

Ernst & Young LLP 303 Almaden Boulevard Fax: +1 408 947 5717 San Jose, CA 95110

Tel: +1 408 947 5500 ev.com

Report of Independent Accountants

To the Management of Google Trust Services LLC and Google Trust Services Europe Limited:

Scope

We have examined the accompanying assertion made by the management of Google Trust Services LLC and Google Trust Services Europe Limited (collectively, GTS), titled Management's Assertion Regarding the Effectiveness of Its Controls Over the SSL Certificate Authority Services Based on the WebTrust Principles and Criteria for Certification Authorities - SSL Baseline Version 2.8 that for its Certification Authority (CA) services at New York, USA, South Carolina, USA, Oklahoma USA, Ghlin, Belgium, and Zurich, Switzerland for CAs as enumerated in Appendix A, throughout the period from September 1, 2023 through August 31, 2024. GTS has:

- Disclosed its SSL certificate lifecycle management business practices in the applicable versions of GTS' Certification Practice Statement ("CPS") and TLS Certificate Policy ("TLS CP") as referenced in **Appendix B**, including its commitment to provide SSL certificates in conformity with the CA/Browser Forum Requirements on the GTS website, and provided such services in accordance with its disclosed practices
- Maintained effective controls to provide reasonable assurance that:
 - the integrity of keys and SSL certificates it manages is established and protected throughout their lifecycles; and
 - SSL subscriber information is properly authenticated (for the registration activities performed by GTS)
- 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 - SSL Baseline Version 2.8.



Management's responsibilities

GTS' 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 – SSL Baseline v2.8.*

Our responsibilities

Our responsibility is to express an opinion on GTS 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 (AICPA). 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.

The relative effectiveness and significance of specific controls at GTS 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.

Our examination was not conducted for the purpose of evaluating GTS's cybersecurity risk management program. Accordingly, we do not express an opinion or any other form of assurance on its cybersecurity risk management program.

We are required to be independent of GTS and to meet our other ethical responsibilities, as applicable for examination engagements set forth in the Preface: Applicable to All Members and Part 1 – Members in Public Practice of the Code of Professional Conduct established by the AICPA.

Other matters

GTS' management has disclosed to us the attached matters referenced in **Appendix C** that the Company has posted publicly in the online forums of the CA/Browser Forum, as well as the online forums of individual internet browsers that comprise the CA/Browser Forum. We have considered the nature of these matters in our risk assessment and in determining the nature, timing, and extent of our procedures.

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. Because of inherent limitations in its internal control, GTS may achieve reasonable, but not absolute assurance that all security events are prevented and, for those controls may provide reasonable, but not absolute assurance that its commitments and system requirements are achieved. 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.

Examples of inherent limitations of internal controls related to security include (a) vulnerabilities in information technology components as a result of design by their manufacturer or developer; (b) breakdown of internal control at a vendor or business partner; and (c) persistent attackers with the resources to use advanced technical means and sophisticated social engineering techniques specifically targeting the entity. Further, the projection of any evaluations of effectiveness to future periods is subject to the risk that controls may become inadequate because of changes in conditions, that the degree of compliance with such controls may deteriorate, or that changes made to the system or controls, or the failure to make needed changes to the system or controls, may alter the validity of such evaluations.

Opinion

In our opinion, GTS' management's assertion referred to above, is fairly stated, in all material respects, based on the aforementioned criteria.

This report does not include any representation as to the quality of GTS' CA services beyond those covered by the <u>WebTrust Principles and Criteria for Certification Authorities – SSL Baseline Version 2.8</u>, or the suitability of any of GTS' services for any customer's intended purpose.

GTS' use of the WebTrust for Certification Authorities – SSL Baseline 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.

October 3, 2024

Ernst + Young LLP



Management's Assertion Regarding the Effectiveness of Its Controls Over the SSL Certificate Authority Services Based on the WebTrust Principles and Criteria for Certification Authorities – SSL Baseline v2.8

We, as the management of Google Trust Services LLC and Google Trust Services Europe Limited (collectively, GTS), are responsible for operating the SSL Certification Authority (CA) services at New York, USA, South Carolina, USA, Oklahoma, USA, Ghlin, Belgium, and Zurich, Switzerland for the Root and Subordinate CAs in scope for SSL Baseline Requirements listed at **Appendix A**.

