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REPORT OF THE INDEPENDENT ACCOUNTANT

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

We have examined ATS management’s [assertion](#) that for its Certification Authority (“CA”) operations 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 and other CAs listed in [Appendix A](#), ATS has:

- disclosed its extended validation SSL (“EV SSL”) certificate lifecycle management business practices in its:
 - [Amazon Trust Services Certificate Policy v1.0.4](#); and
 - [Amazon Trust Services Certification Practice Statement v1.0.5](#),including its commitment to provide EV SSL certificates in conformity with the CA/Browser Forum Guidelines on the ATS [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 SSL certificates it manages is established and protected throughout their lifecycles; and
 - EV SSL subscriber information is properly authenticated for the registration activities performed by ATS

based on the [WebTrust Principles and Criteria for Certification Authorities - Extended Validation SSL Version 1.4.5](#).

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 SSL certificate lifecycle management business practices, including its relevant controls over the issuance, renewal, and revocation of EV SSL certificates;
- (2) selectively testing transactions executed in accordance with disclosed EV SSL certificate lifecycle management practices;
- (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 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 SSL Version 1.4.5.

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 SSL Version 1.4.5, nor the suitability of any of ATS' services for any customer's intended purpose.

ATS' use of the WebTrust for Certification Authorities - Extended Validation SSL 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 Certification Authority ("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 and other CAs as listed in [Appendix A](#), and provides Extended Validation SSL ("EV SSL") CA services.

The management of ATS is responsible for establishing and maintaining effective controls over its EV SSL CA operations, including its EV SSL CA business practices disclosure on its [website](#), EV SSL key lifecycle management controls, and EV SSL 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 SSL CA services. Based on that assessment, in ATS management's opinion, in providing its EV SSL CA services in the United States of America, throughout the period January 16, 2016 to January 15, 2017, ATS has:

- disclosed its extended validation SSL ("EV SSL") certificate lifecycle management business practices in its:
 - [Amazon Trust Services Certificate Policy v1.0.4](#); and
 - [Amazon Trust Services Certification Practice Statement v1.0.5](#),including its commitment to provide EV SSL certificates in conformity with the CA/Browser Forum Requirements on the ATS 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 SSL certificates it manages is established and protected throughout their lifecycles; and
 - EV SSL subscriber information is properly authenticated for the registration activities performed by ATS

based on the [WebTrust Principles and Criteria for Certification Authorities – Extended Validation SSL, Version 1.4.5](#).

Jonathan Kozolchyk

Jonathan Kozolchyk
Vice President
Amazon Trust Services LLC

APPENDIX A – IN-SCOPE CAS

| Root CAS | SHA-256 Hash of Subject Public Key Information |
|---|--|
| CN=Amazon Root CA 1, O=Amazon, C=US | fbe3018031f9586bcbf41727e417b7d1c45c2f47f93be372a17b96b50757d5a2 |
| CN=Amazon Root CA 2, O=Amazon, C=US | 7f4296ffc5b6d4e3b35d3c369623e364db1af381d8fa7121533c9d6c633ea2461 |
| CN=Amazon Root CA 3, O=Amazon, C=US | 36db32656acfc645c61b71613c4bf21c787f5cabbee48348d58597803d7ab c9 |
| CN=Amazon Root CA 4, O=Amazon, C=US | f7ecdcd5c66047d28ed6466b543c40e0743abe81d109254dcf845d4c2c7853c5 |
| CN=Starfield Services Root Certificate Authority - G2, O=Starfield Technologies, Inc., L=Scottsdale, ST=Arizona, C=US | 2b071c59a0a0ae76b0eaddb2bad23bad4580b69c3601b630c2eaf0613afa83f92 |
| Other CAS | SHA-256 Hash of Subject Public Key Information |
| CN=Amazon, OU=Server CA 0A, O=Amazon, C=US | b58539ecaa13921ccdb80d38d34875fde6471c5a159d9beeef2fa6f99983bdd611 |
| CN=Amazon, OU=Server CA 1A, O=Amazon, C=US | 64bb5bd80311fa3f53bd99404cab8762ad6e048447d0a97f219fcecqa1661f37c |
| CN=Amazon, OU=Server CA 2A, O=Amazon, C=US | 1bdd5dff83781380bf708198f9f7d2db1e067f14bb9ea7bae70aac0b0305e7b |
| CN=Amazon, OU=Server CA 3A, O=Amazon, C=US | 7c53b5df79135d9af6195ef6bb73ab98c2c89950b892b192dffdf784db925a41c |
| CN=Amazon, OU=Server CA 4A, O=Amazon, C=US | 17708dff2b7faec9cb1b5215ebb2421d97b0543c936facc9d6e02b92f20e5c707 |

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.