Europa: A Community-Run Liquidity Hub And Gateway To The SKALEVERSE

The SKALE V2 upgrade brings to reality a universe of connected blockchains, giving SKALE the capacity to grow to thousands of chains and enabling millions of transactions per second at no cost to users. This increased capacity adds tremendous value, but also brings new challenges to user experience and token mapping. These challenges can be mitigated if dealt with upfront in a thoughtful, strategic, and coordinated manner.

The Europa Initiative is a direct effort to ensure that token mapping is optimized from the start in a decentralized and community-driven manner.

TL;DR

SKALE V2 enables all SKALE Chains to bridge to one another and the Ethereum mainnet as independent chains. SKALE imposes no global token mapping across SKALE Chains, meaning that every bridge could potentially have its own token mapping standards and different wrappings of USDC, ETH, etc, cannot be used interchangeably. This can cause the creation of numerous versions of the same token, resulting in confusion and poor user experience.

To circumvent this issue, we propose the creation of a community-run SKALE Chain, which will host the default mainnet bridge and act as a gateway for tokens entering the SKALEVERSE. This will ensure bridging is uniform and will result in an optimized user experience across the network.

To maintain independence and decentralization, the chain will be managed by a group of major stakeholders from the SKALE community including validators, dApp

developers, Foundation representatives, and ultimately a DAO. In pre-empting the problem of liquidity fragmentation, there is also an opportunity to invite initial stakeholders to create a Liquidity Hub, comprising a cluster of "public service" dApps on the same chain.

Background: Liquidity Fragmentation

SKALE's architecture is designed to be open, powerful, and performant, giving developers all the tools they need to build trustless decentralized applications running on independent but interoperable chains.

While such flexibility is critical, there are cases where standardization and limited choice are necessary or desirable. One instance of this is token bridging and the problem of liquidity fragmentation.

In IMA/Skale v2.0 anyone can run a bridge between Ethereum mainnet and their dApp's SKALE Chain, as well as directly between SKALE Chains. However, each bridge has its own token mapping standards. Tokens are locked on the bridge and a "wrapped" version of the token is minted on the other side.

The openness and decentralization of the SKALE network mean that the same L1 token will have different ids when migrated across different bridges, and these tokens will not be fungible.

For example, if USDC is migrated across two different bridges from mainnet, this will result in two separate wrapped tokens. While both are backed by L1 USDC locked in their respective bridges, they cannot be used interchangeably, and a dApp that supports USDC-A will not support USDC-B.

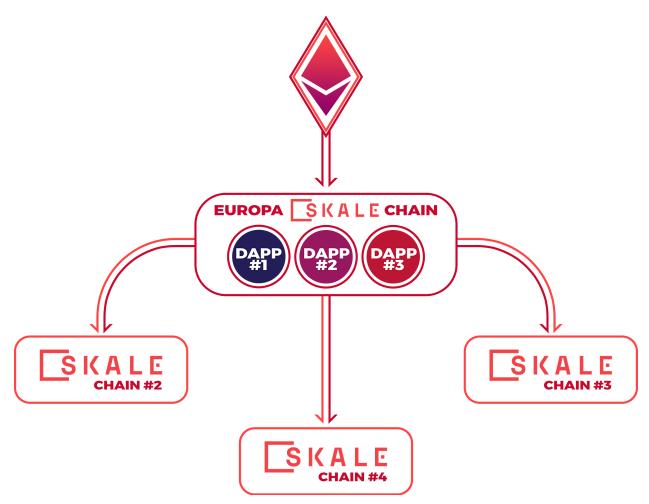
This problem is compounded when tokens are bridged between SKALE Chains, since they are wrapped on every bridge transfer. Migrating USDC-A to 10 different SKALE Chains will result in a further 10 different token ids. This fragmentation of liquidity and

loss of fungibility—especially for key assets such as stablecoins, ETH, BTC, SKL, and so on—requires a solution before the launch of IMA v2.0, when dApps start deploying on v2.0 chains (at which point the wider SKALE network can and will evolve freely, and it will become difficult and costly to put the toothpaste back in the tube).

Single Mainnet Bridge And Hub Chain

An effective solution to the problem is for migration of all key tokens from Ethereum mainnet to be **concentrated to just one bridge**, and therefore also into **one chain**. The SKALE Chain on which the bridge is hosted—**provisionally titled "Europa"**—will become the gateway to the wider SKALE network. Based on the <u>SKALE v2 vision</u> recently published by the SKALE team, as a critical Hub chain, Europa may have multiple dApps deployed on it.

