



**International
Standard**

ISO 24165-1

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

**Part 1:
Method for registration and
assignment**

*Jeton digital — Enregistrement, affectation et structure —
Partie 1: Méthode pour l'enregistrement et l'affectation*

**Second edition
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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 document 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).

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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.

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

This second edition cancels and replaces the first edition (ISO 24165-1:2021), 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 standard 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 scope).
- Anchor block information has been added where genesis block is either not known/lost.
- Functionally Fungible Group has been renamed Equivalent Group.
- Addition of Issuer and Maintainer 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.

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 or a 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 conforming to the definition provided in this document. 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.

The standard scope has been expanded to include DTI issuance for non-fungible tokens (NFTs), which were excluded in the 2021 edition of this document.

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 & DLI registry.

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

Part 1: Method for registration and assignment

1 Scope

This document defines the assignment and generation of a random, unique, fixed-length identifier for digital tokens in response to a request for registration that conforms to specified application guidelines (see also ISO 24165-2).

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 24165-2, *Digital token identifier (DTI) — Registration, assignment and structure — Part 2: Data elements for registration*

ISO/IEC 7064:2003, *Information technology — Security techniques — Check character systems*

3 Terms and definitions

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

asset

anything that has value to a stakeholder

[SOURCE: ISO 22739:2024, 3.1]

3.2

currency

medium of exchange of value, defined by reference to the geographical location of the monetary authorities responsible for it

[SOURCE: ISO 4217:2015, 3.2]

3.3

digital asset

asset (3.1) that exists only in digital form or that is the digital representation of another asset

[SOURCE: ISO 22739:2024, 3.21]