

## INDEPENDENT ASSURANCE REPORT

*To the management of Asseco Data Systems S.A. ("ADS"):*

### Scope

We have been engaged, in a reasonable assurance engagement, to report on *ADS - Management's Assertion 2026\_TLS EV* that for its Certification Authority (CA) operations in Szczecin, Poland, and supporting facilities in Łódź, Poland, throughout the period February 11, 2025 to February 10, 2026 for its CAs as enumerated in Attachment A, ADS has:

- ▶ disclosed its extended validation TLS ("EV TLS") certificate lifecycle management business practices in its:
  - o [Certification Practice Statement of Certum Certification Services, version 7.11](#) (15.01.2025 - 28.02.2025)
  - o [Certification Practice Statement of Certum Certification Services, version 7.12](#) (01.03.2025 - 30.06.2025)
  - o [Certification Practice Statement of Certum Certification Services, version 7.13](#) (01.07.2025 - 30.11.2025)
  - o [Certification Practice Statement of Certum Certification Services, version 8.0](#) (01.12.2025 - 18.12.2025)
  - o [Certification Practice Statement of Certum Certification Services, version 8.1](#) (19.12.2025 - 01.02.2026)
  - o [Certification Practice Statement of Certum Certification Services, version 8.2](#) (02.02.2026 - 31.03.2026); and
  - o [Certification Policy of Certum's Certification Services, version 5.1](#) (06.12.2024 - 30.11.2025)
  - o [Certification Policy of Certum's Certification Services, version 5.2](#) (Valid from 01.12.2025)
- including its commitment to provide EV TLS certificates in conformity with the CA/Browser Forum Guidelines on the ADS website, and provided such services in accordance with its disclosed practices
- ▶ maintained effective controls to provide reasonable assurance that:
  - o the integrity of keys and EV TLS certificates it manages is established and protected throughout their lifecycles; and
  - o EV TLS subscriber information is properly authenticated (for the registration activities performed by ADS)

in accordance with the [WebTrust Principles and Criteria for Certification Authorities – Extended Validation TLS, v2.0.1](#).

ADS makes use of external registration points for specific subscriber registration activities as disclosed in ADS's business practices. Our examination did not extend to the controls exercised by these external registration points.

### Certification authority's responsibilities

ADS'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 – Extended Validation TLS, v2.0.1.

## Our independence and quality management

We have complied with the independence and other ethical requirements of the *Code of Ethics for Professional Accountants* issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

The firm applies International Standard on Quality Management (ISQM) 1, *Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements*, which requires the firm to design, implement and operate a system of quality control including documented policies and 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 procedures in accordance 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 ADS's EV TLS certificate lifecycle management business practices, including its relevant controls over the issuance, renewal, and revocation of EV TLS certificates;
- 2) selectively testing transactions executed in accordance with disclosed EV TLS 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.

As part of our engagement, we assessed the attached matters (Attachment B) that have been publicly posted by ADS management in the online forums of the Bugzilla site, as well as the online forums of individual internet browsers that comprise the CA/Browser Forum. We have considered the nature of these issues, their root causes, and CA's remediation plans in determining the nature, timing, and extent of our procedures.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

The relative effectiveness and significance of specific controls at ADS 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 unauthorized 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 February 11, 2025 to February 10, 2026, ADS 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 – Extended Validation TLS, v2.0.1.

This report does not include any representation as to the quality of ADS's services beyond those covered by the WebTrust Principles and Criteria for Certification Authorities – Extended Validation TLS, v2.0.1 nor the suitability of any of ADS's services for any customer's intended purpose.

#### Use of the WebTrust seal

ADS's use of the WebTrust for Certification Authorities – Extended Validation TLS 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.

Ernst & Young Audyt Polska sp. z o.o. sp.k.  
Warsaw, Poland

Anna Wolak

April 3, 2026

Podpisane elektronicznie przez  
Anna Magdalena Wolak  
(Certyfikat kwalifikowany) w dniu  
2026-04-03.

## ASSECO DATA SYSTEMS S.A. MANAGEMENT'S ASSERTION

Asseco Data Systems S.A. ("ADS") operates the Certification Authority (CA) services as enumerated in **Attachment A**, and provides Extended Validation TLS ("EV TLS") CA services.

The management of ADS is responsible for establishing and maintaining effective controls over its EV TLS CA operations, including its EV TLS CA business practices disclosure on its website <https://www.certum.pl/pl/repozytorium/>, EV TLS key lifecycle management controls, and EV TLS 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 ADS's Certification Authority operations. Furthermore, because of changes in conditions, the effectiveness of controls may vary over time.

ADS management has assessed its disclosures of its certificate practices and controls over its EV TLS CA services. Based on that assessment, in ADS management's opinion, in providing its EV TLS Certification Authority (CA) services in Szczecin, Poland, and supporting facilities in Łódź, Poland, throughout the period February 11, 2025 to February 10, 2026, ADS has:

- disclosed its extended validation TLS ("EV TLS") certificate lifecycle management business practices in its:
  - [Certification Practice Statement of Certum Certification Services, version 7.11](#) (15.01.2025 - 28.02.2025)
  - [Certification Practice Statement of Certum Certification Services, version 7.12](#) (01.03.2025 - 30.06.2025)
  - [Certification Practice Statement of Certum Certification Services, version 7.13](#) (01.07.2025 - 30.11.2025)
  - [Certification Practice Statement of Certum Certification Services, version 8.0](#) (01.12.2025 - 18.12.2025)
  - [Certification Practice Statement of Certum Certification Services, version 8.1](#) (19.12.2025 - 01.02.2026)
  - [Certification Practice Statement of Certum Certification Services, version 8.2](#) (02.02.2026 - 31.03.2026); and
  - [Certification Policy of Certum's Certification Services, version 5.1](#) (06.12.2024 - 30.11.2025)
  - [Certification Policy of Certum's Certification Services, version 5.2](#) (Valid from 01.12.2025)

including its commitment to provide EV TLS certificates in conformity with the CA/Browser Forum Guidelines on the ADS 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 TLS certificates it manages is established and protected throughout their lifecycles; and
  - EV TLS subscriber information is properly authenticated (for the registration activities performed by ADS)

in accordance with the [WebTrust Principles and Criteria for Certification Authorities – Extended Validation TLS v2.0.1.](#)

Management of Asseco Data Systems S.A.

Andrzej Dopierała  
3 kwietnia 2026

Tomasz Litarowicz  
3 kwietnia 2026

.....  
April 3, 2026

## Attachment A: List of CAs in Scope

### Root CAs

| CA # | CERT. # | SUBJECT                                                                                                                             | ISSUER                                                                                                                              | SERIAL NUMBER                                    | KEY ALGORITHM      | KEY SIZE  | DIGEST ALGORITHM | NOT BEFORE | NOT AFTER  | SUBJECT KEY IDENTIFIER                                                                   | SHA-256 FINGERPRINT                                              | OTHER INFORMATION                                                             |
|------|---------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|--------------------|-----------|------------------|------------|------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------|-------------------------------------------------------------------------------|
| 1    | 1       | CN = Certum CA<br>O = Unizeto Sp.<br>Z. o. o.<br>C = PL                                                                             | CN = Certum CA<br>O = Unizeto Sp.<br>Z. o. o.<br>C = PL                                                                             | 010020                                           | rsaEncryption      | 2048 bits | sha1RSA          | 2002-06-11 | 2027-06-11 | 9736AC3B2<br>5D16C45A4<br>5418A96457<br>8156480A8C<br>C434541DD<br>C5DD59233<br>229868DE | D8E0FEB1DB2E38D00940F37D27D41344D993E734B99D5656D9778D4D8143624  | - standard<br><br>- SSL<br><br>- SSL EV<br><br>- Code Signing<br><br>- S/MIME |
| 2    | 1       | CN = Certum<br>Trusted Network<br>CA<br>OU = Certum<br>Certification<br>Authority<br>O = Unizeto<br>Technologies<br>S.A.<br>C = PL  | CN = Certum<br>Trusted Network<br>CA<br>OU = Certum<br>Certification<br>Authority<br>O = Unizeto<br>Technologies<br>S.A.<br>C = PL  | 0444C0                                           | rsaEncryption      | 2048 bits | sha1RSA          | 2008-10-22 | 2029-12-31 | AA2630A7B<br>617B04D0A<br>294BAB7A8<br>CAA5016E<br>6DBE60483<br>7A83A85719<br>FAB667EB5  | 5C58468D55F58E497E743982D2B50010B6D165374ACF83A7D4A32DB768C4408E | - standard<br><br>- SSL<br><br>- SSL EV<br><br>- Code Signing<br><br>- S/MIME |
| 3    | 1       | CN = Certum<br>Trusted Network<br>CA2<br>OU = Certum<br>Certification<br>Authority<br>O = Unizeto<br>Technologies<br>S.A.<br>C = PL | CN = Certum<br>Trusted Network<br>CA2<br>OU = Certum<br>Certification<br>Authority<br>O = Unizeto<br>Technologies<br>S.A.<br>C = PL | 21d6d04<br>a4f250fc<br>93237fca<br>a5e128d<br>e9 | rsaEncryption      | 4096 bits | sha512RSA        | 2011-10-06 | 2046-10-06 | 6B3B57E9E<br>C88D1BB3D<br>01637FF33C<br>7698B3C975<br>8255E9F01E<br>A9178F3E7<br>F3B2B52 | B676F2EDDAE8775CD36CB0F63CD1D4603961F49E6265BA013A2F0307B6D0B804 | - standard<br><br>- SSL<br><br>- SSL EV<br><br>- Code Signing<br><br>- S/MIME |
| 4    | 1       | CN = Certum<br>Elliptic Curve CA<br>OU = Certum<br>Certification<br>Authority<br>O = Asseco Data<br>Systems S.A.<br>C = PL          | CN = Certum<br>Elliptic Curve CA<br>OU = Certum<br>Certification<br>Authority<br>O = Asseco Data<br>Systems S.A.<br>C = PL          | d2de593<br>eaf11206<br>e7905e7<br>4176f23d<br>b4 | id-ec<br>PublicKey | 521 bits  | sha512<br>ECDSA  | 2018-03-16 | 2043-03-16 | 5A9BB21B0<br>40E90D330<br>ED4148F34<br>8C8F38F208<br>4E4                                 | 7A5FBB25D8F4945FB9BB38AD0A203624CDA78CC89FE2E5A5349437BF4B3E9844 | - standard<br><br>- SSL<br><br>- SSL EV<br><br>- Code Signing<br><br>- S/MIME |

