

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 2025_NQ* that for its Certification Authority (CA) operations in Szczecin, Poland, and supporting facilities in Łódź, Poland, throughout the period February 11, 2024 to February 10, 2025 for its CAs as enumerated in Attachment A, ADS has:

- ▶ disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in its:
 - [Certification Practice Statement version 7.11](#); and
 - [Certification Policy version 5.1](#)
- ▶ maintained effective controls to provide reasonable assurance that:
 - ADS's Certification Practice Statement is consistent with its Certificate Policy; and
 - ADS provides its services in accordance with its Certificate Policy and Certification Practice Statement
- ▶ maintained effective controls to provide reasonable assurance that:
 - the integrity of keys and certificates it manages is established and protected throughout their lifecycles;
 - the integrity of subscriber keys and certificates it manages is established and protected throughout their lifecycles;
 - subscriber information is properly authenticated (for the registration activities performed by ADS); and
 - subordinate CA certificate requests are accurate, authenticated, and approved
- ▶ maintained effective controls to provide reasonable assurance that:
 - logical and physical access to CA systems and data is restricted to authorized individuals;
 - the continuity of key and certificate management operations is maintained; and
 - CA systems development, maintenance, and operations are properly authorized and performed to maintain CA systems integrity

in accordance with the [WebTrust Principles and Criteria for Certification Authorities v2.2.2](#).

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

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

Certification authority's responsibilities

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 v2.2.2.

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 Standard Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

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

- 1) obtaining an understanding of ADS's key and certificate lifecycle management business practices and its controls over key and certificate integrity, over the authenticity and confidentiality of subscriber and relying party information, over the continuity of key and certificate lifecycle management operations and over development, maintenance and operation of systems integrity;
- 2) selectively testing transactions executed in accordance with disclosed key and certificate lifecycle management business practices;
- 3) testing and evaluating the operating effectiveness of the controls; and
- 4) performing such other procedures as we considered necessary in the circumstances.

ADS management has disclosed to us the attached matters (Attachment B) that have been posted publicly 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 comments 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 conclusion based on our findings is subject to the risk that controls may become ineffective.

Opinion

In our opinion, throughout the period February 11, 2024 to February 10, 2025, 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 v2.2.2.

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 v2.2.2, 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 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

**Jakub Jerzy
Walarus**

Digitally signed by Jakub Jerzy
Walarus
DN: cn=Jakub Jerzy Walarus,
c=PL
Date: 2025.04.04 13:25:12
+0200

Jakub Walarus



Artur Żwak

Dokument podpisany
przez Artur Żwak
Data: 2025.04.04
17:55:02 CEST

April 4, 2025

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 the following CA services:

- Subscriber registration
- Certificate renewal
- Certificate rekey
- Certificate issuance
- Certificate distribution
- Certificate revocation
- Certificate validation
- Subscriber key generation and management
- Subordinate CA [cross-]certification

The management of ADS is responsible for establishing and maintaining effective controls over its CA operations, including its CA business practices disclosure on its website <https://www.certum.pl/pl/repozytorium/>, CA business practices management, CA environmental controls, CA key lifecycle management controls, subscriber key lifecycle management controls, certificate lifecycle management controls, and subordinate CA certificate lifecycle management controls. These controls contain monitoring mechanisms, and actions are taken to correct deficiencies identified.

There are inherent limitations in any controls, including the possibility of human error, and the circumvention or overriding of controls. Accordingly, even effective controls can only provide reasonable assurance with respect to 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 CA services. Based on that assessment, in ADS management's opinion, in providing its Certification Authority (CA) services in Szczecin, Poland, and supporting facilities in Łódź, Poland, throughout the period February 11, 2024 to February 10, 2025, ADS has:

- disclosed its business, key lifecycle management, certificate lifecycle management, and CA environmental control practices in its:
 - [Certification Practice Statement version 7.11](#); and
 - [Certification Policy version 5.1](#)
- maintained effective controls to provide reasonable assurance that:
 - ADS's Certification Practice Statement is consistent with its Certificate Policy; and
 - ADS provides its services in accordance with its Certificate Policy and Certification Practice Statement
- maintained effective controls to provide reasonable assurance that:
 - the integrity of keys and certificates it manages is established and protected throughout their lifecycles;
 - the integrity of subscriber keys and certificates it manages is established and protected throughout their lifecycles;
 - subscriber information is properly authenticated (for the registration activities performed by ADS); and
 - subordinate CA certificate requests are accurate, authenticated, and approved

- maintained effective controls to provide reasonable assurance that:
 - logical and physical access to CA systems and data is restricted to authorised individuals;
 - the continuity of key and certificate management operations is maintained; and
 - CA systems development, maintenance, and operations are properly authorised and performed to maintain CA systems integrity

in accordance with the [WebTrust Principles and Criteria for Certification Authorities v2.2.2](#) including the following:

CA Business Practices Disclosure

- Certification Practice Statement (CPS)
- Certificate Policy (CP)

CA Business Practices Management

- Certificate Policy Management
- Certification Practice Statement Management
- CP and CPS Consistency

CA Environmental Controls

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

CA Key Lifecycle Management Controls

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

Subscriber Key Lifecycle Management Controls

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

Certificate Lifecycle Management Controls

- Subscriber Registration
- Certificate Renewal
- Certificate Rekey
- Certificate Issuance
- Certificate Distribution
- Certificate Revocation
- Certificate Validation

Subordinate CA Certificate Lifecycle Management Controls

- Subordinate CA Certificate Lifecycle Management

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

Management of Asseco Data Systems S.A.

