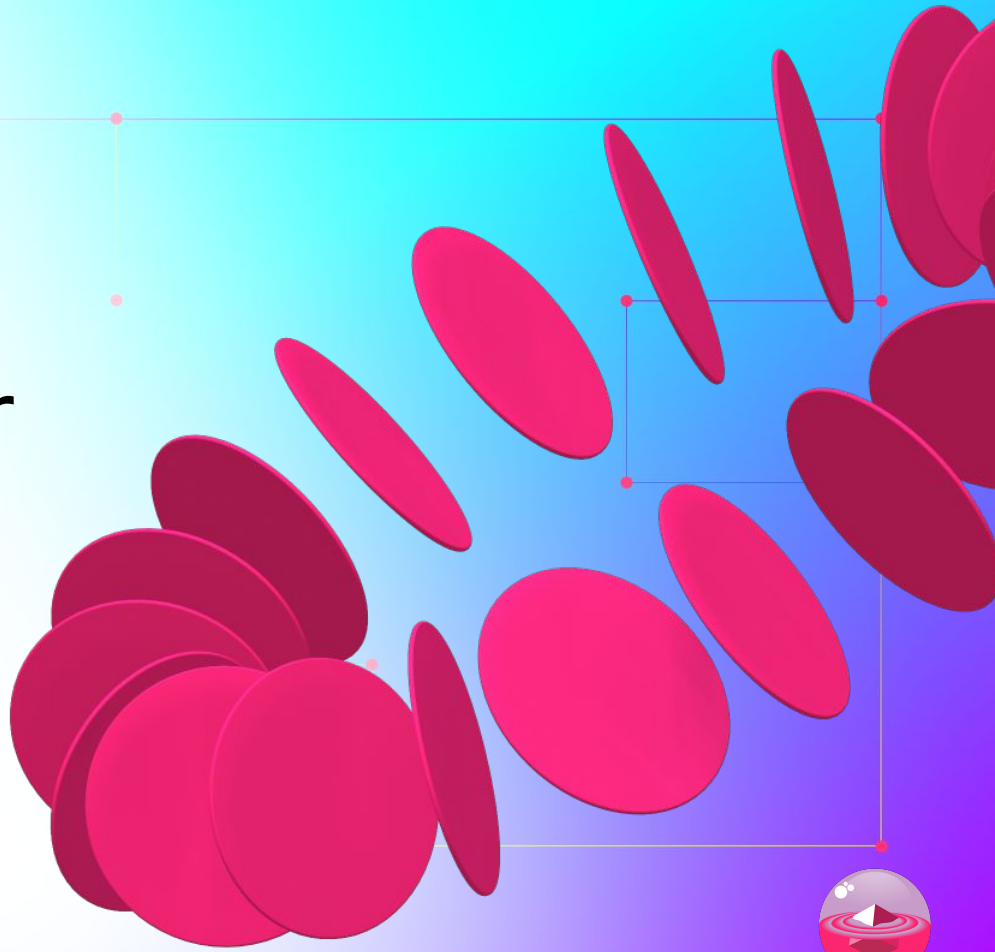
Polkadot

Polkadot: End of Year Report 2024



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Forward

As the Data Team at Parity Technologies, we're driven by the conviction that data is the cornerstone of meaningful advancements. It's through understanding data that we can unlock the full potential of the Polkadot ecosystem and demonstrate its value to the world. Our mission is to decode Polkadot's block and ecosystem data, transforming them into valuable community insights.

Check out our website where you will find the full Monthly Reporting and more.

The following report is for informational purposes only. All the data is sourced from DotLake which gathers directly from distinct chains.

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2024 Highlights

Coretime

Slot Auctions were replaced with the new Coretime model, enabling on-demand and bulk blockspace purchases

Bridges

Three trustless bridges were launched: Snowbridge for Polkadot-Ethereum, the Polkadot-Kusama bridge, and Hyperbridge for universal interoperability beyond the native Polkadot ecosystem

Throughput

Over 143,000 TPS were recorded during the Spammening event on December 4th, 2024

Async Backing

Async Backing was introduced, improving throughput and reducing rollup (parachain) block times in half from 12 to 6 seconds

Security

Polkadot's active validator set grew to 500, confirming its lead with the highest Nakamoto Coefficient in Web3

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2024 Highlights

Activity

2024 saw a rise in monthly transactions from 13.1 million January to 39.6 million in November, a 200% increase

OpenGov

More than 1,300 referendums initiated overall, with over 900 launched in 2024 and approximately 215 million DOT locked through conviction voting

Inflation

The Polkadot community set a fixed inflation at 120M DOT annually through on-chain governance

Stablecoins

The total USD value of stablecoins rose from approximately $22M at the start of the year to $90M

Developers

Contributions to Polkadot repos in the OSS Repository list showed 1273 developers contributing to more than 270 repos

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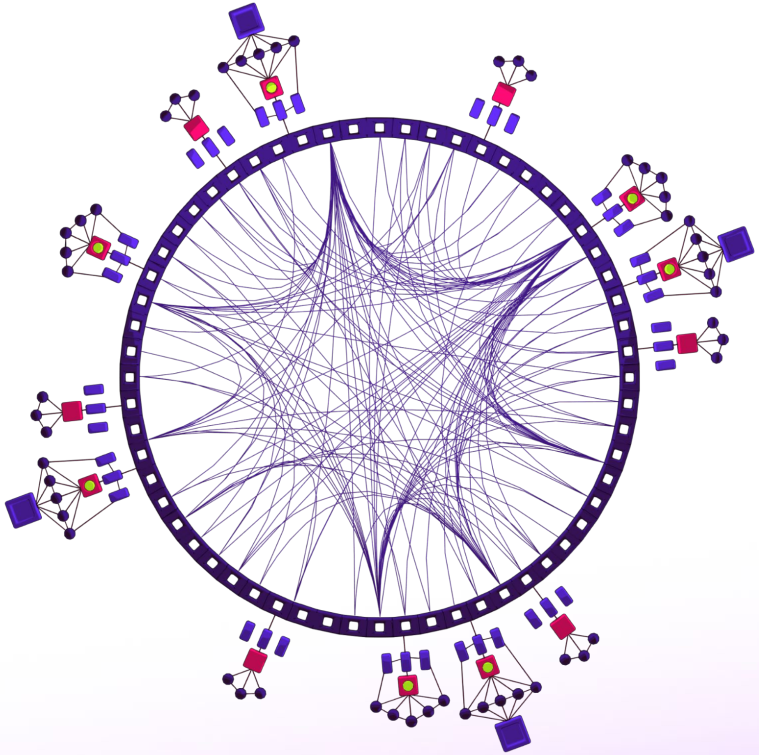
Security, Resilience and Decentralization



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Staking DOT secures the network

Security is incentivized

Staking DOT ensures the security of Polkadot by incentivizing validators to act honestly. Validators validate transactions and produce blocks, and malicious actions are penalized through slashing, making attacks costly and unfeasible.

Decentralization powered by 500 active validators

With 500 validators actively securing the network and a greater number ready to join in the next era, Polkadot's architecture ensures resilience, fairness, and a high level of trustlessness across its ecosystem.

A new inflation model - 8% and decreasing

Polkadot has transitioned from an exponential model of token supply growth with a constant inflation rate to a linear model of token supply growth with an inflation rate which decreases yearly, starting at 8% in the first year. Translating to approximately 120M DOT in the first year, the new inflation model ensures sustainable validator rewards for continued network security and allocates 15% to the treasury to keep driving ecosystem growth.

