Independent Assurance Report

To the Management of TrustFactory Proprietary Limited Certification Authority ("TrustFactory-CA")

Scope

We have been engaged, in a reasonable assurance engagement, to report on TrustFactory-CA Management's Assertion that for its Certification Authority ("CA") operations at the following locations at their respective dates throughout the period 08 October 2022 to 07 October 2023:

— Teraco JB1 Isando (5 Brewery Street, Isando, Kempton Park);

— Teraco JB2 Bredell (0A 1st Road, Glen Marais, Kempton Park).

For its CAs as enumerated in Appendix A, TrustFactory-CA has:

— Disclosed its business, key lifecycle management, certificate lifecycle management and CA environmental control practices in its:

- o TrustFactory Certification Authority Certificate Policy, v1.9, dated 03 April 2023;
- o TrustFactory Client Root CA Certification Practice Statement, v1.9, dated 18 September 2023;
- o TrustFactory Client Issuing CA Certification Practice Statement, v1.10, dated 03 April 2023;

— Maintained effective controls to provide reasonable assurance that:

- o TrustFactory-CA's Certificate Practice Statements are consistent with its Certificate Policy
- o TrustFactory-CA provides its services in accordance with its Certification Policy and Certification Practice Statements

— Maintained effective controls to provide reasonable assurance that:

- o the integrity of keys and certificates it manages is established and protected throughout their lifecycles;
- o the integrity of subscriber keys and certificates it manages is established and protected throughout their lifecycles;
- o subscriber information is properly authenticated (for the registration activities performed by TrustFactory-CA); and
- o subordinate CA certificate requests are accurate, authenticated and approved

— Maintained effective controls to provide reasonable assurance that:

- o logical and physical access to CA systems and data is restricted to authorised individuals;
- o the continuity of key and certificate management operations is maintained; and
- o CA systems development, maintenance, and operations are properly authorized and performed to maintain CA systems integrity

in accordance with the [WebTrust Principles and Criteria for Certification Authorities, v2.2.2](#), and those provisions contained within Chapter 3 of the Accreditation Regulations of the Electronic Communications and Transaction Act of 2002 and ISO/SANS 21188.

TrustFactory-CA does not escrow its CA keys and does not provide certificate suspension services. Accordingly, our procedures did not extend to controls that would address those criteria.

Certification authority's responsibilities

TrustFactory-CA's 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, v2.2.2,](#) and those provisions contained within Chapter 3 of the Accreditation Regulations of the Electronic Communications and Transaction Act of 2002 and ISO/SANS 21188.

Our independence and quality management

We have complied with the independence and other ethical requirements of the Code of Professional Conduct for Registered Auditors issued by the Independent Regulatory Board for Auditors (IRBA Code), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. The IRBA Code is consistent with the corresponding sections of the International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (including International Independence Standards).

The firm applies the International Standard on Quality Management 1, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Practitioner's responsibilities

Our responsibility is to express an opinion on Management's Assertion based on our procedures. We conducted our engagement in accordance with International Standard on Assurance Engagements 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information, issued by the International Auditing and Assurance Standards Board. This standard requires that we plan and perform our procedures to obtain reasonable assurance about whether, in all material respects, management's assertion is fairly stated, and, accordingly, included:

1. obtaining an understanding of TrustFactory-CA's key and certificate lifecycle 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 lifecycle management operations and over development, maintenance and operation of systems integrity;

2. selectively testing transactions executed in accordance with disclosed key and certificate lifecycle 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 the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Relative effectiveness of controls

The relative effectiveness and significance of specific controls at TrustFactory-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.

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. For example, because of their nature, controls may not prevent, or detect unauthorised access to systems and information, or failure to comply with internal and external policies or requirements. Also, the projection to the future of any conclusions based on our findings is subject to the risk that controls may become ineffective.

Opinion

In our opinion, throughout the period 08 October 2022 to 07 October 2023, TrustFactory-CA Management's Assertion, as referred to above, is fairly stated, in all material respects, in accordance with the WebTrust Principles and Criteria for Certification Authorities, v2.2.2, and those provisions contained within Chapter 3 of the Accreditation Regulations of the Electronic Communications and Transaction Act of 2002 and ISO/SANS 21188.

This report does not include any representation as to the quality of TrustFactory-CA's services beyond those covered by the WebTrust Principles and Criteria for Certification Authorities, v2.2.2, and those provisions contained within Chapter 3 of the Accreditation Regulations of the Electronic Communications and Transaction Act of 2002 and ISO/SANS 21188, nor the suitability of any of TrustFactory-CA's services for any customer's intended purpose.

Restriction on use

This report is for the purpose of providing information to the South African Accreditation Authority (SAAA) and Chartered Professional Accountants (CPA) Canada solely in connection with the re-certification of the WebTrust seal and accreditation with SAAA and may not be suitable for any other purpose (save for the TrustFactory-CA own internal purposes).

Use of the WebTrust seal

TrustFactory-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.

Yours faithfully

KPMG Inc.