Andrzej Dopierała
4 kwietnia 2025




Paweł
Barchwic

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April 4, 2025

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 O = Unizeto Sp. Z. o. o. C = PL	CN = Certum CA O = Unizeto Sp. Z. o. o. C = PL	010020	rsaEncryption	2048 bits	sha1RSA	2002-06-11	2027-06-11	9736AC3B2 5D16C45A4 5418A96457 8156480A8C C434541DD C5DD59233 229868DE	D8E0FEB31DB2E38D00940F37D27D41344D993E734B99D5656D9778D4D8143624	- standard - SSL - SSL EV - Code Signing - S/MIME
2	1	CN = Certum Trusted Network CA OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	CN = Certum Trusted Network CA OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	0444C0	rsaEncryption	2048 bits	sha1RSA	2008-10-22	2029-12-31	AA2630A7B 617B04D0A 294BAB7A8 CAA5016E 6DBE60483 7A83A85719 FAB667EB5	5C58468D55F58E497E743982D2B50010B6D165374ACF83A7D4A32DB768C4408E	- standard - SSL - SSL EV - Code Signing - S/MIME
3	1	CN = Certum Trusted Network CA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	CN = Certum Trusted Network CA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	21d6d04 a4f250fc 93237fca a5e128d e9	rsaEncryption	4096 bits	sha512RSA	2011-10-06	2046-10-06	6B3B57E9E C88D1BB3D 01637FF33C 7698B3C975 8255E9F01E A9178F3E7 F3B2B52	B676F2EDDAE8775CD36CB0F63CD1D4603961F49E6265BA013A2F0307B6D0B804	- standard - SSL - SSL EV - Code Signing - S/MIME
4	1	CN = Certum Elliptic Curve CA OU = Certum Certification Authority O = Asseco Data Systems S.A. C = PL	CN = Certum Elliptic Curve CA OU = Certum Certification Authority O = Asseco Data Systems S.A. C = PL	d2de593 eaf11206 e7905e7 4176f23d b4	id-ec PublicKey	521 bits	sha512 ECDSA	2018-03-16	2043-03-16	5A9BB21B0 40E90D330 ED4148F34 8C8F38F208 4E4	7A5FBB25D8F4945FB9BB38AD0A203624CDA78CC89FE2E5A5349437BF4B3E9844	- standard - SSL - SSL EV - Code Signing - 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 OU = Certum Certification Authority O = Asseco Data Systems S.A. C = PL	CN = Certum Trusted Root CA OU = Certum Certification Authority O = Asseco Data Systems S.A. C = PL	1ebf5950b8c980374c06f7eb554fb5ed	rsaEncryption	4096 bits	sha512WithRSA	2018-03-16	2043-03-16	8CFB1C75B C02D39F4E 2E48D9F96 054AAC4B3 4FFA	FE7696573855773E37A95E7AD4D9CC96C30157C15D31765BA9B15704E1AE78FD	- standard - SSL - SSL EV - Code Signing - S/MIME
6	1	CN = Certum EC-384 CA OU = Certum Certification Authority O = Asseco Data Systems S.A. C = PL	CN = Certum EC-384 CA OU = Certum Certification Authority O = Asseco Data Systems S.A. C = PL	788f275c81125220a504d02dddba73f4	id-ec PublicKey	384 bits	Sha384 ECDSA	2018-03-26	2043-03-26	8D06667424763AF389F7BCD6BD477D2FBC105F4B	6B328085625318AA50D173C98D8BDA09D57E27413D114CF787A0F5D06C030CF6	- standard - SSL - SSL EV - Code Signing - S/MIME
7	1	CN=Certum TLS RSA Root CA, C=PL,O=Asseco Data Systems S.A.,	CN=Certum TLS RSA Root CA, C=PL,O=Asseco Data Systems S.A.,	E7DD2138A2C94146FF5F121789950553	rsaEncryption	4096 bits	sha384WithRSAEncryption	2023-01-27	2048-01-26	EB34E400A1E67B7CD223F4CAD74EC0CB85671576	ED12A6E9289239D66CA1D244CE90C623AC305AD05602DA352BCFC5FEF2C4458D	- standard - SSL - SSL EV
8	1	CN=Certum TLS ECC Root CA C=PL,O=Asseco Data Systems S.A.,	CN=Certum TLS ECC Root CA C=PL,O=Asseco Data Systems S.A.,	B07EC0CB2E05E63C71DA0D7F997971F3	id-ec PublicKey	384 bits	ecdsa-with-SHA384	2023-01-27	2048-01-26	30BD170817FEB51086940D7863726C5867B9D0EA	630CCB83B0180A992495E039D2613C3287A8102F8A8D703DB1330A3E86D4E653	- standard - SSL - SSL EV
9	1	CN=Certum SMIME RSA Root CA C=PL,O=Asseco Data Systems S.A.,	CN=Certum SMIME RSA Root CA C=PL,O=Asseco Data Systems S.A.,	4212C0F546E05991DAD135455C2F8BC1	rsaEncryption	4096 bits	sha384WithRSAEncryption	2023-01-27	2048-01-26	3EDE0E9A077C0A645AB06C7B1DA8254AF48EAC78	08EF47A61F8D33B37B429FE3127B59F645E3BA4A82470F8380FFB21FDD3B2131	- standard - S/MIME
10	1	CN=Certum SMIME ECC Root CA C=PL,O=Asseco Data Systems S.A.,	CN=Certum SMIME ECC Root CA C=PL,O=Asseco Data Systems S.A.,	9AE84EF80016555FC27E5F0DB382D979	id-ec PublicKey	384 bits	ecdsa-with-SHA384	2023-01-27	2048-01-26	1B0FE091C0FDAD38279DA104A9F9E65ECA7162CE	0BA1591A23AFDE691EE7E9D4881B03E69A178AB6B5BD5FC2EE31E4BEC176C98B	- standard - 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=Certum Code Signing RSA Root CA , C=PL,O=Asseco Data Systems S.A.,	CN=Certum Code Signing RSA Root CA , C=PL,O=Asseco Data Systems S.A.,	546683B CC36947 ADA75B9 5BC4080 4808	rsaEncryption	4096 bits	sha384WithR SAEncryption	2023-01-27	2048-01-26	A473B2C5E 5CDC00AFB 187ECA469 B7B5511EC 2911	69BE9FCC7AD9717775969D96FF836CBDA6D15876BF758E0B7CACCB1A1BFA3B53	- standard - Code Signing
12	1	CN=Certum Code Signing ECC Root CA , C=PL,O=Asseco Data Systems S.A.,	CN=Certum Code Signing ECC Root CA , C=PL,O=Asseco Data Systems S.A.,	F0B6BD4 ACD3428 BD28A9 C15F2A6 0769E	id-ec PublicKey	384 bits	ecdsa-with-SHA384	2023-01-27	2048-01-26	6D24B72445 5F09F55E58 EE184404B F23A1AD11 0D	A0E90EB2F7DD82993430BF1C4B8423473FD91D4BA494FAA5327900D9094288F1	- standard - Code Signing
13	1	CN=Certum Document Signing RSA Root CA , C=PL,O=Asseco Data Systems S.A.,	CN=Certum Document Signing RSA Root CA , C=PL,O=Asseco Data Systems S.A.,	4E23491 4946CD0 1BE3005 7994437 84FE	rsaEncryption	4096 bits	sha384WithR SAEncryption	2023-01-27	2048-01-26	14E8899066 F247FB3021 B437FAED1 D2BEDF0B DBF	EE04DF77F179176B6B879E9D6B78C0E20C6BECA8379B0234735FA501CAD2F0BD	- standard
14	1	CN=Certum Document Signing ECC Root CA , C=PL,O=Asseco Data Systems S.A.,	CN=Certum Document Signing ECC Root CA , C=PL,O=Asseco Data Systems S.A.,	50DA948 19C5239 0FC8C8 D2F6058 5573C	id-ec PublicKey	384 bits	ecdsa-with-SHA384	2023-01-27	2048-01-26	31EC8AB24 089B52C565 0FCA4BE74 4ECE64098 4C4	89BACB86809F7A1B62097F0D81E26F8CA82261672F04B43D8799D5EB061D2EF8	- standard
15	1	CN=Certum Trusted Network CA 2; OU=Certum Certification Authority; O=Unizeto Technologies S.A.; C=PL	CN=Certum Trusted Network CA 2; OU=Certum Certification Authority; O=Unizeto Technologies S.A.; C=PL	00B8591 4713F57 DF8F31C 0333DD2 D6197A2 317B4EB	rsaEncryption	4096 bits	SHA512With RSA	2011-10-06	2046-10-06	9736AC3B2 5D16C45A4 5418A96457 8156480A8C C434541DD C5DD59233 229868DE	9F8B05137F20ACDE9B996410F4D0BF7971A1006DC99E094C346D279B93CFF7AE	- standard - SSL - SSL EV - Code Signing - S/MIME Revoked on 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 a29b042 89f7f5c6 4247009f d339	rsaEncryption	2048 bits	sha1withRSA	2014-09-11	2027-06-09	0E530BDC8 21962629B9 1CE6C83F5 65C2EEC69 8B3A14C7C 65C220E7B 8CF2E5DCA	2AB4DFF69D75BBF9541060B434CE5AD0C4DACB7AF0DBF21D3616AFCB473796DE	- standard - SSL - SSL EV - Code Signing - S/MIME
2	1	CN = Certum Class I CA, 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	177d3b0 9461efbe 8f0faa4d 35e2da7 99	rsaEncryption	2048 bits	sha1withRSA	2009-04-25	2024-04-25	31B17FEB3 CC434980D 301B5D895 E91FFDF86 67B97A365 E108F017E1 96DFD626B	B34A33B44474FDB0078F113527BBDB76FE5BF81CA24BB86D628136C5016043E8	- standard - SSL - SSL EV - Code Signing - S/MIME
3	1	CN = Certum Global Services CA O = Unizeto Technologies S.A., OU = Certum Certification Authority, C = PL	CN = Certum CA O = Unizeto Sp. Z. o. o. C = PL	00c53c18 bf8f3f9cc 77306a9 c6a13e8 4e7	rsaEncryption	2048 bits	sha1withRSA	2009-03-03	2024-03-03	B4D31633D 83B3105CD 26915F7C0 E6BF8A0E3 8959A65EB 6D83DD42F 56D391A48 E	2E481FF3A53D293BD49F3CD83976583682B3BD79A160FD6E9CA58725D93B945B	- standard - SSL - SSL EV - Code Signing - S/MIME
4	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 e5dd5bd 221e7c7 4cf6468b 3146	rsaEncryption	2048 bits	SHA256with RSA	2014-09-11	2027-06-09	33B683FC7 9A0CB8085 F2C4DD76B E6CA35319 58406E35F2 C87467B58 EFCB45FA1	9E852C59DFC6FD6ABD4E17EA80B5F4E56FC04192D107258D54DA8A92528670D6	- standard - SSL - SSL EV - Code Signing - 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 Level I CA, O = Unizeto Technologies S.A., OU = Certum Certification Authority, C = PL	CN = Certum CA O = Unizeto Sp. Z. o. o. C = PL	0de21c3c a714fe4b 0a64ac4 69b1aacc c	rsaEncryption	2048 bits	sha1withRSA	2009-03-03	2024-03-03	7548E568C D2A00D1BE 9C9583B7A AC00732C8 0F84977E94 397F3AAF1 7C07BF8F7	55BB45D85F2157403DB9BAA033ED2CAD7EC9A0C490CC4C5CA8C5399E6EACB7D0	- standard - SSL - SSL EV - Code Signing - S/MIME
6	1	CN = Certum Level II CA, O = Unizeto Technologies S.A., OU = Certum Certification Authority, C = PL	CN = Certum CA O = Unizeto Sp. Z. o. o. C = PL	770ac6c2 ba51a41 c1d5d2f9 9b26b0c 1a	rsaEncryption	2048 bits	sha1withRSA	2009-03-03	2024-03-03	405C2DC29 33AC5AD5D 5523844F3E 59440804DF 720FB04760 AB9FB821B 621DA25	FE716FF3996CD6561B6B63A8C440FDF5489CF48F7834283EEBD19B380F3FBC22	- standard - SSL - SSL EV - Code Signing - S/MIME
7	1	CN = Certum Level III CA, O = Unizeto Technologies S.A., OU = Certum Certification Authority, C = PL	CN = Certum CA O = Unizeto Sp. Z. o. o. C = PL	64fe29dc cf38e030 dcffe34d 0568966 1	rsaEncryption	2048 bits	sha1withRSA	2009-03-03	2024-03-03	0D3EFB8F1 12406F0DD 5A42C6CE4 7F9635FD58 0E14ECD57 5A27DBA44 0EC243FC4	DE8A6FD403447319FB31B471A9468A00A87DEDC062E6970D770A51603832688C	- standard - SSL - SSL EV - Code Signing - S/MIME
8	1	CN = Certum Level IV CA, O = Unizeto Technologies S.A., OU = Certum Certification Authority, C = PL	CN = Certum CA O = Unizeto Sp. Z. o. o. C = PL	4ca5fec6 617c48b 056382a 8280e05 08c	rsaEncryption	2048 bits	sha1withRSA	2009-03-03	2024-03-03	F81D038262 81E61584B8 789BD349B 68EF089581 94E608D0D 1933265636 95AC90	14239787E8FEC7DFFA5F4C570B721B96C169ACCA3F4E95BC3057A3F8A60D7EEF	- standard - SSL - SSL EV - Code Signing - 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
9	1	CN = Certum Extended Validation CA, 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	7f510c05c9b39d04fff306ba2c56e827	rsaEncryption	2048 bits	sha1withRSA	2009-12-03	2024-12-03	33D8DFBD44CE117A9A91C0A5359874C48096735DAAB82A51F51F25E3515EB692	CF1EA15DC9C05ABC72AF0E62C48D93434AE0271B1AA4318BE3544126D24B6184	- standard - SSL - SSL EV - Code Signing - S/MIME
10	1	CN = Certum Code Signing CA, 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	00fa33b79dd496cfd10c846539a49d63b5	rsaEncryption	2048 bits	sha1withRSA	2011-09-20	2026-09-20	1BEF3990DA51B41010A69C3F47B326F52877FA10B9F05856319AE127AFBF2410	0E8CC50D64DF43D35971DEC320B4BA226B0DC844380EB4B2BB7F845B12A3B48A	- standard - Code Signing
11	1	CN = Certum Code Signing CA, O = Unizeto Technologies S.A., OU = Certum Certification Authority, C = PL	CN = Certum Trusted Network CA 2, OU = Certum Certification Authority, O = Unizeto Technologies S.A., C = PL	7f46f004f1a530486aa6b8b95e946748	rsaEncryption	2048 bits	sha1withRSA	2013-01-24	2028-01-24	8C8F2ACF398E86DCDE80B4D0CB3D5B90B20DDC4C85D78B411279A41BB7A7C31	1B82F666CEDC5D302B0A8F1CCE498CEECD730208A2337DC7664FEAC3DD2D0F92	- standard - Code Signing
12	1	CN = GIS CA, O = GAZINFORMSE RVICE Company limited, OU = CA, C = RU	CN = Certum Global Services CA, OU = Certum Certification Authority, O = Unizeto Technologies S.A., C = PL	3d77a35b76b02931bc300d969f6161b6	rsaEncryption	2048 bits	SHA256withRSA	2014-09-30	2024-09-27	066CA18FAD76FB0A287064691E7735F6BDDDC4BF12CF7A86E0B0C8AFA541DE16	2E816BCF852D830245DDC3534BCF85A53B0B19991A525CD328626FD74A40FC82	- standard - SSL - SSL EV - Code Signing - S/MIME
13	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	f18734d48395862a0c3af6e4b927381a	rsaEncryption	4096 bits	sha1withRSA	2013-01-24	2028-01-24	AF19834886EE88D4BC7F3907AEAC1BE6033C7C65D85D8EC482AE5F2D8C849F8B	7816C7B0566B46783B1C15D8A28D8B0D20CFEB20B3D13F79446E15C4A51C91DF	- standard - SSL - SSL EV - Code Signing - 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
13	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	b47de80b8745855c6e9c4e6bb189abb4	rsaEncryption	4096 bits	sha1withRSA	2013-01-24	2028-01-24	5ABEECD5E79ED66D094BFEAD76BE58BBFAC93A9AAC8EC6FC21E35C8664A390BE	337AC56F39FB8877B9F0524554B755D1835A807FFC9058DFC6DE1B707F696123	- standard - SSL - SSL EV - Code Signing - S/MIME
14	1	CN = SpaceSSL CA, O = Unizeto Technologies S.A., OU = SpaceSSL Certification Authority, C = PL	CN = Certum Global Services CA, OU = Certum Certification Authority, O = Unizeto Technologies S.A., C = PL	2539661f537d7b5cea2c999db63c083e	rsaEncryption	2048 bits	sha1withRSA	2014-04-16	2024-03-02	467DF2EEFF6D1A02D081E5D1CF893BD48D1BC03A6D602BDBDBB3F4976B889982	3A29828F3DDCA85FBD18628A052476431360AD67E89420282771C1236207D43C	- standard - SSL - SSL EV - Code Signing - S/MIME
15	1	CN = Certum Domain 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	26ddd22b46c9c44d5a694d39807e72ad	rsaEncryption	2048 bits	SHA256withRSA	2014-09-11	2027-06-09	4B801B24D1AFC92E7B9F3270BFCB0F31430BF151D2A87D6F6E205FB5D3DC12B2	129FB5DE501E24041CD14A81075FD1CDE257408D4A353E636912E38BDDA2D3FB	- standard - SSL - SSL EV - Code Signing - S/MIME
16	1	CN = Certum Organization 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	00b5ad0f63854cc4622e4b3923b2900216	rsaEncryption	2048 bits	SHA256withRSA	2014-09-11	2027-06-09	E751AF78A36BA498ED1A95D8E500F1D37B3761343069089CE9D581AA8DF35FAB	FD02362244F31266CAFF005818D1004EC4EB08FB239AAFAAAFF47497D6005D6	- standard - SSL - SSL EV - Code Signing - 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
17	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	00c5a2d3f6eb4d193c17a90aa38a296e54	rsaEncryption	2048 bits	SHA256withRSA	2014-09-11	2027-06-09	1D82D7F1FA9711B377367EFEE640C26A06DBC D99D2A17B0FFAB0316D92788AC3	6C47D365C13BC8CC3D6DEF5D8F07AB8DBEA3C8D4945D651AA9854A9C9A3CC71C	- standard - SSL - SSL EV - Code Signing - S/MIME
18	1	CN = nazwaSSL, O = nazwa.pl S.A., OU = http://nazwa.pl, C = PL	CN = Certum Global Services CA SHA2, OU = Certum Certification Authority, O = Unizeto Technologies S.A., C = PL	528a14cda91a4b45a5637c03647f42c1	rsaEncryption	2048 bits	SHA256withRSA	2014-09-30	2024-09-27	B0F86924C397D7F40422330DFE72F2F988A8C643B4A411922BB73E323F70C9BC	749CC529CDAAB9AE2858147C4B001AE1D5BE058FC165C3E74AF9704131C5E1C1	- standard - SSL - SSL EV - Code Signing - S/MIME
19	1	CN= Shoper® SSL, O = Dreamcommerce S.A., OU = 2Dreamcommerce S.A., C = PL	CN = Certum Global Services CA SHA2, OU = Certum Certification Authority, O = Unizeto Technologies S.A., C = PL	4e4f65e01f6b735afe9c072c607c4abf	rsaEncryption	2048 bits	SHA256withRSA	2014-09-30	2024-09-27	BB6AB346B01D98DAFE31ECACBA98BDC7B50D31A2D8673B93E0E4D3867FFAC45E	277CF4B65F530FCC07285EF89D8311884884004E4F2C7DBE7CA006E96536CD62	- standard - SSL - SSL EV - Code Signing - S/MIME
20	1	CN = SpaceSSL CA, O = Unizeto Technologies S.A., OU = SpaceSSL Certification Authority, C = PL	CN = Certum Global Services CA SHA2, OU = Certum Certification Authority, O = Unizeto Technologies S.A., C = PL	3d5dff1eb3144fc808cfa46bf8cc17b	rsaEncryption	2048 bits	SHA256withRSA	2014-09-30	2024-09-27	00E5F2E90785457AF72DEDA3CBD5541D57344D8E8DA1F0D0B1E15071A0D1968C	65DE322A1EF7AFFEDEB7387138C26060825B08CC27E1992DD9EAC8337297957B	- standard - SSL - SSL EV - Code Signing - 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 = Yandex CA, O = Yandex LLC, OU = Yandex Certification Authority, C = RU	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	e405478 30e0c64 52976f7a 3549c0d d48	rsaEncryption	2048 bits	SHA256with RSA	2015-01-21	2025-01-18	2CD15EFB2 738FCD65B 255CA7A71 01E01DF9B AD4DC43F0 19BB7017A 55E52323F6	C333B61638B0315FA801CCE21CC4EA96EF7F65A3999450186A99D19BB20128F7	- standard - SSL - SSL EV - Code Signing - S/MIME
22	1	CN = www.lh.pl, O = LH.pl Sp. z o.o., OU = LH.pl, C = PL	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	0a21d80 af794ed9 046816a 3c5db3d d33	rsaEncryption	2048 bits	SHA256with RSA	2015-01-28	2025-01-25	48F7E52533 DF6D183A3 56624C6B39 AA96163914 CFA77A7F1 7BC3CE72D 3F2105A	59A3456E750E325FCB1359DC29E828189B4982C119C64FACFD6728711B30532F	- standard - SSL - SSL EV - Code Signing - S/MIME
23	1	CN = Certum Digital Identification 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	66dae03 db84619 16b25ba 83fb174e 13	rsaEncryption	2048 bits	SHA256with RSA	2015-04-21	2027-06-09	41D72A22F D8E3CDB03 EF9C37D9D F6D303C9A 8B6F829734 91B7FE3D8 B4598C1B5	0F672D92A0B06CEE948F03B272502602C6E37D2A2AD694A31D5DE313196E9282	- standard - SSL - SSL EV - Code Signing - S/MIME
24	1	CN = nazwaSSL, O = nazwa.pl sp. z o.o., OU = http://nazwa.pl, C = PL	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	606c62dc 97d1a03 92ee9cb 12b21d6 dd9	rsaEncryption	2048 bits	SHA256with RSA	2015-12-31	2025-12-28	016E94F2A3 EA935D78A DF976B008 621229B63D FD26ABF45 BFC17964A 554088FE	A69C59966EBBCDFEC7F4FF0288C86FF60356FA7860208B93B43A095B0600CC1E	- standard - SSL - SSL EV - Code Signing - 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
25	1	CN = Certum Code Signing 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	6b326a0f0328d37a1d530bfd23bd48e2	rsaEncryption	2048 bits	SHA256withRSA	2015-10-29	2027-06-09	9FC9321AE26600F77F3B1D9EA54D6F36B54E4E9E65C2BE32E57061E34D4A904B	06E5BAF59E3DA805CE9F286DF1BAEA93D2BD671F6D73728A25EB6AC697F204C1	- standard - Code Signing