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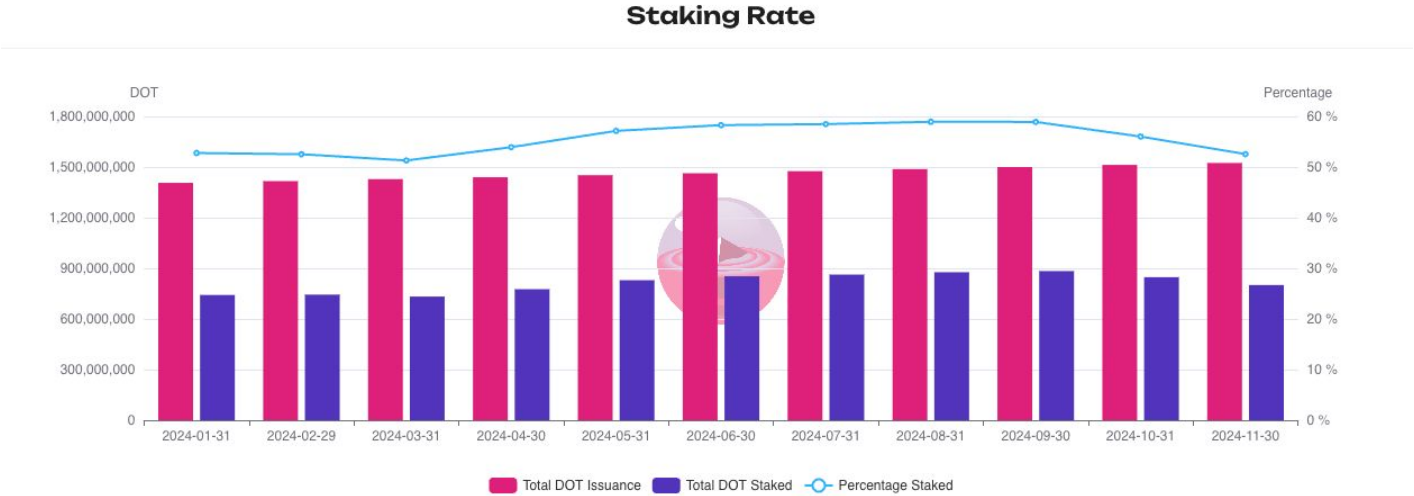
Staked DOT over 50% of Total Issuance

As of November 2024, **52.5%** of DOT tokens were staked totalling over 800 Million DOT (ca. **8 Billion USD**) in economic security. Polkadot's high staking rate is crucial for maintaining network security, as it ensures robust validator participation and aligns token holder incentives with the network's long-term success. This strong staking participation also reflects the community's confidence in Polkadot's economic model.



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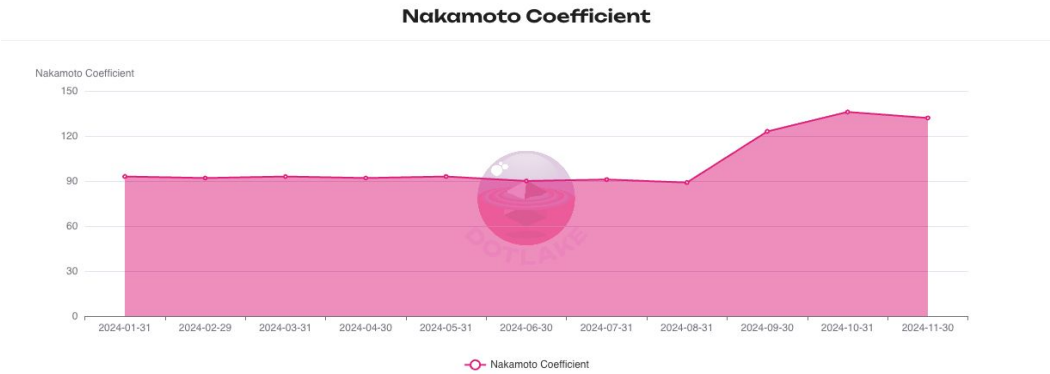
Expansion of validator set boosts network resilience

Polkadot increased the number of validators to secure block production. The number of active validators rose from 297 to 400 in September and then to **500** in October, strengthening network decentralization and ensuring greater resilience.



Nakamoto Coefficient rising

As a result, the Nakamoto Coefficient rose up to **132**, further underscoring Polkadot's leadership in validator decentralization and cementing its position as one of the most decentralized and secure blockchain networks.

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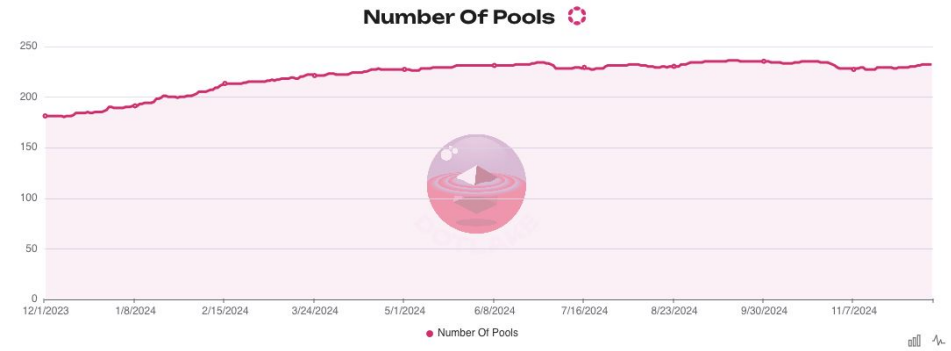
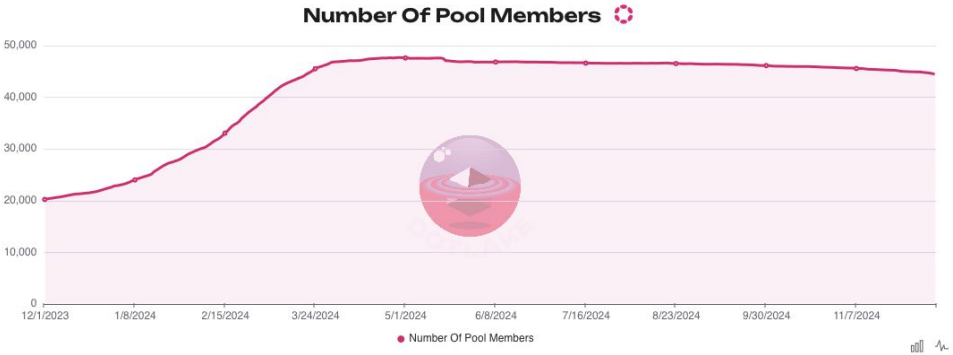
Growth in Nomination Staking Pools

There are now **229** Nomination Pools with over 44k Pool Members bonding ca. **22.1 million DOT** . Throughout 2024, the trend has seen a rise in Pool Members and a decrease in direct Nominators.

To directly nominate validators on Polkadot and earn rewards the Minimum Active Stake is currently 263 DOT.

For users who wish to stake less and still earn DOT, Nomination Pools allow for jointly nominating a validator set curated by the Nomination Pool Provider. It provides easy access to the Staking protocol with a smaller amount of DOT.