This does not prevent other projects/SKALE Chains from launching their own bridges and providing the means to migrate tokens. However, establishing a community-managed chain onto which multiple liquidity-focused projects can reach consensus and clarity around the agreed version of each token that will be fungible between dApps, and therefore the route for each token into the SKALEVERSE, is vital for DeFi users, developers, and services like fiat gateway providers.

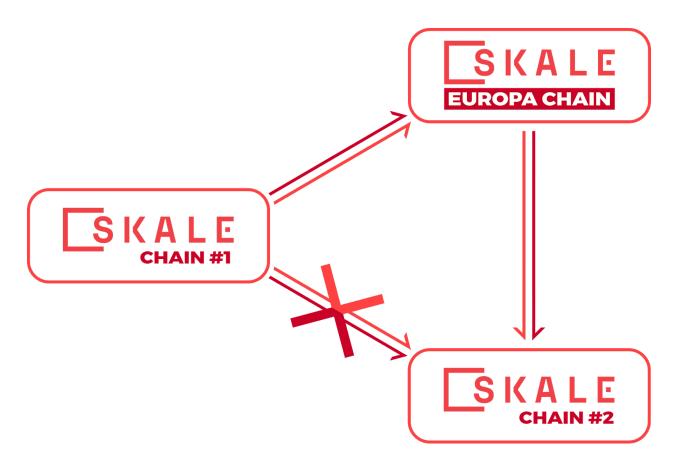


The same principle holds for other bridging services that link to the SKALE network: **Each token should bridge to just one SKALE Chain**.

While each blockchain token can be integrated with any SKALE Chain, so long as it is only one SKALE Chain, there are good reasons why the SKALEVERSE's first bridges would ideally all be integrated with Europa. In the future, this initial Bridge/Hub model might be replicated throughout the SKALE ecosystem (see further below).

The Europa chain is also **vital for transfers between SKALE Chains**, since every bridging operation wraps the tokens and results in a unique token id. For example, transferring USDC from the Europa chain to dApp #1 and then to dApp #2 will result in one version of USDC, while a direct transfer from Europa to dApp #2 would result in a different version.

All "direct" transfers between SKALE Chains should therefore use the Europa chain as an intermediary hop, thereby unwrapping the token from the wrapper it received when transferred into its starting chain. For example, dApp #1 -> dApp #2 would be routed dApp #1 -> Europa -> dApp #2.



In practice, much of the complexity can be abstracted away to ensure a user-friendly bridging experience. A community-provided bridging widget, which can be embedded into Europa-connected dApps, will make bridging compatibly-wrapped tokens from the Europa chain a straightforward process.

Community-Governed Liquidity Hub

DeFi systems are built on the principle of decentralization, and the Ruby. Exchange team recognizes the importance of community ownership. To that end, we propose the creation of a shared dApp/service ecosystem Hub on Europa, which will also host a

mainnet bridge, and which will be the default and logical route for liquidity to enter the <u>SKALEVERSE</u> upon the launch of SKALE v2.

Because the bridge and the chain on which it is hosted will be pieces of critical public infrastructure for the SKALE network, control should be distributed among multiple parties.

A key task for the Europa's governance will be the simple but important process of approving or denying proposals for new tokens to be supported (whitelisted) by the bridge. Governance will also be able to add or remove key holders, to facilitate deployment of other or new dApps onto the chain, and to update the governance framework as required.

Distributed governance of the bridge necessarily also requires distributed <u>ownership of the Europa SKALE Chain</u>. This additionally gives all key holders the <u>right to deploy dApps directly on Europa</u>.

To make the most of this opportunity, we therefore also propose that the Europa SKALE Chain becomes home to a cluster of liquidity-focused dApps that it makes sense to be in direct connection with Ethereum mainnet, as a major source of migrating liquidity, and in close proximity to each other. As a community-run Liquidity Hub, Europa will essentially provide key public services for all SKALE users, and will become a staging post to the wider SKALEVERSE.

From Multi-Sig To DAO

It is important that governance for the Hub reflects the needs of the community, but also remains agile.

We therefore propose a solution that evolves from multi-sig control to a system involving a DAO component, allowing the growing SKALE community to take a greater

role in decision-making over time but without relying on slow and inefficient collective votes in the early days, when the community is still small.

- Stage 1 (April-September 2022): 3/5 multi-sig
- Stage 2 (October 2022-March 2023): 5/8 multi-sig
- Stage 3 (April 2023-): 2/3 multi-sig, including 1/3 DAO

Stages 2 and 3 will require proposals to be submitted by the community, and for existing signatories to approve them and update the bridge contract. (The proposed dates are suggested as a starting point only, rather than being absolute deadlines.) Use of the SKALE forum is recommended to maintain a permanent record of all Europa proposals and discussion, and the SKALE Discord offers a venue for real-time discussion of proposals.