26	1	CN = Certum Extended Validation Code Signing 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	4e96c1ba06258a0c2aba27625e9064d3	rsaEncryption	2048 bits	SHA256withRSA	2015-10-29	2027-01-19	2A6162E44DFC3808BD888B7BE2372DEE22474340126E338EC1D2B9ECE143BBC5	176AAE8BDD5DD06A7DBD42862DC173BD838FFE3013103B097B9671C37BA6AE14	- standard - Code Signing
27	1	CN = Certyfikat SSL O = home.pl S.A., C = PL	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	311d7ede4920208bbd85ef7262bba	rsaEncryption	2048 bits	SHA256withRSA	2016-06-08	2026-06-06	E4F2788C1D6C8C9E64C776B40ECDA7A093DCD3B64E6FFCB5BD1D6D375B7916C4	A95F23B52AF10895886FB65323D29A9876EA7D396F805E4CA280D561C26E3DAD	- standard - SSL - SSL EV - Code Signing - S/MIME
28	1	CN = WoSign OV SSL CA, O = WoSign CA Limited, C = CN	CN = Certum Trusted Network CA OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	ef051a741a1d9409fca5e4640f8d3c9b	rsaEncryption	2048 bits	SHA256withRSA	2016-11-09	2026-11-09	319283D9CEB4147101A23FAE64D95E8329481AF09A7EED2D059D9E5076A8D3ED	C7F546F0C76C9A0DA9992E9884E6248B7CA2BB6ADE838BD7A03A8C41EE2A3064	- standard - SSL - 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
29	1	CN = WoSign Code Signing CA, O = WoSign CA Limited, C = CN	CN = Certum Trusted Network CA, OU = Certum Certification Authority, O = Unizeto Technologies S.A., C = PL	17ef72b4157d6f4b68e4bdd575e5ccae	rsaEncryption	2048 bits	SHA256withRSA	2016-11-09	2026-11-09	1594B417FFC9EC51F3A4DAAFD867E14D96759ECF258AFA846A207D35FB5D8A85	7B0BC3563D43309118F560A6C99A221C35399B10293F73BE41A12ACA0338075F	- standard - Code Signing
30	1	CN = WoSign EV SSL CA, O = WoSign CA Limited, C = CN	CN = Certum Trusted Network CA, OU = Certum Certification Authority, O = Unizeto Technologies S.A., C = PL	520a3a469d146b20297afd015e64abf5	rsaEncryption	2048 bits	SHA256withRSA	2016-11-10	2026-11-10	914B1AA8415C44D61E2CC0DA2924FCDA308AD9F3F6433483454C8DF768A272FC	C0AB07D9071A4CC1D34409178F8BCA058310A8B111DDCFA655658760226F50F9	- standard - SSL - SSL EV
31	1	CN= 4fastssl.com, O = 3S2N Sp. z o.o., OU = 3S2N Sp. z o.o., C = PL	CN = Certum Global Services CA SHA2, OU = Certum Certification Authority, O = Unizeto Technologies S.A., C = PL	7c0876ae51f52f127a953247b4834b62	rsaEncryption	2048 bits	SHA256withRSA	2017-04-18	2027-04-16	B0DED8BF4A93CA35BE0494DF933755BD8C5DD44C5417097772FC1B2F3B64E457	31AC346B31073DC0D134E29FC212CC4A15ED3530EEA1EDCFC8DACB36492D5DE4	- standard - SSL - SSL EV - Code Signing - S/MIME
32	1	CN = WoSign DV SSL CA, O = WoSign CA Limited, C = CN	CN = Certum Trusted Network CA, OU = Certum Certification Authority, O = Unizeto Technologies S.A., C = PL	e21a211aa891e2d35459ffd36d27c426	rsaEncryption	2048 bits	SHA256withRSA	2017-05-18	2027-05-18	1BF57EE00608F57024363764E1266A2EB5A4CA57D96E03C6D52E1C367014D45E	0330286DF3612C0E968DCD518A7A316D5E0790D1CA324B906B0EF017C0BE3EA7	- standard - SSL - 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
33	1	CN = TrustAsia DV SSL CA - C3, O = TrustAsia Technologies Inc., C = CN	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	f15cc09c2dcc610208b80ea3057243a9	rsaEncryption	2048 bits	SHA256withRSA	2017-10-23	2027-05-14	9190F5AC0872754718C7F8878B043EC6C87DDA275CE42AF2BECE3ED8C7909E99	C25F1E96000BC36E2AA5CD54BF24F48B76890A162E1AD8E104992650510626C2	- standard - SSL - SSL EV - Code Signing - S/MIME
34	1	CN = TrustAsia OV SSL CA - C3, O = TrustAsia Technologies Inc., C = CN	CN = Certum Global Services CA OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	309e97b6ccd8672842fa2059592920a8	rsaEncryption	2048 bits	SHA256withRSA	2017-10-23	2027-05-14	8446516F46817F287FD72A22EC82369B44D0FC90A42605B07CB6678BB9595076	7A142B1A5E16215183A13E840A862A437E293D9366921DB07EDB54F138AC0D78	- standard - SSL - SSL EV - Code Signing - S/MIME
35	1	CN = TrustAsia EV SSL CA - C3, O = TrustAsia Technologies Inc., C = CN	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	178666a8554acbf73457e6451a686c	rsaEncryption	2048 bits	SHA256withRSA	2017-10-23	2027-05-14	DF3BE1AFD14BA31FFA1CAF822EF47FC04E172908EDA83BF334FC52AF433C8DE6	BC0878CBBC4E0DAF7A9DA464AB16262A235BFDAED33B9F9569BA18FF34997580	- standard - SSL - SSL EV - Code Signing - S/MIME
36	1	CN = TrustOcean Certification Authority, O = QiaoKr Corporation Limited, C = CN	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	1509b3b352d6689b5a7272f372e7e028	rsaEncryption	2048 bits	SHA256withRSA	2017-10-23	2027-05-14	02A9F195518772E132C01750C6770EA0C05DDB0FA274D95FA031274E0131E52E	A416A2BA490C454E23B85BF087DB7B137F4F47D9747E60F8692FF4C8DF0E062B	- standard - SSL - SSL EV - Code Signing - 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
37	1	CN = GDCA TrustAUTH R4 DV 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	9e9cb69426c45cc4306d3e1cc2a79efc	rsaEncryption	2048 bits	SHA256withRSA	2018-01-26	2027-05-20	71FB108FAF19908C9B935817EA18B359A72813B86FA8936E8CDBB6134DE7FF78	6CDF9DCBF3510A3BB402761D62D0C5E4E7AFC51D9CFF01F02BD53256DC567ADF	- standard - SSL - SSL EV - Code Signing - S/MIME
38	1	CN = GDCA TrustAUTH R4 OV 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	b0efd02a81bf1ce89f7a18c294e4c33c	rsaEncryption	2048 bits	SHA256withRSA	2018-01-26	2027-05-20	5FF9034491B2A3582BE57812E211A4035247D7D45B9F4FA301DC51906C0E7E2B	E81B01F9F5692CF3823C6FD35886542BFAEEFC5EA94F4E246E42C4A9FC5FE8AB	- standard - SSL - SSL EV - Code Signing - S/MIME
39	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	d5f83e8ddaf67c8829e89016b7877d13	rsaEncryption	2048 bits	SHA256withRSA	2018-01-26	2027-05-20	1A57EB460C3D8D6F55342ED8D5A5C3B13B0787A7543C012E77C7E1CCE3BE11D6	6869242CD8AD2AC77BC028947BC7D0C4F6E9CBF0899D65709810D89F94B5D70D	- standard - SSL - SSL EV - Code Signing - S/MIME
40	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	b0a20c009da4b5eba644c79c228270c5	rsaEncryption	2048 bits	SHA256withRSA	2018-01-26	2027-05-20	A75F396D8C6214EF99C0A015FA6227787C3EBEE1F6AEA589033B28CA37B0F21	B5F62EC38131CD14B1FC95B877F4D210BE4BFACC7E6A6AA1422D89E34B7AC4C1	- standard - SSL - SSL EV - Code Signing - 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
41	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	c557eac31e7e21fb026f20e096b6bad4	rsaEncryption	2048 bits	SHA256with RSA	2018-05-20	2027-05-20	5A125BD51863EBE5177ED55491E555E4288E6707D617881DB24115BF25A93713	18958D03AFB409687A1BC263860D0D735A25A004AB60E0F0E45D6333587437AE	- standard - SSL - SSL EV - Code Signing - S/MIME
42	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	27c6c981d3d15d0f78377121f8233e00	rsaEncryption	2048 bits	SHA256with RSA	2018-05-20	2027-05-20	04F102C7AC0DABDD29F20BB462927515CD03C7B8744A692D7832B9C439974F96	EEDA15BA000B006EAD49A21BBE769F3BA6CE75C9249F0114D8DD882DFC0F2C1B	- standard - SSL - SSL EV - Code Signing - S/MIME
43	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	349bb144ae5611e99bf4345c7fc9aefc	rsaEncryption	2048 bits	SHA256with RSA	2018-04-17	2027-05-18	AA8D50CB360250233A4D3A647E5C9695ED8446E350F2AEFF7DA02B754660E09	6970E396621417DCEE315AAC28BB5EA3161F175020F7F4E9BA17DADE58DBB08D	- standard - SSL - SSL EV
44	1	CN = WoTrus OV SSL CA, O = WoTrus CA Limited, C = CN	CN = Certum Trusted Network CA OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	05ed88d8088d11ebddd623963cbaed42	rsaEncryption	2048 bits	SHA256with RSA	2018-04-17	2027-05-18	C710CA27A5ACAC86755FF1355C8D4842050D19CD52AAE4A4E549323811CAAB82	F6BF88B2A8DCD4FEB4015984EC2F1427C8017D140CF41F22EE689E0D6718012F	- standard - SSL - 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
45	1	CN = WoTrus EV SSL CA, O = WoTrus CA Limited, C = CN	CN = Certum Trusted Network CA OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	07dded674e2a2c08c9de666c971541f	rsaEncryption	2048 bits	SHA256withRSA	2018-04-17	2027-05-18	6DF9B7D0A DAE7D00B7 81020DC65 ECEC11128 15240426B2 B879C303D E3CBF4257	EA6963696750564A228B3EB88E0FD4304C5DA27A7AF92D1D4199357A50078315	- standard - SSL - SSL EV
46	1	CN = WoTrus Code Signing CA O = WoTrus CA Limited, C = CN	CN = Certum Trusted Network CA OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	6ea1d4945f0e69e9d6f1482c586a71af	rsaEncryption	2048 bits	SHA256withRSA	2018-04-17	2027-05-18	AC81415641 A2B9207251 5978BEE90 9CF541CB5 864B0632C9 F5955AE8D B65DC0F	0829CAB693AADFAF21C77876DBE76BB9AC7491608FFAEBF7D1D53C289FC88452	- standard - Code Signing
47	1	CN = Abitab SSL Domain Validated, O = Abitab S.A., OU = IDdigital, C = UY	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	101d422255e1fe416660c480177611	rsaEncryption	2048 bits	SHA256withRSA	2018-08-22	2027-05-02	F708359316 E5FDEC3EE 7EEEDA5AB 6D3CFBBF8 FD6E00DCB 64B9C364A 4E1BE53AB	E67D18639367C5B29BF7A5683B56B0F0C23155C8FE9452BCFE51681436023742	- standard - SSL - SSL EV - Code Signing - S/MIME
48	1	CN = Abitab SSL Organization Validated O = Abitab S.A. OU = IDdigital, C = UY	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	f0d59415c6decba4f888f2837e606810f	rsaEncryption	2048 bits	SHA256withRSA	2018-08-22	2027-05-02	13818B0ED 4C4C0EED4 09E02D3BC 89B6CEBBA 14B6714885 02FDF07321 B339995E	EEF9066424C23508E9C65F84671B14E16DA1BEC358E75FC6382ECA070AE861BE	- standard - SSL - SSL EV - Code Signing - 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
49	1	CN = Abitab SSL Extended Validation O = Abitab S.A., OU = IDdigital, C = UY	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	63e9b37a0fea72231484b67eed4ba9e3	rsaEncryption	2048 bits	SHA256with RSA	2018-08-22	2027-05-02	CB629A02C5355F25F5914183DEA871D5C4ED4656BC12C38C46ABBA D226DC882	93B281BD81D83CF986659DFFD0AF57993B92E6E4614162539F750524CE11BBCB	- standard - SSL - SSL EV - Code Signing - S/MIME
50	1	CN = QIDUOCA 2018 DV SSL, O = "Suzhou Qiduo Information Technology Co., Ltd.", OU = Domain Validated SSL, C = CN	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	d8f02e7002e2f53fa539ea253a264d3a	rsaEncryption	2048 bits	SHA256with RSA	2018-08-22	2027-05-02	1E34F5D6EC5BD1D5D7C599E1E8552611654750BB52B4F6752CBCD161D91DA2A6	E372221266A330DD13EB1388DFAAF1FAB11DF254B63385CB637BFEF8FB5FB675	- standard - SSL - SSL EV - Code Signing - S/MIME
51	1	CN = Shuidi Webtrust SSL Domain Validated O = Shanghai Ping An Credit Reference Company Limited, C = CN	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	9073d7674c9cba7bbe10706593dd7233	rsaEncryption	2048 bits	SHA256with RSA	2019-02-07	2027-05-21	CFC52F65523268E4E4268B25D959FC1DB727EC284A0A8B0512628182F44B87A5	4D67237B2CFACFF3DDC83C2FF1C92A8E0A98A71BD04ED39F8AFF42AAF99371D	- standard - SSL - SSL EV
52	1	CN = Shuidi Webtrust SSL Extended Validated O = Shanghai Ping An Credit Reference Company Limited, C = CN	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	a51d3444bcdeb1f33240001bd58d2138	rsaEncryption	2048 bits	SHA256with RSA	2019-02-07	2027-05-21	600458F0CE293554234AC9395E0C3E3776FB65A42CB14DFE325DAAE5CE793F54	6C40D07F4705A5B4F04C6AECDC5A1BF5FD38D2B6CF2DB7F212CA251075BE125D	- standard - SSL - 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
53	1	CN = Shuidi Webtrust SSL Organization Validated, O = Shanghai Ping An Credit Reference Company Limited, C = CN	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	b3780c84db0d041b1cd66a40cb8d9573	rsaEncryption	2048 bits	SHA256with RSA	2019-02-07	2027-05-21	6D0129552FCFD93689048860A445C10BC8C7A972E5A12F5BE0490A7F75882C4F	EE09D49C7CF441840DA5158D0E70D4C6CAEB4FCCFE6758EE4CC45C71A287DF39	- standard - SSL - SSL EV
54	1	CN = OKCERT R4 DV SSL CA G2, O = "Kingnet Information Technology Co., Ltd.", C = CN,	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	69c0570d6e2146319ad1e5834e049dcc	rsaEncryption	2048 bits	SHA256with RSA	2019-06-12	2027-05-21	BADEF241FE1D335A824795ED281A1856FA6FB4D2	7EB445EA38A46A6411F0A12A0E16CD3D073E91B125679977041FFBCE83BE3C1A	- standard - SSL - SSL EV
55	1	CN = OKCERT R4 EV SSL CA G2, O = "Kingnet Information Technology Co., Ltd.", C = CN,	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	13109cbcd429eae881f09e215f2ded38	rsaEncryption	2048 bits	SHA256with RSA	2019-06-12	2027-05-21	B1C04671EFA88E0D41CA5F9B952A02EE2C62114B	C5453F7C147016A9AA0F5F4BB1D217DEBE1C2D368C53CF74D35F55C5233C498A	- standard - SSL - SSL EV
56	1	CN = OKCERT R4 OV SSL CA G2, O = "Kingnet Information Technology Co., Ltd.", C = CN,	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	ec4e0eb6ab2a278a66cf3b0d619a9d82	rsaEncryption	2048 bits	SHA256with RSA	2019-06-12	2027-05-21	853218FF779AC99180D81B9117BA144002316A42	BCC3A54D7083116316CE03B9A40CA36F336F4839AC581862D4311A84F701514D	- standard - SSL - 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
57	1	CN = SZCA DV SSL CA, O = "Shenzhen Digital Certificate Authority Center Co., Ltd", C = CN,	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	db3ae99f cf6407d8 daeef98c c77f8c13	rsaEncryption	2048 bits	SHA256with RSA	2019-07-16	2027-05-21	76B3B0CBF 54E9121B69 5577B830FF C15B20A1C 30	F6787FA8CAD7D2C279A0374BFB503807CC6ADCC7C23709273DD5A4047D1AEF78	- standard - SSL - SSL EV
58	1	CN = SZCA OV SSL CA, O = "Shenzhen Digital Certificate Authority Center Co., Ltd", C = CN	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	2036943 cbea08b 692a296 d662440 64a2	rsaEncryption	2048 bits	SHA256with RSA	2019-07-16	2027-05-21	2CC610A7F 414EC84193 FB253EC98 CB3CC9F75 764	CC0B2512EE20280C36F30D57084ACB6B8636D94B481742E424335C7767E758C6	- standard - SSL - SSL EV
59	1	CN = SZCA EV SSL CA, O = "Shenzhen Digital Certificate Authority Center Co., Ltd", C = CN,	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	4e0d59e 13a1a08 eb0dae8 9e91b67 50da	rsaEncryption	2048 bits	SHA256with RSA	2019-07-16	2027-05-21	B3FEDBE44 995D0A100 FB8569DD9 ED20C9437 B0CA	7FBF5DB4917639930076AAFF78FC91DDA0EFEEA86CAD38A18D98947D7CD36948	- standard - SSL - SSL EV
60	1	CN = Certum Extended Validation RSA CA, O = Asseco Data Systems S.A., C = PL,	CN = Certum Trusted Root CA OU = Certum Certification Authority O = Asseco Data Systems S.A. C = PL	239c8d4 1dd60d0 4ea6a32f e004a9e 85d	rsaEncryption	2048 bits	SHA256with RSA	2019-10-17	2034-10-17	4E08958E4 BC323EBA3 3A18CAB83 6AFD66499 12C9	1C4EEA3A47ABD122568EAB547E06B52111F7F388662C246C8ECBE2660B9F26F1	- standard - SSL - 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
61	1	CN = Certum Extended Validation ECC CA, O = Asseco Data Systems S.A. C = PL,	CN = Certum EC-384 CA OU = Certum Certification Authority O = Asseco Data Systems S.A. C = PL	63b4fbe02028aa507d9293416ff4104f	id-ec PublicKey	384 bits	Sha384 ECDSA	2019-10-17	2034-10-17	1CE14E22497457E92B8F99E12A560B62DCA1E2A3	C7063A8DC668205E66153108FBE3BDBF6EDB6F8CE5F616A369BEF6324DCB6354	- standard - SSL - SSL EV
62	1	CN = vTrus DV SSL CA G1, O = "iTrusChina Co., Ltd.", C = CN,	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	cb046b5804e8f3da024bcfec24410d08	rsaEncryption	2048 bits	SHA256with RSA	2019-12-20	2024-12-20	62741D646D8094D6DAC3825FA297F6307FE5C4C9	A5764DFD0454AD3A06428B907DB8AA436DA6317209EAFD61DD42E56AE77F9B13	- standard - SSL - SSL EV
63	1	CN = vTrus OV SSL CA G1, O = "iTrusChina Co., Ltd.", C = CN,	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	b8f9924feedb725003e015cf689f8bf6	rsaEncryption	2048 bits	SHA256with RSA	2019-12-20	2024-12-20	6B55C9822073E0352524E1485754B079254B79A4	DAFD2506A7E917C126E5904479439D7795087F04FA7BBE614796727B9A161D6F	- standard - SSL - SSL EV
64	1	CN = Root Global CA - G2, O = "Root Networks, LLC", C = US,	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	c3e00f9f002ec559ba02c4a5f2600c5e	rsaEncryption	2048 bits	SHA256with RSA	2020-01-30	2027-05-20	B1C04671EFA88E0D41CA5F9B952A02EE2C62114B	309A7823BB3D1DDF44A573EC0BF9FD5166625FDE73776184C62212B4C0B4E94E	- standard - SSL - 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
64	1	CN= XinChaCha Trust SSL Domain Validated O = Beijing Xinchacha Credit Management Co., Ltd. C = CN	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	56814be297e30ceb2e65988547af504a	rsaEncryption	2048 bits	SHA256with RSA	2020-05-18	2025-05-18	786c05c36f01ad5cd7d2ce8a970f72e906f2554d	4D45039EECCA114D64822A0AA80944D66E08FAEE62B1D253F140298769F227B4	- standard - SSL - SL EV
65	1	CN=XinChaCha Trust SSL Organization Validated O = Beijing Xinchacha Credit Management Co., Ltd. C = CN	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	0a05471ba855d169cf84f3366ceb09ec	rsaEncryption	2048 bits	SHA256with RSA	2020-05-18	2025-05-18	203283bf97547911758cfa46730550f40e7d3c4	8E2D07BFC591B14FA314686E1CC8D9BB5F6F8D091C0595194AA2C7585B991887	- standard - SSL - SSL EV
66	1	CN=XinChaCha Trust SSL Extended Validated O = Beijing Xinchacha Credit Management Co., Ltd. C = CN	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	42be50b1a6753c36409a037888a60eab	rsaEncryption	2048 bits	SHA256with RSA	2020-05-18	2025-05-18	1ea4b2fd1806ae3f3fcfc8e381b670974dc7d01	FE7340370D595A39FFE10DCE2197447CE67C98BE28F0330C8FC85DD03212486D	- standard - SSL - SSL EV
67	1	CN=Root CA - G3 O=Root Networks, LLC; C=US	CN = Certum Trusted Network CA OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	00C3E00F9F002EC559BA02C4A5F2600C5F	rsaEncryption	2048 bits	SHA256with RSA	2020-09-09	2028-09-09	ba305f3267d35ffddd096415f3d658d93c38aa115fda90366baeac2765c5f5	6C834388F2A0D06949C63EFCF30D77782E25A8250135939E54960214540EEA45	- standard - SSL - SSL EV Revoked 2023-05-22 10:21:34 UTC