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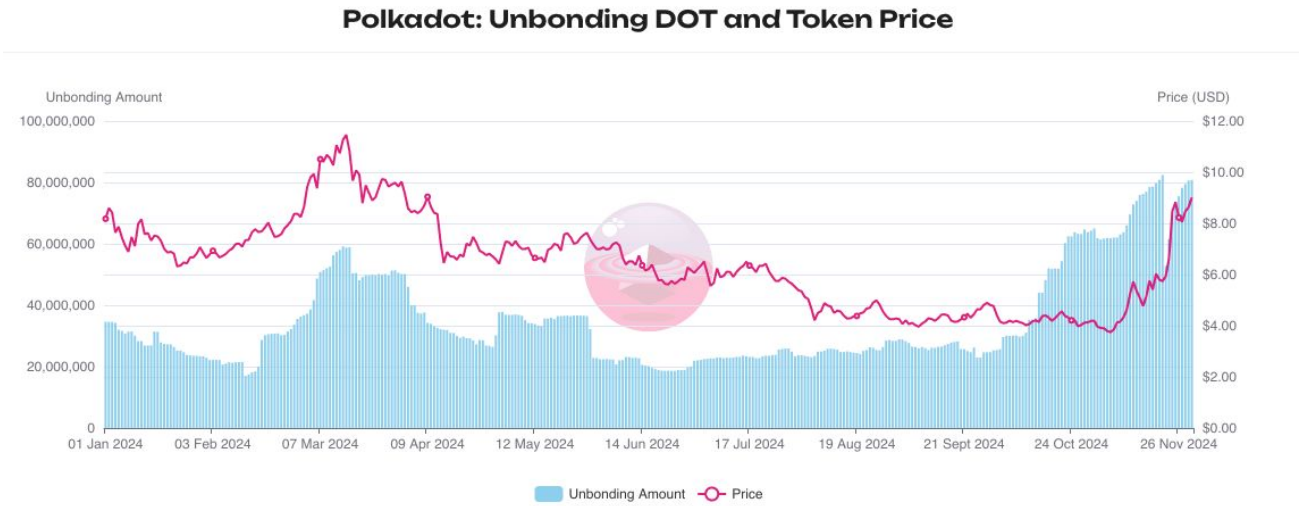
Unbonding DOT following market trends

Towards the end of October 2024, the amount of unbonding DOT has been increasing, rising above the previous yearly high of ca. **60 million DOT** in March to **80 million** in November.

During periods of market fluctuation, the unbonding stake increases, seen by two spikes in April and October.



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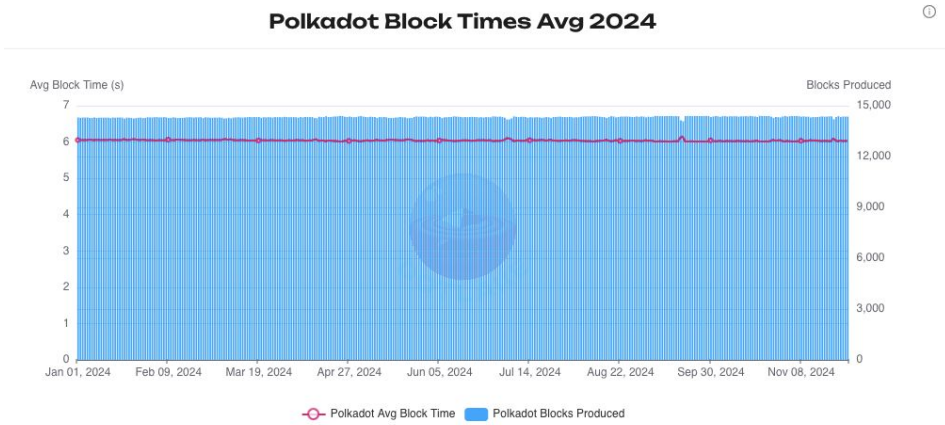
Stable block production on the Relay chain

The relay chain showed consistent block production throughout the year, with daily average times remaining close to the expected 6 seconds.

99.49% of all blocks were produced under **7 seconds** and **99.99%** were produced under **30 seconds**, with only 9 exceeding this threshold during the entire year.

Even during high frequency transaction periods from multiple rollups, no significant rises in block times were observed. The network showed stable and resilient behaviour in 2024.

Total # Blocks	Blocks Under 7s	% Blocks Under 7s	Blocks Over 30s	% Blocks Under 30s
4,799,201	4,774,752	99.49%	9	99.999%



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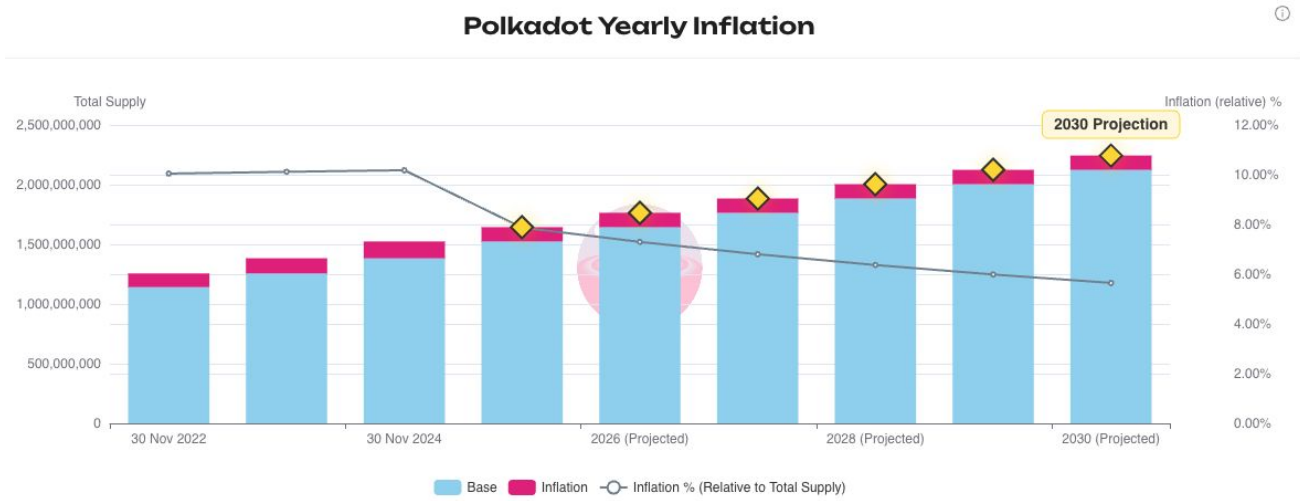

The data illustrates the yearly inflation values from the previous model, showing an annual rise in absolute terms. With the adoption of the **new inflation model**, set at **8%, or ~120M DOT** in the first year, inflation is now decoupled from total supply. As total supply continues to increase, relative inflation will decline over time, all the while maintaining sustainable validator rewards. Further accounting for treasury burns and coretime sales burns, the total yearly inflation will be 120M DOT minus the amounts burned.

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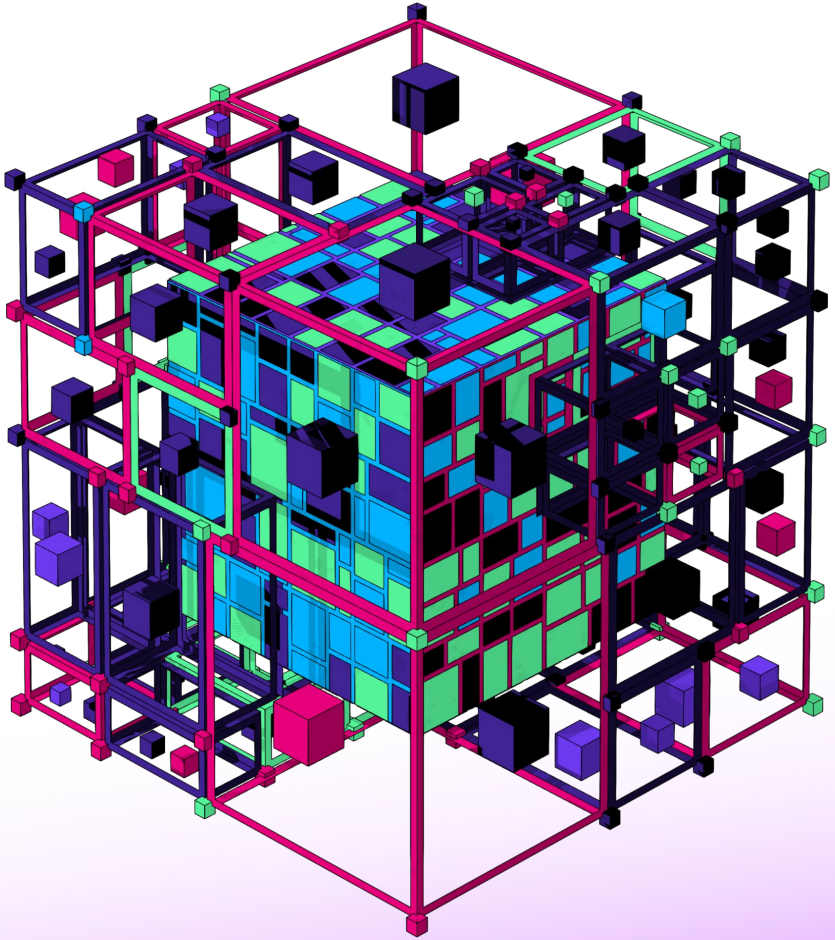
Throughput