| CA # | CERT. # | SUBJECT                                                                                                       | ISSUER                                                                                                        | SERIAL NUMBER                              | KEY ALGORITHM  | KEY SIZE  | DIGEST ALGORITHM        | NOT BEFORE | NOT AFTER  | SUBJECT KEY IDENTIFIER                                          | SHA-256 FINGERPRINT                                              | OTHER INFORMATION                                                                                    |
|------|---------|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|--------------------------------------------|----------------|-----------|-------------------------|------------|------------|-----------------------------------------------------------------|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| 5    | 1       | CN = Certum Trusted Root CA<br>OU = Certum Certification Authority<br>O = Asseco Data Systems S.A.<br>C = PL  | CN = Certum Trusted Root CA<br>OU = Certum Certification Authority<br>O = Asseco Data Systems S.A.<br>C = PL  | 1ebf5950b8c980374c06f7eb554fb5ed           | rsaEncryption  | 4096 bits | sha512WithRSA           | 2018-03-16 | 2043-03-16 | 8CFB1C75BC02D39F4E2E48D9F96054AAC4B34FFA                        | FE7696573855773E37A95E7AD4D9CC96C30157C15D31765BA9B15704E1AE78FD | - standard<br>- SSL<br>- SSL EV<br>- Code Signing<br>- S/MIME                                        |
| 6    | 1       | CN = Certum EC-384 CA<br>OU = Certum Certification Authority<br>O = Asseco Data Systems S.A.<br>C = PL        | CN = Certum EC-384 CA<br>OU = Certum Certification Authority<br>O = Asseco Data Systems S.A.<br>C = PL        | 788f275c81125220a504d02dddb73f4            | id-ecPublicKey | 384 bits  | Sha384 ECDSA            | 2018-03-26 | 2043-03-26 | 8D06667424763AF389F7BCD6BD477D2FBC105F4B                        | 6B328085625318AA50D173C98D8BDA09D57E27413D114CF787A0F5D06C030CF6 | - standard<br>- SSL<br>- SSL EV<br>- Code Signing<br>- S/MIME                                        |
| 7    | 1       | CN=Certum TLS RSA Root CA,<br>C=PL,O=Asseco Data Systems S.A.,                                                | CN=Certum TLS RSA Root CA,<br>C=PL,O=Asseco Data Systems S.A.,                                                | E7DD2138A2C94146FF5F121789950553           | rsaEncryption  | 4096 bits | sha384WithRSAEncryption | 2023-01-27 | 2048-01-26 | EB34E400A1E67B7CD223F4CAD74EC0CB85671576                        | ED12A6E9289239D66CA1D244CE90C623AC305AD05602DA352BCFC5FEF2C4458D | - standard<br>- SSL<br>- SSL EV                                                                      |
| 8    | 1       | CN=Certum TLS ECC Root CA<br>C=PL,O=Asseco Data Systems S.A.,                                                 | CN=Certum TLS ECC Root CA<br>C=PL,O=Asseco Data Systems S.A.,                                                 | B07EC0CB2E05E63C71DA0D7F997971F3           | id-ecPublicKey | 384 bits  | ecdsa-with-SHA384       | 2023-01-27 | 2048-01-26 | 30BD170817FEB51086940D7863726C5867B9D0EA                        | 630CCB83B0180A992495E039D2613C3287A8102F8A8D703DB1330A3E86D4E653 | - standard<br>- SSL<br>- SSL EV                                                                      |
| 9    | 1       | CN=Certum Trusted Network CA 2;<br>OU=Certum Certification Authority;<br>O=Unizeto Technologies S.A.,<br>C=PL | CN=Certum Trusted Network CA 2;<br>OU=Certum Certification Authority;<br>O=Unizeto Technologies S.A.,<br>C=PL | 00B85914713F57DF8F31C0333DD2D6197A2317B4EB | rsaEncryption  | 4096 bits | SHA512WithRSA           | 2011-10-06 | 2046-10-06 | 9736AC3B25D16C45A45418A964578156480A8C434541DDC5DD59233229868DE | 9F8B05137F20ACDE9B996410F4D0BF7971A1006DC99E094C346D279B93CFF7AE | - standard<br>- SSL<br>- SSL EV<br>- Code Signing<br>- S/MIME<br><br><b>Revoked on</b><br>2023-01-23 |

## Other CA's

| CA # | CERT. # | SUBJECT                                                                                                             | ISSUER                                                                                                      | SERIAL NUMBER                                      | KEY ALGORITHM | KEY SIZE  | DIGEST ALGORITHM | NOT BEFORE | NOT AFTER  | SUBJECT KEY IDENTIFIER                                                                      | SHA-256 FINGERPRINT                                              | OTHER INFORMATION                                             |
|------|---------|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------|---------------|-----------|------------------|------------|------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------|
| 1    | 1       | CN = Certum Class I CA SHA2, O = Unizeto Technologies S.A., O = Unizeto Technologies S.A., C = PL                   | CN = Certum Trusted Network CA, O = Unizeto Technologies S.A., OU = Certum Certification Authority, C = PL, | 00d147a<br>a29b042<br>89f7f5c6<br>4247009f<br>d339 | rsaEncryption | 2048 bits | sha1withRSA      | 2014-09-11 | 2027-06-09 | 0E530BDC8<br>21962629B9<br>1CE6C83F5<br>65C2EEC69<br>8B3A14C7C<br>65C220E7B<br>8CF2E5DCA    | 2AB4DFF69D75BBF9541060B434CE5AD0C4DACB7AF0DBF21D3616AFCB473796DE | - standard<br>- SSL<br>- SSL EV<br>- Code Signing<br>- S/MIME |
| 2    | 1       | CN = Certum Global Services CA SHA2, O = Unizeto Technologies S.A., OU = Certum Certification Authority, C = PL     | CN = Certum Trusted Network CA OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL     | 00d04b6f<br>e5dd5bd<br>221e7c7<br>4cf6468b<br>3146 | rsaEncryption | 2048 bits | SHA256with RSA   | 2014-09-11 | 2027-06-09 | 33B683FC7<br>9A0CBB085<br>F2C4DD76B<br>E6CA35319<br>58406E35F2<br>C87467B58<br>EFCB45FA1    | 9E852C59DFC6FD6ABD4E17EA80B5F4E56FC04192D107258D54DA8A92528670D6 | - standard<br>- SSL<br>- SSL EV<br>- Code Signing<br>- S/MIME |
| 3    | 1       | CN = Certum Extended Validation CA, O = Unizeto Technologies S.A., OU = Certum Certification Authority, C = PL      | CN = Certum Trusted Network CA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL    | f18734d4<br>8395862<br>a0c3af6e<br>4b92738<br>1a   | rsaEncryption | 4096 bits | sha1withRSA      | 2013-01-24 | 2028-01-24 | AF19834886<br>EE88D4BC7<br>F3907AEAC<br>1BE6033C7<br>C65D85D8E<br>C482AE5F2<br>D8C849F8B    | 7816C7B0566B46783B1C15D8A28D8B0D20CFEB20B3D13F79446E15C4A51C91DF | - standard<br>- SSL<br>- SSL EV<br>- Code Signing<br>- S/MIME |
| 4    | 1       | CN = Certum Class I CA, O = Unizeto Technologies S.A., OU = Certum Certification Authority, C = PL                  | CN = Certum Trusted Network CA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL    | b47de80<br>b874585<br>5c6e9c4e<br>6bb189a<br>bb4   | rsaEncryption | 4096 bits | sha1withRSA      | 2013-01-24 | 2028-01-24 | 5ABEECD5<br>E79ED66D0<br>94BFAD76<br>BE58BBFAC<br>93A9AAC8E<br>C6FC21E35<br>C8664A390<br>BE | 337AC56F39FB8877B9F0524554B755D1835A807FFC9058DFC6DE1B707F696123 | - standard<br>- SSL<br>- SSL EV<br>- Code Signing<br>- S/MIME |
| 5    | 1       | CN = Certum Extended Validation CA SHA2, O = Unizeto Technologies S.A., OU = Certum Certification Authority, C = PL | CN = Certum Trusted Network CA OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL     | 00c5a2d<br>3f6eb4d1<br>93c17a9<br>0aa38a2<br>96e54 | rsaEncryption | 2048 bits | SHA256with RSA   | 2014-09-11 | 2027-06-09 | 1D82D7F1F<br>A9711B3773<br>67EFEE640<br>C26A06DBC<br>D99D2A17B<br>0FFAB0316<br>D92788AC3    | 6C47D365C13BC8CC3D6DEF5D8F07AB8DBEA3C8D4945D651AA9854A9C9A3CC71C | - standard<br>- SSL<br>- SSL EV<br>- Code Signing<br>- S/MIME |

| CA # | CERT. # | SUBJECT                                                                                                                       | ISSUER                                                                                                                | SERIAL NUMBER                                              | KEY ALGORITHM | KEY SIZE  | DIGEST ALGORITHM | NOT BEFORE | NOT AFTER  | SUBJECT KEY IDENTIFIER                                                                   | SHA-256 FINGERPRINT                                              | OTHER INFORMATION                                                             |
|------|---------|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|---------------|-----------|------------------|------------|------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------|-------------------------------------------------------------------------------|
| 6    | 1       | CN = Certum Domain Validation CA SHA2,<br>O = Unizeto Technologies S.A.,<br>OU = Certum Certification Authority,<br>C = PL    | CN = Certum Trusted Network CA<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL      | 26ddd<br>22b46c<br>9c44d5<br>a694d<br>39807<br>e72ad       | rsaEncryption | 2048 bits | SHA256with RSA   | 2014-09-11 | 2027-06-09 | 4B801B24D1<br>AFC92E7B9F<br>3270BFCB0F<br>31430BF151<br>D2A87D6F6E<br>205FB5D3D<br>C12B2 | 129FB5DE501E24041CD14A81075FD1CDE257408D4A353E636912E38BDDA2D3FB | - standard<br><br>- SSL<br><br>- SSL EV<br><br>- Code Signing<br><br>- S/MIME |
| 7    | 1       | CN = Certum Organization Validation CA SHA2,<br>O = Unizeto Technologies S.A., OU = Certum Certification Authority,<br>C = PL | CN = Certum Trusted Network CA<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL      | 00b5a<br>d0f638<br>54cc46<br>22e4b<br>3923b<br>29002<br>16 | rsaEncryption | 2048 bits | SHA256with RSA   | 2014-09-11 | 2027-06-09 | E751AF78A3<br>6BA498ED1A<br>95D8E500F1<br>D37B376134<br>3069089CE9<br>D581AA8DF3<br>5FAB | FD02362244F31266CAFF005818D1004EC4EB08FB239AAFAAAFF47497D6005D6  | - standard<br><br>- SSL<br><br>- SSL EV<br><br>- Code Signing<br><br>- S/MIME |
| 8    | 1       | CN = Certum Digital Identification CA SHA2,<br>O = Unizeto Technologies S.A., OU = Certum Certification Authority,<br>C = PL  | CN = Certum Trusted Network CA<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL      | 66daef<br>03db8<br>46191<br>6b25b<br>a83fb1<br>74e13       | rsaEncryption | 2048 bits | SHA256with RSA   | 2015-04-21 | 2027-06-09 | 41D72A22FD<br>8E3CDB03E<br>F9C37D9DF6<br>D303C9A8B6<br>F82973491B<br>7FE3D8B459<br>8C1B5 | 0F672D92A0B06CEE948F03B272502602C6E37D2A2AD694A31D5DE313196E9282 | - standard<br><br>- SSL<br><br>- SSL EV<br><br>- Code Signing<br><br>- S/MIME |
| 9    | 1       | CN = nazwaSSL,<br>O = nazwa.pl sp. z o.o.,<br>OU = http://nazwa.pl,<br>C = PL                                                 | CN = Certum Global Services CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | 606c62<br>dc97d1<br>a0392<br>ee9cb1<br>2b21d<br>6dd9       | rsaEncryption | 2048 bits | SHA256with RSA   | 2015-12-31 | 2025-12-28 | 016E94F2A3<br>EA935D78A<br>DF976B0086<br>21229B63DF<br>D26ABF45BF<br>C17964A554<br>088FE | A69C59966EBBCDFEC7F4FF0288C86FF60356FA7860208B93B43A095B0600CC1E | - standard<br><br>- SSL<br><br>- SSL EV<br><br>- Code Signing<br><br>- S/MIME |
| 10   | 1       | CN = Certyfikat SSL<br>O = home.pl S.A.,<br>C = PL                                                                            | CN = Certum Global Services CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | 311d7<br>edde4<br>92020<br>8bbd8<br>5ef726<br>2bba         | rsaEncryption | 2048 bits | SHA256with RSA   | 2016-06-08 | 2026-06-06 | E4F2788C1D<br>6C8C9E64C7<br>76B40ECDA<br>7A093DCD3<br>B64E6FFCB5<br>BD1D6D375<br>B7916C4 | A95F23B52AF10895886FB65323D29A9876EA7D396F805E4CA280D561C26E3DAD | - standard<br><br>- SSL<br><br>- SSL EV<br><br>- Code Signing<br><br>- S/MIME |