CA #	CERT. #	SUBJECT	ISSUER	SERIAL NUMBER	KEY ALGORITHM	KEY SIZE	DIGEST ALGORITHM	NOT BEFORE	NOT AFTER	SUBJECT KEY IDENTIFIER	SHA-256 FINGERPRINT	OTHER INFORMATION
68	1	CN= Yekta Domain Validated SSL CA 1 O = Pardazeshgaran Shahr Hooshmand Yekta Co. C = IR	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	2635b3c efefd15d 42b2248 6c70946 aa8	rsaEncryption	2048 bits	SHA256with RSA	2021-01-20	2027-05-31	ad556fe9503 876ccb97ae b7a6c6c226 b81b1061c	3818995B28A090D83A61667117D50C77C1F1DC7A137680F2E55CE755314F2D0A	- standard - SSL - SSL EV
69	1	CN= Yekta Organization Validated SSL CA 1 O = Pardazeshgaran Shahr Hooshmand Yekta Co. C = IR	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	2f60421d a95dcb2 13e5ff64 7b0b9a8 36	rsaEncryption	2048 bits	SHA256with RSA	2021-01-20	2027-05-31	86ed7f8a525 80169a6311 e36566b1a2 e6aa742b6	17F08A4F5DC38C49BB17DCD64B2CE742CFEAB99BE5B67DBC14C2E896771C60E1	- standard - SSL - SSL EV
70	1	CN=United Trust; O=United SSL Deutschland GmbH; C=DE	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	4BE92A9 0278495 1DC13A C6CE37 D230FE	rsaEncryption	2048 bits	SHA256with RSA	2021-02-24	2027-05-31	5D9BB6215 EC56915549 D083362FC 48460EE703 3BB10D831 C7CC233F0 63952D37	68FC6237C4B8722A1BDFB9583F728840A18BFCC3D6C6E1D6B0A307624577DBD0	- standard - SSL - SSL EV
71	1	CN=Certum Code Signing 2021 CA; O=Asseco Data Systems S.A.; C=PL	CN=Certum Trusted Network CA 2 OU=Certum Certification Authority O=Unizeto Technologies S.A. C=PL	0099A38 00A2655 3B65ABD C6E84A6 B3EA39	rsaEncryption	4096 bits	SHA256with RSA	2021-05-19	2036-05-18	E64D532CF 987EE0260F DA04A8251 103CB650F 7CF8FC92A 7D3865F5D 6E8992E50	5AC82CBE9F28351E85D5262293BCFC8BACABEAD1294F248C1DF17F81CE5AC3CE	- standard - Code Signing