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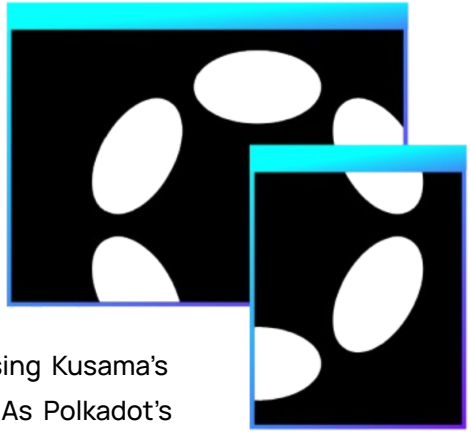
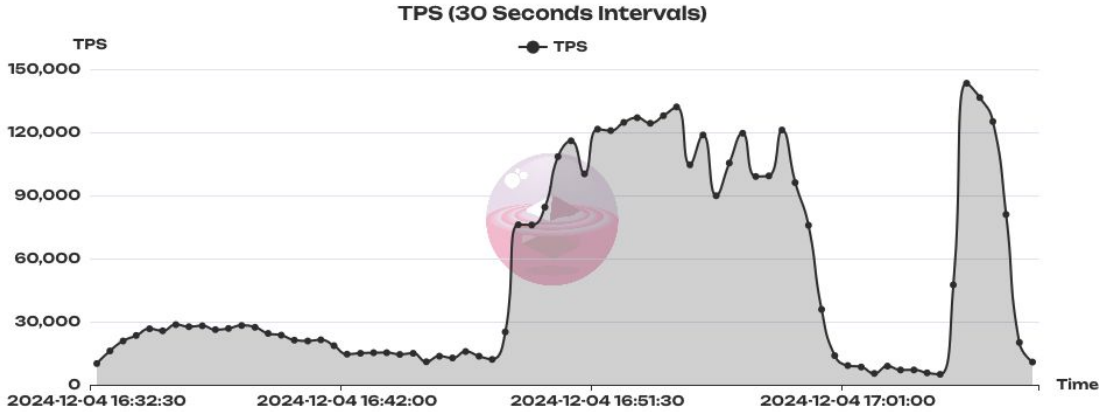
The Spammening

The "Spammening" was a live stress test event on the Kusama network that took place on December 4th, 2024. It involved continuously submitting a high volume of transactions to push the network beyond previously seen limits. Check out the live event recording here!



At its peak, over **143,000 transactions per second (TPS)** were recorded, showcasing Kusama's remarkable potential in handling surges of activity and paving the way for future improvements. As Polkadot's canary network, Kusama was the ideal candidate for testing, while also leveraging advanced features such as 'Elastic Scaling' on a real live network.



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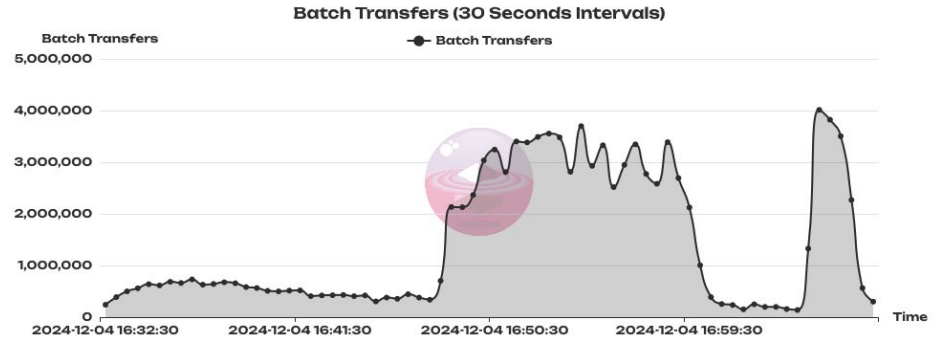
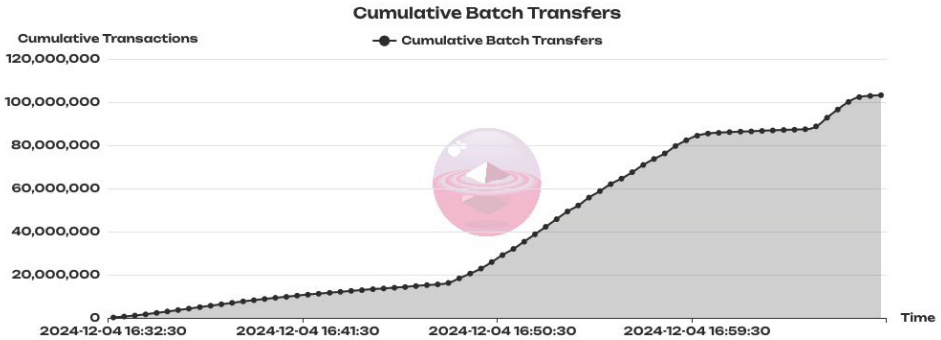
Transactions and Batch Transfers

At the height of the experiment's **TPS** of **143k**, almost **4 million** batched transfer calls were executed within the 30 second time interval. The event witnessed multiple peaks as 1 million to almost 4 million batch transfers flooded the chains.

Overall, the cumulative amount of batched transfers reached above **103 million** . The success of the experiment is a testament to the scalability of Kusama. Utilizing Elastic Scaling on the Spam Rollup cores, the amount of throughput was able to be ramped up and handle tremendous surges in activity.





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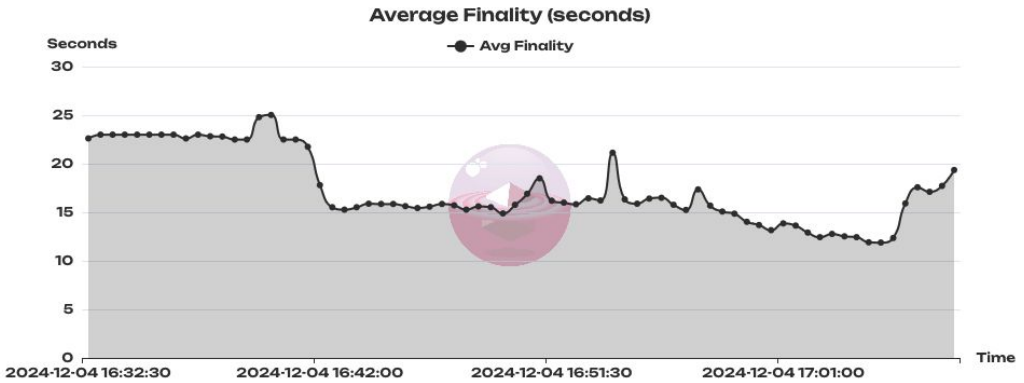
Finality averaged 16.8 seconds

Average finality times on the Spam Rollups dropped to as low as **11.8 seconds** during the testing period with an overall overage of 16.58s. The maximum times measured was 25s.