Controls have inherent limitations, including the possibility of human error and the circumvention or overriding of controls. Accordingly, even effective controls can provide only reasonable assurance with respect to GTS' CA operations. Furthermore, because of changes in conditions, the effectiveness of controls may vary over time.

Management of GTS has assessed the disclosures of its certificate practices and controls over its SSL CA services. Based on that assessment, in providing its SSL Certification Authority (CA) services at New York, USA, South Carolina, USA, Oklahoma, USA, Ghlin, Belgium, and Zurich Switzerland throughout the period from September 1, 2023 through August 31, 2024, GTS has:

- Disclosed its SSL certificate lifecycle management business practices in the applicable versions of GTS' Certification Practice Statement ("CPS") and TLS Certificate Policy ("TLS CP") as referenced in Appendix B, including its commitment to provide SSL certificates in conformity with the CA/Browser Forum Requirements on the GTS website, and provided such services in accordance with its disclosed practices
- Maintained effective controls to provide reasonable assurance that:
 - the integrity of keys and SSL certificates it manages was established and protected throughout their lifecycles; and
 - SSL subscriber information was properly authenticated (for the registration activities performed by GTS)
- Maintained effective controls to provide reasonable assurance that:
 - logical and physical access to CA systems and data was restricted to authorized individuals;
 - o the continuity of key and certificate management operations was maintained; and
 - CA systems development, maintenance, and operations are properly authorized and performed to maintain CA systems integrity



for the Root and Subordinate CAs in scope for SSL Baseline Requirements at **Appendix A**, based on the WebTrust Principles and Criteria for Certification Authorities – SSL Baseline Version 2.8,

Very truly yours,

GOOGLE TRUST SERVICES LLC &
GOOGLE TRUST SERVICES EUROPE LIMITED

October 3, 2024

Appendix A:

Table 1: Root CAs

Root Name	Subject Key Identifier	Certificate Serial Number	SHA256 Fingerprint	Applicable Notes
CN=GlobalSign OU=GlobalSign ECC Root CA - R4 O=GlobalSign	54B07BAD45B8 E2407FFB0A6EF BBE33C93CA38 4D5	0203E57EF53F93F DA50921B2A6	B085D70B964F191A73E4AF0D54AE7A0E07AAFDAF9B71DD0 862138AB7325A24A2	
CN=GlobalSign OU=GlobalSign ECC Root CA - R4 O=GlobalSign	54B07BAD45B8 E2407FFB0A6EF BBE33C93CA38 4D5	2A38A41C960A04 DE42B228A50BE8 349802	BEC94911C2955676DB6C0A550986D76E3BA005667C442C97 62B4FBB773DE228C	Historical Root CA Certificate
CN=GTS Root R1 O=Google Trust Services LLC C=US	E4AF2B26711A2 B4827852F5266 2CEFF08913713 E	0203E5936F31B01 349886BA217	D947432ABDE7B7FA90FC2E6B59101B1280E0E1C7E4E40FA 3C6887FFF57A7F4CF	
CN=GTS Root R1 O=Google Trust Services LLC C=US	E4AF2B26711A2 B4827852F5266 2CEFF08913713 E	6E47A9C54B470C 0DEC33D089B91C F4E1	2A575471E31340BC21581CBD2CF13E158463203ECE94BCF9 D3CC196BF09A5472	Historical Root CA Certificate
CN=GTS Root R2 O=Google Trust Services LLC C=US	BBFFCA8E239F 4F99CADBE268 A6A51527171ED 90E	0203E5AEC58D04 251AAB1125AA	8D25CD97229DBF70356BDA4EB3CC734031E24CF00FAFCF D32DC76EB5841C7EA8	
CN=GTS Root R2 O=Google Trust Services LLC C=US	BBFFCA8E239F 4F99CADBE268 A6A51527171ED 90E	6E47A9C65AB3E7 20C5309A3F6852F 26F	C45D7BB08E6D67E62E4235110B564E5F78FD92EF058C840A EA4E6455D7585C60	Historical Root CA Certificate
CN=GTS Root R3 O=Google Trust Services LLC C=US	C1F126BAA02D AE8581CFD3F12 A12BDB80A67F DBC	0203E5B882EB20F 825276D3D66	34D8A73EE208D9BCDB0D956520934B4E40E69482596E8B6F 73C8426B010A6F48	

