# Metamask Snap



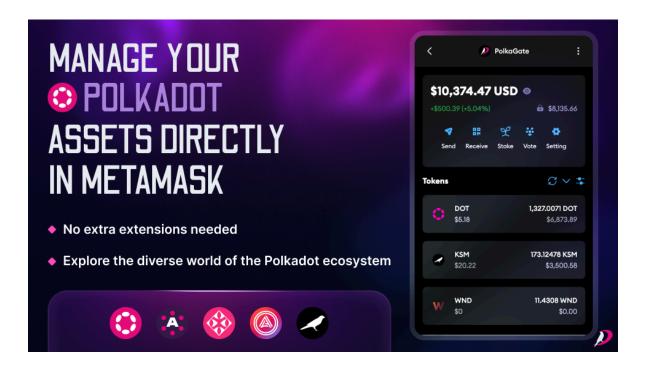


# PolkaGate MetaMask Snap: Retroactive Funding Proposal (Oct 2024 - Jan 2025)

Proponent: 17VdcY2F3WvhSLFHBGZreubzQNQ3NZzLbQsugGzHmzzprSG (PolkaGate)

• Date: 15.2.2025

• Requested allocation: 53,600 USD



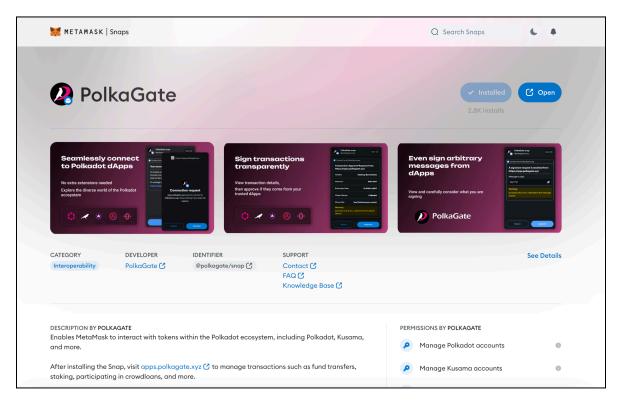
# 1. Proposal Overview

#### 1.1 Introduction

This proposal seeks retroactive funding for the development and key feature implementations of the PolkaGate MetaMask Snap over the past four months. These updates significantly enhance MetaMask's usability for Polkadot users by introducing support for staking, fund transfers, and UI improvements.







PolkaGate Snap on MetaMask Snap directory (link)

# 2. Context of the Proposal

## 2.1 About PolkaGate

PolkaGate is a dedicated team of Polkadot enthusiasts focused on enhancing the user experience for interacting with Substrate-based chains like Polkadot and Kusama. Through our MetaMask Snap project, we aim to simplify complex processes such as asset management, staking, and governance participation. By integrating seamlessly with MetaMask, PolkaGate empowers users to manage their digital assets and actively engage with the Polkadot network. PolkaGate is committed to lowering entry barriers, making the Polkadot ecosystem more accessible to both newcomers and experienced users.

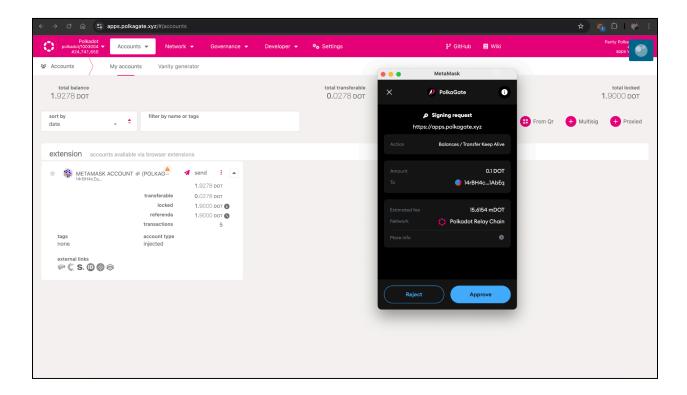
### 2.2 Overview of Product

PolkaGate MetaMask Snap enables Polkadot and Kusama users to manage assets and participate in staking and governance directly through MetaMask. This integration extends the Polkadot ecosystem's accessibility to millions of MetaMask users. The Snap supports multiple tokens, including testnet assets like Westend and Paseo, and displays balances directly on the home page for easy tracking. Users can transfer tokens within MetaMask without relying on external dApps. By integrating directly with MetaMask,





users benefit from a frictionless experience in managing assets and participating in staking and governance.



