

# Qualified Electronic Seal CA Certificate Profiles IDnow Trust Services AB

Version 1.0

# Table of Contents

|                            |    |
|----------------------------|----|
| Document Information ..... | 3  |
| Change Log .....           | 3  |
| 1. Introduction .....      | 4  |
| 2. Certificate Body .....  | 5  |
| 2.1 CA Certificate .....   | 5  |
| 2.2 Seal Certificate.....  | 8  |
| 3. CRL .....               | 11 |

## Document Information

|                       |   |
|-----------------------|---|
| Version               | 1.0   |
| Version date          | 05.07.2024  |
| Confidentiality level | Public  |
| Approved by           | Representative of IDnow Trust Services Management |
| Owner of the document | System Administrator                              |
| Document name         | Qualified Electronic Seal CA Certificate Profiles |
| Relevant for          | External  |
| Document OID          | 1.3.6.1.4.1.61867.2.1.4.1.1                       |

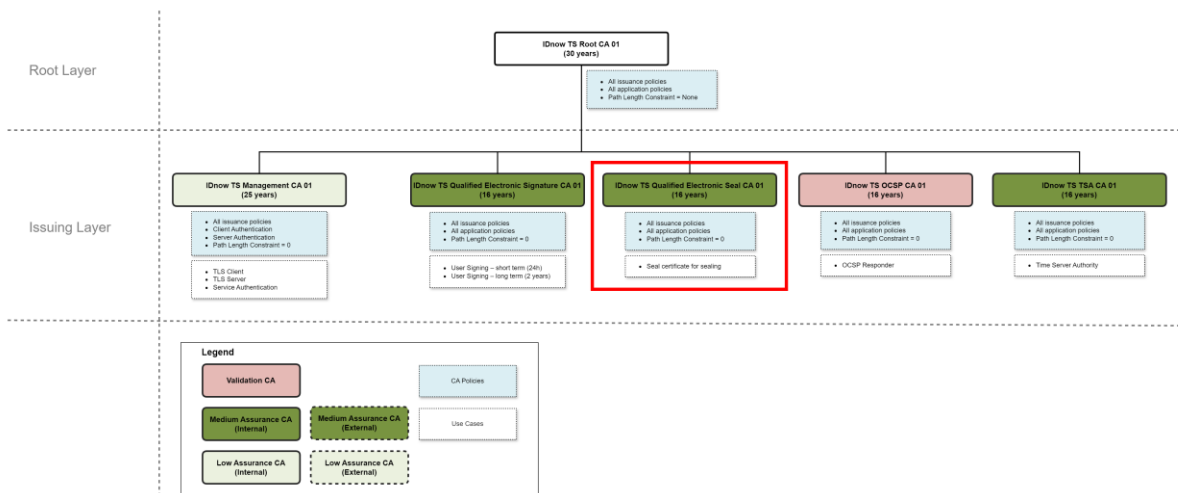
## Change Log

| Version | Version Date | Changes         | Author           |
|---------|--------------|-----------------|------------------|
| 1.0     | 05.07.2024   | Initial Version | Mateusz Kowalski |
|         |              |                 |                  |

# 1. Introduction

The document describes the structure of digital certificates of IDnow Trust Services AB.

This document contains information about the IDnow Trust Services Qualified Electronic Seal CA [XX] certificate profiles and related end entity and CRL ones (where [XX] is 01,02,03...).



## 2. Certificate Body

### 2.1 CA Certificate

| CA Certificate                   |           |  |  |
|----------------------------------|-----------|--|--|
| Field                            | Mandatory | Value                                      | Description  |
| <b>Certificate Data</b>          |           |  |  |
| Serial Number                    | Yes       | <unique_serial_number>                     | Unique serial number of the certificate.   |
| Version                          | Yes       | 3  | Certificate format version.  |
| Signature Algorithm              | Yes       | sha512RSA                                  | Signature algorithm in accordance to RFC 5280.   |
| <b>Subject DN</b>                |           |  |  |
| Common Name (CN)                 | Yes       | IDnow TS Qualified Electronic Seal CA [XX] | Certificate authority name, where [XX] is 01,02,03...  |
| Organization (O)                 | Yes       | IDnow Trust Services AB                    | Organization name.   |
| Organization Identifier (ORG_ID) | Yes       | SE5594699489                               | Identification of the organization different from the organization name. Certificates may include one or more semantics identifiers as specified in clause 5.1.4 of ETSI EN 319 412-1. |
| Country (C)                      | Yes       | SE   | Country code: SE - Sweden (2 character ISO 3166 country code).   |
| <b>Issuer Name</b>               |           |  |  |
| Common Name (CN)                 | Yes       | IDnow TS Root CA [XX]                      | Certificate authority name, where [XX] is 01,02,03...  |
| Organization (O)                 | Yes       | IDnow Trust Services AB                    | Organization name.   |
| Organization Identifier (ORG_ID) | Yes       | SE5594699489                               | Identification of the organization different from the organization name. Certificates may include one or more semantics identifiers as specified in clause 5.1.4 of ETSI EN 319 412-1. |

