

Report of Independent Accountants

To the Management of AWS:

We have examined the assertion by the management of Amazon Web Services Inc. (AWS), that in providing its Certification Authority (CA) services in Seattle, Washington known as Amazon Root 1, Amazon Root 2, Amazon Root 3 and Amazon Root 4 as of May 27, 2015, AWS has:

- Disclosed its Business, Key Life Cycle Management, Certificate Life Cycle Management and CA Environment Controls practices:
 - Certification Practice Statement and
 - Certificate Policy
- Maintained effective controls to provide reasonable assurance that:
 - AWS' Certification Practice Statement was consistent with its Certificate Policy;
 - AWS provides its services in accordance with its Certificate Policy and Certification Practice Statement;
 - The integrity of keys and certificates it managed was established and protected throughout their life cycles;
 - Subordinate CA certificate requests are accurate, authenticated, and approved;
 - Logical and physical access to CA systems and data was restricted to authorized individuals;
 - The continuity of key and certificate management operations was maintained; and
 - CA systems development, maintenance and operations were properly authorized and performed to maintain CA systems integrity,

based on the [Trust Service Principles and Criteria for Certification Authorities, Version 2.0](#).

AWS' management is responsible for its assertion. 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, and accordingly, included (1) obtaining an understanding of AWS' key and certificate life cycle management business practices and its controls over key and certificate integrity, over the authenticity and privacy of subscriber and relying party information, over the continuity of key and certificate life cycle management operations, and over development, maintenance and operation of systems integrity, (2) selectively testing transactions executed in accordance with disclosed key and certificate life cycle management business, (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 AWS 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, AWS ability to meet the aforementioned criteria may be affected. For example, control 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, as of May 27, 2015, AWS' management's assertion referred to above is fairly stated, in all material respects, based on the Trust Service Principles and Criteria for Certification Authorities, Version 2.0.

AWS has not issued any Subordinate CAs for the Amazon Root CA 1, Amazon Root CA 2, Amazon Root CA 3 and Amazon Root CA 4. Since AWS does not currently operate subordinate CAs the criteria relevant to Subscriber information under Principle 6: Certificate Life Cycle Management Controls (properly authenticated) was not applicable.

This report does not include any representation as to the quality of AWS' CA services beyond those covered by the Trust Service Principles and Criteria for Certification Authorities, Version 2.0. criteria, nor the suitability of any of AWS' services for any customer's intended purpose.

Ernst & Young LLP

June 3, 2015



**Assertion by Management of AWS
Regarding Its Disclosure of Its Business Practices and
Its Controls Over Certification Authority Operations
As of May 27, 2015**

June 3, 2015

Amazon Web Services Inc. ("AWS" or the "Company") operates Certification Authority (CA) known as Amazon Root CA 1, Amazon Root CA 2, Amazon Root CA 3 and Amazon Root CA 4.

AWS' CA services referred above provide the following certification authority services:

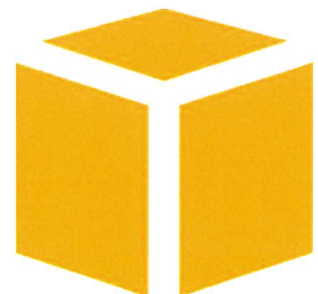
- Certificate Renewal
- Certificate Rekey
- Certificate Issuance
- Certificate Revocation
- Certificate Distribution
- Certificate Validation
- Certificate Status Information Processing, and
- Subordinate CA Certificate Life Cycle Management

Management of AWS is responsible for establishing and maintaining effective controls over its CA operations, including CA business practices, service integrity (including key and certificate life cycle management controls), and CA environmental controls. These controls contain monitoring mechanisms, and actions are taken to correct deficiencies identified.

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 AWS' Certification Authority operations. Furthermore, because of changes in conditions, the effectiveness of controls may vary over time.

Management of AWS has assessed the controls over its CA operations. Based on that assessment, in AWS Management's opinion, in providing its Certification Authority (CA) services at Seattle, Washington as of May 27, 2015, AWS has:

- Disclosed its Business, Key Life Cycle Management, Certificate Life Cycle Management and CA Environment Control practices below:
 - Certification Practice Statement and
 - Certificate Policy





- Maintained effective controls to provide reasonable assurance that:
 - AWS’s Certification Practice Statement was consistent with its Certificate Policy;
 - AWS provides its services in accordance with its Certificate Policy and Certification Practice Statement;
 - The integrity of keys and certificates it managed was established and protected throughout their life cycles;
 - Subordinate CA certificate requests were accurate, authenticated and approved;
 - Logical and physical access to CA systems and data was restricted to authorized individuals;
 - The continuity of key and certificate management operations was maintained; and
 - CA systems development, maintenance and operations were properly authorized and performed to maintain CA systems integrity,

for the Amazon Root CA 1, Amazon Root CA 2, Amazon Root CA 3 and Amazon Root CA 4, based on the [Trust Service Principles and Criteria for Certification Authorities, Version 2.0](#), including the following:

CA Business Practices Disclosure

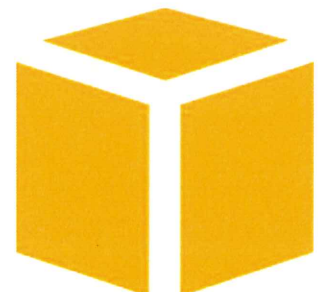
CA Business Practices Management
Certification Practice Statement Management
Certificate Policy Management
CP/CPS Consistency

Service Integrity

CA Key Life Cycle Management Controls
CA Key Generation
CA Key Storage, Backup, and Recovery
CA Public Key Distribution
CA Key Usage
CA Key Archival and Destruction
CA Key Compromise
CA Cryptographic Hardware Life Cycle Management
CA Key Escrow

Certificate Life Cycle Management Controls

Certificate Renewal
Certificate Rekey
Certificate Issuance
Certificate Revocation





Certificate Distribution
Certificate Validation

Subordinate CA Certificate Life Cycle Management Controls
Subordinate CA Certificate Life Cycle Management

CA Environmental Controls

Security Management
Asset Classification and Management
Personnel Security
Physical and Environmental Security
Operations Management
System Access Management
Systems Development and Maintenance
Business Continuity Management
Monitoring and Compliance
Audit Logging

AWS has not issued any Subordinate CAs for the Amazon Root CA 1, Amazon Root CA 2, Amazon Root CA 3 and Amazon Root CA 4. Since AWS does not currently operate subordinate CAs the criteria relevant to Subscriber information under Principle 6: Certificate Life Cycle Management Controls (properly authenticated) was not applicable.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Charlie Bell", written over a horizontal line.

Charlie Bell
Senior Vice President, Utility Computing Services
Amazon Web Services Inc.