| CA # | CERT. # | SUBJECT                                                                       | ISSUER                                                                                                                | SERIAL NUMBER                                    | KEY ALGORITHM | KEY SIZE  | DIGEST ALGORITHM | NOT BEFORE | NOT AFTER  | SUBJECT KEY IDENTIFIER                                                                   | SHA-256 FINGERPRINT                                              | OTHER INFORMATION                                                             |
|------|---------|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|---------------|-----------|------------------|------------|------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------|-------------------------------------------------------------------------------|
| 11   | 1       | CN = WoSign OV SSL CA,<br>O = WoSign CA Limited,<br>C = CN                    | CN = Certum Trusted Network CA<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL      | ef051a74<br>1a1d940<br>9fca5e46<br>40f8d3c9<br>b | rsaEncryption | 2048 bits | SHA256with RSA   | 2016-11-09 | 2026-11-09 | 319283D9C<br>EB4147101<br>A23FAE64D<br>95E8329481<br>AF09A7EED<br>2D059D9E5<br>076A8D3ED | C7F546F0C76C9A0DA9992E9884E6248B7CA2BB6ADE838BD7A03A8C41EE2A3064 | - standard<br><br>- SSL<br><br>- SSL EV                                       |
| 12   | 1       | CN = WoSign EV SSL CA,<br>O = WoSign CA Limited,<br>C = CN                    | CN = Certum Trusted Network CA<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL      | 520a3a4<br>69d146b<br>20297afd<br>015e64a<br>bf5 | rsaEncryption | 2048 bits | SHA256with RSA   | 2016-11-10 | 2026-11-10 | 914B1AA84<br>15C44D61E<br>2CC0DA292<br>4FCDA308A<br>D9F3F64334<br>83454C8DF<br>768A272FC | C0AB07D9071A4CC1D34409178F8BCA058310A8B111DDCFA655658760226F50F9 | - standard<br><br>- SSL<br><br>- SSL EV                                       |
| 13   | 1       | CN= 4fastssl.com<br>, O = 3S2N Sp. z o.o.,<br>OU = 3S2N Sp. z o.o.,<br>C = PL | CN = Certum Global Services CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | 7c0876a<br>e51f52f1<br>27a9532<br>47b4834<br>b62 | rsaEncryption | 2048 bits | SHA256with RSA   | 2017-04-18 | 2027-04-16 | B0DED8BF4<br>A93CA35BE<br>0494DF9337<br>55BD8C5DD<br>44C5417097<br>772FC1B2F<br>3B64E457 | 31AC346B31073DC0D134E29FC212CC4A15ED3530EEA1EDCFC8DACB36492D5DE4 | - standard<br><br>- SSL<br><br>- SSL EV<br><br>- Code Signing<br><br>- S/MIME |
| 14   | 1       | CN = WoSign DV SSL CA,<br>O = WoSign CA Limited,<br>C = CN                    | CN = Certum Trusted Network CA<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL      | e21a211<br>aa891e2<br>d35459ff<br>d36d27c<br>426 | rsaEncryption | 2048 bits | SHA256with RSA   | 2017-05-18 | 2027-05-18 | 1BF57EE00<br>608F570243<br>63764E1266<br>A2EB5A4CA<br>57D96E03C<br>6D52E1C36<br>7014D45E | 0330286DF3612C0E968DCD518A7A316D5E0790D1CA324B906B0EF017C0BE3EA7 | - standard<br><br>- SSL<br><br>- SSL EV                                       |
| 15   | 1       | CN = TrustAsia DV SSL CA - C3,<br>O = TrustAsia Technologies Inc.,<br>C = CN  | CN = Certum Global Services CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | f15cc09c<br>2dcc6102<br>08b80ea<br>3057243<br>a9 | rsaEncryption | 2048 bits | SHA256with RSA   | 2017-10-23 | 2027-05-14 | 9190F5AC0<br>872754718C<br>7F8878B043<br>EC6C87DD<br>A275CE42A<br>F2BECE3ED<br>8C7909E99 | C25F1E96000BC36E2AA5CD54BF24F48B76890A162E1AD8E104992650510626C2 | - standard<br><br>- SSL<br><br>- SSL EV<br><br>- Code Signing<br><br>- S/MIME |

| CA # | CERT. # | SUBJECT                                                                                                                     | ISSUER                                                                                                                                  | SERIAL NUMBER                                    | KEY ALGORITHM | KEY SIZE  | DIGEST ALGORITHM  | NOT BEFORE | NOT AFTER  | SUBJECT KEY IDENTIFIER                                                                       | SHA-256 FINGERPRINT                                               | OTHER INFORMATION                                                         |
|------|---------|-----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|---------------|-----------|-------------------|------------|------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------------------------|
| 16   | 1       | CN = TrustAsia<br>OV SSL CA - C3,<br>O = TrustAsia<br>Technologies<br>Inc.,<br>C = CN                                       | CN = Certum<br>Global Services<br>CA<br>OU = Certum<br>Certification<br>Authority<br>O = Unizeto<br>Technologies<br>S.A.<br>C = PL      | 309e97b<br>6ccd8672<br>842fa205<br>9592920<br>a8 | rsaEncryption | 2048 bits | SHA256with<br>RSA | 2017-10-23 | 2027-05-14 | 8446516F46<br>817F287FD7<br>2A22EC823<br>69B44D0FC<br>90A42605B0<br>7CB6678BB<br>9595076     | 7A142B1A5E16215183A13E840A862A437E293D9366921DB07EDB54F138AC0D78  | - standard<br><br>- SSL<br><br>- SSL EV<br><br>- Code Signing<br>- S/MIME |
| 17   | 1       | CN = TrustAsia<br>OV SSL CA - C3,<br>O = TrustAsia<br>Technologies<br>Inc.,<br>C = CN                                       | CN = Certum<br>Global Services<br>CA SHA2<br>OU = Certum<br>Certification<br>Authority<br>O = Unizeto<br>Technologies<br>S.A.<br>C = PL | 178666a<br>8554accb<br>fe73457e<br>6451a68<br>6c | rsaEncryption | 2048 bits | SHA256with<br>RSA | 2017-10-23 | 2027-05-14 | DF3BE1AFD<br>14BA31FFA<br>1CAF822EF<br>47FC04E17<br>2908EDA83<br>BF334FC52<br>AF433C8DE<br>6 | BC0878CBBBC4E0DAF7A9DA464AB16262A235BFDAED33B9F9569BA18FF34997580 | - standard<br><br>- SSL<br><br>- SSL EV<br><br>- Code Signing<br>- S/MIME |
| 18   | 1       | CN = TrustOcean<br>Certification<br>Authority,<br>O = QiaoKr<br>Corporation<br>Limited,<br>C = CN                           | CN = Certum<br>Global Services<br>CA SHA2<br>OU = Certum<br>Certification<br>Authority<br>O = Unizeto<br>Technologies<br>S.A.<br>C = PL | 1509b3b<br>352d668<br>9b5a727<br>2f372e7e<br>028 | rsaEncryption | 2048 bits | SHA256with<br>RSA | 2017-10-23 | 2027-05-14 | 02A9F19551<br>8772E132C0<br>1750C6770E<br>A0C05DDB0<br>FA274D95F<br>A031274E01<br>31E52E     | A416A2BA490C454E23B85BF087DB7B137F4F47D9747E60F8692FF4C8DF0E062B  | - standard<br><br>- SSL<br><br>- SSL EV<br><br>- Code Signing<br>- S/MIME |
| 19   | 1       | CN = GDCA<br>TrustAUTH R4<br>DV SSL CA G2,<br>O = "Global<br>Digital<br>Cybersecurity<br>Authority Co.,<br>Ltd.",<br>C = CN | CN = Certum<br>Global Services<br>CA SHA2<br>OU = Certum<br>Certification<br>Authority<br>O = Unizeto<br>Technologies<br>S.A.<br>C = PL | 9e9cb69<br>426c45cc<br>4306d3e<br>1cc2a79e<br>fc | rsaEncryption | 2048 bits | SHA256with<br>RSA | 2018-01-26 | 2027-05-20 | 71FB108FA<br>F19908C9B<br>935817EA18<br>B359A72813<br>B86FA8936<br>E8CDBB613<br>4DE7FF78     | 6CDF9DCBF3510A3BB402761D62D0C5E4E7AFC51D9CFF01F02BD53256DC567ADF  | - standard<br><br>- SSL<br><br>- SSL EV<br><br>- Code Signing<br>- S/MIME |
| 20   | 1       | CN = GDCA<br>TrustAUTH R4<br>OV SSL CA G2,<br>O = "Global<br>Digital<br>Cybersecurity<br>Authority Co.,<br>Ltd.",<br>C = CN | CN = Certum<br>Global Services<br>CA SHA2<br>OU = Certum<br>Certification<br>Authority<br>O = Unizeto<br>Technologies<br>S.A.<br>C = PL | b0efd02a<br>81bf1ce8<br>9f7a18c2<br>94e4c33c     | rsaEncryption | 2048 bits | SHA256with<br>RSA | 2018-01-26 | 2027-05-20 | 5FF9034491<br>B2A3582BE<br>57812E211A<br>4035247D7<br>D45B9F4FA<br>301DC5190<br>6C0E7E2B     | E81B01F9F5692CF3823C6FD35886542BFAEEFC5EA94F4E246E42C4A9FC5FE8AB  | - standard<br><br>- SSL<br><br>- SSL EV<br><br>- Code Signing<br>- S/MIME |

| CA # | CERT. # | SUBJECT                                                                                                        | ISSUER                                                                                                       | SERIAL NUMBER                        | KEY ALGORITHM | KEY SIZE  | DIGEST ALGORITHM | NOT BEFORE | NOT AFTER  | SUBJECT KEY IDENTIFIER                                                 | SHA-256 FINGERPRINT                                              | OTHER INFORMATION                                             |
|------|---------|----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|--------------------------------------|---------------|-----------|------------------|------------|------------|------------------------------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------|
| 21   | 1       | CN = GDCA TrustAUTH R4 EV SSL CA G2, O = "Global Digital Cybersecurity Authority Co., Ltd.", C = CN            | CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL | d5f83e8d daf67c88 29e8901 6b7877d 13 | rsaEncryption | 2048 bits | SHA256with RSA   | 2018-01-26 | 2027-05-20 | 1A57EB460 C3D8D6F55 342ED8D5A 5C3B13B07 87A7543C01 2E77C7E1C CE3BE11D6 | 6869242CD8AD2AC77BC028947BC7D0C4F6E9CBF0899D65709810D89F94B5D70D | - standard<br>- SSL<br>- SSL EV<br>- Code Signing<br>- S/MIME |
| 22   | 1       | CN = GoGetSSL Domain Validation CA SHA2, O = EnVers Group SIA, OU = GoGetSSL Certification Authority, C = LV   | CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL | b0a20c0 09da4b5 eba644c 79c2282 70c5 | rsaEncryption | 2048 bits | SHA256with RSA   | 2018-01-26 | 2027-05-20 | A75F396D8 C6214EF99 C0A015FA6 227787C3E BEE1F6AEA A589033B28 CA37B0F21 | B5F62EC38131CD14B1FC95B877F4D210BE4BFACC7E6A6AA1422D89E34B7AC4C1 | - standard<br>- SSL<br>- SSL EV<br>- Code Signing<br>- S/MIME |
| 23   | 1       | CN = GoGetSSL Business Validation CA SHA2 O = EnVers Group SIA, OU = GoGetSSL Certification Authority, C = LV  | CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL | c557eac3 1e7e21fb 026f20e0 96b6bad 4 | rsaEncryption | 2048 bits | SHA256with RSA   | 2018-05-20 | 2027-05-20 | 5A125BD51 863EBE517 7ED55491E 555E4288E6 707D617881 DB24115BF 25A93713 | 18958D03AFB409687A1BC263860D0D735A25A004AB60E0F0E45D6333587437AE | - standard<br>- SSL<br>- SSL EV<br>- Code Signing<br>- S/MIME |
| 24   | 1       | CN = GoGetSSL Extended Validation CA SHA2, O = EnVers Group SIA, OU = GoGetSSL Certification Authority, C = LV | CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL | 27c6c981 d3d15d0f 7837712 1f8233e0 0 | rsaEncryption | 2048 bits | SHA256with RSA   | 2018-05-20 | 2027-05-20 | 04F102C7A C0DABDD2 9F20BB4629 27515CD03 C7B8744A6 92D7832B9 C439974F96 | EEDA15BA000B006EAD49A21BBE769F3BA6CE75C9249F0114D8DD882DFC0F2C1B | - standard<br>- SSL<br>- SSL EV<br>- Code Signing<br>- S/MIME |
| 25   | 1       | CN = WoTrus DV SSL CA O = WoTrus CA Limited C = CN                                                             | CN = Certum Trusted Network CA OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL      | 349bb14 4ae5611 e99bf434 5c7fc9aef c | rsaEncryption | 2048 bits | SHA256with RSA   | 2018-04-17 | 2027-05-18 | AA8D50CB3 60250233A4 D3A647E5C 9695ED8446 E350F2AEF FF7DA02B7 54660E09 | 6970E396621417DCEE315AAC28BB5EA3161F175020F7F4E9BA17DADE58DBB08D | - standard<br>- SSL<br>- SSL EV                               |