Finality initially dropped from 25s to 15s and below. Towards the middle and end of the experiment, two bumps are seen from 15-20s finality which align with the peak TPS figures where millions of batch transactions were sent across the network.



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Fees remained low

Throughout the experimental period, Kusama's transaction fees demonstrated remarkable stability, reflecting the network's efficiency and robustness. The only notable spike, reaching $8 USD during a 30-second interval, was linked to a specific **extrinsic** call and was unrelated to the "spammening" activity.

For the remainder of the experiment, fees consistently ranged between 0.02 and 0.15 USD per 30-second interval, maintaining a low-cost environment for users and developers. This stability highlights Kusama's capacity to handle network activity efficiently, ensuring scalability and affordability.

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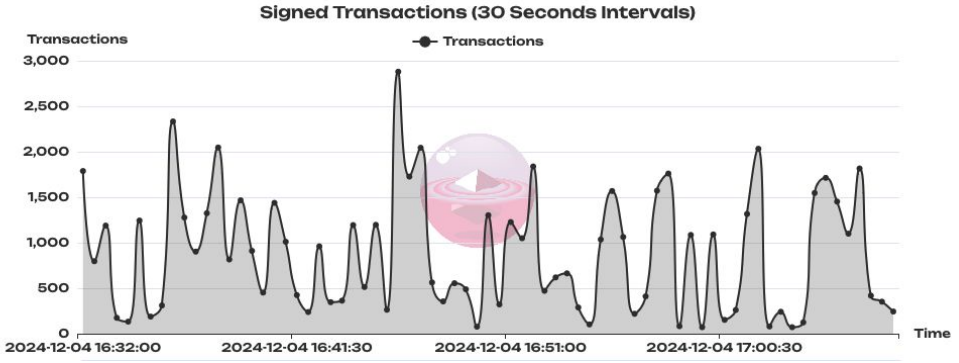
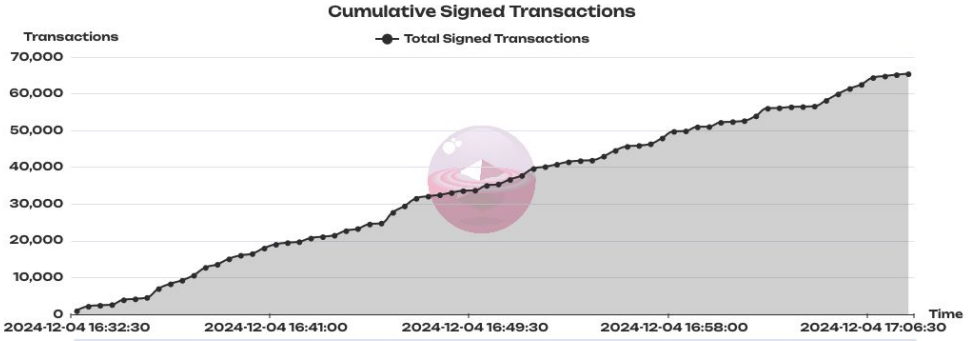
Signed Transactions (Existing Rollups)

During the experiment, over **60k** signed transactions were also recorded from existing rollups. Almost **3k** signed transactions were processed within 30 second intervals and held up well over 1.5k for several minutes of the experiment.

The network can handle a sudden influx of transactions on rollups while also maintaining high performance and stability for established rollups already in full operation. This was more than a showcase of raw speed, it was a demonstration of a mature, adaptive ecosystem prepared to meet the dynamic demands of a rapidly scaling blockchain environment.





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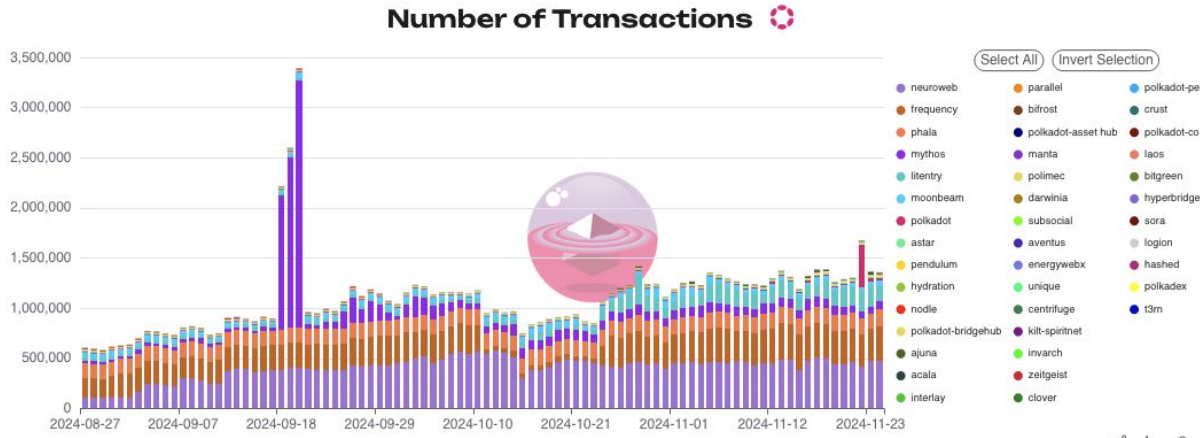
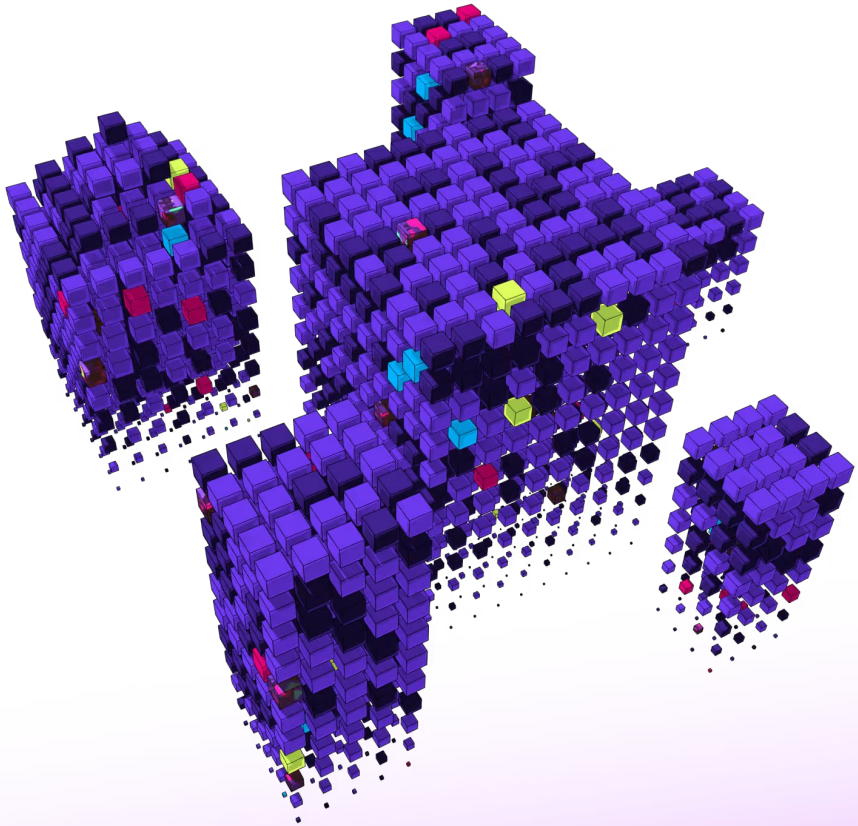
High throughput no bottlenecks

Polkadot is built to handle high throughput from multiple rollups in parallel.