Root Name	Subject Key Identifier	Certificate Serial Number	SHA256 Fingerprint	Applicable Notes
CN=GTS Root R3 O=Google Trust Services LLC C=US	C1F126BAA02D AE8581CFD3F12 A12BDB80A67F DBC	6E47A9C76CA973 2440890F0355DD8 D1D	15D5B8774619EA7D54CE1CA6D0B0C403E037A917F131E8A 04E1E6B7A71BABCE5	Historical Root CA Certificate
CN=GTS Root R4 O=Google Trust Services LLC C=US	804CD6EB74FF4 936A3D5D8FCB 53EC56AF0941D 8C	0203E5C068EF631 A9C72905052	349DFA4058C5E263123B398AE795573C4E1313C83FE68F93 556CD5E8031B3C7D	
CN=GTS Root R4 O=Google Trust Services LLC C=US	804CD6EB74FF4 936A3D5D8FCB 53EC56AF0941D 8C	6E47A9C88B94B6 E8BB3B2AD8A2B2 C199	71CCA5391F9E794B04802530B363E121DA8A3043BB26662F EA4DCA7FC951A4BD	Historical Root CA Certificate

Table 2: Subordinate CAs

Subordinate Name	Subject Key Identifier	Certificate Serial Number	SHA256 Fingerprint
CN=AE1 O=Google Trust Services C=US	488960F9A37D0C EA0024A2DC9F07 CE4688A8323A	7FF4E5CE36A6 A1FA5EE1916C 08D39B7C	812C212E9E45DC5005C7F47411183F5FB2FF1BAEE184D3354B2E93D78C280164
CN=GTS CA 1C3 O=Google Trust Services LLC C=US	8A747FAF85CDEE 95CD3D9CD0E246 14F371351D27	0203BC53596B 34C718F501506 6	23ECB03EEC17338C4E33A6B48A41DC3CDA12281BBC3FF813C0589D6CC2387522
CN=GTS CA 1D4 O=Google Trust Services LLC C=US	25E2180EB257919 42AE5D45D86908 3DE53B3B892	02008EB202333 6658B64CDDB9 B	64E286B76063602A372EFD60CDE8DB2656A49EE15E84254B3D6EB5FE38F4288B
CN=GTS CA 1D9 O=Google Trust Services LLC C=US	4AD0A481556E16 D70B25785FAA9C 3918053BA0AE	7F57F38B77116 2561FB3C18D6 1E5D8B9	02609E88979FC6862EA1571F3BC6DF6C70F2FE9277473E43FE04C3597C43431D
CN=GTS CA 1P5 O=Google Trust Services LLC C=US	D5FC9E0DDF1EC ADD0897976E2BC 55FC52BF5ECB8	0203BC50A327 53F0918022ED F1	97D42003E132552946097F20EF955F5B1CD570AA4372D780033A65EFBE69758D
CN=GTS CA 2A1 O=Google Trust Services LLC C=US	9318639117769A5 AE63B7F2E33838 4866B1ED4F9	02008EB258E7 B5940C1FF900 44	11C697878732056DE17C1DA134E9D2B6D23CF1DE95B3FB0A4D18A517AB63230A
CN=GTS CA 2D5 O=Google Trust Services LLC C=US	1556BFF2453E18 C48E15C60F3EC7 21284B0A857C	7F57F3C4CA39 F4BEC6649F26 E77E82D4	EDBCDD01698D83EAFA1E3D38F017B3AD96B2D8D88E746C58011CEE0EF106939 C
CN=GTS CA 2D6 O=Google Trust Services LLC C=US	FAD34FA04DE872 A65A16C12DF60A 0EE46821AE7E	7F57F3D2EAF1 C0CBA691B003 C9FBD0A4	F5D12415A12C07FDE93BD6F9E4E4588E03D20596E4F8A5E9D213A83364BCEE71
CN=GTS CA 2P2 O=Google Trust Services LLC C=US	8723A950480E078 9540A7130F633D2 0A47F69DAC	02166825E1700 440612491F540	3647AAC2B282BC941FE7A642E3DCB99CFC5B3C6DCE944A1E96F8028E89B7B090