| CA # | CERT. # | SUBJECT                                                                                | ISSUER                                                                                                                | SERIAL NUMBER                     | KEY ALGORITHM | KEY SIZE  | DIGEST ALGORITHM | NOT BEFORE | NOT AFTER  | SUBJECT KEY IDENTIFIER                                           | SHA-256 FINGERPRINT                                              | OTHER INFORMATION                                                 |
|------|---------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------|---------------|-----------|------------------|------------|------------|------------------------------------------------------------------|------------------------------------------------------------------|-------------------------------------------------------------------|
| 26   | 1       | CN = WoTrus OV SSL CA,<br>O = WoTrus CA Limited,<br>C = CN                             | CN = Certum Trusted Network CA<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL      | 05ed88d8088d11ebddd623963cbaed42  | rsaEncryption | 2048 bits | SHA256withRSA    | 2018-04-17 | 2027-05-18 | C710CA27A5ACAC86755FF1355C8D4842050D19CD52AAE4A4E549323811CAAB82 | F6BF88B2A8DCD4FEB4015984EC2F1427C8017D140CF41F22EE689E0D6718012F | - standard<br><br>- SSL<br>- SSL EV                               |
| 27   | 1       | CN = WoTrus EV SSL CA,<br>O = WoTrus CA Limited,<br>C = CN                             | CN = Certum Trusted Network CA<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL      | 07dded674e2a2c08c9de666c971541f   | rsaEncryption | 2048 bits | SHA256withRSA    | 2018-04-17 | 2027-05-18 | 6DF9B7D0ADAE7D00B781020DC65ECEC1112815240426B2B879C303DE3CBF4257 | EA6963696750564A228B3EB88E0FD4304C5DA27A7AF92D1D4199357A50078315 | - standard<br><br>- SSL<br>- SSL EV                               |
| 28   | 1       | CN = Abitab SSL Domain Validated,<br>O = Abitab S.A.,<br>OU = IDdigital,<br>C = UY     | CN = Certum Global Services CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | 101d422255e1fe416660c480177611    | rsaEncryption | 2048 bits | SHA256withRSA    | 2018-08-22 | 2027-05-02 | F708359316E5FDEC3EE7EEEDA5AB6D3CFBBF8FD6E00DCB64B9C364A4E1BE53AB | E67D18639367C5B29BF7A5683B56B0F0C23155C8FE9452BCFE51681436023742 | - standard<br><br>- SSL<br>- SSL EV<br>- Code Signing<br>- S/MIME |
| 29   | 1       | CN = Abitab SSL Organization Validated<br>O = Abitab S.A.<br>OU = IDdigital,<br>C = UY | CN = Certum Global Services CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | f0d59415c6decba4f888f2837e606810f | rsaEncryption | 2048 bits | SHA256withRSA    | 2018-08-22 | 2027-05-02 | 13818B0ED4C4C0EED409E02D3BC89B6CEBBA14B671488502FDF07321B339995E | EEF9066424C23508E9C65F84671B14E16DA1BEC358E75FC6382ECA070AE861BE | - standard<br><br>- SSL<br>- SSL EV<br>- Code Signing<br>- S/MIME |

| CA # | CERT. # | SUBJECT                                                                                                             | ISSUER                                                                                                                   | SERIAL NUMBER                                    | KEY ALGORITHM | KEY SIZE  | DIGEST ALGORITHM | NOT BEFORE | NOT AFTER  | SUBJECT KEY IDENTIFIER                                                                   | SHA-256 FINGERPRINT                                              | OTHER INFORMATION                                                             |
|------|---------|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|---------------|-----------|------------------|------------|------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------|-------------------------------------------------------------------------------|
| 30   | 1       | CN = Abitab SSL Extended Validation<br>O = Abitab S.A.,<br>OU = IDdigital,<br>C = UY                                | CN = Certum Global Services<br>CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | 63e9b37<br>a0fea722<br>31484b6<br>7eed4ba<br>9e3 | rsaEncryption | 2048 bits | SHA256with RSA   | 2018-08-22 | 2027-05-02 | CB629A02C<br>53555F25F5<br>914183DEA<br>B71D5C4ED<br>4656BC12C<br>38C46ABBA<br>D226DC882 | 93B281BD81D83CF986659DFFD0AF57993B92E6E4614162539F750524CE11BBCB | - standard<br><br>- SSL<br><br>- SSL EV<br><br>- Code Signing<br><br>- S/MIME |
| 31   | 1       | CN = QIDUOCA 2018 DV SSL,<br>O = "Suzhou Qiduo Information Technology Co., Ltd.", OU = Domain Validated SSL, C = CN | CN = Certum Global Services<br>CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | d8f02e70<br>02e2f53f<br>a539ea2<br>53a264d<br>3a | rsaEncryption | 2048 bits | SHA256with RSA   | 2018-08-22 | 2027-05-02 | 1E34F5D6E<br>C5BD1D5D7<br>C599E1E85<br>5261165475<br>0BB52B4F6<br>752CBCD16<br>1D91DA2A6 | E372221266A330DD13EB1388DFAAF1FAB11DF254B63385CB637BFEF8FB5FB675 | - standard<br><br>- SSL<br><br>- SSL EV<br><br>- Code Signing<br><br>- S/MIME |
| 32   | 1       | CN = Shuidi Webtrust SSL Domain Validated<br>O = Shanghai Ping An Credit Reference Company Limited,<br>C = CN       | CN = Certum Global Services<br>CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | 9073d76<br>74c9cba7<br>bbe1070<br>6593dd7<br>233 | rsaEncryption | 2048 bits | SHA256with RSA   | 2019-02-07 | 2027-05-21 | CFC52F655<br>23268E4E42<br>68B25D959<br>FC1DB727E<br>C284A0A8B<br>0512628182<br>F44B87A5 | 4D67237B2CFACFF3DDC83C2FF1C92A8E0A98A71BD04ED39F8AFF42AAF99371D  | - standard<br><br>- SSL<br><br>- SSL EV                                       |
| 33   | 1       | CN = Shuidi Webtrust SSL Extended Validated<br>O = Shanghai Ping An Credit Reference Company Limited,<br>C = CN     | CN = Certum Global Services<br>CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | a51d344<br>4bcdeb1f<br>3324000<br>1bd58d2<br>138 | rsaEncryption | 2048 bits | SHA256with RSA   | 2019-02-07 | 2027-05-21 | 600458F0C<br>E293554234<br>AC9395E0C<br>3E3776FB65<br>A42CB14DF<br>E325DAAE5<br>CE793F54 | 6C40D07F4705A5B4F04C6AECDC5A1BF5FD38D2B6CF2DB7F212CA251075BE125D | - standard<br><br>- SSL<br><br>- SSL EV                                       |

| CA # | CERT. # | SUBJECT                                                                                                        | ISSUER                                                                                                                | SERIAL NUMBER                     | KEY ALGORITHM | KEY SIZE  | DIGEST ALGORITHM | NOT BEFORE | NOT AFTER  | SUBJECT KEY IDENTIFIER                                           | SHA-256 FINGERPRINT                                              | OTHER INFORMATION               |
|------|---------|----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------|---------------|-----------|------------------|------------|------------|------------------------------------------------------------------|------------------------------------------------------------------|---------------------------------|
| 34   | 1       | CN = Shuidi Webtrust SSL Organization Validated, O = Shanghai Ping An Credit Reference Company Limited, C = CN | CN = Certum Global Services CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | b3780c84db0d041b1cd66a40cb8d9573  | rsaEncryption | 2048 bits | SHA256withRSA    | 2019-02-07 | 2027-05-21 | 6D0129552FCFD93689048860A445C10BC8C7A972E5A12F5BE0490A7F75882C4F | EE09D49C7CF441840DA5158D0E70D4C6CAEB4FCCFE6758EE4CC45C71A287DF39 | - standard<br>- SSL<br>- SSL EV |
| 35   | 1       | CN = OKCERT R4 DV SSL CA G2, O = "Kingnet Information Technology Co., Ltd.", C = CN,                           | CN = Certum Global Services CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | 69c0570d6e2146319ad1e5834e049dcc  | rsaEncryption | 2048 bits | SHA256withRSA    | 2019-06-12 | 2027-05-21 | BADEF241FE1D335A824795ED281A1856FA6FB4D2                         | 7EB445EA38A46A6411F0A12A0E16CD3D073E91B125679977041FFBCE83BE3C1A | - standard<br>- SSL<br>- SSL EV |
| 36   | 1       | CN = OKCERT R4 EV SSL CA G2, O = "Kingnet Information Technology Co., Ltd.", C = CN,                           | CN = Certum Global Services CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | 13109cbc d429eae881f09e215f2ded38 | rsaEncryption | 2048 bits | SHA256withRSA    | 2019-06-12 | 2027-05-21 | B1C04671EFA88E0D41CA5F9B952A02EE2C62114B                         | C5453F7C147016A9AA0F5F4BB1D217DEBE1C2D368C53CF74D35F55C5233C498A | - standard<br>- SSL<br>- SSL EV |
| 37   | 1       | CN = OKCERT R4 OV SSL CA G2, O = "Kingnet Information Technology Co., Ltd.", C = CN,                           | CN = Certum Global Services CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | ec4e0eb6ab2a278a66cf3b0d619a9d82  | rsaEncryption | 2048 bits | SHA256withRSA    | 2019-06-12 | 2027-05-21 | 853218FF779AC99180D81B9117BA144002316A42                         | BCC3A54D7083116316CE03B9A40CA36F336F4839AC581862D4311A84F701514D | - standard<br>- SSL<br>- SSL EV |