Aside from the Spammening's record TPS, in 2024 we also saw how transactions on Mythos rose sharply in September, increasing the overall number of transactions to **3 million** in one day (nearly 3x daily amounts). During periods of high throughput, the network has showed itself to be resilient and stable, effectively handling spikes without strain. Block production was not impacted on other rollups even during peak usage periods. Surges in transaction volume will be improved further with Elastic Scaling where chains can increase their capacity to meet high demand when it occurs.



Scalability



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Agile Coretime lowers entry barriers and enhances resource efficiency

Efficient blockspace usage

Agile Coretime offers flexible options for blockspace allocation. On-demand Coretime lets rollups acquire blockspace as needed, while Bulk Coretime provides long-term, predictable allocations for projects with consistent needs.

Cost-effective blockspace usage through secondary markets

Teams can trade excess blockspace, monetizing unused allocations while acquiring additional resources as needed.

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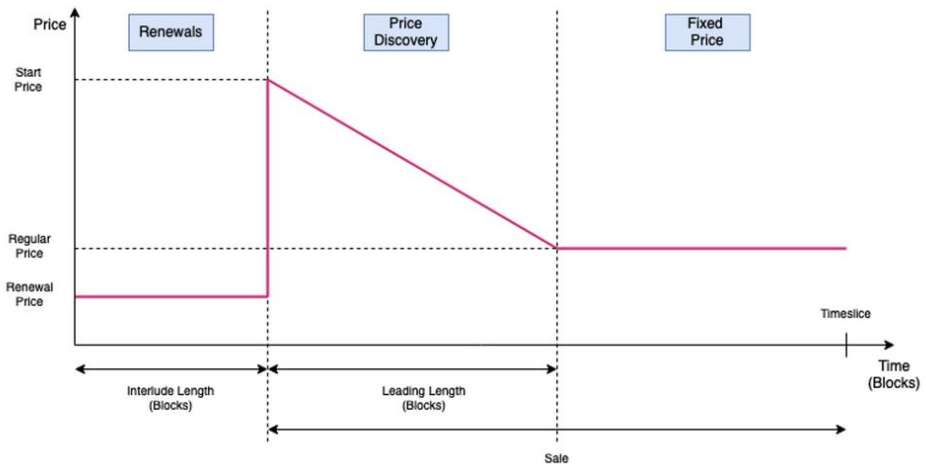

Coretime sale phases

Coretime sales operate on a decreasing price scale through a Dutch auction mechanism. The price starts at a predefined start_price and decreases block by block during the Price Discovery period until it reaches an equilibrium known as the regular_price. This price is then maintained during the Fixed Price period.

Sales are divided into two key phases:

Renewal Period: A time for renewing bulk Coretime, lasting for interlude_length blocks.

Sale Period : Split into:

> **Price Discovery Period** : Determines market equilibrium through a Dutch auction lasting for leading_length blocks.
>
> **Fixed Price Period** : Offers Coretime at the determined regular_price.

This phased pricing approach ensures fair market value and encourages active participation in price discovery.

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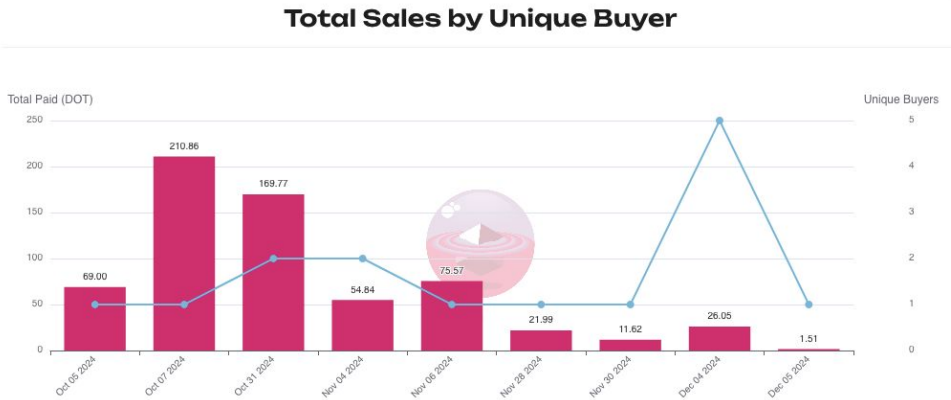
Coretime sales are live on Polkadot

The first coretime purchase on Polkadot was on October 6th, 2024 with a single core being sold for **69 DOT**. Since then there have been 23 more cores sold, 2 renewed, with scheduled ongoing sales as the number of cores available on the network increases. So far the total coretime sales revenue is at approximately **844 DOT**, all of which is subsequently burned.

As existing rollup leases expire, they are transitioning to the coretime model, allowing projects to renew their blockspace at a fixed price or purchase a new core at current market rates.



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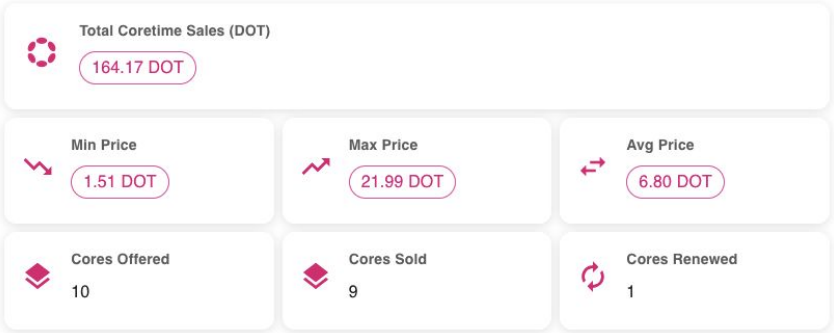
Polkadot: Latest Sale



Core sales are rolling on

Coretime sales is currently in its third period with the most recent sale resulting in 9 Cores sold and 1 Core renewed.

The minimum price paid in the third period was 1.5 DOT (16 USD) and maximum 21.99 DOT (180 USD).

A total of 164.17 DOT will be subsequently burned. Sale 4 began on December 12th.

Reserve your Core now - Visit Lastic or RegionX to purchase and manage Coretime.

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Accelerating throughput with Asynchronous Backing

6-second block times for Rollups

Asynchronous Backing reduces block times for rollups from 12 to 6 seconds, enabling faster inclusion of blocks.

Scaling throughput by 10x

Through parallel transaction validation, increased block execution time, and pipelining, Asynchronous Backing delivers up to 10x higher throughput for rollups.