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 Extended Validation Code Signing 2021 CA; O=Asseco Data Systems S.A.; C=PL	CN=Certum Trusted Network CA 2 OU=Certum Certification Authority O=Unizeto Technologies S.A. C=PL	00BBF0C CB5B7B8 31FD21A E32778A E40C89	rsaEncryption	4096 bits	SHA256with RSA	2021-05-19	2036-05-18	F5DA4F4D2 E1261D2CD 32497F9EE1 7674B710B7 BE86F4A44 EFA44314B C4F778DB	D6D9BFA813BFCBAB204C1AE503D2DE4093D2FC0041E365485AD02139F66AA76A	- standard - Code Signing
73	1	CN=Certum Timestamping 2021 CA; O=Asseco Data Systems S.A.; C=PL	CN=Certum Trusted Network CA 2 OU=Certum Certification Authority O=Unizeto Technologies S.A. C=PL	00E7FF6 9C73B35 CE4B912 6D8747C 68A587	rsaEncryption	4096 bits	SHA256with RSA	2021-05-19	2036-05-18	308D118FA E3DB23F51 4FDD10984 DB28BAB2F 98CCA6316 19964FB511 69B3A1D21	F882EFFC16DE28D508C092E35825B00242CF963071C279EF09310D9D95784B35	- standard - Code Signing
74	1	CN=WoTrus Code Signing 2021 CA; O=WoTrus CA Limited; C=CN	CN = Certum Trusted Network CA OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	389CD29 D8FDBC 739F549 33BECE9 893B4	rsaEncryption	2048 bits	SHA256with RSA	2021-05-26	2027-05-18	28C16484C ECD9716C5 C7C9134AD F7EB2DA53 63D23DC03 839DA3ED7 EF3AE67A3 0	2D687BA569A21640D62F424A999FF36FCAC2203815FCAF5EB0FB77C98C9EC45F	- standard - Code Signing
75	1	CN=Nyatwork; O=Nyatwork Communication Ltd; C=CA	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	00FB512 F8FE205 EA41401 929C6D3 DFEBDF	rsaEncryption	2048 bits	SHA256with RSA	2021-10-19	2026-10-19	A348E3C73 6C8B7C8E3 F33693E881 4EC390777 D402DD46A 4D85F355A 8CEE00156	2A6286C3AC09AE6CD3748B24A33F30FB93DA991F883F7002824B14A914955855	- standard - SSL - 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
76	1	CN= Xcc Trust OV SSL CA C=CN,O=Beijing Xinchacha Credit Management Co., Ltd.,	CN = Certum Trusted Network CA OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	F244082 DABA90 DA58C72 E9F29A9 340AE	rsaEncryption	2048 bits	SHA256with RSA	2022-07-01	2027-06-30	FAA0CBC2 C75D81B52 09207200BB 63B703B090 E55	2628D65E94D62E57B6344C31B22920EDA316D9BE68EEF5EACC7362206B7DEAFA	- standard - SSL - SSL EV
77	1	CN= Xcc Trust DV SSL CA, C=CN,O=Beijing Xinchacha Credit Management Co., Ltd.,	CN = Certum Trusted Network CA OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	C2B755D B93BD47 2C18D35 10BD8EE A0DE	rsaEncryption	2048 bits	SHA256with RSA	2022-07-01	2027-06-30	A1438E0034 09E57B3533 AE758904F2 32610FA8E7	B81D7010D7E495179BB5BB504223EF2EEF3056557EE3924533718169F1A670C8	- standard - SSL - SSL EV
78	1	CN= ANTIC DV CA C=CM,O=National Agency for Information and Communication Technologies	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	D32C455 6DD4AC FE0284D 1368DC8 3757F	rsaEncryption	2048 bits	SHA256with RSA	2022-07-28	2027-05-31	4D4D1A5D4 5929128557 0ADDA9657 E61FD648D 85A	E53A69193E22FAECC833F80631BE15E020A04C20BB679FD351F0CB95C0089E50	- standard - SSL - SSL EV
79	1	CN= SSL Secure Site CA C=GB,O=SSL Limited,	CN = Certum Trusted Network CA OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	670033A EB205D5 417F34D DDC3E9 4B562	rsaEncryption	2048 bits	SHA256with RSA	2022-09-29	2027-09-28	77E894CD0 062EE9AA2 359E084824 18B31E56E B74	D859828E4E8C35ECC38E415E1D0CFFD4A9DFC116205401D1298FC13347DC0187	- standard - SSL - 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
80	1	CN= netartSSL C=PL,O=netart.com sp. z o.o.,	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	D32C4556DD4ACFE0284D1368DC837580	rsaEncryption	2048 bits	SHA256withRSA	2023-01-23	2027-05-20	63C436A4A1748C5289876ADC59620CC675CEB5BC	E21A784343F763F5EFE894DDC81E0B5B92A89DF65056FCA8C49AD4414CD74EB4	- standard - SSL - SSL EV Revoked 2023-05-10 09:40:43 UTC
81	1	CN= Sooma Digital Trust Validation, C=PT,O=Sooma.com Web Services Lda,	CN = Certum Global Services CA SHA2 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	40103C009518C0E91C1361E37A3B95AA	rsaEncryption	2048 bits	SHA256withRSA	2023-01-23	2027-05-20	9FE3F487C2D394D30410D53A571D7822D938465F	CF8F3E3A993C9D020068B7AB200AC94200748731822FD5B32767226A2EE4EFA5	- standard - SSL - SSL EV
82	1	CN= cyber_Folks O= cyber_Folks S.A., C= PL	CN=Certum Global Services CA SHA2 O=Unizeto Technologies S.A. OU=Certum Certification Authority C=PL	D32C4556DD4ACFE0284D1368DC837582	rsaEncryption	2048 bits	sha256WithRSAEncryption	2023-03-16	2027-05-20	83F0DAD05C24157EB0F35957225465C5FA1342F8	2E198C227F93F9CF96F7B8A1986F659735502C956407DB36F0D4A3D601F42472	- standard - SSL - SSL EV Revoked 2023-05-15 08:11:26 UTC
83	1	CN=netartSSL O=netart.com sp. z o.o., C=PL	CN=Certum Global Services CA SHA2 O=Unizeto Technologies S.A. OU=Certum Certification Authority C=PL	4566BBEA77B9B40DC6867FECCD158C99	rsaEncryption	2048 bits	sha256WithRSAEncryption	2023-05-10	2027-05-20	6A8F32FEB9D200BDF07B642969274DA90402CAC2	5A86CB297E37CFF1DB01FEA8E14FE4C5E054F8B228E976E4A782E3AEA723FC1B	- standard - SSL - 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
84	1	CN=cyber_Folks O=cyber_Folks S.A. C=PL	CN=Certum Global Services CA SHA2 O=Unizeto Technologies S.A. OU=Certum Certification Authority C=PL	8C353DD1E4236E8D51A3AD574E262090	rsaEncryption	2048 bits	sha256WithRSAEncryption	2023-05-15	2027-05-20	05DDB1C4443BE1A2825372E2765DA914F924AD45	35F8CC89610508BC16BD332DA543964698C72D67895FEB4E068BEA5E06686457	- standard - SSL - SSL EV
85	1	CN=Root Networks CA O=Root Networks, LLC C=US	CN=Certum Trusted Network CA O=Unizeto Technologies S.A. OU=Certum Certification Authority C=PL	F9C8E2531E1B7689499D5C276916DF97	rsaEncryption	2048 bits	sha256WithRSAEncryption	2023-05-15	2023-09-09	1806CD5DD79B56BA02E6232E4D7C1AFD1DF0C9CB	BF64C06D1D48D977A0BC2DFC917E8E0D6342BD11590471636D7A0806CC8DF003	- standard - SSL - SSL EV
86	1	CN=IKARUS mail.security O=IKARUS Security Software GmbH C=AT	CN=Certum Global Services CA SHA2 O=Unizeto Technologies S.A. OU=Certum Certification Authority C=PL	83E06505E0B5D1ACDC0858527EF53177	rsaEncryption	2048 bits	sha256WithRSAEncryption	2023-06-13	2027-05-20	89A399FD6194EAE5F21CA956B28273EF5C4CB06	002E6D642C2EE639B40FBED1020EE7BEEDF2E521F9B2BDE46C958D32E6353E9D	- standard - S/MIME
87	1	CN=Certum SMIME RSA CA O=Asseco Data Systems S.A. C=PL	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	0CE13227A82CE6A3D0F357C36CB61E86	rsaEncryption	4096 bits	sha512WithRSAEncryption	2023-08-01	2038-07-23	66FBC30FBEF4BFE09CC9AB4DDE4719BDC0CAA668	ABC27367A236EC90F91B6457CBAEF942BF657C9C97E87F4A2CC8302160A67AB8	- standard - S/MIME
88	1	CN=Certum SMIME ECC CA O=Asseco Data Systems S.A. C=PL	CN=Certum EC-384 CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	8A2527AD93733CC2276C488C437433B2	id-ecPublicKey	384 bits	ecdsa-with-SHA384	2023-08-01	2038-07-23	4997927052227E313FC3415B31F792AD03AA0693	1131362B431A474A0BC5F2BFEC5B3CC5B5D5E1BDE9FAE64C50AC8E26CE295B56	- standard - S/MIME

89	1	CN=Certum Global Services SMIME RSA CA O=Asseco Data Systems S.A. C=PL	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	0BA3582 EDD7AB 32A93A1 E32B27D 04ACA	rsaEncryption	4096 bits	sha512WithRSAEncryption	2023-08-08	2038-07-30	7F9D5C72F F6C3AFF28 27DBC1291 6724E6119 E908	41C7155655F8DC27BA1128248980067D46836B6450CF4E1062C8C2772606773F	- standard - S/MIME
90	1	CN=IKARUS mail.security O=IKARUS Security Software GmbH C=AT	CN=Certum Global Services SMIME RSA CA O=Asseco Data Systems S.A. C=PL	2D4FAFA 5AF0BBC DF2C8D FC4AC4 C043E3	rsaEncryption	2048 bits	sha256WithRSAEncryption	2023-08-08	2028-08-01	7FD938B52 6A34BEFA E211E7D32 14DA0CAE ED0956	8006BF194B9856EAC36A0A1A4B88EAE54018F06F8CED90E7669D5F373D71D59	- standard - S/MIME
91	1	CN=Nya Labs CA O=NYA LABS LLC C=US	CN=Certum Global Services CA SHA2 O=Unizeto Technologies S.A., OU=Certum Certification Authority C=PL	8B794BA FFB4350 1C11D1A 3D583EC 4CFA	rsaEncryption	2048 bits	sha256WithRSAEncryption	2023-11-02	2027-05-22	AA92F53F7 98D5D712C 0AFFACD8 A6F97D3C8 35C57	7E0A8C9844D0F99EC84307483F2E331980749F88A7185649D4D99FA3C3589E52	- standard - SSL - SSL EV
92	1	CN=CFCA DV RSA CA O=China Financial Certification Authority C=CN	CN=Certum Global Services CA SHA2 O=Unizeto Technologies S.A. OU=Certum Certification Authority C=PL	BA750BA DFB4AF BC52010 7CE31AF 7AB58	rsaEncryption	2048 bits	sha256WithRSAEncryption	2023-12-05	2027-05-23	7788AD930 9E10F72DF C26586868 459E9F986 D16F	ED124F475AAF4D98D1E618D3BE32F003B3CBB873C7D15B0F1A0089739CB4E4C	- standard - SSL - SSL EV
93	1	CN=CFCA EV RSA CA O=China Financial Certification Authority C=CN	CN=Certum Global Services CA SHA2 O=Unizeto Technologies S.A. OU=Certum Certification Authority C=PL	B3F601D B6BAAE8 14497D3 FB59E12 16E5	rsaEncryption	2048 bits	sha256WithRSAEncryption	2023-12-05	2027-05-23	BBBABE00 F4D0AB06 E60FB87BF 0B4180FA3 D515E8	98380E437E1A46E6AC2AA64D7BE6D71F2969E510ACAF5D37846CF12B8AFE7B3E	- standard - SSL - SSL EV
94	1	CN=CFCA OV RSA CA O=China Financial Certification Authority C=CN	CN=Certum Global Services CA SHA2 O=Unizeto Technologies S.A. OU=Certum Certification Authority C=PL	D743806 18371EA 603EB43 2409C2B 8DDA	rsaEncryption	2048 bits	sha256WithRSAEncryption	2023-12-05	2027-05-23	32FC68609 02517C79B 79FCC9427 70710DD24 0E52	076EA7358389410DF85D911D251B9A582C5E6F684E0F046ED430187F0533AEFC	- standard - SSL - SSL EV