Subordinate Name	Subject Key	Certificate	SHA256 Fingerprint
	Identifier	Serial Number	
CN=GTS Root R1	E4AF2B26711A2B	77BD0D6CDB3	3EE0278DF71FA3C125C4CD487F01D774694E6FC57E0CD94C24EFD769133918E5
O=Google Trust Services LLC	4827852F52662CE	6F91AEA210FC	
C=US	FF08913713E	4F058D30D	
CN=GTS Root R4	804CD6EB74FF49	7FE530BF3313	76B27B80A58027DC3CF1DA68DAC17010ED93997D0B603E2FADBE85012493B5A7
O=Google Trust Services LLC	36A3D5D8FCB53E	43BEDD821610	
C=US	C56AF0941D8C	493D8A1B	
CN=WE1	9077923567C4FFA	7FF31977972C	1DFC1605FBAD358D8BC844F76D15203FAC9CA5C1A79FD4857FFAF2864FBEBF96
O=Google Trust Services	8CCA9E67BD9807	224A76155D13	
C=US	97BCC93F938	B6D685E3	
CN=WE1	9077923567C4FFA	7FF357689BC2	A287FFAB762CC69A26D482037EDF701F653CE899025C62A7E5CB88BB9B419CBB
O=Google Trust Services	8CCA9E67BD9807	4E302D90E18A	
C=US	97BCC93F938	41BD0E1F	
CN=WE2	75BEC477AE89F6	7FF32D6B409D	9C3F2FD11C57D7C649AD5A0932C0F0D29756F6A0A1C74C43E1E89A62D64CD320
O=Google Trust Services	44377DCFB1681F	15D5965B0587	
C=US	1D1AEBDC3459	3A7C72E0	
CN=WE2	75BEC477AE89F6	7FF3577FF63C	54F8CA858BCC7591F28D8DC3772E9BC581717F3A23A288BFD405939C36208DE5
O=Google Trust Services	44377DCFB1681F	7CA37E0642F8	
C=US	1D1AEBDC3459	C8B86290	
CN=WE3	36B62CCEA3B4D0	7FF32D6DBD5	9F819A4C876E12DC84E6FE0E37C1A69B137094B453FA98449398F4B71F4D0092
O=Google Trust Services	409045F38B4581C	EDD54CA4E4B	
C=US	1C8E319D46D	6795729143	
CN=WE3	36B62CCEA3B4D0	7FF357910F07	54C660DA29D75FC81F07AD6DC8BB7AEE2258E071E8B1077544FA5622FF44C99D
O=Google Trust Services	409045F38B4581C	E1929F3D0084	
C=US	1C8E319D46D	AEF198C7	
CN=WE4	6DE7D465B43857	7FF32D70BBD1	D0C97E56C7B0BA812D944AD771F7799B5D4144A2327A4E416554F7EE2AA0AEAE
O=Google Trust Services	5695CDE5B4775A	A7309B5732500	
C=US	360ADE7D52A6	AC99AAE	
CN=WE4	6DE7D465B43857	7FF357A2DCFA	9D5E86906A1680A86BE278CF76E3D2B62B775186101461D303CEE910D94CE13A
O=Google Trust Services	5695CDE5B4775A	8935B32362F61	
C=US	360ADE7D52A6	523B3A7	