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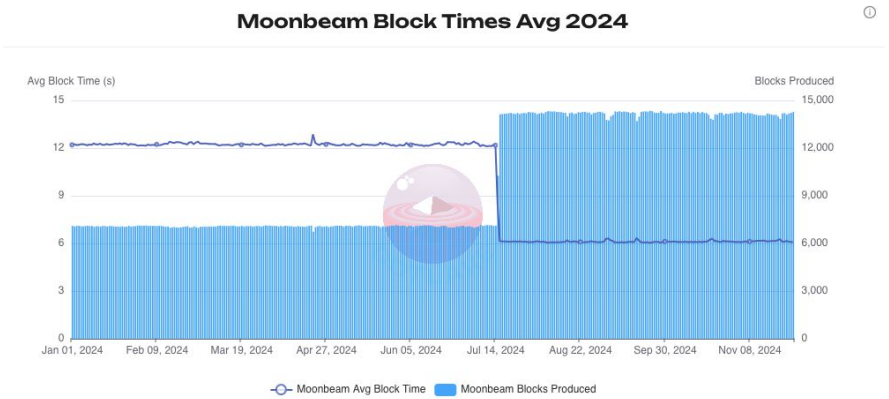
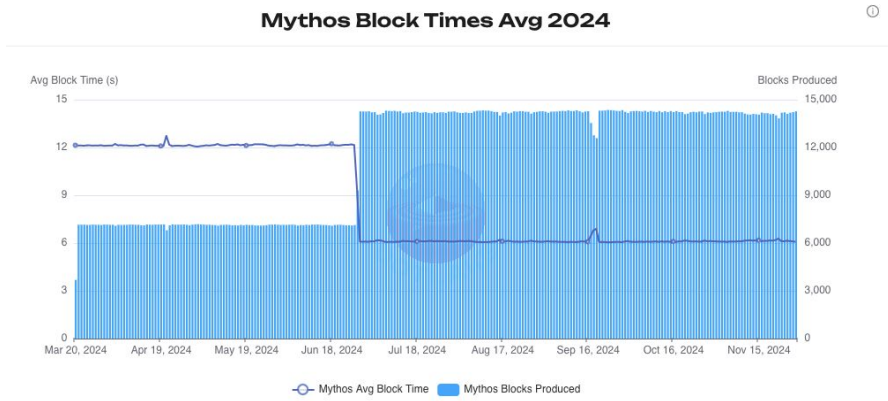




Enhancing network performance with Async Backing

The activation of asynchronous backing across rollups has cut their block production times in half.

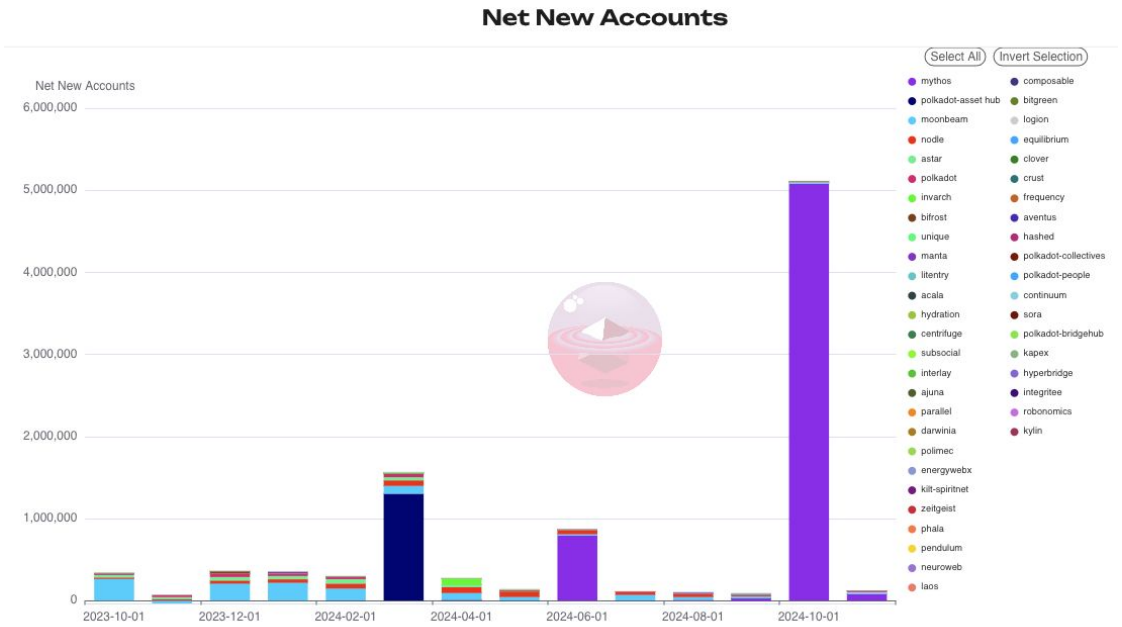
Illustratively, on Moonbeam and Mythos, pre-upgrade block times averaged around **12 seconds** . Following the runtime upgrades - at block 6593038 and block 707464 respectively, average block time dropped to approximately **6 seconds** .

Faster block times significantly increase the network's throughput, enabling more transactions to be processed. It allows the network to support a growing user base and more complex applications without congestion. Additionally, reduced block times lead to quicker transaction confirmations, improving the overall user experience.

Polkadot AssetHub and Mythos accounts surge

The number of New Accounts in 2024 saw three months with spikes in activity. During March, June and October 2024, **millions of addresses** were created on AssetHub during the launch of an ecosystem token and on **Mythos** during their migration from Ethereum to Polkadot.

The network is able to handle high transaction throughput and provide a scalable solution for onboarding projects. In the case of Mythos (play-and-own game economies on blockchain), the month on month percentage increase between September's 180k and October's 5 million was **2,662%**.



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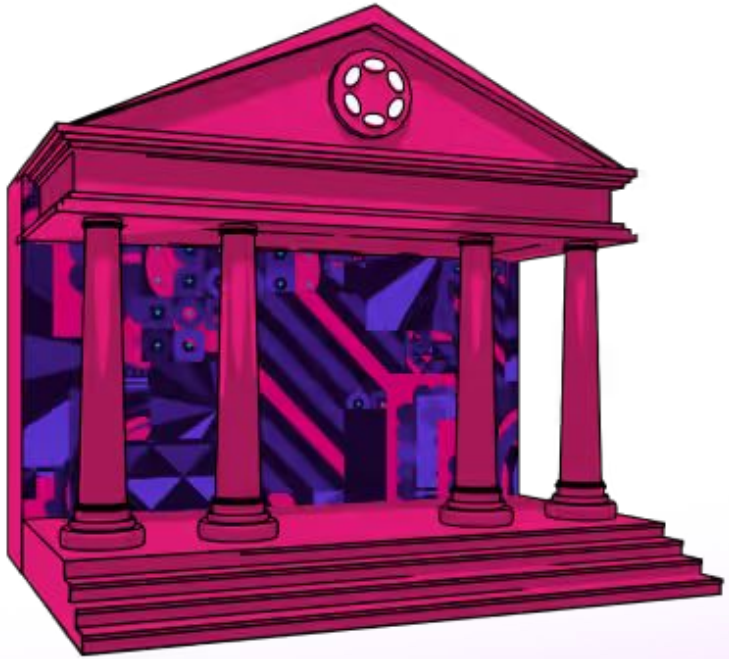
Governance



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Governance shapes the future of Polkadot

A vibrant community making impactful decisions

Polkadot's governance system enables its community to vote on a wide variety of critical topics, from runtime upgrades to network parameters like inflation. With over 1300 referendums initiated, the community actively shapes the direction of Polkadot's evolution.

Treasury fuelling Web3 innovation

Through decentralized voting, Polkadot's treasury has allocated substantial resources to drive technical advancements, community initiatives, the funding of collectives, and ecosystem growth, ensuring that Polkadot continues to be at the forefront of Web3 development.