95	1	CN=CFCA DV ECC CA O=China Financial Certification Authority C=CN	CN=Certum Global Services CA SHA2 O=Unizeto Technologies S.A. OU=Certum Certification Authority C=PL	2756495 F96F59F 3DCFD 2ED5B72 DA76B	rsaEncryp tion	2048 bits	sha256WithR SAEncryptio n	2023-12- 05	2027- 05-23	C9F74AFE5 EE4134B0D A4919EDC 5B50C75A5 37612	690DD5AB690009813339BC668C6D3839144F34E17E5BE7F0958879E9A9E057FB	- standard - SSL - SSL EV
96	1	CN=CFCA OV ECC CA O=China Financial Certification Authority C=CN	CN=Certum Global Services CA SHA2 O=Unizeto Technologies S.A. OU=Certum Certification Authority C=PL	FA1CB08 C7144FB D63A0A0 33CEAE D4634	rsaEncryp tion	2048 bits	sha256WithR SAEncryptio n	2023-12- 05	2027- 05-23	63EF0430A 4746EE144 E1EC3E38 F1211F7F4 21171	A92BF1FDFB2DA2A1CE60E7440992E53A410CE2FAA8AB71EAD7444F2486E5FA9F	- standard - SSL - SSL EV
97	1	CN=CFCA EV ECC CA O=China Financial Certification Authority C=CN	CN=Certum Global Services CA SHA2 O=Unizeto Technologies S.A. OU=Certum Certification Authority C=PL	CC081BF 16779E9 CBEFE2 E0190EF 51EE6	rsaEncryp tion	2048 bits	sha256WithR SAEncryptio n	2023-12- 05	2027- 05-23	213933BE1 4F3D0F6CF A85607731 0EA5C75E D4937	D65810FFD7BF9A0E5779DF6753BA3894379F850B1B743AEC55786F98AC29011F	- standard - SSL - SSL EV
98	1	CN=vTrus DV SSL CA G2O=iTrusChina Co., Ltd. C=CN	CN=Certum Global Services CA SHA2 O=Unizeto Technologies S.A. OU=Certum Certification Authority C=PL	E981765 6FCFF3E BE0FF6F 9FCCB37 B592	rsaEncryp tion	2048 bits	sha256WithR SAEncryptio n	2023-12- 07	2027- 05-25	4A5FC3B35 515AE2C4 D5CAFD59 8C9BC9D8 61326E2	D7A43AAB5B59F58CB68CC01CF838A392EE913FF330FE7C3309EDA30B84541D07	- standard - SSL - SSL EV
99	1	CN=vTrus OV SSL CA G2 O=iTrusChina Co., Ltd. C=CN	CN=Certum Global Services CA SHA2 O=Unizeto Technologies S.A. OU=Certum Certification Authority C=PL	61EF741 269E462 001863A 280073D FC45	rsaEncryp tion	2048 bits	sha256WithR SAEncryptio n	2023-12- 07	2027- 05-25	5F4C6A839 F36AE1D2 BE54659C DC92C395F 62D659	3296EB060C887E8EC0E59903E9CC8D5F6302EE8FABA95620AE5DE2364333F753	- standard - SSL - SSL EV
100	1	CN=LH.pl CA O=LH.pl Sp. z o.o. C=PL	CN=Certum Global Services CA SHA2 O=Unizeto Technologies S.A. OU=Certum Certification Authority C=PL	833BCAD 443EE6A D80D385 3BAD3D2 EDC4	rsaEncryp tion	2048 bits	sha256WithR SAEncryptio n	2024-01- 02	2027- 05-11	DD86D4076 1905209C8 4D011AC38 35D59EAC E68C2	E4B2A0736F95950D11B82C9E6C32031E1420E06A66493E665F128AE499498FAB	- standard - SSL - SSL EV

101	1	CN=Certum DV TLS G3 E39 CA O=Asseco Data Systems S.A. C=PL	CN=Certum TLS ECC Root CA O=Asseco Data Systems S.A. C=PL	0CFA8F0 9C098A9 0C49F63 2A78DD3 8C50	id- ecPublicK ey	384 bits	ecdsa-with- SHA384	2024-04- 02	2039- 03-20	E4CF03401 D39918688 7AF3E53D4 A0A6D5C4 E3D9A	DF823B3B53109E142D1C8BA5574D5DEC7F1A14AC23168D97CDC6C83081AD2BAB	- standard - SSL
102	1	CN=Certum DV TLS G3 R39 CA O=Asseco Data Systems S.A. C=PL	CN=Certum TLS RSA Root CA O=Asseco Data Systems S.A. C=PL	FEF18B8 82025B7 39BB28B 631C856 7E12	rsaEncryp tion	4096 bits	sha512WithR SAEncryptio n	2024-04- 02	2039- 03-20	8058DE424 422ABD8F C16EDB06 A9A2220B6 A3E010	2815EDBD52B749EB9FE1C88FA68B85C8559BEE04FF05D1EE17E0AED8B14308B3	- standard - SSL
103	1	CN=Certum EV TLS G3 E39 CA O=Asseco Data Systems S.A. C=PL	CN=Certum TLS ECC Root CA O=Asseco Data Systems S.A. C=PL	D954BC2 36F5761 DFEFE1 BDBA9E CEF838	id- ecPublicK ey	384 bits	ecdsa-with- SHA384	2024-04- 02	2039- 03-20	4B454AD30 20E658B35 34E8A4BEF FBD1E215F 3C1A	EE2E652AF16790B709041EB9B1430B4A93AA18EC2A2983E6E67137FDE25CD511	- standard - SSL - SSL EV
104	1	CN=Certum EV TLS G3 R39 CA O=Asseco Data Systems S.A. C=PL	CN=Certum TLS RSA Root CA O=Asseco Data Systems S.A. C=PL	64101B2 045C0BD F3E6C1F 2EA442D 2759	rsaEncryp tion	4096 bits	sha512WithR SAEncryptio n	2024-04- 02	2039- 03-20	E6E266E4D D7B960BB9 7E61A0457 6D341A2D AD746	5C1D0DA0785C1D09E02BFD53C3D3D84D141DE00C01AE2BBF93C539CA87A5FF03	- standard - SSL - SSL EV
105	1	CN=Certum OV TLS G3 E39 CA O=Asseco Data Systems S.A. C=PL	CN=Certum TLS ECC Root CA O=Asseco Data Systems S.A. C=PL	96B1E28 A1B7724 3CC24B7 23EFECEB CDB2	id- ecPublicK ey	384 bits	ecdsa-with- SHA384	2024-04- 02	2039- 03-20	C0E559B61 2580DBE3B 91EB8813C 175D0A19A 53C0	DD9FA363315EAD6D110C94BAFD2AA61929E41B63A5877FFE84F50FBC36422A65	- standard - SSL
106	1	CN=Certum OV TLS G3 R39 CA O=Asseco Data Systems S.A. C=PL	CN=Certum TLS RSA Root CA O=Asseco Data Systems S.A. C=PL	B9961C5 8D6D422 0E1B19B F59F82A 409F	rsaEncryp tion	4096 bits	sha512WithR SAEncryptio n	2024-04- 02	2039- 03-20	52463FDCD D81B3434B 15B4F2ABE D24731CA7 E3F2	F447B8DBA8F73A5A2236B73DB6173BBDB3A17626F4F1CC7087092427B5C0F67F	- standard - SSL

107	1	CN=Certum SMIME G3 E39 CA O=Asseco Data Systems S.A. C=PL	CN=Certum SMIME ECC Root CA O=Asseco Data Systems S.A. C=PL	A72E841 1370F77 620930A 9650C28 726D	id-ecPublickey	384 bits	ecdsa-with-SHA384	2024-04-02	2039-03-20	BB9B6C549 80F670484 CF28F7C5 CE256CC6 722E22	D286F91B30895B02FE557BC22B5B65A423833E3AE17FEEAA15534A657FAC1DAA	- standard - S/MIME
108	1	CN=Certum SMIME G3 R39 CA O=Asseco Data Systems S.A. C=PL	CN=Certum SMIME RSA Root CA O=Asseco Data Systems S.A. C=PL	04820460 0550ABE CB16E92 60C21FD 87A	rsaEncryption	4096 bits	sha512WithRSAEncryption	2024-04-02	2039-03-20	B76F2EE26 411FCE41E 407957BE6 E75A4547B 4EDC	B7627C4F868250E2829D635435E52FB4CE71AA98D1DA449CBD6B6BBC43608C1F	- standard - S/MIME
109	1	CN=Certum Code Signing G3 E39 CA O=Asseco Data Systems S.A. C=PL	CN=Certum Code Signing ECC Root CA O=Asseco Data Systems S.A. C=PL	800E10B E2B2F5C EDC4331 5B57FEC D107	id-ecPublickey	384 bits	ecdsa-with-SHA384	2024-04-02	2039-03-20	243213DFE 794C754FB BBDAD21C 7F23049C8 496CE	03C846959A74CC1E28645BDB9E7B4512A7C9A9BFCFE76DD2D73207075AB502AE	- standard - Code Signing
110	1	CN=Certum Code Signing G3 R39 CA O=Asseco Data Systems S.A. C=PL	CN=Certum Code Signing RSA Root CA O=Asseco Data Systems S.A. C=PL	EE48707 028C09E 1E68040 9806510 E089	rsaEncryption	4096 bits	sha512WithRSAEncryption	2024-04-02	2039-03-20	8866E9618 AC6A7DEA 67CF01177 FCF3208C2 47B91	B4AE6B768A2261FDC7EAFD82F332FF038F0DE0F5D918E451D3E69C79D1A7D419	- standard - Code Signing
111	1	CN=Certum Document Signing G3 E39 CA O=Asseco Data Systems S.A. C=PL	CN=Certum Document Signing ECC Root CA O=Asseco Data Systems S.A. C=PL	5C504F2 D293D91 1CC3040 0F91052 4D81	id-ecPublickey	384 bits	ecdsa-with-SHA384	2024-04-02	2039-03-20	65201C23D F758DCC32 DCFE1577 CDC406808 8655B	E9D378909010EC726A33731CDC54D7C87979BB61B3EA383CA18630376D273542	- standard
112	1	CN=Certum Document Signing G3 R39 CA O=Asseco Data Systems S.A. C=PL	CN=Certum Document Signing RSA Root CA O=Asseco Data Systems S.A. C=PL	91432B2 75AA2D2 43F8F68 0C69EA9 E5DD	rsaEncryption	4096 bits	sha512WithRSAEncryption	2024-04-02	2039-03-20	792BA621D 62726B68D 649A6898C F03BDB371 C5D1	3A89C462D83749220A19E46980806A0E9430E62F1F8D94EE27D9AA13486B9D0C	- standard

113	1	CN=XinChaCha Trust DV TLS G2 R34 CA O=Beijing Xinchacha Credit Management Co., Ltd. C=CN	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	74A2944 B333F34 FFD1DC 8D70D67 FC42A	rsaEncryption	4096 bits	sha512WithRSAEncryption	2024-05-28	2034-05-16	4B01F8828 FADA98FC F0A563093 7248FEA4E EC154	B5C87A0B2239DAFE0A5285E340626269ACA5E90F57492C38E9050CA5D18BC21A	- standard - SSL
114	1	CN=XinChaCha Trust EV TLS G2 R34 CA O=Beijing Xinchacha Credit Management Co., Ltd. C=CN	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	1D4FD44 6A82B03 9A251A7 07472A3 7BAF	rsaEncryption	4096 bits	sha512WithRSAEncryption	2024-05-28	2034-05-16	6587A502F 47B5CC35 A72524E8C 2AF38DF54 4A9A7	D79F1F0C8141804B39D04B2592D57AFEBE74F9460654AFF491490DBB7C5A2D74	- standard - SSL - SSL EV
115	1	CN=XinChaCha Trust OV TLS G2 R34 CA O=Beijing Xinchacha Credit Management Co., Ltd. C=CN	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	0EE6624 82017DB 0CEB556 F9B6948 D454	rsaEncryption	4096 bits	sha512WithRSAEncryption	2024-05-28	2034-05-16	9A1D695CF 21FEA0947 111DF4ED8 BEBAE7CD 7C67B	B5D46DC027130E5CED3BE5083EB34028DD9230F4D5A36AD1924D21C0EF984CBA	- standard - SSL
116	1	CN=Shoper DV TLS G2 R34 CA O=Shoper S.A. C=PL	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	98FF877 B6D6D5E 77A325F 393049F AD8C	rsaEncryption	4096 bits	sha512WithRSAEncryption	2024-05-28	2034-05-16	D635681A1 EF46C6186 D3FC4A287 A455A436C B4AC	509ABBB92864C2C44D7CBC466B63950E350165EE772A3037AE8168E92226A46F	- standard - SSL
117	1	CN=Certum DV TLS G2 E39 CA O=Asseco Data Systems S.A. C=PL	CN=Certum EC-384 CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	0A7378F 3CE61A1 3C60A23 5EE5B8E D3DD	id-ecPublicKey	384 bits	ecdsa-with-SHA384	2024-06-18	2039-06-05	8F42802DC B1CCA571 C3A612B2E CDD69D23 6E3770	5202D5F0505C69B2F7B6DA2D15D2DD61515C63958A90C05A23D9A8CEAFDEDBFA	- standard - SSL
118	1	CN=Certum DV TLS G2 R39 CA O=Asseco Data Systems S.A. C=PL	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	A82DD9E 5DCAFD F13205E 70043E6 B95A8	rsaEncryption	4096 bits	sha512WithRSAEncryption	2024-06-18	2039-06-05	33A877B70 1386F5F1F 2424A21E6 C14E36E22 03DF	83C0A5A76844C840DFAF820FFD02ADF6573A26823EF6AF758A3384A0AC044083	- standard - SSL