Phase 2 should also include tools to provide greater granularity for the controls that key holders have over the SKALE Chain. For example, while all stakeholders should have the ability to whitelist tokens for the bridge, non-dApp stakeholders would not need to deploy dApps.

Founder dApps

Initially, the Hub will be controlled by five key holders, with contract upgrades implemented using three-of-five multi-sig. As soon as reasonably possible, this will be updated to five-of-eight. Soon after we hope to see this control be managed entirely by on-chain voting. This level of decentralization is in line with other major DeFi projects.

We would hope and expect that key SKALE projects would appreciate the opportunity to become key holders and host their dApps on Europa, since:

 It helps position them as leaders within their sector and within the SKALE ecosystem.

- They will enjoy the benefits of close integration with other major dApps and services.
- It minimizes the potential for these key dApps to encounter incompatible tokens (e.g. the USDC-A and USDC-B examples above).

Most dApps will, in any case, need to access a mainnet bridge and address the problem of liquidity fragmentation. They will typically do this by bridging to the Europa chain, if not by deploying directly on it.

Europa founders would ideally include a mixture of dApps and other services, such as bridges and fiat integrations, as well as large SKALE holders/validators. Potential key holders might include:

- Ruby.Exchange (NFT-powered AMM)
- Boot Finance (custom pool AMM)
- <u>IVY.CASH</u> (NFT distribution platform)
- A fiat gateway service
- <u>Impossible Finance</u> (crowdfunding service)
- Connext (crosSKALE Chain network)
- N.O.D.E. Foundation (SKALE network bootstrapping organisation)
- SKALE validator and VC partners

Europa DAO Governance Token

In the final phase, the Europa DAO would hold a large part of the responsibility for contract updates, with other signatories only required to confirm any decisions, or to enable fast response in the event of a security threat.

There are various options for a DAO governance token, including:

- Dedicated Europa Hub (EUROPA) token
- Existing SKL tokens, or a proxy on SKALE network itself

• RUBY tokens or another Europa stakeholder token

Of these options, we suggest creating a dedicated EUROPA token. Using an existing token like RUBY compromises Europa's independence, and does not fairly reflect the shared nature of the Europa SKALE Chain. And, while SKALE holders have a vested interest in seeing the SKALEVERSE succeed, their chief task is securing the SKALE network as a whole, and requiring them to take specific actions to manage just one SKALE Chain imposes an unnecessary governance burden on them, without aligning incentives well.

A better option is to airdrop EUROPA tokens to a large number of Hub users, who will have an interest in maintaining and shaping the future of the bridge and Europa SKALE Chain, including the services it hosts. Tokens might be airdropped to users who have bridged funds from Ethereum mainnet since the hub launched, since most or all value in the SKALEVERSE will originate from mainnet. Additional tranches of tokens might be granted to initial founder members/multi-sig key holders, to distribute to their users as they see fit. A further token reserve can be retained in case future hub dApps mint value directly on-chain. This suggestion is, like other major decisions, open for discussion within the SKALE community.

A Blueprint For The SKALEVERSE

The model of a cluster of dApps hosted on the same "Hub" chain is designed to help partners integrate efficiently to provide their services to dApps within the network. As suggested on SKALE's blog, there could be "a few primary Decentralized Exchange Hubs in the network and a few primary NFT Marketplace hubs. This enables partners to focus their integration efforts on a handful of chains rather than needing to provide support across the entire universe of chains."

Europa will be the first SKALE Hub chain, and the process of launching it will provide insights to future hubs that wish to replicate this approach across the SKALEVERSE.

The Role Of Ruby. Exchange

Ruby. Exchange has several roles to play in the Europa and wider SKALE ecosystems:

- Proposal and development. As one of the parties leading the creation of Europa,
 Ruby's team will help refine the initial proposal, present it to the community,
 develop the smart contracts required to manage the SKALE Chain, and
 communicate with potential stakeholders.
- **Key holder**. Ruby's team also offers to be one of the five initial key holders for the Europa SKALE Chain.
- **Community member**. Ruby intends to be an active community member and advocate for governance decisions that benefit the wider SKALE ecosystem.
- Listing EUROPA tokens. Ruby. Exchange will be the first and default venue for trading EUROPA governance tokens.
- Whitelisting for liquidity pools. All tokens approved by Europa (i.e. that are
 whitelisted for the Bridge) will automatically be whitelisted for Ruby.Exchange,
 enabling anyone to create new liquidity pools for these assets without further
 approval.