Subordinate Name	Subject Key Identifier	Certificate Serial Number	SHA256 Fingerprint
CN=WE5	D465CB38C7253C	7FF4E5CBECD	847409E63526F162753AC49F75218EFAAFA7D5C94ADE9095CE72E7F6B6E3AC99
O=Google Trust Services	286BE97E43C3A1	981F2ADFA089	
C=US	A1B8E44C68A0	13CEFAB14	
CN=WR1	666949D4DE2A9C	7FD9E2C2D204	B10B6F00E609509E8700F6D34687A2BFCE38EA05A8FDF1CDC40C3A2A0D0D0E45
O=Google Trust Services	9103CF890E24B80	8A0474B627A2	
C=US	E30036E882E	6D0868A7	
CN=WR2	DE1B1EED7915D4	7FF005A07C4C	E6FE22BF45E4F0D3B85C59E02C0F495418E1EB8D3210F788D48CD5E1CB547CD4
O=Google Trust Services	3E3724C321BBEC	DED100AD9D6	
C=US	34396D42B230	6A5107B98	
CN=WR3	C781F5FD8E88D9	7FF005A91568	2FE357DB13751FF9160E87354975B3407498F41C9BD16A48657866E6E5A9B4C7
O=Google Trust Services	003C4D63A250312	D63ABC228616	
C=US	4A0CE23FE23	84AA4B5A	
CN=WR4	9BC811BC3DAA36	7FF005B4DA75	DC9416C2F855126D6DE977677538F2F967FF4998E90DFA435A17219BE077FC06
O=Google Trust Services	B9318C4E8F44D5	B86A5AC61FE4	
C=US	57322FC3C061	307713CD	
CN=WR5	4C5B19C28F1A7F	7FF4E5C91496	AE0FC852280F1B87CEDAF73CFB84CF106EFEC88E8294253AF352ED4034460D7B
O=Google Trust Services	556FAA1029FA028	B0F2A18905ED	
C=US	BC73C2A223C	501E62A3	

Appendix B

Google Trust Services Certification Practice Statement

Version Number	Effective Date	Note
<u>5.11</u>	7/12/2024	Clarify router and firewall logging requirements
5.10	6/27/2024	S/MIME SMC05 updates + reference section 6.3.2 in certificate profiles from Appendix C
5.9	5/10/2024	SC-70 updates to 1.3.2 and 3.2.2: CAA DNS queries MUST NOT be delegated to third parties.
5.8	3/18/2024	Improve formatting
5.7	2/22/2024	SC-63 & SC-66: Require CRLs and cleanup
5.6	1/12/2024	Remove permission to issue during CAA lookup failure
5.5	12/13/2023	Add 16 newly issued intermediate CAs to section 1.3.1
5.4	12/5/2023	Mention that 4.9.10 only applies to certificates including an OCSP URI
5.3	11/22/2023	Add newly issued LTS32 private CA to section 1.3.1
5.2	11/20/2023	Add newly cross-signed GTS Root R4 to section 1.3.1
5.1	11/10/2023	Minor updates to certificate profiles
5.0	10/11/2023	Add Google Trust Services Europe Ltd
4.21	9/18/2023	Removed revoked Subordinate CA
4.20	9/14/2023	Removed revoked Subordinate CA
4.19	9/13/2023	Removed revoked Subordinate CA

Google Trust Services TLS Certificate Policy

Version Number	Effective Date	Note
<u>4.6</u>	7/12/2024	Clarify router and firewall logging requirements
4.5	5/10/2024	SC-70 updates to 1.3.2 and 3.2.2: CAA DNS queries MUST NOT be delegated to third parties.
4.4	3/18/2024	Improve formatting
4.3	2/22/2024	SC-63 & SC-66: Make OCSP optional, require CRLs, and cleanup
4.2	12/5/2023	Make Google policy OIDs optional and align 4.9.10 with BRs 2.0.1
4.1	11/1/2023	Fix table formatting issues

Version Number	Effective Date	Note
4.0	10/11/2023	Add Google Trust Services Europe Ltd
3.8	10/9/2023	Updated Policy OIDs

Appendix C:

Appei	idix C:		
	Disclosure	Relevant WebTrust Criteria	Publicly Disclosed Link
1	On 2/29/2024, GTS issued a public statement stating GTS OCSP responders incorrectly responded to requests with an "unauthorized" status for certificates issued by two (2) new intermediate CAs (WE2 and WR2), which impacted 3,301 OCSP responses. GTS' legacy OCSP responder includes an additional pipeline to periodically push status information refreshes for each Sub CA before the status information is propagated. As such, the legacy OCSP responder depends upon the source pipeline to provide the correct information. GTS investigated the issue and determined that the OCSP responders relying on legacy OCSP pipeline were misconfigured for two (2) new intermediate CAs (WE2 and WR2), invalidating any updates received. Thus, the status information was lost, and the responders began returning an "unauthorized" response for the certificates issued under the two impacted CAs. In response to this incident, GTS implemented automation to generate OCSP information for new intermediate CAs, limiting the risk of manual human error, and to ensure their legacy OCSP pipeline is agnostic to intermediate CA addition and removal. GTS also introduced additional monitoring around OCSP and CRLs when a new intermediate CA is configured. The incident was closed in Bugzilla on 5/5/2024, during the current examination period.	2.5.9 The CA maintains controls to provide reasonable assurance that OCSP responses conform to RFC6960 and/or RFC5019, and are signed either: • by the CA that issued the Certificates whose revocation status is being checked, or • by an OCSP Responder whose Certificate is signed by the CA that issued the Certificate whose revocation status is being checked (the OCSP signing Certificate must contain an extension of type id-pkix-ocsp-nocheck, as defined by RFC6960). 2.5.6 The CA maintains controls to provide reasonable assurance that an online 24x7 Repository is provided that application software can use to automatically check the current status of all unexpired Certificates issued by the CA, and: • for the status of Subscriber Certificates: — the OCSP responses: • have a validity interval greater than or equal to eight hours; • have a validity interval greater than or equal to eight hours; • with validity intervals less than sixteen hours, then the CA SHALL update the information provided via an OCSP prior to one-half of the validity period before the nextUpdate; and • with validity intervals greater than or equal to sixteen hours, the CA SHALL update the information provided via an OCSP at least eight (8) hours prior to the nextUpdate, and no later than four days after the thisUpdate.	Google Trust Services: Incorrect OCSP responses for new ICAs under test (#1882904)

	Disclosure	Relevant WebTrust Criteria	Publicly Disclosed Link
2	On 1/25/2024, GTS issued a public statement stating that the IP validation record for one (1) Alphabet owned IP address was not properly retained during the issuance process, impacting 58 certificates, 12 of which were active at the time of incident discovery. The incident was due to a manual error, as the CAE who approved issuance of the certificate did so without the submission of validation evidence. In response to the incident, GTS implemented technical controls to validate identifiers prior to adding them to validation flat files. The incident was closed in Bugzilla on 4/17/2024, during the current examination period.	 2.4.1 The CA maintains controls to provide reasonable assurance that prior to issuing a Certificate: the CA obtains confirmation in accordance with the SSL Baseline Requirements Sections 3.2.2.4, 3.2.2.5, 3.2.2.6 and 4.2.2 related to the Fully-Qualified Domain Name(s) (including wildcard domains and new gTLDs (generic top-level domains)) and IP address(es) listed in the Certificate; when the FQDN is an Onion Domain, the CA validates the FQDN in accordance with Appendix B of the SSL Baseline Requirements; and the CA maintains records of which validation method, including the relevant SSL Baseline Requirements version number, used to validate every domain and IP address. 	Google Trust Services: Failure to properly validate IP address (#1876593)
3	On 6/14/2024, GTS issued a public statement stating that 58 SXG certificates were issued without the presence of "issue" or "issuewild" CAA property. 12 were active at the time the incident was discovered. The incident is limited to SXG-specific CAA validation requirements, and did not impact SSL certificates. All affected certificates complied to the SSL CAA checking requirements. The incident occurred as GTS failed to consider the corner cases where the required "issue" and "issuewild" properties were absent, but other properties were included, leading the CAA validation to succeed where it should have failed. Further, GTS revoked the impacted certificates within 24 hours of discovering the incident. In response to this incident, GTS implemented several new unit tests for SXG CAA, to catch	N/A	Google Trust Services: SXG certificates issued without correctly checking CAA restrictions (#1902670)