119	1	CN=Certum EV TLS G2 E39 CA O=Asseco Data Systems S.A. C=PL	CN=Certum EC-384 CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	29B6454D5DA249033BB37AA53717B743	id-ecPublicKey	384 bits	ecdsa-with-SHA384	2024-06-18	2039-06-05	3FB601755A20F8D1B0269478DCA98CD1690CD7B3	3B28121D8985E2DADF2029C53F232007F0C19EC788654B2C2BAAEBE50419B0D5	- standard - SSL - SSL EV
120	1	CN=Certum EV TLS G2 R39 CA O=Asseco Data Systems S.A. C=PL	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	C1753CEE5EC5B79144A8E3F3C9DDBF28	rsaEncryption	4096 bits	sha512WithRSAEncryption	2024-06-18	2039-06-05	E088FC58516CD61898A6189065931B61D4E0BB18	4736F1ECF26A043CB4D8F94DA8302EA9E45F3D311048F3A400D01AEED1E99444	- standard - SSL - SSL EV
121	1	CN=Certum OV TLS G2 E39 CA O=Asseco Data Systems S.A. C=PL	CN=Certum EC-384 CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	2C036155FFFDE985CB7A0511D34E6102	id-ecPublicKey	384 bits	ecdsa-with-SHA384	2024-06-18	2039-06-05	551D6A31B1C09090A35CB7A0511D34E6102	A248F04C5529A4CD1DAECA8177B7546530625E3018BCC5A53F647F9F587497B1	- standard - SSL
122	1	CN=Certum OV TLS G2 R39 CA O=Asseco Data Systems S.A. C=PL	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	2F7B22589A0DFCE2307C2CD6410DA5D1	rsaEncryption	4096 bits	sha512WithRSAEncryption	2024-06-18	2039-06-05	E879076D8D83FB9A796363BCA53263B3054172A9	F54CE21EA0F79548F1201A619049CA15F065E49A69F26FB9CF1282C7EECF9C4C	- standard - SSL
123	1	CN=nazwaSSL DV TLS G2 E29 CA O=nazwa.pl Sp. z o.o. C=PL	CN=Certum EC-384 CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	B8FF01A8B6586AF72FE313D2D2B45F14	id-ecPublicKey	384 bits	ecdsa-with-SHA384	2024-08-20	2029-08-14	A0EAD40B0F49FA4310E45BBFC023FF5C14CEA42C	7F02E351F89B119741B01D1371CA1B9C14ED8B34D640BA44EFC3ABB9FEBBE7C8	- standard - SSL
124	1	CN=nazwaSSL DV TLS G2 R29 CA O=nazwa.pl Sp. z o.o. C=PL	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	A18B344928074C327BDA047EE59104CE	rsaEncryption	4096 bits	sha512WithRSAEncryption	2024-08-20	2029-08-14	F951FBC94BF32F5CC0F0DC322D9B74B27BCC1AA	AA0C4B7801B09FB77E423C91331EFB62A5A2A8B23A9D7C997E6A9BEEA435D2BF	- standard - SSL

125	1	CN=JoySSL DV TLS G2 R33 CA O=JoySSL Limited C=CN	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	345E1A056C9ECF C801A11573497D EE9A	rsaEncryption	4096 bits	sha512WithRSAEncryption	2024-08-20	2029-08-08	BB4767B98E1C23566E D9C968D6 ADD42D45 202EED	43EDFB2C7C93E63D6566D240EB9C69CFF5C0D5C996C4AC9BCC9CE75828C3B9BE	- standard - SSL
126	1	CN=JoySSL OV TLS G2 R33 CA O=JoySSL Limited C=CN	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	DE05B81B5D2F6A D1ECC95BA3ED5 F2B3D	rsaEncryption	4096 bits	sha512WithRSAEncryption	2024-08-20	2029-08-08	0AA174F878499E5556 0B17AD6016B04B232C 3F1B	EF3653AC5056AA4C6EF72AA922F43DAF750CA901AD1198FEA1B81E0D10B51E0A	- standard - SSL
127	1	CN=TLC DV TLS CA O=泰尔认证中心有限公司 C=CN	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	AF4D6089D16ECE 9A82F3F226A5C9 A94A	rsaEncryption	4096 bits	sha512WithRSAEncryption	2024-12-17	2034-12-05	63BDAD948CC494361 01FA9DB751A9906478 D3F48	AA985028EE5CF60287E86159B11DA578727E7C7433B2DA6F53C183D032A9294D	- standard - SSL
128	1	CN=TLC EV TLS CA O=泰尔认证中心有限公司 C=CN	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	419051280882D80 366268B35535929 4D	rsaEncryption	4096 bits	sha512WithRSAEncryption	2024-12-17	2034-12-05	60CF1F77C4E08E9167 30BAD17EF67BA0520 66E1D	2BAD3A42760061D221577E059B794A9A4B21F589ADE38BC280FEF790DC011E79	- standard - SSL - SSL EV
129	1	CN=TLC OV TLS CA O=泰尔认证中心有限公司 C=CN	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	AEFE3D7A96A870 4FF6063F279C44 7CE8	rsaEncryption	4096 bits	sha512WithRSAEncryption	2024-12-17	2034-12-05	6862374396BD48CC4 8785034755EFF83C5E 613A7	DA99474EB4D1DA945FD6C13CD383B908E6F9BEA2E5108EB158F62EED8513C035	- standard - SSL
130	1	CN=XinNet DV TLS CA O=Xin Net Technology Corp. C=CN	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	7F575682D641F8 B8A78BF887361A D725	rsaEncryption	4096 bits	sha512WithRSAEncryption	2024-12-17	2034-12-05	5F1ADFF3DC75D0B1 97395CDA D5D376EE 7F060A03	305EEB4EB23FBCE99276CD08CA51FECCE6E96786C87F5AD84804AAA1F15CF8A5	- standard - SSL

131	1	CN=XinNet EV TLS CA O=Xin Net Technology Corp. C=CN	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	FB6233E58AEC436769ECF FA78C19DE63	rsaEncryption	4096 bits	sha512WithRSAEncryption	2024-12-17	2034-12-05	B1D3ADC299EAD980A B1C6B29F A0D1887FD D37A07	44489A469C5CF8B2007E2E58125DDBC24F4186EF3B1C75C2B219DDE6A64FAA7F	- standard - SSL - SSL EV
132	1	CN=XinNet OV TLS CA O=Xin Net Technology Corp. C=CN	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	C22898E4722CE45FE5DC3 A23A2E9CFAE	rsaEncryption	4096 bits	sha512WithRSAEncryption	2024-12-17	2034-12-05	88E8836886F1BCB05 BA10FB5F07BF31DEC 708DA8	472CE6D110A5F3C58B6A34F307EFD5AF173402D6E25C109C455EE390A1C6E3C0	- standard - SSL
133	1	CN=GeoSSL DV TLS CA O=GeoSSL, Inc. C=CN	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	5194CE6712E63F95F7B4A ADF9396BEB7	rsaEncryption	4096 bits	sha512WithRSAEncryption	2024-12-17	2034-12-05	E702D97A9EC4190371 AA27B7B8770F93A155 1BC0	B5C8E05AA6826A4E43ACC5CEBC652AD7A5D5FA158DC1C9211DD5C50184BD7A97	- standard - SSL
134	1	CN=GeoSSL EV TLS CA O=GeoSSL, Inc. C=CN	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	E344E1A780B842A769258 79F14315710	rsaEncryption	4096 bits	sha512WithRSAEncryption	2024-12-17	2034-12-05	71FEB044FAD74F5EE 54AFA06B27EAE30B92 A1294	9E9A40D4DED044B0E40E8FD2D76C19E46FC5FC7F90BCAEBFCB050AAF862CE75	- standard - SSL - SSL EV
135	1	CN=GeoSSL OV TLS CA O=GeoSSL, Inc. C=CN	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	A1383FEBD1520265754E5 204DE48520B	rsaEncryption	4096 bits	sha512WithRSAEncryption	2024-12-17	2034-12-05	1C3A70BD1FCEC7101 E9BEDB86D49EDE68 AFB5588	45C479E096C7C8BB2CB90E9D3BD6FDE3CA3240308E67D00DD64DF5BA06978800	- standard - SSL
136	1	CN=TrustAsia DV TLS RSA CA C5 O=TrustAsia Technologies, Inc. C=CN	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	62DB2441F12A6415DB34E 012E21C2C2C	rsaEncryption	4096 bits	sha512WithRSAEncryption	2025-01-15	2035-01-03	331C484BCBBCC5327 99F79C809F320C9385 F4F43	282C0E6401E5C33D1C89F2835FAE01B0F9585C51A71766FDCED3AA5B2222B796	- standard - SSL

137	1	CN=TrustAsia EV TLS ECC CA C5 O=TrustAsia Technologies, Inc. C=CN	CN=Certum EC- 384 CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	C4B6DD 589D238 FC80F7F 60FBD6A 68827	id- ecPublicK ey	384 bits	ecdsa-with- SHA384	2025-01- 15	2035- 01-03	EE39AA154 3E75AC547 F1CA730B3 53B16835B 723D	3ACC4CAD7718C2E5BF549BFE1DAB9234B2EB71C00E72A554759745A611D81774	- standard - SSL - SSL EV
138	1	CN=TrustAsia EV TLS RSA CA C5 O=TrustAsia Technologies, Inc. C=CN	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	2A26E43 1FF549D 133FAED 1B1811F 713F	rsaEncryp tion	4096 bits	sha512WithR SAEncryptio n	2025-01- 15	2035- 01-03	7E3A0129D BC1E954B0 766042ACF 6FCC79F7B A2A5	A18CBF79E904E3BCC9D74D5ED062A46A90E2C7D89904114EC38B18650CD83E2C	- standard - SSL - SSL EV
139	1	CN=TrustAsia OV TLS ECC CA C5 O=TrustAsia Technologies, Inc. C=CN	CN=Certum EC- 384 CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	3DE6F5C 069A24A 46BA47B 2EFED2B D8CE	id- ecPublicK ey	384 bits	ecdsa-with- SHA384	2025-01- 15	2035- 01-03	9CF2CB25 DF1223554 B4CEBC75 E868A1279 A8EA01	C66497D671E53EE16A3D90A65C24A06FD7C0465E4DCFD4F8EF86B6CC75FC7760	- standard - SSL
140	1	CN=TrustAsia OV TLS RSA CA C5 O=TrustAsia Technologies, Inc. C=CN	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	EFC7C75 0C7DDE 552570A C78B9FC E1EED	rsaEncryp tion	4096 bits	sha512WithR SAEncryptio n	2025-01- 15	2035- 01-03	321ECA307 6255752D3 9D74EF7F8 C81E0E5A4 5161	ABF95652710CE99ECFBCBDAFCDC8A81F3865BA1F88161ADA61090E502A6B1667E	- standard - SSL
141	1	CN=TrustAsia SMIME CA 2025 O=TrustAsia Technologies, Inc. C=CN	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	2E8B1C6 88353269 4EFE243 A3F8333 5	rsaEncryp tion	4096 bits	sha512WithR SAEncryptio n	2025-01- 15	2035- 01-03	151995DD3 72B19373D EC853DB9 22D9808D3 D609C	E802A9679975DAD283EC482666D82A7CE54E1086873510F5A4CC49BD913CECAC	- standard - S/MIME
142	1	CN=iTrust DV TLS CA O=iTrust, Inc C=CN	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	866441C CE9AE56 EF2CB83 8C027FF EE6A	rsaEncryp tion	4096 bits	sha512WithR SAEncryptio n	2025-01- 15	2035- 01-03	D75F82DA8 41AD7FD17 FBFC00C0 D3248084B 43D6F	7CF26EB49E3999795959A80A7305EB7048D179CB15DD2DE897702EBA1F42C082	- standard - SSL

143	1	CN=iTrust OV TLS CA O=iTrust, Inc C=CN	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	1FC7068 437F72B D3DD0E A2742F5 FF4C5	rsaEncryption	4096 bits	sha512WithRSAEncryption	2025-01-15	2035-01-03	7A7555016 C1B218CA 291C28332 332FE5408 CB078	553602422FD9B73B95DB5D78B24DC83EA58D046D93D4A9D87493AA706CE62F3D	- standard - SSL
144	1	CN=宝塔 DV TLS CA O=广东宝塔安全技术有限公司 C=CN	CN=Certum Trusted Root CA O=Asseco Data Systems S.A. OU=Certum Certification Authority C=PL	D21AD24 C132557 54888BB 19C977A 7754	rsaEncryption	4096 bits	sha512WithRSAEncryption	2025-01-15	2035-01-03	DB4C8938 C427EB633 F72F90AD4 E942DDEC 9973A8	7AEA9978F8E2030B972B7941DB2C0B67E9FF391A212E608F5AF3EAA989B059CA	- standard - SSL

