordinate CA Certificate Lifecycle Management

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

DigiCert, Inc.

A photograph of a handwritten signature in blue ink on a light-colored surface. The signature is cursive and appears to read 'Jeremy Rowley'.

Jeremy Rowley  
Executive VP of Product

January 29, 2019



**Attachment A - Certification Practice Statements and Certificate Policy Versions In-Scope**

Policy Name	Version	Date
<a href="#">DigiCert Certification Practices Statement for Thawte</a>	3.7.19	September 11, 2018
thawte Certification Practice Statement	3.7.18	September 8, 2017
<a href="#">DigiCert Certificate Policy for Symantec Trust Network (STN)</a>	2.9	September 11, 2018
Symantec Trust Network (STN) Certificate Policy	2.8.24	September 8, 2017



## Attachment B - List of CAs In-Scope

Root CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=thawte, Inc., OU=Certification Services Division, OU=(c) 2006 thawte, Inc. - For authorized use only, CN=thawte Primary Root CA	344ED55720D5EDEC49F4 2FCE37DB2B6D	91:C6:D6:EE:3E:8A:C8:63:84 :E5:48:C2:99:29:5C:75:6C:8 1:7B:81	8D:72:2F:81:A9:C1:13:C0:79 :1D:F1:36:A2:96:6D:B2:6C:9 5:0A:97:1D:B4:6B:41:99:F4: EA:54:B7:8B:FB:9F
C=US, O=thawte, Inc., OU=(c) 2007 thawte, Inc. - For authorized use only, CN=thawte Primary Root CA - G2	35FC265CD9844FC93D26 3D579BAED756	AA:DB:BC:22:23:8F:C4:01:A1 :27:BB:38:DD:F4:1D:DB:08:9 E:F0:12	A4:31:0D:50:AF:18:A6:44:71 :90:37:2A:86:AF:AF:8B:95:1 F:FB:43:1D:83:7F:1E:56:88: B4:59:71:ED:15:57
C=ZA, ST=Western Cape, L=Durbanville, O=Thawte, OU=Thawte Certification, CN=Thawte Timestamping CA	00	BE:36:A4:56:2F:B2:EE:05:DB :B3:D3:23:23:AD:F4:45:08:4 E:D6:56	6B:6C:1E:01:F5:90:F5:AF:C5 :FC:F8:5C:D0:B9:39:68:84:0 4:86:59:FC:2C:6D:11:70:D6: 8B:04:52:16:C3:FD
C=US, O=thawte, Inc., OU=Certification Services Division, OU=(c) 2008 thawte, Inc. - For authorized use only, CN=thawte Primary Root CA - G3	600197B746A7EAB4B49A D64B2FF790FB	F1:8B:53:8D:1B:E9:03:B6:A6 :F0:56:43:5B:17:15:89:CA:F 3:6B:F2	4B:03:F4:58:07:AD:70:F2:1B :FC:2C:AE:71:C9:FD:E4:60:4 C:06:4C:F5:FF:B6:86:BA:E5: DB:AA:D7:FD:D3:4C

Cross Signed CAs				
Issuer	Subject	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=thawte, Inc., OU=Certification Services Division, OU=(c) 2008 thawte, Inc. - For authorized use only, CN=thawte Primary Root CA - G3	C=US, O=DigiCert, Inc, OU=www.digicert.com, CN=thawte Primary G3 Transition Root	2CEODDA0A50D5 8F1B98B9CD051A 70F75	4D:90:53:2C:6F:82:28 :03:AF:39:52:93:50:2 1:8A:14:48:E8:7F:E2	85:74:3A:EA:6A:97:C1: 34:45:E0:82:4C:2E:1F: E5:02:B9:7A:DD:12:4A :97:EF:51:20:FE:07:F5 :58:12:FC:33
C=US, O=thawte, Inc., OU=Certification Services Division, OU=(c) 2006 thawte, Inc. - For authorized use only, CN=thawte Primary Root CA	C=US, O=DigiCert, Inc, OU=www.digicert.com, CN=thawte Primary Transition Root	06776FBA09F6D3 4694325ECB0D26 7472	A4:E4:11:DE:0A:FD:61 :97:76:40:F9:D8:69:2 0:C5:E7:0E:B5:0A:E3	DB:A1:09:77:10:F3:C6: 29:94:3C:23:DC:75:03: AC:82:B9:14:28:25:EF: 04:9F:1C:26:53:8D:B3: 6B:48:05:49