| CA # | CERT. # | SUBJECT                                                                                    | ISSUER                                                                                                                | SERIAL NUMBER                                    | KEY ALGORITHM | KEY SIZE  | DIGEST ALGORITHM | NOT BEFORE | NOT AFTER  | SUBJECT KEY IDENTIFIER                                   | SHA-256 FINGERPRINT                                              | OTHER INFORMATION                       |
|------|---------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|---------------|-----------|------------------|------------|------------|----------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------|
| 38   | 1       | CN = SZCA DV SSL CA, O = "Shenzhen Digital Certificate Authority Center Co., Ltd", C = CN, | CN = Certum Global Services CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | db3ae99f<br>cf6407d8<br>daee98c<br>c77f8c13      | rsaEncryption | 2048 bits | SHA256with RSA   | 2019-07-16 | 2027-05-21 | 76B3B0CBF<br>54E9121B69<br>5577B830FF<br>C15B20A1C<br>30 | F6787FA8CAD7D2C279A0374BFB503807CC6ADCC7C23709273DD5A4047D1AEF78 | - standard<br><br>- SSL<br><br>- SSL EV |
| 39   | 1       | CN = SZCA OV SSL CA, O = "Shenzhen Digital Certificate Authority Center Co., Ltd", C = CN  | CN = Certum Global Services CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | 2036943<br>cbea08b<br>692a296<br>d662440<br>64a2 | rsaEncryption | 2048 bits | SHA256with RSA   | 2019-07-16 | 2027-05-21 | 2CC610A7F<br>414EC84193<br>FB253EC98<br>CB3CC9F75<br>764 | CC0B2512EE20280C36F30D57084ACB6B8636D94B481742E424335C7767E758C6 | - standard<br><br>- SSL<br><br>- SSL EV |
| 40   | 1       | CN = SZCA EV SSL CA, O = "Shenzhen Digital Certificate Authority Center Co., Ltd", C = CN, | CN = Certum Global Services CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | 4e0d59e<br>13a1a08<br>eb0dae8<br>9e91b67<br>50da | rsaEncryption | 2048 bits | SHA256with RSA   | 2019-07-16 | 2027-05-21 | B3FEDBE44<br>995D0A100<br>FB8569DD9<br>ED20C9437<br>B0CA | 7FBF5DB4917639930076AAFF78FC91DDA0EFEEA86CAD38A18D98947D7CD36948 | - standard<br><br>- SSL<br><br>- SSL EV |
| 41   | 1       | CN = Certum Extended Validation RSA CA, O = Asseco Data Systems S.A., C = PL,              | CN = Certum Trusted Root CA<br>OU = Certum Certification Authority<br>O = Asseco Data Systems S.A.<br>C = PL          | 239c8d4<br>1dd60d0<br>4ea6a32f<br>e004a9e<br>85d | rsaEncryption | 2048 bits | SHA256with RSA   | 2019-10-17 | 2034-10-17 | 4E08958E4<br>BC323EBA3<br>3A18CAB83<br>6AFD66499<br>12C9 | 1C4EEA3A47ABD122568EAB547E06B52111F7F388662C246C8ECBE2660B9F26F1 | - standard<br><br>- SSL<br><br>- SSL EV |

| CA # | CERT. # | SUBJECT                                                                                                | ISSUER                                                                                                                | SERIAL NUMBER                                    | KEY ALGORITHM      | KEY SIZE  | DIGEST ALGORITHM  | NOT BEFORE | NOT AFTER  | SUBJECT KEY IDENTIFIER                                   | SHA-256 FINGERPRINT                                              | OTHER INFORMATION                       |
|------|---------|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|--------------------|-----------|-------------------|------------|------------|----------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------|
| 42   | 1       | CN = Certum Extended Validation ECC CA, O = Asseco Data Systems S.A. C = PL,                           | CN = Certum EC-384 CA<br>OU = Certum Certification Authority<br>O = Asseco Data Systems S.A.<br>C = PL                | 63b4fbe0<br>2028aa5<br>07d9293<br>416ff410<br>4f | id-ec<br>PublicKey | 384 bits  | Sha384<br>ECDSA   | 2019-10-17 | 2034-10-17 | 1CE14E224<br>97457E92B<br>BF99E12A5<br>60B62DCA1<br>E2A3 | C7063A8DC668205E66153108FBE3BDBF6EDB6F8CE5F616A369BEF6324DCB6354 | - standard<br><br>- SSL<br><br>- SSL EV |
| 43   | 1       | CN = Root Global CA - G2, O = "Root Networks, LLC", C = US,                                            | CN = Certum Global Services CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | c3e00f9f<br>002ec55<br>9ba02c4<br>a5f2600c<br>5e | rsaEncryption      | 2048 bits | SHA256with<br>RSA | 2020-01-30 | 2027-05-20 | B1C04671E<br>FA88E0D41<br>CA5F9B952<br>A02EE2C62<br>114B | 309A7823BB3D1DDF44A573EC0BF9FD5166625FDE73776184C62212B4C0B4E94E | - standard<br><br>- SSL<br><br>- SSL EV |
| 44   | 1       | CN= XinChaCha Trust SSL Domain Validated O = Beijing Xinchacha Credit Management Co., Ltd. C = CN      | CN = Certum Global Services CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | 56814be<br>297e30c<br>eb2e659<br>88547af5<br>04a | rsaEncryption      | 2048 bits | SHA256with<br>RSA | 2020-05-18 | 2025-05-18 | 786c05c36f0<br>1ad5cd7d2c<br>e8a970f72e9<br>06f2554d     | 4D45039EECCA114D64822A0AA80944D66E08FAEE62B1D253F140298769F227B4 | - standard<br><br>- SSL<br><br>- SL EV  |
| 45   | 1       | CN=XinChaCha Trust SSL Organization Validated O = Beijing Xinchacha Credit Management Co., Ltd. C = CN | CN = Certum Global Services CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | 0a05471<br>ba855d1<br>69cf84f3<br>366ceb0<br>9ec | rsaEncryption      | 2048 bits | SHA256with<br>RSA | 2020-05-18 | 2025-05-18 | 203283bf975<br>47911758cf<br>a46730550f4<br>0e7d3c4      | 8E2D07BFC591B14FA314686E1CC8D9BB5F6F8D091C0595194AA2C7585B991887 | - standard<br><br>- SSL<br><br>- SSL EV |
| 46   | 1       | CN=XinChaCha Trust SSL Extended Validated O = Beijing Xinchacha Credit Management Co., Ltd. C = CN     | CN = Certum Global Services CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | 42be50b<br>1a6753c<br>36409a0<br>37888a6<br>0eab | rsaEncryption      | 2048 bits | SHA256with<br>RSA | 2020-05-18 | 2025-05-18 | 1ea4b2fd180<br>6ae3f3cfff8<br>e381b67097<br>4dc7d01      | FE7340370D595A39FFE10DCE2197447CE67C98BE28F0330C8FC85DD03212486D | - standard<br><br>- SSL<br><br>- SSL EV |

| CA # | CERT. # | SUBJECT                                                                                             | ISSUER                                                                                                                | SERIAL NUMBER                                      | KEY ALGORITHM | KEY SIZE  | DIGEST ALGORITHM | NOT BEFORE | NOT AFTER  | SUBJECT KEY IDENTIFIER                                                                   | SHA-256 FINGERPRINT                                              | OTHER INFORMATION                       |
|------|---------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|---------------|-----------|------------------|------------|------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------|
| 47   | 1       | CN= Yekta Domain Validated SSL CA 1<br>O = Pardazeshgaran Shahr Hooshmand Yekta Co.<br>C = IR       | CN = Certum Global Services CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | 2635b3c<br>efef15d<br>42b2248<br>6c70946<br>aa8    | rsaEncryption | 2048 bits | SHA256with RSA   | 2021-01-20 | 2027-05-31 | ad556fe9503<br>876ccb97ae<br>b7a6c6c226<br>b81b1061c                                     | 3818995B28A090D83A61667117D50C77C1F1DC7A137680F2E55CE755314F2D0A | - standard<br><br>- SSL<br><br>- SSL EV |
| 48   | 1       | CN= Yekta Organization Validated SSL CA 1<br>O = Pardazeshgaran Shahr Hooshmand Yekta Co.<br>C = IR | CN = Certum Global Services CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | 2f60421d<br>a95dcb2<br>13e5ff64<br>7b0b9a8<br>36   | rsaEncryption | 2048 bits | SHA256with RSA   | 2021-01-20 | 2027-05-31 | 86ed7f8a525<br>80169a6311<br>e36566b1a2<br>e6aa742b6                                     | 17F08A4F5DC38C49BB17DCD64B2CE742CFEAB99BE5B67DBC14C2E896771C60E1 | - standard<br><br>- SSL<br><br>- SSL EV |
| 49   | 1       | CN=United Trust;<br>O=United SSL Deutschland GmbH; C=DE                                             | CN = Certum Global Services CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | 4BE92A9<br>0278495<br>1DC13A<br>C6CE37<br>D230FE   | rsaEncryption | 2048 bits | SHA256with RSA   | 2021-02-24 | 2027-05-31 | 5D9BB6215<br>EC56915549<br>D083362FC<br>48460EE703<br>3BB10D831<br>C7CC233F0<br>63952D37 | 68FC6237C4B8722A1BDFB9583F728840A18BFCC3D6C6E1D6B0A307624577DBD0 | - standard<br><br>- SSL<br><br>- SSL EV |
| 50   | 1       | CN=Nyatwork;<br>O=Nyatwork Communication Ltd; C=CA                                                  | CN = Certum Global Services CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | 00FB512<br>F8FE205<br>EA41401<br>929C6D3<br>DFEBDF | rsaEncryption | 2048 bits | SHA256with RSA   | 2021-10-19 | 2026-10-19 | A348E3C73<br>6C8B7C8E3<br>F33693E881<br>4EC390777<br>D402DD46A<br>4D85F355A<br>8CEE00156 | 2A6286C3AC09AE6CD3748B24A33F30FB93DA991F883F7002824B14A914955855 | - standard<br><br>- SSL<br><br>- SSL EV |
| 51   | 1       | CN= Xcc Trust OV SSL CA<br>C=CN,O=Beijing Xinchacha Credit Management Co., Ltd.,                    | CN = Certum Trusted Network CA<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL      | F244082<br>DABA90<br>DA58C72<br>E9F29A9<br>340AE   | rsaEncryption | 2048 bits | SHA256with RSA   | 2022-07-01 | 2027-06-30 | FAA0CBC2<br>C75D81B52<br>09207200BB<br>63B703B090<br>E55                                 | 2628D65E94D62E57B6344C31B22920EDA316D9BE68EEF5EACC7362206B7DEAFA | - standard<br><br>- SSL<br><br>- SSL EV |

| CA # | CERT. # | SUBJECT                                                                                  | ISSUER                                                                                                                | SERIAL NUMBER                                    | KEY ALGORITHM | KEY SIZE  | DIGEST ALGORITHM        | NOT BEFORE | NOT AFTER  | SUBJECT KEY IDENTIFIER                                   | SHA-256 FINGERPRINT                                              | OTHER INFORMATION               |
|------|---------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|---------------|-----------|-------------------------|------------|------------|----------------------------------------------------------|------------------------------------------------------------------|---------------------------------|
| 52   | 1       | CN= Xcc Trust DV SSL CA, C=CN,O=Beijing Xinchacha Credit Management Co., Ltd.,           | CN = Certum Trusted Network CA<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL      | C2B755D<br>B93BD47<br>2C18D35<br>10BD8EE<br>A0DE | rsaEncryption | 2048 bits | SHA256with RSA          | 2022-07-01 | 2027-06-30 | A1438E0034<br>09E57B3533<br>AE758904F2<br>32610FA8E7     | B81D7010D7E495179BB5BB504223EF2EEF3056557EE3924533718169F1A670C8 | - standard<br>- SSL<br>- SSL EV |
| 53   | 1       | CN= ANTIC DV CA<br>C=CM,O=National Agency for Information and Communication Technologies | CN = Certum Global Services CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | D32C455<br>6DD4AC<br>FE0284D<br>1368DC8<br>3757F | rsaEncryption | 2048 bits | SHA256with RSA          | 2022-07-28 | 2027-05-31 | 4D4D1A5D4<br>5929128557<br>0ADDA9657<br>E61FD648D<br>85A | E53A69193E22FAECC833F80631BE15E020A04C20BB679FD351F0CB95C0089E50 | - standard<br>- SSL<br>- SSL EV |
| 54   | 1       | CN= SSL Secure Site CA<br>C=GB,O=SSL Limited,                                            | CN = Certum Trusted Network CA<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL      | 670033A<br>EB205D5<br>417F34D<br>DDC3E9<br>4B562 | rsaEncryption | 2048 bits | SHA256with RSA          | 2022-09-29 | 2027-09-28 | 77E894CD0<br>062EE9AA2<br>359E084824<br>18B31E56E<br>B74 | D859828E4E8C35ECC38E415E1D0CFFD4A9DFC116205401D1298FC13347DC0187 | - standard<br>- SSL<br>- SSL EV |
| 55   | 1       | CN= Sooma Digital Trust Validation, C=PT,O=Sooma.com Web Services Lda,                   | CN = Certum Global Services CA SHA2<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | 40103C0<br>09518C0<br>E91C136<br>1E37A3B<br>95AA | rsaEncryption | 2048 bits | SHA256with RSA          | 2023-01-23 | 2027-05-20 | 9FE3F487C<br>2D394D304<br>10D53A571<br>D7822D938<br>465F | CF8F3E3A993C9D020068B7AB200AC94200748731822FD5B32767226A2EE4EFA5 | - standard<br>- SSL<br>- SSL EV |
| 56   | 1       | CN=netartSSL<br>O=netart.com sp. z o.o.,<br>C=PL                                         | CN=Certum Global Services CA SHA2<br>O=Unizeto Technologies S.A.<br>OU=Certum Certification Authority<br>C=PL         | 4566BBE<br>A77B9B4<br>0DC6867<br>FECDD1<br>58C99 | rsaEncryption | 2048 bits | sha256WithRSAEncryption | 2023-05-10 | 2027-05-20 | 6A8F32FEB<br>9D200BDF0<br>7B64296927<br>4DA90402C<br>AC2 | 5A86CB297E37CFF1DB01FEA8E14FE4C5E054F8B228E976E4A782E3AEA723FC1B | - standard<br>- SSL<br>- SSL EV |