Connect MetaMask Snap to a dApp

# 2.3 Why MetaMask Snap

MetaMask is the most widely used self-custodial wallet, with millions of users managing their assets daily. However, it primarily supports EVM-based chains, leaving Polkadot users with limited options. The **PolkaGate MetaMask Snap** bridges this gap by enabling seamless Polkadot and Kusama integration without requiring users to switch wallets or learn a new interface.

By leveraging MetaMask Snaps, we provide:

- **Frictionless Onboarding**: No need to install a separate Polkadot wallet—users can interact with Polkadot directly within their familiar MetaMask environment.
- Enhanced Accessibility: Extends Polkadot's reach to a broader audience, making it easier for new users to engage with the ecosystem.
- Unified Asset Management: Users can hold and manage both EVM and Substrate-based assets in one place, improving convenience and usability.







## 3. Features

PolkaGate Snap extends beyond basic transaction signing by integrating an interactive JSX-supported UI and advanced staking options. It aims to evolve into a full-featured Polkadot wallet within MetaMask.

## 3.1. Current Features:

- Sign Transactions: Execute transactions on supported Polkadot networks.
- Sign with Metadata: Support for signing transactions even when APIs are unavailable.
- Fund Transfers: Send tokens (e.g., DOT, KSM) directly within MetaMask.
- Staking Support: Configure solo and pooled staking, manage rewards, and unstake efficiently.
- Enhanced UI: Interactive interface with JSX elements for improved usability.
- Account Export: Securely export accounts as JSON files.
- Whitelisted dApp Support: Seamless integration with staking platforms, governance dApps, and PolkaGate apps.

Below, we detail the key updates and features added to the Snap during this period.

Table 1. The Features in the MetaMask Snap



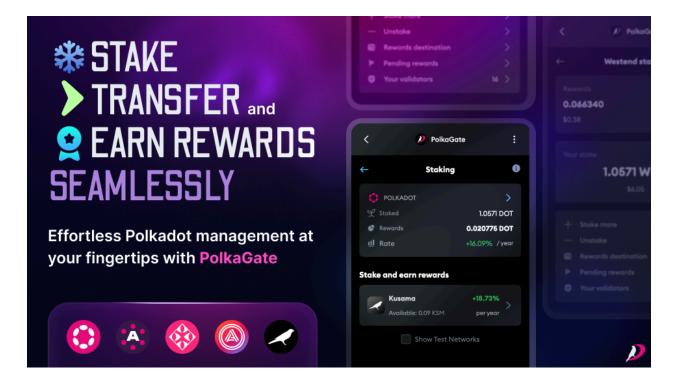


Theme	Feature	Description		
New Home	List portfolio and tokens balances	Display portfolio balance, track changes over time, and show the balances and values of selected tokens, along with detailed information for each token balance		
Transfer Funds	Send funds to another account	Transfer Polkadot tokens between accounts within MetaMask.		
	List (Staked) Tokens	Display staked tokens along with available tokens for staking, including staking rates and detailed stake information.		
	Stake in Pool	Join nomination pools		
	Claim rewards	Claim outstanding rewards or compound them by adding to the staked amount.		
	Stake More	Increase your staked tokens to maximize rewards		
Staking	Unstake	Reduce your staked tokens anytime. You'll be notified when they become redeemable based on the network's unbonding period		
	Redeem	Redeem your unstaked tokens once the unlocking period has ended		
	Stake Solo			
	Manage Validators	Select or change validators based on their provided info		
	Manage Reward Destination	Config rewards destination as staked or move to account		
	Stake-More/Unstake/Red eem	Adjust your staked tokens anytime—stake more to maximize rewards, unstake when needed, and redeem them after the unbonding period.		
Sign with Metadata	Metadata Signing for Unavailable APIs	Allows signing transactions with metadata when the API is unavailable. Supports signing transactions for any Substrate chain, even if it's not listed among the available chains in the MetaMask Snap.		
Enhanced UI	Interactive UI and JSX Components	The interface has been enhanced using new interactive UI elements and <u>JSX components</u> provided by MetaMask. The Snap has been rewritten to offer a		