Class 3 CA	Serial Number	SHA1 Thumbprint	SHA2 Thumbprint
C=US, O=Symantec Corporation, CN=Symantec Time Stamping Services CA - G2	7E93EBFB7CC64E59EA4B 9A77D406FC3B	6C:07:45:3F:FD:DA:08:B8:37 :07:C0:9B:82:FB:3D:15:F3:5 3:36:B1	06:25:FE:E1:A8:0D:7B:89:7A :97:12:24:9C:2F:55:FF:39:1D :66:61:DB:D8:B8:7F:9B:E6:F 2:52:D8:8C:ED:95
C=US, O=Thawte, Inc., CN=Thawte Code Signing CA - G2	47974D7873A5BCAB0D2 FB370192FCE5E	80:8D:62:64:2B:7D:1C:4A:9A :83:FD:66:7F:7A:2A:9D:24:3 F:B1:C7	AF:84:0C:A2:B9:DF:B7:76:BF :81:AA:94:C4:01:BC:44:0C:5 2:E5:C5:90:C4:36:07:A1:3D: 66:80:D8:3E:33:49
C=US, O=thawte, Inc., CN=thawte ECC EV SSL CA	1FF2FCBC6326AABD286 693991F43EC21	E9:2B:D8:99:36:8C:0F:41:67 :82:A5:BE:8D:F2:B9:75:66:A 8:3F:6B	EA:D6:2F:42:BB:36:9D:D4:3C :F6:13:1A:C2:D8:D7:2E:4F:9 F:EE:85:E6:9D:45:DA:AF:FE: 32:6A:AC:2A:46:F1
C=US, O=thawte, Inc., CN=thawte EV Code Signing CA	779A2BE6DEEDA2BFB90 2CA8E3668B9AF	B1:7E:FE:36:89:24:DF:F5:0A :91:9C:58:A6:A8:6E:F1:81:F A:C5:6E	F3:76:F6:E5:BF:66:0F:6B:ED :B7:68:DC:D1:30:3E:AD:D4:A 9:6F:2E:D7:A9:77:17:E8:78:F A:E6:BB:59:59:FA