|                              |  |                                |  |
|------------------------------|--|--------------------------------|--|
| Country (C)                  | Yes  | SE                             | Country code: SE - Sweden (2 character ISO 3166 country code). |
| <b>Validity</b>              |  |                                |  |
| Validity Period              | Yes  | 16 years                       | Validity period of certificate from issuance date.             |
| Not Before                   | Yes  | <issuance_date_and_time>       | First date of certificate validity.                            |
| Not After                    | Yes  | <issuance_date_and_time> + 16Y | Last date of certificate validity.                             |
| <b>Public Key Info</b>       |  |                                |  |
| Algorithm                    | Yes  | RSA (4096 Bits)                | RSA algorithm in accordance with RFC 4055.                     |
| Public Key                   | Yes  | <public_key>                   | Public Key.  |
| <b>Extensions</b>            |  |                                |  |
| <b>Extension</b>             | <b>Values and Limitations</b>  |                                | <b>Criticality</b>   |
| Key Usage                    | Certificate Signing (Off-line CRL Signing)<br>CRL Signing (06)   |                                | Critical   |
| Basic Constraints            | Subject Type=CA<br>Path Length Constraint=0  |                                | Critical   |
| Subject Key Identifier       | SHA-1 hash of the public key   |                                | Non-critical   |
| Certificate Policies         | Certificate Policy [1]:<br>PolicyIdentifier:<br>1.3.6.1.4.1.61867.2.1.1.1.1<br>PKIX CPS Pointer Qualifier<br>(1.3.6.1.5.5.7.2.1)<br>=CPS Pointer: https://trust-services.io/repository/Practice_Statement_IDnowTrustServicesAB.pdf |                                | Non-critical   |
| Authority Key Identifier     | SHA-1 hash of the public key   |                                | Non-critical   |
| Authority Information Access | Authority Information Access [1]:<br>Access Method: CA Issuers<br>(1.3.6.1.5.5.7.48.2)<br>Access Location:<br>URI: http://ca.trust-services.io/rootca[XX].cer  |                                | Non-critical   |
| CRL Distribution Points      | CRL Distribution Point [1]:<br>Distribution Point Name:<br>Full Name:  |                                | Non-critical   |
|                              |  |                                | Yes  |

|  |  |  |  |
|--|--|--|--|
|  | URI: <a href="http://crl.trust-services.io/rootca[XX].crl">http://crl.trust-services.io/rootca[XX].crl</a> |  |  |
|--|--|--|--|

## 2.2 Seal Certificate

| Seal Certificate                 |           |  |  |
|----------------------------------|-----------|--|--|
| Field                            | Mandatory | Value                                      | Description  |
| <b>Certificate Data</b>          |           |  |  |
| Serial Number                    | Yes       | <unique_serial_number>                     | Unique serial number of the certificate.   |
| Version                          | Yes       | 3  | Certificate format version.  |
| Signature Algorithm              | Yes       | sha512RSA                                  | Signature algorithm in accordance to RFC 5280.   |
| <b>Subject DN</b>                |           |  |  |
| Common Name (CN)                 | Yes       | <common_name>                              | End certificate common name.   |
| Organization (O)                 | Yes       | <organization>                             | Organization name.   |
| Organization Identifier (ORG_ID) | Yes       | <organization_identifier>                  | Identification of the organization different from the organization name. Certificates may include one or more semantics identifiers as specified in clause 5.1.4 of ETSI EN 319 412-1. |
| Country (C)                      | Yes       | SE   | Country code: SE - Sweden (2 character ISO 3166 country code).   |
| serialNumber                     | No        | <serialNumber>                             | Subject Unique Identifier.   |
| <b>Issuer Name</b>               |           |  |  |
| Common Name (CN)                 | Yes       | IDnow TS Qualified Electronic Seal CA [XX] | Certificate authority name, where [XX] is 01,02,03...  |
| Organization (O)                 | Yes       | IDnow Trust Services AB                    | Organization name.   |
| Organization Identifier (ORG_ID) | Yes       | SE5594699489                               | Identification of the organization different from the organization name. Certificates may include one or more semantics identifiers as specified in clause 5.1.4 of ETSI EN 319 412-1. |