such issues prior to deployment to production. Further, GTS added references within their code to clarify the CAA requirements for future developers and reviewers. The incident was closed in Bugzilla on 7/31/2024, during the current examination period. 4 On 6/8/2023, GTS issued a public statement stating that GTS failed to respond to a Certificate Problem Report (CPR) which requested revocation of a certificate, within 24 hours. GTS investigated the issue and determined that revocation requests sent via the contact form on the website to report CPRs, was no longer passing new requests into pipeline for review. The issue began on 6/4/2023 and impacted four CPR form submissions, one of which was determined to be a valid submission. Per further investigation, it was determined that revocation was not needed since the certificate had been issued to the third-party service provider of the subscriber. As such, no mis-issuances occurred, despite the failure to respond to the valid form submission in 24 hours. In response, the dependent service that caused the issue was fixed on 6/9/2023. To prevent future issues, GTS removed one of the significant dependencies of the CPR revocation request process and added checks to ensure		Disclosure	Relevant WebTrust Criteria	Publicly Disclosed
Further, GTS added references within their code to clarify the CAA requirements for future developers and reviewers. The incident was closed in Bugzilla on 7/31/2024, during the current examination period. 4 On 6/8/2023, GTS issued a public statement stating that GTS failed to respond to a Certificate Problem Report (CPR) which requested revocation of a certificate, within 24 hours. GTS investigated the issue and determined that revocation requests sent via the contact form on the website to report CPRs, was no longer passing new requests into pipeline for review. The issue began on 6/4/2023 and impacted four CPR form submissions, one of which was determined to be a valid submission. Per further investigation, it was determined that revocation was not needed since the certificate had been issued to the third-party service provider of the subscriber. As such, no mis-issuances occurred, despite the failure to respond to the valid form submission in 24 hours. In response, the dependent service that caused the issue was fixed on 6/9/2023. To prevent future issues, GTS removed one of the significant dependencies of the CPR revocation request process and added checks to ensure				Link
period. 4 On 6/8/2023, GTS issued a public statement stating that GTS failed to respond to a Certificate Problem Report (CPR) which requested revocation of a certificate, within 24 hours. GTS investigated the issue and determined that revocation requests sent via the contact form on the website to report CPRs, was no longer passing new requests into pipeline for review. The issue began on 6/4/2023 and impacted four CPR form submissions, one of which was determined to be a valid submission. Per further investigation, it was determined that revocation was not needed since the certificate had been issued to the third-party service provider of the subscriber. As such, no mis-issuances occurred, despite the failure to respond to the valid form submission in 24 hours. In response, the dependent service that caused the issue was fixed on 6/9/2023. To prevent future issues, GTS removed one of the significant dependencies of the CPR revocation request process and added checks to ensure 2.5.1 - The CA maintains controls to provide reasonable assurance that a process in savailable 24x7 that the CA is able to accept and respond to revocation requests and related inquiries, and that the CA provides a process for Subscribers to request revocation of their own certificates. 2.5.2 - The CA maintains controls to provide reasonable assurance that a process in Savailable 24x7 that the CA provides a process for Subscribers to request revocation of their own certificates. 2.5.2 - The CA maintains controls to provide reasonable assurance that a process for Subscriber failure 1 responde to revocation requests and related inquiries, and that the CA provides a process for Subscribers to request revocation of their own certificates. 2.5.2 - The CA maintains controls to provide reasonable assurance that a process for Subscriber subscriber subscriber and the valid form submission in 24 hours. 1. has the capability to accept and acknowledge Certificate Problem Reports; 2. begin investigation of Certificate Problem Reports within 2		Further, GTS added references within their code to clarify the CAA requirements for future developers and reviewers. The incident was closed in Bugzilla on		