| CA # | CER T. # | SUBJECT                                                                      | ISSUER                                                                                                                           | SERIAL NUMBER                                    | KEY ALGORITHM | KEY SIZE     | DIGEST ALGORITHM            | NOT BEFORE | NOT AFTER  | SUBJECT KEY IDENTIFIER                                   | SHA-256 FINGERPRINT                                              | OTHER INFORMATION                       |
|------|----------|------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|---------------|--------------|-----------------------------|------------|------------|----------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------|
| 57   | 1        | CN=cyber_Folks<br>O=cyber_Folks S.A.<br>C=PL                                 | CN=Certum<br>Global Services<br>CA SHA2<br>O=Unizeto<br>Technologies<br>S.A.<br>OU=Certum<br>Certification<br>Authority<br>C=PL  | 8C353DD<br>1E4236E<br>8D51A3A<br>D574E26<br>2090 | rsaEncryption | 2048<br>bits | sha256WithRS<br>AEncryption | 2023-05-15 | 2027-05-20 | 05DDB1C4<br>443BE1A28<br>25372E276<br>5DA914F92<br>4AD45 | 35F8CC89610508BC16BD332DA543964698C72D67895FEB4E068BEA5E06686457 | - standard<br><br>- SSL<br><br>- SSL EV |
| 58   | 1        | CN=Root Networks<br>CA<br>O=Root Networks,<br>LLC<br>C=US                    | CN=Certum<br>Trusted Network<br>CA<br>O=Unizeto<br>Technologies<br>S.A.<br>OU=Certum<br>Certification<br>Authority<br>C=PL       | F9C8E25<br>31E1B76<br>89499D5<br>C276916<br>DF97 | rsaEncryption | 2048<br>bits | sha256WithRS<br>AEncryption | 2023-05-15 | 2028-09-09 | 1806CD5D<br>D79B56BA0<br>2E6232E4D<br>7C1AFD1D<br>F0C9CB | BF64C06D1D48D977A0BC2DFC917E8E0D6342BD11590471636D7A0806CC8DF003 | - standard<br><br>- SSL<br><br>- SSL EV |
| 59   | 1        | CN=Nya Labs CA<br>O=NYA LABS LLC<br>C=US                                     | CN=Certum<br>Global Services<br>CA SHA2<br>O=Unizeto<br>Technologies<br>S.A.,<br>OU=Certum<br>Certification<br>Authority<br>C=PL | 8B794BA<br>FFB4350<br>1C11D1A<br>3D583EC<br>4CFA | rsaEncryption | 2048<br>bits | sha256WithRS<br>AEncryption | 2023-11-02 | 2027-05-22 | AA92F53F7<br>98D5D712C<br>0AFFACD8<br>A6F97D3C8<br>35C57 | 7E0A8C9844D0F99EC84307483F2E331980749F88A7185649D4D99FA3C3589E52 | - standard<br><br>- SSL<br><br>- SSL EV |
| 60   | 1        | CN=CFCA DV RSA<br>CA<br>O=China Financial<br>Certification Authority<br>C=CN | CN=Certum<br>Global Services<br>CA SHA2<br>O=Unizeto<br>Technologies<br>S.A.<br>OU=Certum<br>Certification<br>Authority<br>C=PL  | BA750BA<br>DFB4AF<br>BC52010<br>7CE31AF<br>7AB58 | rsaEncryption | 2048<br>bits | sha256WithRS<br>AEncryption | 2023-12-05 | 2027-05-23 | 7788AD930<br>9E10F72DF<br>C26586868<br>459E9F986<br>D16F | ED124F475AAF4D98D1E618D3BE32F003B3CBB873C7D15B0F1A0089739CB4E4CC | - standard<br><br>- SSL<br><br>- SSL EV |
| 61   | 1        | CN=CFCA EV RSA<br>CA<br>O=China Financial<br>Certification Authority<br>C=CN | CN=Certum<br>Global Services<br>CA SHA2<br>O=Unizeto<br>Technologies<br>S.A.<br>OU=Certum<br>Certification<br>Authority<br>C=PL  | B3F601D<br>B6BAAE8<br>14497D3<br>FB59E12<br>16E5 | rsaEncryption | 2048<br>bits | sha256WithRS<br>AEncryption | 2023-12-05 | 2027-05-23 | BBBABE00<br>F4D0AB06<br>E60FB87BF<br>0B4180FA3<br>D515E8 | 98380E437E1A46E6AC2AA64D7BE6D71F2969E510ACAF5D37846CF12B8AFE7B3E | - standard<br><br>- SSL<br><br>- SSL EV |

| CA # | CER T. # | SUBJECT                                                                | ISSUER                                                                                                        | SERIAL NUMBER                                    | KEY ALGORITHM | KEY SIZE  | DIGEST ALGORITHM        | NOT BEFORE | NOT AFTER  | SUBJECT KEY IDENTIFIER                                   | SHA-256 FINGERPRINT                                              | OTHER INFORMATION               |
|------|----------|------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|--------------------------------------------------|---------------|-----------|-------------------------|------------|------------|----------------------------------------------------------|------------------------------------------------------------------|---------------------------------|
| 62   | 1        | CN=CFCA OV RSA CA<br>O=China Financial Certification Authority<br>C=CN | CN=Certum Global Services CA SHA2<br>O=Unizeto Technologies S.A.<br>OU=Certum Certification Authority<br>C=PL | D743806<br>18371EA<br>603EB43<br>2409C2B<br>8DDA | rsaEncryption | 2048 bits | sha256WithRSAEncryption | 2023-12-05 | 2027-05-23 | 32FC68609<br>02517C79B<br>79FCC9427<br>70710DD24<br>0E52 | 076EA7358389410DF85D911D251B9A582C5E6F684E0F046ED430187F0533AEFC | - standard<br>- SSL<br>- SSL EV |
| 63   | 1        | CN=CFCA DV ECC CA<br>O=China Financial Certification Authority<br>C=CN | CN=Certum Global Services CA SHA2<br>O=Unizeto Technologies S.A.<br>OU=Certum Certification Authority<br>C=PL | 2756495<br>F96F59F<br>3DCFD<br>2ED5B72<br>DA76B  | rsaEncryption | 2048 bits | sha256WithRSAEncryption | 2023-12-05 | 2027-05-23 | C9F74AFE5<br>EE4134B0D<br>A4919EDC<br>5B50C75A5<br>37612 | 690DD5AB690009813339BC668C6D3839144F34E17E5BE7F0958879E9A9E057FB | - standard<br>- SSL<br>- SSL EV |
| 64   | 1        | CN=CFCA OV ECC CA<br>O=China Financial Certification Authority<br>C=CN | CN=Certum Global Services CA SHA2<br>O=Unizeto Technologies S.A.<br>OU=Certum Certification Authority<br>C=PL | FA1CB08<br>C7144FB<br>D63A0A0<br>33CEAE<br>D4634 | rsaEncryption | 2048 bits | sha256WithRSAEncryption | 2023-12-05 | 2027-05-23 | 63EF0430A<br>4746EE144<br>E1EC3E38<br>F1211F7F4<br>21171 | A92BF1FDFB2DA2A1CE60E7440992E53A410CE2FAA8AB71EAD7444F2486E5FA9F | - standard<br>- SSL<br>- SSL EV |
| 65   | 1        | CN=CFCA EV ECC CA<br>O=China Financial Certification Authority<br>C=CN | CN=Certum Global Services CA SHA2<br>O=Unizeto Technologies S.A.<br>OU=Certum Certification Authority<br>C=PL | CC081BF<br>16779E9<br>CBEFE2<br>E0190EF<br>51EE6 | rsaEncryption | 2048 bits | sha256WithRSAEncryption | 2023-12-05 | 2027-05-23 | 213933BE1<br>4F3D0F6CF<br>A85607731<br>0EA5C75E<br>D4937 | D65810FFD7BF9A0E5779DF6753BA3894379F850B1B743AEC55786F98AC29011F | - standard<br>- SSL<br>- SSL EV |
| 66   | 1        | CN=vTrus DV SSL CA G2O=iTrusChina Co., Ltd.<br>C=CN                    | CN=Certum Global Services CA SHA2<br>O=Unizeto Technologies S.A.<br>OU=Certum Certification Authority<br>C=PL | E981765<br>6FCFF3E<br>BE0FF6F<br>9FCCB37<br>B592 | rsaEncryption | 2048 bits | sha256WithRSAEncryption | 2023-12-07 | 2027-05-25 | 4A5FC3B35<br>515AE2C4<br>D5CAF5D9<br>8C9BC9D8<br>61326E2 | D7A43AAB5B59F58CB68CC01CF838A392EE913FF330FE7C3309EDA30B84541D07 | - standard<br>- SSL<br>- SSL EV |

| CA # | CER T. # | SUBJECT                                                                                        | ISSUER                                                                                                        | SERIAL NUMBER                    | KEY ALGORITHM  | KEY SIZE  | DIGEST ALGORITHM        | NOT BEFORE | NOT AFTER  | SUBJECT KEY IDENTIFIER                   | SHA-256 FINGERPRINT                                              | OTHER INFORMATION               |
|------|----------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|----------------------------------|----------------|-----------|-------------------------|------------|------------|------------------------------------------|------------------------------------------------------------------|---------------------------------|
| 67   | 1        | CN=vTrus OV SSL CA G2<br>O=iTrusChina Co., Ltd.<br>C=CN                                        | CN=Certum Global Services CA SHA2<br>O=Unizeto Technologies S.A.<br>OU=Certum Certification Authority<br>C=PL | 61EF741269E462001863A280073DFC45 | rsaEncryption  | 2048 bits | sha256WithRSAEncryption | 2023-12-07 | 2027-05-25 | 5F4C6A839F36AE1D2BE54659CDC92C395F62D659 | 3296EB060C887E8EC0E59903E9CC8D5F6302EE8FABA95620AE5DE2364333F753 | - standard<br>- SSL<br>- SSL EV |
| 68   | 1        | CN=LH.pl CA<br>O=LH.pl Sp. z o.o.<br>C=PL                                                      | CN=Certum Global Services CA SHA2<br>O=Unizeto Technologies S.A.<br>OU=Certum Certification Authority<br>C=PL | 833BCAD443EE6AD80D3853BAD3D2EDC4 | rsaEncryption  | 2048 bits | sha256WithRSAEncryption | 2024-01-02 | 2027-05-11 | DD86D40761905209C84D011AC3835D59EACE68C2 | E4B2A0736F95950D11B82C9E6C32031E1420E06A66493E665F128AE499498FAB | - standard<br>- SSL<br>- SSL EV |
| 69   | 1        | CN=Certum EV TLS G3 E39 CA<br>O=Asseco Data Systems S.A.<br>C=PL                               | CN=Certum TLS ECC Root CA<br>O=Asseco Data Systems S.A.<br>C=PL                                               | D954BC236F5761DFFE1BDBA9ECE838   | id-ecPublicKey | 384 bits  | ecdsa-with-SHA384       | 2024-04-02 | 2039-03-20 | 4B454AD3020E658B3534E8A4BEFFBD1E215F3C1A | EE2E652AF16790B709041EB9B1430B4A93AA18EC2A2983E6E67137FDE25CD511 | - standard<br>- SSL<br>- SSL EV |
| 70   | 1        | CN=Certum EV TLS G3 R39 CA<br>O=Asseco Data Systems S.A.<br>C=PL                               | CN=Certum TLS RSA Root CA<br>O=Asseco Data Systems S.A.<br>C=PL                                               | 64101B2045C0BDF3E6C1F2EA442D2759 | rsaEncryption  | 4096 bits | sha512WithRSAEncryption | 2024-04-02 | 2039-03-20 | E6E266E4DD7B960BB97E61A04576D341A2DAD746 | 5C1D0DA0785C1D09E02BFD53C3D3D84D141DE00C01AE2BBF93C539CA87A5FF03 | - standard<br>- SSL<br>- SSL EV |
| 71   | 1        | CN=XinChaCha Trust EV TLS G2 R34 CA<br>O=Beijing Xinchacha Credit Management Co., Ltd.<br>C=CN | CN=Certum Trusted Root CA<br>O=Asseco Data Systems S.A.<br>OU=Certum Certification Authority<br>C=PL          | 1D4FD446A82B039A251A707472A37BAF | rsaEncryption  | 4096 bits | sha512WithRSAEncryption | 2024-05-28 | 2034-05-16 | 6587A502F47B5CC35A72524E8C2AF38DF544A9A7 | D79F1F0C8141804B39D04B2592D57AFEBE74F9460654AFF491490DBB7C5A2D74 | - standard<br>- SSL<br>- SSL EV |