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 OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	CN = Certum CA O = Unizeto Sp. Z. o. o. C = PL	0023e8290d71950418c008597e42f7481b	rsaEncryption	2048 bits	sha1withRSA	2008-10-22	2025-12-30	AA2630A7B617B04D0A294BAB7A8CAA5016E6DBE604837A83A85719FAB667EB5	2D87FF20FE8AD2305DFB6F3992867ED2BF4FE3E1346212C4345991AAC02266E9	- standard - SSL - SSL EV - Code Signing - S/MIME
2	1	CN = Certum Trusted Network CA, OU = Certum Certification Authority O = Unizeto Technologies S.A. C = PL	CN = Certum CA O = Unizeto Sp. Z. o. o. C = PL	939285400165715F947F288FEFC99B28	rsaEncryption	2048 bits	sha1withRSA	2008-10-22	2027-06-10	AA2630A7B617B04D0A294BAB7A8CAA5016E6DBE604837A83A85719FAB667EB5	949424DC2CCAAB5E9E80D66E0E3F7DEEB3201C607D4315EF4C6F2D93A917279D	- standard - SSL - SSL EV - Code Signing - S/MIME
3	1	CN = SSL.com Root Certification Authority RSA, O = SSL Corporation, L = Houston, ST = Texas, C = US	CN = Certum Trusted Network CA, = Unizeto Technologies S.A., OU = Certum Certification Authority, C = PL	e4270495f68c91d6d0ec7b494ea4df1c	rsaEncryption	2048 bits	SHA256withRSA	2018-09-11	2023-09-11	d1c45377ebdcd618cd1651dc2e02c21d751e5aa9fcd1b3431ff6ecf6a31348fa	ACF718DF838E640051777D1947F51620E8D804BA186553AE52FC9811B5D34B8B	- standard - SSL - SSL EV - Code Signing - S/MIME Expired
4	1	CN = SSL.com EV Root Certification Authority RSA R2, O = SSL Corporation, L = Houston, ST = Texas, C = US	CN = Certum Trusted Network CA, = Unizeto Technologies S.A., OU = Certum Certification Authority, C = PL	62f812a35f52bd74b718d610ac4b4783	rsaEncryption	2048 bits	SHA256withRSA	2018-09-11	2023-09-11	7cd67c248f69d83fc2f9bb01dcb1f7ad67a363d046043796d0984c3a231f6bb0	B97176F21B6ED64609267B2D1A2A9FAF0C4DEBD44644DC85EB6AE986FC867D56	- standard - SSL - SSL EV - Code Signing - S/MIME Expired
5	1	CN = UCA Global G2 Root O = UniTrust C = CN	CN = Certum Trusted Network CA, = Unizeto Technologies S.A., OU = Certum Certification Authority, C = PL	00bb022bf9ab4bf20bf4ed2016da849fbe	rsaEncryption	4096 bits	SHA256withRSA	2020-02-21	2025-02-21	81c48ccccf5e430ffa50c085f8c1567217401dfff	C1AFC65B1E813B0E6146E6AA5341681272ABE9A38D59F7BD1B27B729834A0D9C	- standard - SSL - SSL EV Revoked 2023-04-28 15:00:39 UTC

6	1	CN=Certum Trusted Network CA 2; OU=Certum Certification Authority; O=Unizeto Technologies S.A.; C=PL	CN=Certum Trusted Network CA; OU=Certum Certification Authority; O=Unizeto Technologies S.A.; C=PL	1BB58F2 52ADF23 004928C 9AE3D7E ED27	rsaEncryption	4096 bits	SHA384With RSA	2021-05-31	2029-09-17	6B3B57E9E C88D1BB3D 01637FF33C 7698B3C975 8255E9F01E A9178F3E7 F3B2B52	08E7EAC998A62C4155CC4CBC5EDA32F5B41A12C012F29AB3433BD366348149F0	- standard - SSL - SSL EV - Code Signing - S/MIME
7	1	CN = UCA Global G2 Root O=UniTrust C=CN	CN = Certum Trusted Network CA O = Unizeto Technologies S.A., OU = Certum Certification Authority C = PL	E5E470E 83BF9A0 12394C7 313ACA2 5593	rsaEncryption	4096 bits	SHA256with RSA	2023-03-08	2025-02-21	81C48CCCF 5E430FFA5 0C085F8C1 567217401D FDF	3DD69C5BE170F943F804D1D31FE8F916C0C0226CDD7AEA9AA9A0CDFD3474361	- standard - SSL - SSL EV
8	1	CN = Certum Trusted Root CA O = Asseco Data Systems S.A., OU = Certum Certification Authority C = PL	CN = Certum Trusted Network CA O = Unizeto Technologies S.A., OU = Certum Certification Authority C = PL	00D8E07 44B5824 919FBD0 8847DF7 2020FA	rsaEncryption	4096 bits	sha512WithR SAEncryption	2023-09-19	2028-09-19	8CFB1C75B C02D39F4E 2E48D9F96 054AAC4B3 4FFA	FB13890C7AB14FF7B94B2714503E31123BFDD340FC4D979743166E0469B47A88	- standard - SSL - SSL EV - Code Signing - S/MIME
9	1	CN = Certum EC- 384 CA O = Asseco Data Systems S.A., OU = Certum Certification Authority C = PL	CN = Certum Trusted Network CA O = Unizeto Technologies S.A., OU = Certum Certification Authority C = PL	DAFD4B F54121E 027D686 96225F1 FC EE8	id- ecPublicKey	384 bits	sha512WithR SAEncryption	2023-09-19	2028-09-19	8D06667424 763AF389F7 BCD6BD477 D2FBC105F 4B	B72450ABF5047A8AF63EC9D87E331484850B1849A2550A82A86DB6B41ED38760	- standard - SSL - SSL EV - Code Signing - S/MIME
10	1	CN = UCA Global G2 Root O = UniTrust C = CN	CN = Certum Trusted Network CA O = Unizeto Technologies S.A., OU = Certum Certification Authority C = PL	BCAFE9 189509E 612F825 2B74C03 98792	rsaEncryption	4096 bits	sha256WithR SAEncryption	2024-01-08	2029-01-06	81C48CCCF 5E430FFA5 0C085F8C1 567217401D FDF	BFA95C5DF164B659FA32F6D10564D7170DDE661A853A782E6AB63639433BCB41	- standard - SSL - SSL EV
11	1	CN = UCA Global G2 Root O = UniTrust C = CN	CN = Certum Trusted Network CA O = Unizeto Technologies S.A., OU = Certum Certification Authority C = PL	1D8A6FC 17A0C81 BCA26C 435AEFA 50078	rsaEncryption	4096 bits	sha256WithR SAEncryption	2024-01-08	2029-01-06	81C48CCCF 5E430FFA5 0C085F8C1 567217401D FDF	BB61408AED9F530B2EC0545E53BA2C8EBEAA57D9976447DB1663CED4600CD6B7	- standard - SSL - SSL EV

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

Mozilla Bug # Link	Description	Date Reported	Date Resolved	Criteria
1879845	Explanation about how and why the mistakes were made or bugs introduced, and how they avoided detection until now. Certum has issued 96 SMIME certificates since January 16, 2024, with invalid content in SubjectAlternativeName. On January 16th 2024, Certum deployed a version with a new interface for retail customers, featuring a new flow for selecting CN for S/MIME. The problem appeared when a customer changed CN to a value different than email - it was copied into the SAN field, instead of keeping the email value. When the chosen CN happened to be an email, SAN had the correct entry - the email. 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. All certificates affected by this mis-issuance have been revoked. New test scenarios were created for this and similar errors. Linting for SMIME issuing process was implemented.	12.02.2024	02.10.2024	S/MIME 2.2.13
1888689	Explanation about how and why the mistakes were made or bugs introduced, and how they avoided detection until now. 49 of Asseco Data Systems' CRLs violated TLS BRs (v2.02): Section 7.2 and RFC 5280. These CRLs contained the revoked certificates field, however no revoked certificates were present. During the testing process, Certum did not detect that some CRLs disclosed to the CCADB were in violation of the TLS Baseline Requirements (BRs) and, by extension, RFC 5280. Specifically, these CRLs contained the revoked certificates field, but no revoked certificates were present. This was because Certum's testing was done on sample CRLs which did not include empty CRLs. Testing approach was to use pkilint on a limited number of samples, since Certum had configured the same profile for all the CRLs. Certum did not automate this testing process, but rather performed it manually. Certum made a wrong assumption that a few positive tests were enough to validate the CRLs. Certum overlooked the possibility of empty CRLs and did not include them as test scenarios. 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. CRL module was updated by 2024-04-05, Manual tests were performed with pkilint for all CRLs by 2024-04-05, Linting for CRLs issuing process was introduced.	29.03.2024	02.10.2024	RFC 5280: Sect. 5.1.2.6 TLS BR 7.2

1904494	Explanation about how and why the mistakes were made or bugs introduced, and how they avoided detection until now. Cross-certificate SHA-256 FINGERPRINT 949424DC2CCAAB5E9E80D66E0E3F7DEEB3201C607D4315EF4C6F2D93A917279D was not included in 2024 S/MIME Audit statement. The primary cause of this issue was a lapse in the verification process during the audit compilation. The Compliance Team did not cross-reference the List of CA certificates for Audit with the Audit Report accurately, resulting in the omission of a cross-certificate in the S/MIME Audit Statement, despite its inclusion in the TLS/ EV TLS/ Code Signing Audit. The CA list was manually compiled, leading to an error where one cross-certificate was not identified as capable of issuing S/MIME. The verification of the CA list relies on a script that cross-references certificate fingerprints to determine their inclusion in the report. Both preliminary and final reports were checked against the initial list, which contained the error, hence the double-checking by the Compliance Team and Auditor Teams did not catch this specific mistake. In recent years, such issues were not encountered because the CA certificate lists for TLS/ EV TLS/ Code Signing Audit were verified and found to be accurate. This year, the error occurred due to the new S/MIME audit, which led to an incorrect update of the list. Furthermore, the CCADB ALV check-up was conducted for both preliminary and final audit statements and did not highlight the missing cross-certificate. The intermediate certificate was only identified as missing after the audit was concluded and the case was closed. The combination of these factors resulted in the cross-certificate being left out of the audit report, and the oversight was not discovered until after the case had been closed. 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. A script for additional verification of SHA256 fingerprints included in audit reports has been created and tested. As a result, it returns a list of SHA256 fingerprints that were not included in the audit report even though they should have been. Certum will use it to verify the preliminary and then for final audit reports they receive from auditors.	25.06.2024	04.09.2024	BR 7.1.4.2.
1917571	Explanation about how and why the mistakes were made or bugs introduced, and how they avoided detection until now. An incident occurred where 4 S/MIME certificates were issued incorrectly due to discrepancies between the OrganizationIdentifier and Country field. This was discovered during a scan that identified similar issues in 6 certificates, 2 of which had already been revoked. The root causes included initial validator limitations and confusion over country names. To address this, linting for S/MIME certificates was implemented, and the process for generating OrganizationIdentifiers was improved. Future plans include adding ISO Country Codes next to country names in user interface to prevent recurrence. After Certum's first mis-issuance of S/MIME certificates that had a wrong OrganizationIdentifier, Certum had planned to solve the problem in two steps. The first step was to improve the validator of that field in Certum's system, ensuring that it checks for basic data integrity and compliance with the required format, reducing the chance of human errors when entering the number. The second step was to implement a mechanism that would fill the OrganizationIdentifier number and reduce the need to enter a number by hand.	09.09.2024	06.11.2024	BR 7.1.4.2.

	This incident is a result of multiple contributing factors: Initial Validator Limitations: The initial validator, implemented in December, did not verify if the Country in the OrganizationIdentifier matched the Country code. This oversight allowed the validation officer to mistakenly use "PL" instead of "CZ" for one of the certificates. Similar Country Names: Three out of four mis-issued certificates had incorrect country fields due to selection of the wrong country from the list. The confusion between "People's Republic of China (Chińska Republika Ludowa)" and "Republic of China (Republika Chińska)" contributed to the mis-issuance. Despite the names being similar, they represent different countries according to ISO-3166 standard. The validation officer did not catch this error, leading to the issuance of certificates with incorrect country information. 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. Improvement completed in June, involved implementing a mechanism that fills the correct OrganizationIdentifier number based on the data provided by the client, and effectively reduced human errors and improved the accuracy of the information.			
19353 93	Explanation about how and why the mistakes were made or bugs introduced, and how they avoided detection until now. On December 3, 2024, a Certum employee reviewed the CCADB and identified errors that appeared after a recent website update. During the review of new features Certum found that the current Certification Policy is older than 365 days. According to Section 2.3 of the Baseline Requirements, the CA is required to annually update a Certificate Policy and/or Certification Practice Statement. Additionally, Section 4 of the Mozilla Root Store Policy requires updates to the CP and CPS at least once every 365 days. This requirement was not met. The root cause of the incident was a gap in internal procedures and the reliance on individual methods for handling the annual update of non-audit documents. Both the CP and CPS updates were manually managed by a single individual. The previous person responsible for the updates had their own approach, which was not standardized. As a result, while the CPS update was completed, the CP update was overlooked due to a lack of clarity in the process. 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. The procedure for documentation update was revised, specifying that the CP and CPS must be updated at least once every 365 days. An internal tracker for CP and CPS updates for employees responsible for the task was created. Update in the procedure for updating the CP and CPS. Creation of internal tracker for CP and CPS updates for employees responsible for the task. Implementation of the script which compares the list of CP and CPS from CCADB public report and alerts if they are about to expire.	05.12. 2024	28.01. 2025	EV BR 9.3.4 BR 7.1.6. 3

1909203	Explanation about how and why the mistakes were made or bugs introduced, and how they avoided detection until now. During scheduled network maintenance on 2024-07-21, Certum's infrastructure experienced a disruption that caused the unavailability. The scope of network maintenance concerned the replacement of network interfaces for networks within the organisation (part one of the work) and for public networks (part two of the work). The problem occurred during the second part of the network maintenance and was related to the incorrect setting of the route in the configuration. As a result, the following services were not available from the internet. The problem affected the following services which according to BR must be available 24x7: CP/CPS respond to revocation requests and Certificate Problem Report CRL OCSP The failure was resolved within about 1-2 hours, and since then all the services mentioned are working correctly. This incident did not affect the issuance of certificates. 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. Implement additional monitoring controls for network devices and traffic. Implement additional monitoring controls for services. Changing the configuration of CDN to automate traffic switching between Primary Origins Server and Secondary Origin Server. Add external monitoring for Certificate Problem Report. Improvements were implemented on time and strengthened controls which were insufficient to prevent this incident.	22.07.2024	04.09.2024	BR 7.1.
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