4 On 6/8/2023, GTS issued a public statement stating that GTS failed to respond to a Certificate Problem Report (CPR) which requested revocation of a certificate, within 24 hours. GTS investigated the issue and determined that revocation requests sent via the contact form on the website to report CPRs, was no longer passing new requests into pipeline for review. The issue began on 6/4/2023 and impacted four CPR form submissions, one of which was determined to be a valid submission. Per further investigation, it was determined that revocation was not needed since the certificate had been issued to the third-party service provider of the subscriber. As such, no mis-issuances occurred, despite the failure to respond to the valid form submission in 24 hours. In response, the dependent service that caused the issue was fixed on 6/9/2023. To prevent future issues, GTS removed one of the significant dependencies of the CPR revocation request process and added checks to ensure 2.5.1 - The CA maintains controls to provide reasonable assurance that a process is available 24x7 that the CA is able to accept and respond to caccept and respond to request revocation of their own certificates. 2.5.2 - The CA maintains controls to provide reasonable assurance that a process is available 24x7 that the CA is able to accept and respond to request revocation of their own certificates. 2.5.2 - The CA maintains controls to provides a process for Subscriber subrocess in a process is available 24x7 that the CA is able to accept and respond to crevocation requests and related inquiries, and that the CA provides a process for Subscriber sto request revocation of their own certificates. 2.5.2 - The CA maintains controls to provide reasonable assurance that a process is available 24x7 that the CA is able to accept and respond to certificates. 2.5.2 - The CA maintains controls to provide reasonable assurance that a process is available 24x7 that the CA is able to accept and respond to certificates. 2.5.2 - The CA maintains controls				
that CPRs are responded to within the required 24-hour time frame. Furthermore, CPR visibility among the team was increased via additional notification mechanisms to avoid bottlenecks and improve response times. The incident was closed within the current examination period on 11/2/2024 due to open community discussion requesting more specific information on how GTS is updating their CPR warranted; if revocation is deemed the appropriate action, the elapsed time from receipt of the Certificate Problem Report or revocation request and revocation status information does not exceed the timelines in SSL Baseline Requirements 4.9.1.1; and where appropriate, forwards such complaints to law enforcement.	4	period. On 6/8/2023, GTS issued a public statement stating that GTS failed to respond to a Certificate Problem Report (CPR) which requested revocation of a certificate, within 24 hours. GTS investigated the issue and determined that revocation requests sent via the contact form on the website to report CPRs, was no longer passing new requests into pipeline for review. The issue began on 6/4/2023 and impacted four CPR form submissions, one of which was determined to be a valid submission. Per further investigation, it was determined that revocation was not needed since the certificate had been issued to the third-party service provider of the subscriber. As such, no mis-issuances occurred, despite the failure to respond to the valid form submission in 24 hours. In response, the dependent service that caused the issue was fixed on 6/9/2023. To prevent future issues, GTS removed one of the significant dependencies of the CPR revocation request process and added checks to ensure that CPRs are responded to within the required 24-hour time frame. Furthermore, CPR visibility among the team was increased via additional notification mechanisms to avoid bottlenecks and improve response times. The incident was closed within the current examination period on 11/2/2024 due to open community discussion requesting more specific	provide reasonable assurance that a process is available 24x7 that the CA is able to accept and respond to revocation requests and related inquiries, and that the CA provides a process for Subscribers to request revocation of their own certificates. 2.5.2 - The CA maintains controls to provide reasonable assurance that it: • has the capability to accept and acknowledge Certificate Problem Reports on a 24x7 basis; • identifies high priority Certificate Problem Reports; • begin investigation of Certificate Problem Reports within 24 hours and provide a preliminary report on its findings to both the Subscriber and the entity who filed the Certificate Problem Report: • decides whether revocation or other appropriate action is warranted; • if revocation is deemed the appropriate action, the elapsed time from receipt of the Certificate Problem Report or revocation request and revocation status information does not exceed the timelines in SSL Baseline Requirements 4.9.1.1; and • where appropriate, forwards such	Google Trust Services: Failure to respond to CPR within 24 hours (#1837519)