		more user-friendly experience with these new components.		
	Secure Account Export	Users can securely export their accounts as JSON files within the Snap, ensuring safe and easy account management.		
Whitelisted dApps Support	Upgrading @PolkaGate/extension-da pp	The Package allows developers and dApps to integrate MetaMask to support non-EVM chains, enabling smoother interaction with various Polkadot-based dApps.		
	Support for Staking and Governance dApps	A list of whitelisted dApps for general use, staking, and governance is integrated into the Snap. Users can easily perform essential tasks like staking and governance directly from MetaMask with full support for these dApps.		



# 4. Projected Allocation & Budget

## 4.1 Team Members and Roles

The PolkaGate team consists of the following key members who have contributed to the project's success:





- 1. G. Kami Ekbatanifard, PhD Founder/CEO & Engineering Team Lead
- 2. Morteza Chalaki, BA CFO
- 3. Mehran Pourvahab, PhD Blockchain researcher & TS Engineer
- 4. Martin Azarbad, BA UI/UX specialist
- 5. Amir H. Ekbatani, PhD candidate Test engineer

# 4.2 Payment Breakdown

- Request USDT from Polkadot Treasury: 53,600 USD
- **Beneficiary**: 17VdcY2F3WvhSLFHBGZreubzQNQ3NZzLbQsugGzHmzzprSG (PolkaGate)

Table 2. Payment details of the PolkaGate MetaMask Snap development

Footure	Person-hours					
Feature	Dev.	Designer	QA	Eng. Manager	Total	
New Home	32	8	8	8	56	
Transfer Funds	24	8	16	8	56	
Staking	80	32	32	40	184	
Sign with Metadata	8	8	8	8	32	
Enhanced UI	40	16	32	16	104	
Whitelisted dApps Support	16	-	8	8	32	
	<del></del>	·	·			
Total Person-hour	200	72	104	88	464	
Hourly Rate	\$125	\$100	\$100	\$125		
Total	\$25,000	\$7,200	\$10,400	\$11,000	\$53,600	

The development of staking features and enhanced UI required a significant time investment to ensure seamless user experience across different Polkadot networks. These contributions, combined with the extensive testing and design work, justify the proposed funding allocation.

# 5. Upcoming Features





These upcoming features will enhance the MetaMask Snap by introducing advanced functionalities such as token swapping and improved smart contract support. They align with our vision of continuously improving user experience and providing a comprehensive solution for Polkadot and Kusama users.

- Smart Contract Support: Exploring integration with Westend asset hubs.
- Bridge Ethereum to Polkadot
- Token Swapping: Researching seamless in-app swaps.
- User-Requested Features: Prioritizing enhancements based on community feedback.

## 6. Links and References

In this section, we provide essential links to access our resources and stay connected with the PolkaGate community:

#### 6.1 Official Website and Documentation

Website: polkagate.xyz

Documentation: docs.polkagate.xyz

X: x.com/@polkagate

• YouTube: <a href="mailto:youtube.com/@polkagate">youtube.com/@polkagate</a>

• Element: matrix.to/#/#polkagate:matrix.org

• GitHub: github.com/polkagate

### **6.2 Notable Announcements**

Staking Feature Announcement Video: <u>Watch on X (Twitter)</u>

## 7. Conclusion

PolkaGate MetaMask Snap bridges the Polkadot ecosystem with MetaMask, offering users an intuitive and powerful tool for asset management, staking, and governance. The requested retroactive funding will allow us to refine existing features and introduce new functionalities based on community feedback. This support will ensure the project's continued growth, helping us make the Polkadot ecosystem more accessible and engaging for users.

#### 7.1 Final Remarks

With the Polkadot Treasury's support, we can continue improving accessibility for millions of users. We look forward to your feedback and collaboration to shape the future of Polkadot within MetaMask.