



# PAG

---

## PRINCETON AUDIT GROUP



**Certification Authorities**  
**Independent Auditors Report**  
**December 1, 2014 to November 30, 2015.**



**Toronto, Canada.**



**Independent Service Auditor's Report**  
**Princeton Audit Group (PAG)**

12 Roszel Road  
Suite B-103  
Princeton, NJ 08540

The Board of Directors  
TrustCor Systems S. de R.L.  
Global Headquarters  
50<sup>th</sup> Street Torre Global Bank  
11<sup>th</sup> Floor, Suite 1102  
Panama, Republic of Panama

We have examined the assertion by the management of TrustCor Systems, S. de R.L. (TrustCor-CA) that during the period December 1<sup>st</sup>, 2014 through November 30<sup>th</sup>, 2015 for its Certification Authority (CA) business operations at Toronto, Ontario, Canada.

The in-scope CAs are:

- TrustCor RootCert CA-1
- TrustCor RootCert CA-2
- TrustCor ECA-1

TrustCor-CA has:

- Disclosed its Business, Key Life Cycle Management, Certificate Life Cycle Management, and CA Environmental Control practices in its certificate policy and certification practice statements:
  - For the period: Dec 1st 2014 — August 14th 2015
    - Certification Practices Statement, version 1.0.0
    - Certificate Policy, version 1.0.0
  - For the period: August 15th 2015 – November 16th 2015
    - Certification Practices Statement, version 1.1.0
    - Certificate Policy, version 1.1.0
  - For the period: November 17th 2015 – November 30th 2015
    - Certification Practices Statement, version 1.2.0
    - Certificate Policy, version 1.2.0
- Maintained effective controls to provide reasonable assurance that:
  - TrustCor-CA's Certification Practice Statement is consistent with its Certificate Policy
  - TrustCor-CA 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 life cycles;
- The integrity of subscriber keys and certificates it manages is established and protected throughout their life cycles;
- Subscriber information is properly authenticated (for the registration activities performed by TrustCor-CA); and
- Subordinate CA certificate requests are accurate, authenticated and approved, and,
- 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 for Root Certs which are based on the WebTrust Principles and Criteria for Certification Authorities 2.0

TrustCor-CA's 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 CPA Canada, accordingly, included (1) obtaining an understanding of TrustCor-CA's key and certificate life cycle management business practices and its controls over key and certificate integrity, over the authenticity and confidentiality 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 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 specific controls at TrustCor-CA 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, TrustCor-CA'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, TrustCor-CA management's assertion, as referred to above, is fairly stated, in all material respects, based on the WebTrust Criteria for Certification Authorities and this report does not include any representation as to the quality of TrustCor-CA's services beyond those covered by the WebTrust Criteria for Certification Authorities, or the suitability of any of TrustCor-CA's services for any customer's intended purpose.

TrustCor-CA'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 or provide any additional assurance.

*Vijay Khosla, CPA.CITP, CGMA, CISA, CISM, CFFA, ACA.*

A handwritten signature in blue ink that reads 'V Khosla' with a horizontal line underneath.

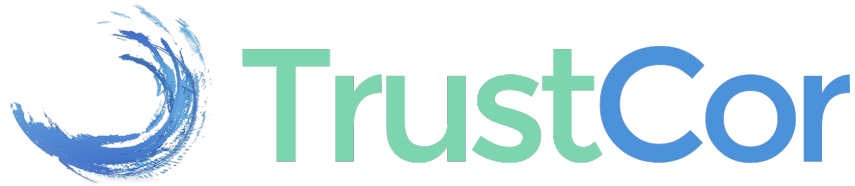
*Managing Partner*

*12/1/2015.*

*Princeton Audit Group, Inc.*

*Princeton, New Jersey*

*[www.princetonauditgroup.com](http://www.princetonauditgroup.com)*



**Assertion of Management as to its Disclosure of its Business Practices and its Controls  
Over its Certification Authority Operations during the period from  
December 1st, 2014 through November 30th, 2015**

December 1, 2015

TrustCor Systems S. de R.L. (TrustCor) operates various Certification Authorities (CAs) which provide a range of CA services. These CAs include the TrustCor RootCert CA-1, the TrustCor RootCert CA-2 and the TrustCor ECA-1; the operations of which are described more fully in TrustCor's Certificate Policy and Certification Practice Statement, located at <https://www.trustcorsystems.com/resources>.

