

TOKEN TAXONOMY FRAMEWORK

Frequently Asked Questions



What is the TTF?

The Token Taxonomy Framework (TTF) is the basic structure that enables multiple parties to define a standard with a common language, behaviors, and properties for the exchange of value using a technology known as tokenization.



What is a token?

A token is simply an indication, proof, or expression of something else. Tokens have virtually no value on their own; they are only useful because they represent something more significant. Examples include the game pieces – the race car, boot, and the plastic hotels – you use to play Monopoly. Except for nostalgia, these pieces do not mean much outside of the value they represent in a Monopoly game. A digital token, however, is a piece of data that stands in for, or represents, a valuable piece of information. The best way to describe what a token does is by defining how it works in a specific use case of user experience.



What is tokenization?

Tokenization is the process of turning something with value into a unique representation of that value. The tokenization process removes sensitive data from your business systems (i.e., game, ecosystem, marketplace, value chain) and replaces it with an undecipherable token. The original data is then stored in a secure, cloud data vault. Secure or encrypted numbers can be decrypted with the appropriate key (i.e., rules). Tokens cannot be reversed because there is no mathematical relationship between the token and its original number.



What is a taxonomy?

A taxonomy is the way to name, describe and classify how something is organized and operated.



Who makes the TTF?

The TTF is designed by an open-source community through the GBBC's InterWork Alliance (IWA) that started in 2020. The community identifies a business use case and is designed a platform-agnostic way to describe tokenization for specific use cases. The framework breaks down tokens into their components: token base, behaviors, and properties, creating a meta-model that defines tokens and provides a framework to create, define, and classify tokens.

By examining specific use cases in the community led IWA working groups, the taxonomy is able to expand to include more token components that can then be reused in other use cases which follow similar business models/processes.



Why is the TTF needed?

There is a lack of common language when discussing digital assets and tokenization. The TTF creates a common language which allows people to discuss tokenization in a consistent way and model business processes using an easy-to-understand framework. The TTF and the Token Designer Tool are also a great way to explain tokenization to those who are unfamiliar with the concept, making it a great teaching tool for both technical and business-minded individuals.



What are the goals of the TTF?

For businesses, to define a common set of concepts and terms that can be used by business and regulatory participants to speak the same language when making business and policy decisions around tokenization.

For developers, to produce token definitions that have clear and understood requirements that are implementation-neutral for developers to follow when creating their tokens.



What is the purpose of the TTF?

- To educate, taking a step back to clearly define a token in non-technical and cross industry terms using real world, everyday analogies so ANYONE can understand them using properties and behaviors to describe and define tokens.
- Define a common set of concepts and terms that can be used by business, technical, and regulatory participants to speak the same language.
- Produce token definitions that have clear and understood requirements for developers to follow and standards organizations to validate using terminology that is neutral to programming language, blockchain, distributed ledger or other distributed medium where tokens reside.
- Deliver tooling meta-data using the TTF syntax that enables the generation of visual representations of classifications, and modelling tools to view and create token definitions mapped to the taxonomy.
- Produce standard artifacts and control message descriptions mapped to the taxonomy that are implementation neutral and provide base components and controls that consortia, startups, platforms, or regulators can use to work together.
- Encourage differentiation and vertical specialization while maintaining an interoperable base.
- Be used in taxonomy workshops for defining existing or new tokens which results in a contribution back to the framework to organically grow and expand across industries for maximum re-use.

The purpose of the TTF is **NOT**:

- Prescriptive on the use of a specific blockchain or technology platform.
- A legal or regulatory framework - but it does establish common ground.
- Complete or comprehensive. It is intended to be expanded over time.



How can I use the TTF?

Developers

1. Go to Github and look at the open-source use cases. They can be used as is or GBBC/IWA members can contribute to the source code and fork custom versions.
2. Determine the business case and economic model for tokenization
3. Come up with a business definition of the desired token(s) including the functionality, lifecycle, and involved parties in the ecosystem
4. Identify base token types, behaviors, and properties for the token(s) using existing TTF components and/or creating new components that are not currently in the TTF
5. Contribute your new token definition and new token components back to the TTF for others to use in the future for their use case
6. Build your tokens using the TTF token definition you have created as a blueprint for the structure of the token

Business Leaders

1. Whiteboard your business ecosystem and use case, including how the token will interact with its ecosystem, what the lifecycle of the token will be, and what parties are involved in the ecosystem
2. Use the TTF and Token Designer Tool to match the business requirements to the language in the framework
3. Using the tool or another visual representation of the token, share the design within your company, validate that the business model is effective and the token is properly structured for it to interact in the ecosystem in a healthy way, gather feedback and iterate on the design as needed, and educate other members of your organization on the concept of tokenization using the tool and TTF as a guide
4. Take the token definition to a developer or implementer and have them construct a token that meets the requirements laid out in your drafted token structure



Who can contribute to the TTF?

The TTF grows through community contributions. The InterWork Alliance (IWA), an initiative of the Global Blockchain Business Council (GBBC), runs working groups which bring members of the GBBC community together to discuss tokenization for specific use cases such as Voluntary Carbon Markets. Those groups collaborate to determine the requirements for tokenization within the specified use case, model those requirements using the TTF, and contribute any new token components back to the broader TTF repository of components for future groups to re-use as they see fit. In this way, the TTF is an expandable framework that can be used in a variety of use cases.



What is the IWA Token Designer Tool?

The IWA's Token Designer tool is a visual sandbox in Visual Studio Code that allows for individuals to model out their token structure using artifacts in the TTF GitHub repository that is linked to the tool. The tool can also be used as an educational tool for companies to explain tokenization in a visual way and can map a company's use case to the TTF when exploring tokenization to solve business problems. The code for the tool is open source and can be forked to provide additional functionality on top of the base tooling.

- [GitHub Code for the Token Designer Tool](#)
- [Token Designer Tool Download \(Visual Studio Marketplace\)](#)



How can I get involved?

Participation in IWA working groups is open to all GBBC members. To learn more about all of the benefits of GBBC membership, or if you are interested in joining, please contact [*Paul.Rapino@gbbcouncil.org*](mailto:Paul.Rapino@gbbcouncil.org).

Where can I find more information on the TTF?

- [TTF GitHub Repository](#)
- **Token Designer Tool (see above section)**