| CA # | CERT.# | SUBJECT                                                          | ISSUER                                                                                               | SERIAL NUMBER                    | KEY ALGORITHM  | KEY SIZE  | DIGEST ALGORITHM        | NOT BEFORE | NOT AFTER  | SUBJECT KEY IDENTIFIER                   | SHA-256 FINGERPRINT                                              | OTHER INFORMATION               |
|------|--------|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------------|----------------|-----------|-------------------------|------------|------------|------------------------------------------|------------------------------------------------------------------|---------------------------------|
| 72   | 1      | CN=Certum EV TLS G2 E39 CA<br>O=Asseco Data Systems S.A.<br>C=PL | CN=Certum EC-384 CA<br>O=Asseco Data Systems S.A.<br>OU=Certum Certification Authority<br>C=PL       | 29B6454D5DA249033BB37AA53717B743 | id-ecPublicKey | 384 bits  | ecdsa-with-SHA384       | 2024-06-18 | 2039-06-05 | 3FB601755A20F8D1B0269478DCA98CD1690CD7B3 | 3B28121D8985E2DADF2029C53F232007F0C19EC788654B2C2BAAEBE50419B0D5 | - standard<br>- SSL<br>- SSL EV |
| 73   | 1      | CN=Certum EV TLS G2 R39 CA<br>O=Asseco Data Systems S.A.<br>C=PL | CN=Certum Trusted Root CA<br>O=Asseco Data Systems S.A.<br>OU=Certum Certification Authority<br>C=PL | C1753CEE5EC5B79144A8E3F3C9DDBF28 | rsaEncryption  | 4096 bits | sha512WithRSAEncryption | 2024-06-18 | 2039-06-05 | E088FC58516CD61898A6189065931B61D4E0BB18 | 4736F1ECF26A043CB4D8F94DA8302EA9E45F3D311048F3A400D01AEED1E99444 | - standard<br>- SSL<br>- SSL EV |
| 74   | 1      | CN=TLC EV TLS CA<br>O=泰尔认证中心有限公司<br>C=CN                         | CN=Certum Trusted Root CA<br>O=Asseco Data Systems S.A.<br>OU=Certum Certification Authority<br>C=PL | 419051280882D80366268B355359294D | rsaEncryption  | 4096 bits | sha512WithRSAEncryption | 2024-12-17 | 2034-12-05 | 60CF1F77C4E08E916730BAD17EF67BA052066E1D | 2BAD3A42760061D221577E059B794A9A4B21F589ADE38BC280FEF790DC011E79 | - standard<br>- SSL<br>- SSL EV |

| CA # | CER T. # | SUBJECT                                                                 | ISSUER                                                                                               | SERIAL NUMBER                        | KEY ALGORITHM  | KEY SIZE  | DIGEST ALGORITHM        | NOT BEFORE | NOT AFTER  | SUBJECT KEY IDENTIFIER                          | SHA-256 FINGERPRINT                                              | OTHER INFORMATION               |
|------|----------|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--------------------------------------|----------------|-----------|-------------------------|------------|------------|-------------------------------------------------|------------------------------------------------------------------|---------------------------------|
| 75   | 1        | CN=XinNet EV TLS CA<br>O=Xin Net Technology Corp.<br>C=CN               | CN=Certum Trusted Root CA<br>O=Asseco Data Systems S.A.<br>OU=Certum Certification Authority<br>C=PL | FB6233E58AEC436769ECF<br>FA78C19DE63 | rsaEncryption  | 4096 bits | sha512WithRSAEncryption | 2024-12-17 | 2034-12-05 | B1D3ADC299EAD980A<br>B1C6B29F<br>A0D1887FD37A07 | 44489A469C5CF8B2007E2E58125DDBC24F4186EF3B1C75C2B219DDE6A64FAA7F | - standard<br>- SSL<br>- SSL EV |
| 76   | 1        | CN=GeoSSL EV TLS CA<br>O=GeoSSL, Inc.<br>C=CN                           | CN=Certum Trusted Root CA<br>O=Asseco Data Systems S.A.<br>OU=Certum Certification Authority<br>C=PL | E344E1A780B842A76925879F14315710     | rsaEncryption  | 4096 bits | sha512WithRSAEncryption | 2024-12-17 | 2034-12-05 | 71FEB044FAD74F5EE<br>54AFA06B27EAE30B92A1294    | 9E9A40D4DED044B0E40E8FD2D76C19E46FC5FC7F90BCAEBFCBC050AAF862CE75 | - standard<br>- SSL<br>- SSL EV |
| 77   | 1        | CN=TrustAsia EV TLS ECC CA C5<br>O=TrustAsia Technologies, Inc.<br>C=CN | CN=Certum EC-384 CA<br>O=Asseco Data Systems S.A.<br>OU=Certum Certification Authority<br>C=PL       | C4B6DD589D238FC80F7F60FBD6A68827     | id-ecPublicKey | 384 bits  | ecdsa-with-SHA384       | 2025-01-15 | 2035-01-03 | EE39AA1543E75AC547F1CA730B353B16835B723D        | 3ACC4CAD7718C2E5BF549BFE1DAB9234B2EB71C00E72A554759745A611D81774 | - standard<br>- SSL<br>- SSL EV |
| 78   | 1        | CN=TrustAsia EV TLS RSA CA C5<br>O=TrustAsia Technologies, Inc.<br>C=CN | CN=Certum Trusted Root CA<br>O=Asseco Data Systems S.A.<br>OU=Certum Certification Authority<br>C=PL | 2A26E431FF549D133FAED1B1811F713F     | rsaEncryption  | 4096 bits | sha512WithRSAEncryption | 2025-01-15 | 2035-01-03 | 7E3A0129DBC1E954B0766042ACF6FCC79F7BA2A5        | A18CBF79E904E3BCC9D74D5ED062A46A90E2C7D89904114EC38B18650CD83E2C | - standard<br>- SSL<br>- SSL EV |

## Cross-certificates

The cross certificates listed below are in scope only for the criterion 7.1 "Subordinate CA and Cross Certificate Lifecycle Management".

| CA # | CERT. # | SUBJECT                                                                                                          | ISSUER                                                                                                            | SERIAL NUMBER                                      | KEY ALGORITHM | KEY SIZE  | DIGEST ALGORITHM            | NOT BEFORE | NOT AFTER  | SUBJECT KEY IDENTIFIER                                                                   | SHA-256 FINGERPRINT                                              | OTHER INFORMATION                                             |
|------|---------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|---------------|-----------|-----------------------------|------------|------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------|
| 1    | 1       | CN = Certum Trusted Network CA<br>OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL | CN = Certum CA<br>O = Unizeto Sp. Z. o. o.<br>C = PL                                                              | 0023e82<br>90d7195<br>0418c00<br>8597e42f<br>7481b | rsaEncryption | 2048 bits | sha1withRSA                 | 2008-10-22 | 2025-12-30 | AA2630A7B<br>617B04D0A<br>294BAB7A8<br>CAA5016E<br>6DBE60483<br>7A83A85719<br>FAB667EB5  | 2D87FF20FE8AD2305DFB6F3992867ED2BF4FE3E1346212C4345991AAC02266E9 | - standard<br>- SSL<br>- SSL EV<br>- Code Signing<br>- S/MIME |
| 2    | 1       | CN = Certum Trusted Network CA, OU = Certum Certification Authority<br>O = Unizeto Technologies S.A.<br>C = PL   | CN = Certum CA<br>O = Unizeto Sp. Z. o. o.<br>C = PL                                                              | 9392854<br>0016571<br>5F947F2<br>88FEFC9<br>9B28   | rsaEncryption | 2048 bits | sha1withRSA                 | 2008-10-22 | 2027-06-10 | AA2630A7B<br>617B04D0A<br>294BAB7A8<br>CAA5016E<br>6DBE60483<br>7A83A85719<br>FAB667EB5  | 949424DC2CCAAB5E9E80D66E0E3F7DEEB3201C607D4315EF4C6F2D93A917279D | - standard<br>- SSL<br>- SSL EV<br>- Code Signing<br>- S/MIME |
| 3    | 1       | CN=Certum Trusted Network CA 2;<br>OU=Certum Certification Authority;<br>O=Unizeto Technologies S.A.; C=PL       | CN=Certum Trusted Network CA; OU=Certum Certification Authority;<br>O=Unizeto Technologies S.A.; C=PL             | 1BB58F2<br>52ADF23<br>004928C<br>9AE3D7E<br>ED27   | rsaEncryption | 4096 bits | SHA384With RSA              | 2021-05-31 | 2029-09-17 | 6B3B57E9E<br>C88D1BB3D<br>01637FF33C<br>7698B3C975<br>8255E9F01E<br>A9178F3E7<br>F3B2B52 | 08E7EAC998A62C4155CC4CBC5EDA32F5B41A12C012F29AB3433BD366348149F0 | - standard<br>- SSL<br>- SSL EV<br>- Code Signing<br>- S/MIME |
| 4    | 1       | CN = UCA Global G2 Root<br>O=UniTrust<br>C=CN                                                                    | CN = Certum Trusted Network CA<br>O = Unizeto Technologies S.A.,<br>OU = Certum Certification Authority<br>C = PL | E5E470E<br>83BF9A0<br>12394C7<br>313ACA2<br>5593   | rsaEncryption | 4096 bits | SHA256with RSA              | 2023-03-08 | 2025-02-21 | 81C48CCCF<br>5E430FFA5<br>0C085F8C1<br>567217401D<br>FDF                                 | 3DD69C5BE170F943F804D1D31FE8F916C0C0226CDD7AE9AA9A0CDFD3474361   | - standard<br>- SSL<br>- SSL EV                               |
| 5    | 1       | CN = Certum Trusted Root CA<br>O = Asseco Data Systems S.A.,<br>OU = Certum Certification Authority<br>C = PL    | CN = Certum Trusted Network CA<br>O = Unizeto Technologies S.A.,<br>OU = Certum Certification Authority<br>C = PL | 00D8E07<br>44B5824<br>919FBD0<br>8847DF7<br>2020FA | rsaEncryption | 4096 bits | sha512WithR<br>SAEncryption | 2023-09-19 | 2028-09-19 | 8CFB1C75B<br>C02D39F4E<br>2E48D9F96<br>054AAC4B3<br>4FFA                                 | FB13890C7AB14FF7B94B2714503E31123BFDD340FC4D979743166E0469B47A88 | - standard<br>- SSL<br>- SSL EV<br>- Code Signing<br>- S/MIME |

