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## REPORT OF THE INDEPENDENT ACCOUNTANT

To the management of Amazon Trust Services, LLC ("ATS"):

We have examined ATS management's <u>assertion</u> that for its Certification Authority ("CA") operations at in the United States of America, throughout the period January 16, 2016 to January 15, 2017 for its root CAs known as Amazon Root CA 1, Amazon Root CA 2, Amazon Root CA 3, Amazon Root CA 4, Starfield Services Root Certificate Authority - G2 as listed in <u>Appendix A</u>, ATS has:

- disclosed its extended validation code signing ("EV CS") certificate lifecycle management business practices in its:
  - Amazon Trust Services, LLC Certificate Policy v1.0.4; and
  - o Amazon Trust Services Certification Practice Statement v1.0.5,

including its commitment to provide EV CS certificates in conformity with the CA/Browser Forum Guidelines on the ATS <u>website</u>, and provided such services in accordance with its disclosed practices

 maintained effective controls to provide reasonable assurance that the integrity of keys and EV CS certificates it manages is established and protected throughout their lifecycles

based on the <u>WebTrust Principles and Criteria for Certification Authorities - Extended Validation</u> <u>Code Signing v1.1</u>

ATS' management is responsible for its assertion. Our responsibility is to express an opinion on management's assertion based on our examination.

We conducted our examination in accordance with standards for attestation engagements established by the American Institute of Certified Public Accountants and, accordingly, included:

- (1) obtaining an understanding of ATS' EV CS certificate lifecycle management business practices, including its relevant controls over the issuance, renewal, and revocation of EV CS certificates;
- (3) testing and evaluating the operating effectiveness of the controls: and
- (4) performing such other procedures as we considered necessary in the circumstances.

We believe that our examination provides a reasonable basis for our opinion.

The relative effectiveness and significance of specific controls at ATS 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. We have performed no procedures to evaluate the effectiveness of controls at individual subscriber and relying party locations.



Because of the nature and inherent limitations of controls, ATS' 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, throughout the period January 16, 2016 to January 15, 2017, ATS management's assertion, as referred to above, is fairly stated, in all material respects, based on the WebTrust Principles and Criteria for Certification Authorities - Extended Validation Code Signing v1.1.

During the examination period, ATS did not issue any Extended Validation Code Signing subscriber certificates.

This report does not include any representation as to the quality of ATS' services beyond those covered by the WebTrust Principles and Criteria for Certification Authorities - Extended Validation Code Signing v1.1, nor the suitability of any of ATS' services for any customer's intended purpose.

ATS' use of the WebTrust for Certification Authorities - Extended Validation Code Signing 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, LLP

Certified Public Accountants St. Louis, Missouri March 28, 2017



## **Amazon Trust Services LLC Management's Assertion**

March 28, 2017

Amazon Trust Services LLC ("ATS") operates the Certification Authorities ("CAs") known as Amazon Root CA 1, Amazon Root CA 2, Amazon Root CA 3, Amazon Root CA4, Starfield Services Root Certificate Authority - G2 as listed in <a href="Appendix A">Appendix A</a> in scope, and provides Extended Validation Code Signing ("EV CS") CA services.

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

ATS management has assessed its disclosures of its certificate practices and controls over its EV CS CA services. Based on that assessment, in ATS management's opinion, in providing its EV CS Certification Authority (CA) services in the United States of America, throughout the period January 16, 2016 to January 15, 2017, ATS has:

- disclosed its extended validation code signing ("EV CS") certificate lifecycle management business practices in its:
  - o Amazon Trust Services Certificate Policy v1.0.4; and
  - o Amazon Trust Services Certification Practice Statement v1.0.5,

including its commitment to provide EV CS certificates in conformity with the CA/Browser Forum Requirements on the ATS  $\underline{\text{website}}$ , and provided such services in accordance with its disclosed practices

• maintained effective controls to provide reasonable assurance that the integrity of keys and EV CS certificates it manages is established and protected throughout their lifecycles

based on the WebTrust Principles and Criteria for Certification Authorities – Extended Validation Code Signing, Version 1.1.

During the examination period, ATS did not issue any Extended Validation Code Signing subscriber certificates.

Jonathan Kozolchyk

Jonathan Kozolchyk

Vice President

Amazon Trust Services LLC

## APPENDIX A - IN-SCOPE CAS

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ROOT CAS	SHA-256 Hash of Subject Public
	Key Information
CN=Amazon Root CA 1,O=Amazon,C=US	fbe3018031f9586bcbf41727e417b7d1c45c2f47f
	93be372a17b96b50757d5a2
CN=Amazon Root CA 2,O=Amazon,C=US	7f4296fc5b6a4e3b35d3c369623e364ab1af381d8
CN=Amazon Root CA 3,O=Amazon,C=US	36abc32656acfc645c61b71613c4bf21c787f5cab
CN=Amazon Root CA 4,O=Amazon,C=US	f7ecded5c66047d28ed6466b543c40e0743abe81d
	109254dcf845d4c2c7853c5
CN=Starfield Services Root Certificate Authority - G2,O=Starfield Technologies	2b071c59a0a0ae76b0eadb2bad23bad4580b69c36
Inc.,L=Scottsdale,ST=Arizona,C=US	01b630c2eaf0613afa83f92

Notes: Amazon Trust Services assumed operation of Starfield Services Root Certificate Authority - G2 (SFSG2) on June 10, 2015. Starfield Technologies operated SFSG2 prior to June 10, 2015 and was responsible for the key generation for SFSG2.