

What you need to know about the V2 token contracts

What is happening

We are upgrading the token smart contracts (EURE, USDe, GBPe, and ISKe) from version 1 (V1) to version 2 (V2). [Ackee Blockchain Security](#), an industry leader trusted by top-tier organizations in web3 like Safe and 1inch, audited the new smart contracts. [The report is available here](#).

Don't worry — the version 1 of the tokens will continue to work as usual without switching to the version 2 token. Version 1 of the tokens will still use the same address as before and operate with the version 2 contracts behind the scenes, ensuring your balance remains correct and you benefit from lower gas fees.

The upgrade is a significant step towards adopting the most advanced and widely accepted ERC standards. By leveraging OpenZeppelin's community-vetted libraries, the tokens inherit industry best practices and benefit from enhanced security and functionality. OpenZeppelin provides a robust framework that simplifies the integration of complex features, such as Permit (ERC2612), facilitates a smoother upgrade process, and guarantees that our smart contracts remain compliant with evolving ERC standards.

When will this happen

We will upgrade the tokens in phases:

Date	Chain	Status
Sunday, 18th of August 2024	Polygon	✔ completed
Sunday, 25th of August 2024	Gnosis	✔ completed
Tuesday, 17th of December 2024	Ethereum	✔ completed

Why the upgrade matters to you

The upgrade of the tokens significantly benefits users with both cost savings and enhanced features.

1. Gas cost efficiency

The new contract includes optimized functions that significantly reduce gas consumption, making onchain transactions much cheaper for users.

Function	V1	V2	Difference
ERC20 function	gas used	gas used	How much gas you save
Transfer Send tokens to another address.	91908	26245	71%
Approve Allow someone to spend tokens from your account	68586	24858	64%

2. A new feature, Permit (ERC2612)

The V2 tokens now support [ERC-2612 Permit](#). Developers can use ERC-2612 Permit instead of [ERC-20 Approve](#) to improve user experience by relying on gasless token approvals through off-chain signatures, eliminating the need for a separate on-chain approval transaction. Using Permit, developers can create more efficient and user-friendly applications.

For more information, [read our tutorial](#).

How you are affected

Although we have tried to be as prudent as possible in the migration, some difficulties are expected. We are working with the wallets, blockchain explorers, and DeFi protocols to migrate users and liquidity to the new tokens. Below is a list of how the upgrade may affect you.

1. Wallets displaying both V1 and V2 tokens

Your wallet may pick up the new token and show both V1 and V2 tokens with the same balance.

Assets

Tokens

NFTs

Hide tokens

Token listAll tokens

CurrencyEUR

Asset	Balance	Value
 Monerium EUR emoney 	10 EURE	€10
 xDai	0.0025 XDAI	€0.00
 Monerium EURE 	10 EURE	€0 

We are working with the wallets and platforms to improve the icon and details for the V2 token. You can differentiate between the versions by the name and address:

	V1	V2
Name	Monerium EUR emoney	Monerium EURE
Gnosis EURE address	0xcB444e90D8198415266c6a2724b7900fb12FC56E	0x420CA0f9B9b604cE0fd9C18EF134C705e5Fa3430
Polygon EURE address	0x18ec0A6E18E5bc3784fDd3a3634b31245ab704F6	0xE0aEa583266584DafBB3f9C3211d5588c73fEa8d
Ethereum EURE address	0x3231Cb76718CDeF2155FC47b5286d82e6eDA273f	0x39b8B6385416f4cA36a20319F70D28621895279D

2. Two transfer events are displayed when transferring V1 tokens

When signing transactions using the V1 token on projects like Aave and Curve, you might see two EURE transfer events in the preview in your wallet.



This behavior is expected because the V1 now forwards all transactions to V2 which manages the state of balances, approvals etc. Once the ecosystem has moved to V2, only one event is emitted, showing a single transfer event for EURE in the preview.

3. Event logs transitioning from V1 to V2

If you're a builder using EURE event logs, your indexer may have broken. Although both V1 and V2 will always show the same balance, there is a nuanced difference in how the two versions emit logs. The fix is transitioning from V1 logs at a specific block height to V2 logs.

Chain	T - block height	V1 address (block height ≤ T)	V2 address (block height ≥ T)
Gnosis EURE	35656951	0xcB444e90D8198415266c6a2724b7900fb12FC56E	0x420CA0f9B9b604cE0fd9C18EF134C705e5Fa3430
Polygon EURE	60733237	0x18ec0A6E18E5bc3784fDd3a3634b31245ab704F6	0xE0aEa583266584DafBB3f9C3211d5588c73fEa8d
Ethereum EURE	21419972	0x3231Cb76718CDeF2155FC47b5286d82e6eDA273f	0x39b8B6385416f4cA36a20319F70D28621895279D

When the `transfer` or `transferFrom` methods are called on the V1 token, two events are emitted, one for each version. When the same methods are called on the V2 token, an event is only emitted for that token. This means that V1 will have all the relevant information to reconstruct the state up to **T**, and V2 will have the appropriate information after **T**.

Continued support for version 1

We understand that transitioning can take time, and users may have various needs and preferences. Therefore, it is important to note that the V1 tokens will continue to be supported. You can still use them as usual without any immediate need to upgrade.

Whether you use the V1 token or the V2 token in your wallet, you will still experience reduced gas costs and see the same balance.

How to use the V2 tokens

All information about token addresses, supported chains, etc., can be found at <https://monerium.dev/docs/tokens>.