International Standard

ISO/IEC 20248

Second edition
2022-06

AMENDMENT 1
2024-10

Information technology — Automatic identification and data capture techniques — Digital signature data structure schema

AMENDMENT 1: Domain authority identifier (DAID) specification for the GS1 legal entity identifier and encoding clarifications

Reference number
ISO/IEC 20248:2022/Amd. 1:2024(en)

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Published in Switzerland

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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 31, *Automatic identification and data capture techniques*.

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Clause 2, Normative references

Add the reference:

Information technology — Automatic identification and data capture techniques — Digital signature data structure schema

AMENDMENT 1: Domain authority identifier (DAID) specification for the GS1 legal entity identifier and encoding clarifications

GS1 General Specifications Standard

7.5.3

Replace the entire subclause with:

7.5.3 DAID for GS1 legal entity(ies)

GS1 General Specifications Standard shall be used to specify the GS1 Party Global Location Number (PGLN), corresponding to GS1 Application Identifier (417), as the GS1 identifier for legal entity(ies).

The DAID shall be "GS1 <PGLN>". The PGLN is a 13-character base 10 (digits 0 to 9) number.

The DAID for GS1 shall be encoded as follows:

— DAID encoding type identifier: 0xFE.

— PGLN encoding: 44-bit binary number.

EXAMPLE The PGLN 9506000151540 is the DAID "GS1 9506000151540" encoded as ":FE:8A549C323F4".

8.2.3

Delete the second bullet: "Empty fields and arrays shall be pruned."

Replace the forth bullet

Base64 shall be in the format when encoded from the binary; it shall contain the padding characters.

with:

The binary value presentations shall be as follows: bstring uses HexString, digsigenv uses Base64String and privatecontainer uses HexString.

8.10.2

Replace the third paragraph

The language tag shall be constructed in accordance with IETF RFC 5646. The use of ISO 639-1, 2-character language tag is compulsory. The IETF RFC 5646 sub-tags are optional.

with:

The language tag shall be constructed in accordance with IETF RFC 5646. The language subtag is compulsory. The other sub-tags are optional.

B.4.6, fourth paragraph

Add the following sentence at the end of the paragraph:

The following example FP256BNwithSHA256 implementation steps was created using the MIRACL Core: Apache License, Version 2.0 library dated 2020 (https://github.com/miracl/core -snapshot date: 2023-12-08).

B.4.6, a)

Replace the Extracted SigData with:

```
["ISO/IEC 20248:2022","https://www.dept-edu.com","QC DGSG",110,"2024-02-11T12:02:01","John
Doe","612209498902",["2021","2022","2023"],"Bachelors in Administration","Business
School","2024-03-04",[["Structures 101","degree","B"],["Accounting
112","degree","A"],["Statistics 159","extra","A"]]]
```

B.4.6, b)

Replace the generated signature with:

```
0x03FAA57BE23549FE02E584B9F14CAEFE2BD5404A8D4165A3CCB5427262D2566AE2
```

Replace the compressed signature with:

```
0xFAA57BE23549FE02E584B9F14CAEFE2BD5404A8D4165A3CCB5427262D2566AE2
```

Replace the encoded the DDDdata after adding the signature with:

```
0xC098099640006EC96C081A129BDA1B8811BD9621B0DA130B1B432B637B9399034B71020B236B4B734B9BA39
30BA34B7B75E84EAE6D2DCCAE6E640A6C6D0DEDED96BBBBBB9730B1319730B1973D30B3245729BA393AB1BA3AB
932B9901898188DC82C6C6DEEADCE8D2DCCE406262641729BA30BA34B9BA34B1B990189A9CC0
```

Replace the URI Envelope with:

```
https://www.dept-edu.com/verify?wJgJlkAAbslsCBoSm9obiBEb2WIbDaEwsbQytje5OZA0txAgsja0tzS5uj
kwujS3t16E6ubS3Mrm5kCmxtDe3tlru7u5cwsTGXMLGXPTCzJFcpujk6sbo6uTK5kBiYGI3ILGxt7q3OjS3M5AYmJk
Fym6MLo0ubo0sbmQGJqcwA
```

B.4.6, c)

Replace the Extracted SigData with:

```
["ISO/IEC 20248:2022","https://www.dept-edu.com","QC DGSG",110,"2024-02-11T12:02:01","John
Doe","612209498902",["2021","2022","2023"],"Bachelors in Administration","Business
School","2024-03-04",[["Structures 101","degree","B"],["Accounting
112","degree","A"],["Statistics 159","extra","A"]]]
```

Replace the extracted signature with:

```
0xFAA57BE23549FE02E584B9F14CAEFE2BD5404A8D4165A3CCB5427262D2566AE2
```