C=US, O=thawte, Inc., CN=thawte EV SSL CA - G2	05237150E67BDD38F33E F53CD211313F	19:73:F3:07:35:9B:C9:61:03: 03:57:90:BF:75:DD:91:51:E8 :3F:99	37:F6:BD:9B:EE:0C:74:F6:08 :DD:47:4B:56:A7:2F:81:83:0 7:7D:FC:26:62:AF:79:BF:E3: D4:FA:BC:F0:B1:C4
C=US, O=thawte, Inc., CN=thawte EV SSL CA - G3	5D72FB337620F64C7280 DBE91281FF6A	68:06:0C:A0:74:FF:36:C7:E8 :1B:0B:33:8D:7E:83:76:79:0 E:D0:20	1A:99:01:9F:9D:41:2A:64:45 :47:49:ED:AA:8E:7D:C4:66:7 3:D6:44:DF:3C:E1:5C:C6:55: 73:5E:A0:DF:86:FE
C=US, O=thawte, Inc., CN=thawte Extended Validation SHA256 SSL CA	0A489E88537E8AA6454D 6E2C4B2AEB20	14:B4:AC:F9:44:34:F7:D0:76 :8D:3E:E4:8D:18:8E:FD:0C:2 9:13:7A	79:20:B8:E1:8D:2F:C1:2D:81 :C2:FA:B9:0A:63:B1:B5:2A:B 3:29:CE:7C:D1:CB:7C:A0:94: CD:F9:D6:00:F4:92
C=US, O=thawte, Inc., CN=thawte SHA256 Code Signing CA	71A0B73695DDB1AFC23 B2B9A18EE54CB	D0:0C:FD:BF:46:C9:8A:83:8B :C1:0D:C4:E0:97:AE:01:52:C 4:61:BC	C4:D1:8E:0A:58:E4:EF:FD:17 :ED:77:C8:40:B6:13:EF:15:F 5:51:07:6E:A9:2C:2B:77:F6: 60:9A:6C:25:57:C7
C=US, O=thawte, Inc., CN=thawte SHA256 Code Signing CA - G2	0BF3CC63CF04304D47C 3B587049FA807	F3:75:9A:4E:54:48:BA:CD:B7 :85:62:32:84:61:04:58:44:21 :6E:B7	F7:6F:0D:8A:D3:30:AC:FD:4C :5B:D0:5A:58:A1:CF:15:5D:E 0:0B:E2:C9:8F:4E:78:99:BE: 24:E8:0A:2A:BC:BF
C=US, O=thawte, Inc., CN=thawte SHA256 SSL CA	36349E18C99C2669B656 2E6CE5AD7132	67:D1:47:D5:DA:B7:F2:8D:66 :3C:A5:B7:A9:56:8F:08:74:2 7:B9:F7	3F:3A:F9:C9:CC:2C:75:99:EF :8F:6D:D7:CA:51:6C:FC:17:9 7:D7:D1:20:02:25:4F:3B:FD: 0D:4D:0F:E9:DE:86
C=US, O=Thawte, Inc., CN=Thawte SSL CA	4D5F2C3408B24C20CD6 D507E244DC9EC	73:E4:26:86:65:7A:EC:E3:54: FB:F6:85:71:23:61:65:8F:2F: 43:57	08:55:41:4A:F5:F5:FD:7E:26: 4F:8B:00:2A:39:CC:ED:67:E5 :95:2E:89:B6:1B:68:0C:C8:4 7:BA:A3:49:44:DE
C=US, O=thawte, Inc., CN=thawte SSL CA - G2	1687D6886DE230068523 3DBF11BF6597	2E:A7:1C:36:7D:17:8C:84:3F :D2:1D:B4:FD:B6:30:BA:54:A 2:0D:C5	B7:A8:AF:2A:4A:43:F0:A8:6B :15:60:4D:E6:46:12:09:C9:C D:76:89:4D:8B:07:48:BC:99: D9:A7:97:01:3B:B0
C=US, O=Thawte, Inc., OU=Domain Validated SSL, CN=Thawte DV SSL CA	7610128A17B682BB3A1F 9D1A9A35C092	3C:A9:58:F3:E7:D6:83:7E:1C :1A:CF:8B:0F:6A:2E:6D:48:7 D:67:62	D2:57:38:31:FA:53:76:B1:C7 :DC:0D:BB:0E:F5:88:13:E9:0 7:06:18:FA:5A:21:E1:3F:5E:9 F:2B:65:E0:A3:20
C=US, O=thawte, Inc., OU=Domain Validated SSL, CN=thawte DV SSL CA - G2	2C69E12F6A670BD99DD 20F919EF09E51	4C:03:68:21:E4:34:13:B6:63: B0:6D:CF:01:4C:E9:0D:50:34 :7F:99	9F:25:11:A2:3E:70:D9:5F:B6 :27:98:50:8A:67:6C:C3:89:6 4:10:09:36:A6:E6:D3:CA:E7: 71:54:C0:29:0F:02
C=US, O=thawte, Inc., OU=Domain Validated SSL, CN=thawte DV SSL SHA256 CA	3E23345AED2C0A517B26 DED4801D10AA	50:F1:25:EF:CA:24:28:FF:17: D2:04:B8:9E:52:64:50:9A:28 :3D:A7	53:7C:5C:80:72:36:3E:14:7C :84:D2:1D:0D:22:48:B6:B9:9 A:9A:8A:43:31:16:59:83:5E: C3:39:26:DA:28:60



**VERISIGN**

**Assertion by Management of VeriSign, Inc. Regarding Its Controls  
Over DigiCert Certification Authority Operations Hosted in New Castle, Delaware  
During the Period November 1, 2017 to October 31, 2018**

VeriSign, Inc. ("Verisign"), an independent service organization (sub-service provider), provides datacenter hosting services to DigiCert, Inc. ("DigiCert") for its Symantec, GeoTrust and Thawte Certification Authority operations ("CAs") hosted in New Castle, Delaware.

The management of Verisign is responsible for establishing and maintaining effective controls over its datacenter hosting services for the Symantec, GeoTrust and Thawte CAs hosted in New Castle, Delaware including CA environmental controls (limited to physical and environmental security), in accordance with applicable versions of the DigiCert Certificate Policy and Symantec, GeoTrust, and Thawte Certification Practice Statements. 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 Verisign's datacenter hosting services for the Symantec, GeoTrust and Thawte CAs hosted in New Castle, Delaware. Furthermore, because of changes in conditions, the effectiveness of controls may vary over time.

Management has assessed the controls over its datacenter hosting services for the Symantec, GeoTrust and Thawte CA operations. Based on that assessment, in Verisign management's opinion, in providing its datacenter hosting services in New Castle, Delaware during the period November 1, 2017 to October 31, 2018, Verisign has maintained effective controls to provide reasonable assurance that physical access to CA systems is restricted to authorized individuals based on the WebTrust Principles and Criteria for Certification Authorities v2.1, including the following:

- CA Environmental Controls
  - Physical and Environmental Security

VeriSign, Inc.

**Pool, Dave** Digitally signed by Pool, Dave  
Date: 2019.01.29 07:52:07  
-08'00'

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Joseph David Pool  
Senior Vice President, Technology Services

DATE