To that end, we have subjected our certification authority business practices to the appropriate audit level in the form of the AICPA/CPA Canada WebTrust for Certification Authorities. We also assert that our practices comply with the conditions established in the CA/Browser Forum's SSL Baseline Requirements for the Issuance and Management of Publicly Trusted Certificates (Baseline Requirements) and the CA/Browser Forum's Network and Certificate Systems Security Requirements (NetSec Requirements). Below are our assertions which have been audited by Princeton Audit Group in accordance with:

- **AICPA/CPA Canada WebTrust for Certification Authorities - SSL Baseline with Network Security - Version 2.0**
- **AICPA/CPA Canada WebTrust Principles and Criteria for Certification Authorities - Version 2.0**

TrustCor provides the following certification authority services through its CAs:

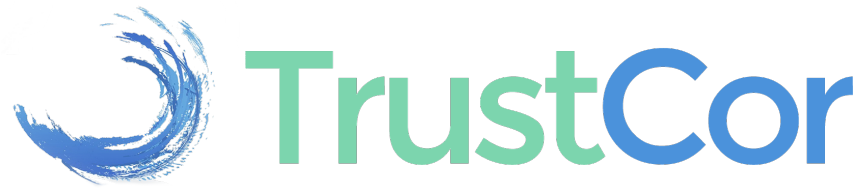
- ☐ Subscriber registration
- ☐ Certificate renewal
- ☐ Certificate issuance
- ☐ Certificate distribution
- ☐ Certificate revocation
- ☐ Certificate status information processing

Management of TrustCor is responsible for establishing and maintaining effective controls over its CA operations, including CA business practices disclosure in its Certification Practice Statement, 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.

TrustCor Systems S. de R.L.  
50th St Torre Bank, Ste 1102  
Panama City, 00395  
República de Panamá

[www.trustcorsystems.com](http://www.trustcorsystems.com)  
T +507 833-9801 PA  
T +1 (289) 408-9990 CA

North American Headquarters  
7270 Woodbine Ave, Ste 308  
Markham, ON L3R 4B9  
Canada



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 provide only reasonable assurance with respect to TrustCor's CA operations. Furthermore because of changes in conditions, the effectiveness of controls may vary over time.

Management of TrustCor has assessed the controls over its CA operations. Based on that assessment, in TrustCor Management's opinion, in providing its Certification Authority (CA) services, during the period from December 1, 2014 through November 30, 2015, TrustCor has:

- ☐ Disclosed its Key Life Cycle Management, Certificate Life Cycle Management, and CA Environmental Control policies in its Certificate Policy and Certification Practices Statement;
- ☐ Maintained effective controls to provide reasonable assurance that:
  - ☐ Subscriber information was properly authenticated (for the registration activities performed by TrustCor);
  - ☐ The integrity of keys and certificates it managed were established and protected throughout their life cycles;
  - ☐ Subscriber and relying party information was restricted to authorized individuals and protected from uses not specified in the CA's business practices disclosure;
  - ☐ The continuity of key and certificate life cycle management operations was maintained, and
  - ☐ CA systems development, maintenance and operations were properly authorized and performed to maintain CA systems integrity.

In accordance with the WebTrust® for Certification Authorities criteria – Version 2.0 (WebTrust 2.0) based on the AICPA/CPA Canada WebTrust for Certification Authorities criteria including the following:

### **CA Business Practices Disclosure**

#### **Service Integrity**

##### **Key Life Cycle Management Controls**

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

TrustCor Systems S. de R.L.  
50th St Torre Bank, Ste 1102  
Panama City, 00395  
República de Panamá

[www.trustcorsystems.com](http://www.trustcorsystems.com)  
T +507 833-9801 PA  
T +1 (289) 408-9990 CA

North American Headquarters  
7270 Woodbine Ave, Ste 308  
Markham, ON L3R 4B9  
Canada



### **Certificate Life Cycle Management Controls**

Subscriber Registration  
Certificate Renewal  
Certificate Issuance  
Certificate Distribution  
Certificate Revocation  
Certificate Status Information Processing

### **CA Environmental Controls**

Certification Practice Statement and Certificate Policy Management  
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  
Event Journaling

Our commitment to these principles and criteria is ongoing and subject to audit every twelve months to verify our continuing compliance with the AICPA/CPA Canada WebTrust for Certification Authorities criteria; the Baseline Requirement and NetSec Requirements.

TrustCor Systems S. de R.L.

Ian Abramowitz  
Chief Financial Officer

TrustCor Systems S. de R.L.  
50th St Torre Bank, Ste 1102  
Panama City, 00395  
República de Panamá

[www.trustcorsystems.com](http://www.trustcorsystems.com)  
T +507 833-9801 PA  
T +1 (289) 408-9990 CA

North American Headquarters  
7270 Woodbine Ave, Ste 308  
Markham, ON L3R 4B9  
Canada