International Standard

ISO 24165-2

Digital token identifier (DTI) — Registration, assignment and structure —

Part 2: Data elements for registration

Jeton digital — Enregistrement, affectation et structure —

Partie 2: Données d'enregistrement

Sample Document
Get full document from standards.iteh.ai

Second edition
2025-06

Corrected version
2026-10

Reference number
ISO 24165-2:2025(en)

© ISO 2025

ISO 24165-2:2025 • https://standards.iteh.ai/catalog/standards/iso/29b22185-c722-40a7-b044-504db87e542f/iso-24165-2-2025

Sample Document

get full document from standards.iteh.ai



COPYRIGHT PROTECTED DOCUMENT

© ISO 2025

All rights reserved.

This ISO publication is protected by copyright and is owned by ISO and/or its licensors.

The content of this ISO publication is provided under licence, not sold. Use is subject to the applicable licence terms issued by ISO, an ISO member body, or an authorized third-party distributor.

Except as required for implementation or expressly permitted by a separate licence, no part of this ISO publication may be reproduced, distributed, modified, used, or made available in any form or by any means – electronic or mechanical, including photocopying, scanning, recording, or posting on internal or external digital platforms.

Any use beyond the scope of the granted rights is prohibited and may result in legal action.

ISO copyright office
CP 401 • CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

ISO 24165-2:2025 • https://standards.iteh.ai/catalog/standards/iso/29b22185-c722-40a7-b044-504db87e542f/iso-24165-2-2025

Contents

Page

Foreword ..... **iv**
Introduction ..... **v**
1 Scope **1**
2 Normative references **1**
3 Terms and definitions **1**
4 Constituents of a registry record **6**
4.1 Digital token identifier (DTI) 6
4.2 Digital ledger identifier 7
4.3 Classes of information 7
5 Data elements **7**
5.1 Categories of data elements 7
5.2 Normative data elements for DTI records 8
5.3 Informative data elements for DTI records 9
5.4 Data elements for base record of digital ledger identifier (DLI) 10
5.5 Normative data elements for base record of DLI 11
5.6 Informative data elements for base record of DLI 11
5.7 Data elements for fork record(s) for DLI 12
5.8 Normative data elements for fork record(s) for DLI 12
6 Registration authority **13**
6.1 Name and contact details of the registration authority 13
6.2 Service provision for the registration authority 13
Annex A (normative) **Data requirements** **14**
Bibliography **18**

Sample Document
get full document from standards.iteh.ai

© ISO 2025 – All rights reserved

ISO 24165-2:2025 • https://standards.iteh.ai/catalog/standards/iso/29b22185-c722-40a7-b044-504db87e542f/iso-24165-2-2025

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

Sample Document

This document was prepared by Technical Committee ISO/TC 68, *Financial services*, Subcommittee SC 8, *Reference data for financial services*.

get full document from standards.iteh.ai

This second edition cancels and replaces the first edition (ISO 24165-2:2021), which has been technically revised.

The main changes are as follows:

— The scope for digital token identifiers (DTIs) has been extended to include non-fungible tokens (NFTs).

— The document now separates DTIs to identify tokens and digital ledger identifiers (DLIs) to identify ledgers (only ledgers that have one or more DTIs linked to them are in the scope of this document).

— Anchor block information has been added where genesis block is either not known/lost.

— "Functionally fungible group" has been renamed "equivalent digital token group".

— Issuer and maintainer have been added as informative, optional fields.

— "Native token" has been renamed "protocol token".

A list of all parts in the ISO 24165 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

This corrected version of ISO 24165-2:2025 incorporates the following corrections:

— "Non-fungible token distributed ledger" has been added to Table A.3.

© ISO 2025 – All rights reserved

ISO 24165-2:2025 • https://standards.iteh.ai/catalog/standards/iso/29b22185-c722-40a7-b044-504db87e542f/iso-24165-2-2025

Introduction

With the rise in popularity of peer-to-peer payment systems, these systems rely less on centralized authorities. Instead, they depend on aspects of cryptography, decentralized processing and a distributed network. This network maintains a shared record of transaction activity.

As a result, the need to identify the digital tokens issued, traded, transacted or stored on these networks has grown. Stakeholders in the trading community, service providers, custodians and regulatory bodies have identified numerous use cases where a standard identifier for accounting, research, tracking and management of these digital tokens would improve efficiency and eliminate confusion in the marketplace.

However, the nature of these new types of digital asset means they do not fit within the structure of existing ISO identifiers, in part because they can lack clear reference to an issuing authority and will therefore not be considered the liability of an issuing authority or corporate governing body. These digital assets, in many cases, extend across various regions and monetary governance jurisdictions.

Though these digital assets are sometimes referred to as cryptocurrencies, virtual currencies or digital currencies, the term "currency" has a specific meaning as defined by ISO 4217. This definition is in conflict with the nature of the digital tokens identified in this document due to the reasons described above; namely, the lack of monetary authority and geographic location.

Where traditional financial instruments or currencies are tokenized for electronic exchange and issued by a legal entity including the monetary authority responsible for it, other International Standards, such as ISO 6166 or ISO 4217, can apply. To eliminate confusion for users of this document, care has been taken to provide a clear definition and eligibility criteria for assignment of a digital token identifier (DTI) and digital ledger identifier (DLI).

This document is addressed to applicants seeking to identify digital tokens that conform to the definition provided in ISO 24165-1. The data elements described in this document are used to distinguish one set of digital tokens and ledgers from another and are, wherever possible, objective and publicly available. Inclusion in the registry and the issuance of an identifier signifies only the existence of the token and/or ledger and its 1:1 relationship to its identifier.

Sample Document
get full document from standards.iteh.ai

The ISO 24165 series is organized into the following parts:

— ISO 24165-1 describes the method of registration and assignment of a DTI and a DLI.

— ISO 24165-2 describes the data elements required for registration and display on the DTI and DLI registry.

© ISO 2025 – All rights reserved

ISO 24165-2:2025 • https://standards.iteh.ai/catalog/standards/iso/29b22185-c722-40a7-b044-504db87e542f/iso-24165-2-2025

Sample Document

get full document from standards.iteh.ai

Digital token identifier (DTI) — Registration, assignment and structure —

Part 2:
Data elements for registration

1 Scope

This document defines the data elements included in the registry record and used to establish the 1:1 relationship between a digital token and the identifier assigned according to the method in ISO 24165-1.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 10646, *Information technology — Universal coded character set (UCS)*

ISO 24165-1, *Digital token identifier—Registration, assignment and structure—Part 1: Method for registration and assignment*

Sample Document

3 Terms and definitions

get full document from standards.iteh.ai

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
anchor block
earliest known and verifiable block in a blockchain

Note 1 to entry: The anchor block is typically the blockchain *genesis block* (3.33).

3.2
anchor block hash
block hash (3.10) of the anchor block

Note 1 to entry: The anchor block hash is typically recorded in the block immediately following the anchor block.

3.3
anchor block hash algorithm
block hash algorithm (3.11) used to produce the *block hash* (3.10) of the *anchor block* (3.1)

3.4
anchor block height
block height (3.13) of the *anchor block* (3.1)

© ISO 2025 – All rights reserved

ISO 24165-2:2025 • https://standards.iteh.ai/catalog/standards/iso/29b22185-c722-40a7-b044-504db87e542f/iso-24165-2-2025