| CA # | CERT. # | SUBJECT                                                                                                 | ISSUER                                                                                                            | SERIAL NUMBER                                    | KEY ALGORITHM  | KEY SIZE  | DIGEST ALGORITHM            | NOT BEFORE | NOT AFTER  | SUBJECT KEY IDENTIFIER                                   | SHA-256 FINGERPRINT                                              | OTHER INFORMATION                                             |
|------|---------|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|----------------|-----------|-----------------------------|------------|------------|----------------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------|
| 6    | 1       | CN = Certum EC-384 CA<br>O = Asseco Data Systems S.A.,<br>OU = Certum Certification Authority<br>C = PL | CN = Certum Trusted Network CA<br>O = Unizeto Technologies S.A.,<br>OU = Certum Certification Authority<br>C = PL | DAFD4B<br>F54121E<br>027D686<br>96225F1<br>FCEE8 | id-ecPublicKey | 384 bits  | sha512WithR<br>SAEncryption | 2023-09-19 | 2028-09-19 | 8D06667424<br>763AF389F7<br>BCD6BD477<br>D2FBC105F<br>4B | B72450ABF5047A8AF63EC9D87E331484850B1849A2550A82A86DB6B41ED38760 | - standard<br>- SSL<br>- SSL EV<br>- Code Signing<br>- S/MIME |
| 7    | 1       | CN = UCA Global G2 Root<br>O = UniTrust<br>C = CN                                                       | CN = Certum Trusted Network CA<br>O = Unizeto Technologies S.A.,<br>OU = Certum Certification Authority<br>C = PL | BCAFE9<br>189509E<br>612F825<br>2B74C03<br>98792 | rsaEncryption  | 4096 bits | sha256WithR<br>SAEncryption | 2024-01-08 | 2029-01-06 | 81C48CCCF<br>5E430FFA5<br>0C085F8C1<br>567217401D<br>FDF | BFA95C5DF164B659FA32F6D10564D7170DDE661A853A782E6AB63639433BCB41 | - standard<br>- SSL<br>- SSL EV<br>- Code Signing<br>- S/MIME |
| 8    | 1       | CN = UCA Global G2 Root<br>O = UniTrust<br>C = CN                                                       | CN = Certum Trusted Network CA<br>O = Unizeto Technologies S.A.,<br>OU = Certum Certification Authority<br>C = PL | 1D8A6FC<br>17A0C81<br>BCA26C<br>435AEFA<br>50078 | rsaEncryption  | 4096 bits | sha256WithR<br>SAEncryption | 2024-01-08 | 2029-01-06 | 81C48CCCF<br>5E430FFA5<br>0C085F8C1<br>567217401D<br>FDF | BB61408AED9F530B2EC0545E53BA2C8EBEAA57D9976447DB1663CED4600CD6B7 | - standard<br>- SSL<br>- SSL EV<br>- Code Signing<br>- S/MIME |
| 9    | 1       | CN = TrustAsia TLS RSA Root CA<br>O = TrustAsia Technologies, Inc.<br>C = CN                            | CN = Certum Trusted Network CA<br>O = Unizeto Technologies S.A.,<br>OU = Certum Certification Authority<br>C = PL | B2DC4C<br>34932D7<br>09CD4BF<br>0B09940<br>1695C | rsaEncryption  | 4096 bits | sha512WithR<br>SAEncryption | 2025-10-07 | 2029-01-14 | B80791795C<br>06F446FD7<br>B59CA5A26<br>91A7452BF8<br>53 | CE0DF856EA6CC0EBE068F55C4CC4DE77DEF45CACB2D4E946D8ADE706666F5887 | - standard<br>- SSL<br>- SSL EV<br>- Code Signing<br>- S/MIME |
| 10   | 1       | CN = TrustAsia TLS ECC Root CA<br>O = TrustAsia Technologies, Inc.<br>C = CN                            | CN = Certum Trusted Network CA<br>O = Unizeto Technologies S.A.,<br>OU = Certum Certification Authority<br>C = PL | C64E96C<br>EA27AD<br>DBCCE6<br>E566E52<br>546349 | id-ecPublicKey | 384 bits  | ecdsa-with-<br>SHA384       | 2025-10-07 | 2029-01-14 | 2C8553BBB<br>143CD32EA<br>9EA387FEA<br>298A8A693<br>E910 | FBE52F7D83E613D166F592A9227B08A9235E3DAA875FBA2ACD10A8C0D220DA2F | - standard<br>- SSL<br>- SSL EV<br>- Code Signing<br>- S/MIME |

**Attachment B: List of Bugzilla issues noted during the period under review.**

| Mozilla Bug # Link      | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Date Reported | Date Resolved | Criteria |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------|----------|
| <a href="#">2007105</a> | <p><b>Explanation about how and why the mistakes were made or bugs introduced, and how they avoided detection until now.</b><br/> On 2025-12-18 at 20:09 UTC, Certum received a Certificate Problem Report indicating that for multiple certificates disclosed in CCADB, the CRL URL(s) present in the certificates did not exactly match the values published in CCADB under the field "Full CRL Issued By This CA". The Certificate Problem Report listed several example CRL URLs; the subsequent investigation expanded the scope to all affected CCADB records. During the investigation, Certum confirmed that the mismatches were caused by the use of HTTPS instead of HTTP in the CRL URLs disclosed in CCADB, and, for some SubCA records, by the omission of dedicated CRL subdomains. All listed URLs resolved to the intended CRLs corresponding to the respective certificates. CRL URLs disclosed in CCADB were populated and updated using established URL patterns that had been historically used and were known to correctly resolve to the intended CRLs. When CCADB Policy v2.0 introduced, effective 2025-07-15, a clarified requirement that CRL URLs disclosed in CCADB must exactly match the CRL Distribution Point values encoded in certificates, this clarification was not reflected in the practices used to maintain CCADB records. As a result, previously applied CRL URL patterns continued to be used for both existing CCADB entries and newly added or updated records until the issue was identified through third-party reporting.</p> <p><b>List of steps your CA is taking to resolve the situation and ensure such issuance will not be repeated in the future, accompanied with a timeline of when your CA expects to accomplish these things.</b><br/> Internal procedure was updated on January 15, 2026 to require copying the "Full CRL Issued By This CA" value directly from the CRL Distribution Point in the certificate and to include a mandatory verification step confirming an exact match between the CCADB entry and the certificate. A review of existing CCADB CA records to verify that CRL URLs exactly match the CRL Distribution Point values in the corresponding certificates was performed on December 19, 2025. A consistency check was developed on March 16, 2026 verify that selected data from issued certificate matches the corresponding values recorded in the associated CCADB CA record, to help detect discrepancies like those identified in this incident.</p> | 2025-12-19    | 2026-03-30    | N/A      |

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |             |                                                                                                                                         |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <a href="#">1958645</a> | <p><b>Explanation about how and why the mistakes were made or bugs introduced, and how they avoided detection until now.</b><br/> Between 16:30 on April 4, 2025 (CEST time), and 2:00 on April 5, 2025 (CEST time), there was a DNS service outage for the certum.pl domain.<br/> The incident affected most services registered under the certum.pl domain, including those related to SSL certificates. The issue was diagnosed and resolved around 2:00 on April 5, 2025 (CEST time), and access to services was restored thereafter.<br/> An outdated configuration caused one of the subdomains to be managed by legacy DNS servers, leading to its unintended inclusion in the DNS migration. A human error resulted in the delegation being updated for the wrong domain. The absence of tests, limited external alerts, and an overloaded monitoring dashboard delayed the identification of the issue.</p> <p><b>List of steps your CA is taking to resolve the situation and ensure such issuance will not be repeated in the future, accompanied with a timeline of when your CA expects to accomplish these things.</b><br/> During the remediation work, the initial focus was on removing legacy configuration issues that triggered the incident. CA then restructured infrastructure tests performed from external locations and added a dedicated test to prevent recurrence. A key change by separating domain administration privileges was introduced — isolating those used by Certum from those used across the company.</p>                                                                                                                                                                                          | 2025-04-05 | 2025-06-10  | TLS<br>1.1.5,<br>2.5.1,<br>2.5.2,<br>2.5.6;<br>CS<br>1.4,<br>2.5.1,<br>2.5.2,<br>2.5.6;<br>S/MIME<br>1.5,<br>2.5.1,<br>2.5.2,<br>2.5.6; |
| <a href="#">2021685</a> | <p><b>Explanation about how and why the mistakes were made or bugs introduced, and how they avoided detection until now.</b><br/> The incident was caused by the absence of a properly configured validation validity parameter for S/MIME email verification in Certum's issuance system. The validation component relied on a configuration, which allowed reuse of completed mailbox validation beyond the maximum 30-day period permitted by the S/MIME Baseline Requirements.<br/> During the implementation of S/MIME Baseline Requirements in September 2023, existing validation mechanisms were assumed to be compliant and were not sufficiently re-reviewed against the new numeric and time-based requirements. As a result, the system did not enforce the 30-day limit at issuance time, allowing certificates to be issued using outdated email validation data.</p> <p><b>List of steps your CA is taking to resolve the situation and ensure such issuance will not be repeated in the future, accompanied with a timeline of when your CA expects to accomplish these things.</b><br/> A configuration fix was applied to the issuance system to enforce the 30-day validity limit for S/MIME email validation. An initial set of 101 valid certificates affected by the issue was identified and revoked on 7 March 2026. A secondary investigation identified an additional scenario, resulting in 32 further valid certificates being revoked on 12 March 2026. Preventive control was introduced by creation of registry/checklist of Baseline Requirements containing numeric and time-based constraints. Additionally production acceptance tests for numeric and date-based compliance constraints are planned.</p> | 2026-03-07 | In progress | S/MIME<br>2.4.1,<br>2.4.10                                                                                                              |

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |            |             |                      |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------|----------------------|
| <a href="#">2023190</a> | <p><b>Explanation about how and why the mistakes were made or bugs introduced, and how they avoided detection until now.</b><br/> During an internal investigation following the remediation of the non-compliance reported in Bug 2021685, Certum identified an additional issue related to delayed revocation of a subset of affected S/MIME certificates. This incident originated from the same underlying misissuance but represents a separate deviation, as not all affected certificates were identified and revoked within the required timeframe.</p> <p>The omission was detected on 11 March 2026 during a subsequent internal review conducted while preparing the detailed Bugzilla report for Bug 2021685. During this review, inconsistencies in the assessment results prompted a re-examination of the search logic used to identify affected certificates. Once the filtering condition was corrected and the assumptions were revisited, Certum identified the complete set of additionally affected certificates. Revocation of the remaining 32 valid certificates was scheduled.</p> <p><b>List of steps your CA is taking to resolve the situation and ensure such issuance will not be repeated in the future, accompanied with a timeline of when your CA expects to accomplish these things.</b></p> <p>Certum addressed the incident by first correcting and revalidating the search script used to identify affected certificates, ensuring that all relevant scenarios and edge cases are properly captured; this corrective action was completed on 11 March 2026. All additionally identified valid certificates were revoked on 12 March 2026, and subscribers were notified accordingly. To prevent recurrence, Certum enhanced its incident handling procedures by introducing explicit guidelines for validating the completeness of impact assessments, including mandatory verification of assumptions and filtering logic used during investigations. These procedural improvements were completed by 27 March 2026 and are intended to ensure that future incident responses consistently identify the full scope of affected certificates within the required timelines.</p> | 2026-03-13 | In progress | S/MIME 2.4.1, 2.4.10 |
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