Devon C Duffield
Chartered Accountant (SA)
Registered Auditor
Director
24 November 2023

Appendix A – In Scope CAs

CA Distinguished Name	SHA256 Fingerprint	SHA1 Fingerprint
CN = TrustFactory Client Root Certificate Authority OU = TrustFactory PKI Operations O = TrustFactory (Pty) Ltd L = Johannesburg S = Gauteng C = ZA	92 C4 DB 06 C4 2A 13 0D 66 35 74 D7 74 1B 7F 93 C8 06 FD 67 14 DC E8 90 E8 4B 56 8F AE 86 E6 4C	f9 0c c7 52 1e ab 33 f2 28 ea a8 35 e4 e5 02 92 e3 1d 28 1e
CN = TrustFactory Client Issuing Certificate Authority OU = TrustFactory PKI Operations O = TrustFactory (Pty) Ltd L = Johannesburg S = Gauteng C = ZA	7D 9F A2 C0 85 90 81 F7 8A BD 73 5C 49 7E 79 5E 54 0C 58 98 D0 5E FA F1 5A BD 46 5E A7 D1 12 93	35 fc 04 61 2c 60 9d 14 c7 d8 ca 5e 89 55 f3 90 cf ba e7 42

TRUSTFACTORY-CA MANAGEMENT'S ASSERTION

TrustFactory Certificate Authority ("TrustFactory-CA") operates the Certification Authority (CA) services known and enumerated in Appendix A, and provides the following CA services:
— Subscriber registration
— Certificate renewal
— Certificate rekey
— Certificate issuance
— Certificate distribution
— Certificate revocation
— Certificate validation
— Subordinate CA certification

The Management of TrustFactory-CA is responsible for establishing and maintaining effective controls over its CA operations, including its CA business practices disclosure on its website [https://www.trustfactory.net/repository/], CA business practices management, CA environmental controls, CA key lifecycle management controls, subscriber key lifecycle management controls, certificate lifecycle management controls, and subordinate CA 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 TrustFactory-CA's Certification Authority operations. Furthermore, because of changes in conditions, the effectiveness of controls may vary over time.

TrustFactory-CA's Management has assessed its disclosures of its certificate practices and controls over its CA services. Based on that assessment, in TrustFactory-CA's Management's opinion, in providing its Certification Authority (CA) services at Teraco JB1 Isando (5 Brewery St, Isando, Kempton Park, 1600) and Teraco JB2 Bredell (0A 1st Rd, Glen Marais, Kempton Park), throughout the period 08 October 2022 to 07 October 2023, has:

- disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in its:

    - TrustFactory Certification Authority Certificate Policy, v1.9, dated 03 April 2023;

    - TrustFactory Client Root CA Certification Practice Statement, v1.9, dated 18 September 2023;

    - TrustFactory Client Issuing CA Certification Practice Statement, v1.10, dated 03 April 2023;

- maintained effective controls to provide reasonable assurance that:

    - TrustFactory-CA's Certificate Practice Statements are consistent with its Certificate Policy

- TrustFactory-CA provides its services in accordance with its Certificate Policy and Certification Practice Statements

– maintained effective controls to provide reasonable assurance that:

- the integrity of keys and certificates it manages is established and protected throughout their lifecycles;

- the integrity of subscriber keys and certificates it manages is established and protected throughout their lifecycles;

- subscriber information is properly authenticated (for the registration activities performed by TrustFactory-CA); and

- subordinate CA certificate requests are accurate, authenticated, and approved

– maintained effective controls to provide reasonable assurance that:

- logical and physical access to CA systems and data is restricted to authorised individuals;

- the continuity of key and certificate management operations is maintained; and

- CA systems development, maintenance, and operations are properly authorised and performed to maintain CA systems integrity

in accordance with the WebTrust Trust Service Principles and Criteria for Certification Authorities v2.2.2, and those provisions contained within Chapter 3 of the Accreditation Regulations of the Electronic Communications and Transaction Act of 2002 and ISO/SANS 21188 including the following:

CA Business Practices Disclosure
  • Certification Practice Statement (CPS)
  • Certificate Policy (CP)

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

CA Environmental Controls
  • Security Management
  • Asset Classification and Management
  • Personnel Security
  • Physical & Environmental Security
  • Operations Management
  • System Access Management
  • System Development and Maintenance
  • Business Continuity Management
  • Monitoring and Compliance
  • Audit Logging

CA Key Lifecycle 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 Lifecycle Management

Subscriber Key Lifecycle Management Controls
- CA-Provided Subscriber Key Generation Services
- CA-Provided Subscriber Key Storage and Recovery Services
- Integrated Circuit Card (ICC) Lifecycle Management
- Requirements for Subscriber Key Management

Certificate Lifecycle Management Controls
- Subscriber Registration
- Certificate Renewal
- Certificate Rekey
- Certificate Issuance
- Certificate Distribution
- Certificate Revocation
- Certificate Validation

Subordinate CA Certificate Lifecycle Management Controls
- Subordinate CA Certificate Lifecycle Management

TrustFactory does not escrow its CA keys, and does not provide certificate suspension services. Accordingly, our assertion does not extend to controls that would address those criteria.

Jayesh Nana
Chief Executive Officer

24 November 2023

Appendix A – In Scope CAs

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CN = TrustFactory Client Issuing Certificate Authority OU = TrustFactory PKI Operations O = TrustFactory(Pty)Ltd L = Johannesburg S = Gauteng C = ZA	7D 9F A2 C0 85 90 81 F7 8A BD 73 5C 49 7E 79 5E 54 0C 58 98 D0 5E FA F1 5A BD 46 5E A7 D1 12 93	35 fc 04 61 2c 60 9d 14 c7 d8 ca 5e 89 55 f3 90 cf ba e7 42