|                        |  |                                     |  |
|------------------------|--|-------------------------------------|--|
| Country (C)            | Yes  | SE                                  | Country code: SE - Sweden (2 character ISO 3166 country code). |
| <b>Validity</b>        |  |                                     |  |
| Validity Period        | Yes  | 24 hours < VALIDITY < =3 years      | Validity period of certificate from issuance date.             |
| Not Before             | Yes  | <issuance_date_and_time>            | First date of certificate validity.                            |
| Not After              | Yes  | <issuance_date_and_time> + VALIDITY | Last date of certificate validity.                             |
| <b>Public Key Info</b> |  |                                     |  |
| Algorithm              | Yes  | RSA (4096 - 8192 Bits)              | RSA algorithm in accordance with RFC 4055.                     |
| Public Key             | Yes  | <public_key>                        | Public Key.  |
| <b>Extensions</b>      |  |                                     |  |
| <b>Extension</b>       | <b>Values and Limitations</b>  |                                     | <b>Criticality</b>   |
| Key Usage              | Non Repudiation  |                                     | Critical   |
| Basic Constraints      | Subject Type=End Entity<br>Path Length Constraint=None   |                                     | Critical   |
| Subject Key Identifier | SHA-1 hash of the public key   |                                     | Non-critical   |
| Certificate Policies   | Certificate Policy [1]:<br>PolicyIdentifier:<br>1.3.6.1.4.1.61867.2.1.1.1.1<br>PKIX CPS Pointer Qualifier<br>(1.3.6.1.5.5.7.2.1)<br>=CPS Pointer: <a href="https://trust-services.io/repository/Practice_Statement_IDnowTrustServicesAB.pdf">https://trust-services.io/repository/Practice_Statement_IDnowTrustServicesAB.pdf</a><br>Certificate Policy [2]:<br>PolicyIdentifier: 0.4.0.194112.1.3 |                                     | Non-critical   |
| Extensions             | Validity Assured General [1]:<br>ETSIValAssuredCertMod<br>(0.4.0.194121.0.1.0)   |                                     | Non-critical   |
| QC Statements          | QC Statement [1]:<br>PKIX QCSyntax-v2<br>OID: 1.3.6.1.5.5.7.11.2<br>QC Statement [2]:<br>Semantics<br>Identifier=0.4.0.194121.0.0.1<br>OID: 1.3.6.1.5.5.7.11.2<br>QC Statement [3]:  |                                     | Non-critical   |

|                              |  |              |     |
|------------------------------|--|--------------|-----|
|                              | <p>Semantics Identifier=0.4.0.194121.1.2<br/> <i>OID: 1.3.6.1.5.5.7.11.2</i></p> <p>QC Statement [4]:<br/>         QC Compliance<br/> <i>OID: 0.4.0.1862.1.1</i></p> <p>QC Statement [5]:<br/>         QC Secure Signature Creation Device<br/> <i>OID: 0.4.0.1862.1.4</i></p> <p>QC Statement [6]:<br/>         QC Type=EtsiQctEseal<br/>         (0.4.0.1862.1.6.2)<br/> <i>OID: 0.4.0.1862.1.6</i></p>  |              |     |
| Authority Key Identifier     | SHA-1 hash of the public key   | Non-critical | Yes |
| Authority Information Access | <p>Authority Information Access [1]:<br/>         Access Method: CA Issuers<br/>         (1.3.6.1.5.5.7.48.2)<br/>         Access Location:<br/>         URI: <a href="http://ca.trust-services.io/qesealca[XX].cer">http://ca.trust-services.io/qesealca[XX].cer</a></p> <p>Authority Information Access [2]:<br/>         Access Method: OCSP (1.3.6.1.5.5.7.48.1)<br/>         Access Location:<br/>         URI: <a href="http://ocsp.trust-services.io">http://ocsp.trust-services.io</a></p> | Non-critical | Yes |
| CRL Distribution Points      | <p>CRL Distribution Point [1]:<br/>         Distribution Point Name:<br/>         Full Name:<br/>         URI: <a href="http://crl.trust-services.io/qesealca[XX].crl">http://crl.trust-services.io/qesealca[XX].crl</a></p>   | Non-critical | Yes |

## 3. CRL

| CRL                              |   |  |  |
|----------------------------------|---|--|--|
| Field                            | Mandatory                                     | Value  | Description  |
| <b>CRL Data</b>                  |   |  |  |
| Delta CRL                        | Yes   | No   |  |
| Immediate Issue                  | Yes   | Yes  |  |
| CRL Build Frequency              | Yes   | 1 / day  |  |
| Format                           | Yes   | DER  |  |
| Signature Algorithm              | Yes   | sha512RSA  | Signature algorithm in accordance to RFC 5280.   |
| <b>Issuer Name</b>               |   |  |  |
| Common Name (CN)                 | Yes   | IDnow Trust Services Qualified Electronic Seal CA [XX] | Certificate authority name, where [XX] is 01,02,03...  |
| Organization (O)                 | Yes   | IDnow Trust Services AB                                | Organization name.   |
| Organization Identifier (ORG_ID) | Yes   | SE5594699489   | Identification of the organization different from the organization name. Certificates may include one or more semantics identifiers as specified in clause 5.1.4 of ETSI EN 319 412-1. |
| Country (C)                      | Yes   | SE   | Country code: SE - Sweden (2 character ISO 3166 country code).   |
| <b>Extensions</b>                |   |  |  |
| Extension                        | Values and Limitations                        | Criticality  | Mandatory  |
| CRL Distribution Points          | http://crl.trust-services.io/qesealca[XX].crl | Non-critical   | Yes  |