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950+

OpenGov Referendums **initiated** in 2024 (YTD)

520+

OpenGov Referendums **approved** in 2024 (YTD)

$217 M

USD value of assets currently controlled by the Polkadot treasury

$129 M

USD spent by the Polkadot treasury in 2024 (YTD)

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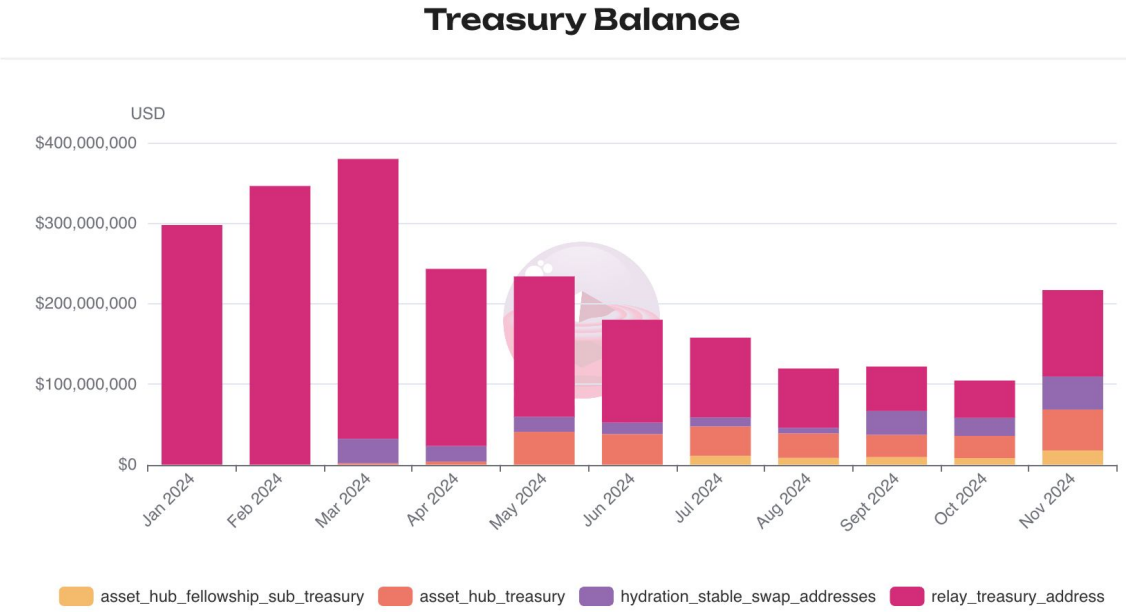
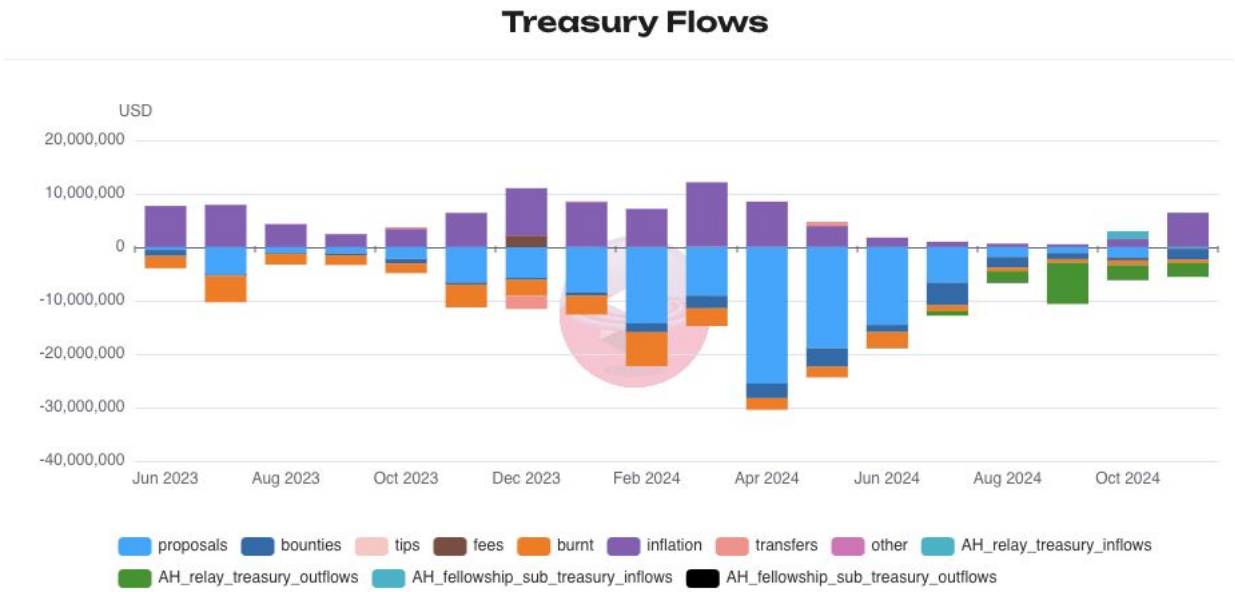
Referenda by Origin

Since the beginning of 2024, over **950** referendums have been initiated, with approximately **77%** focusing on treasury-related proposals. The Medium Spender and Small Spender tracks were the most used with 296 and 124 referenda respectively.

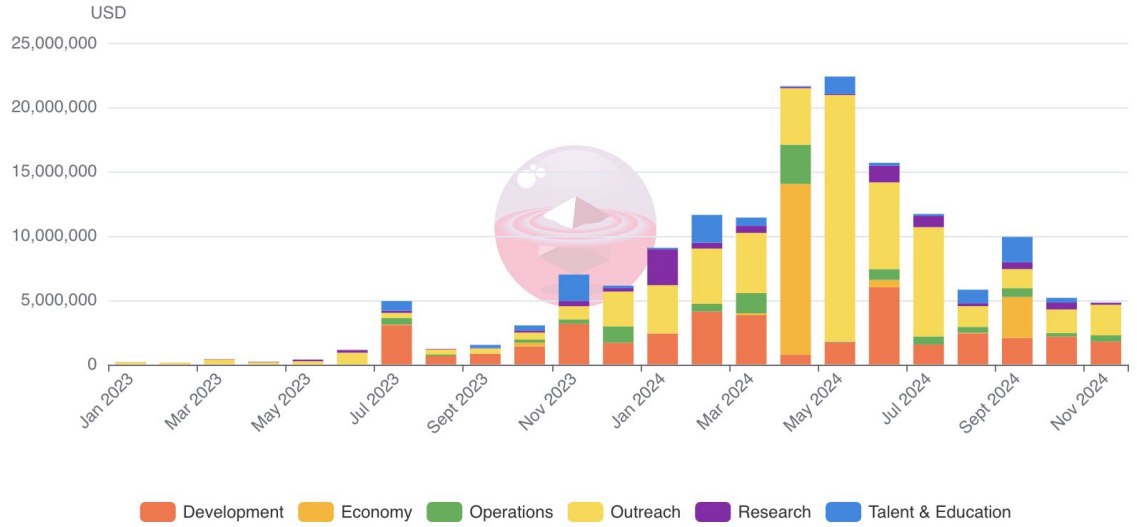


Treasury funds are now spread across the Polkadot relay chain, Asset Hub, and the Hydration chain, where a variety of assets (DOT, USDT, USDC) are managed. The transfer of assets from the relay chain treasury to other chains was enacted through referendums 457, 741, 832, and 1104. The treasury also holds other assets such as DED but these assets fall outside the scope of this report.



This chart provides a view of the **treasury's inflows** and **outflows** since the launch of OpenGov. Spending through proposals has increased, **peaking in April 2024** with **25.5 million USD** spent, though a **sharp decline** occurred after **June 2024**, coinciding with the release of Alice und Bob's OpenGov Treasury report. November 2024 marked the first positive netflow since August 2023, driven by the new inflation model allocating 15% of inflation to the treasury, providing a more predictable source of inflows.

Treasury Spending by Category



Treasury spending has grown significantly, with a **3.2x increase** in **2024 YTD** compared to **2023**. Spending peaked in April and May 2024 but has steadily declined in subsequent months.

This chart shows how funds have been allocated across various categories on a monthly basis, assisted by an AI classification algorithm to categorize each referendum.

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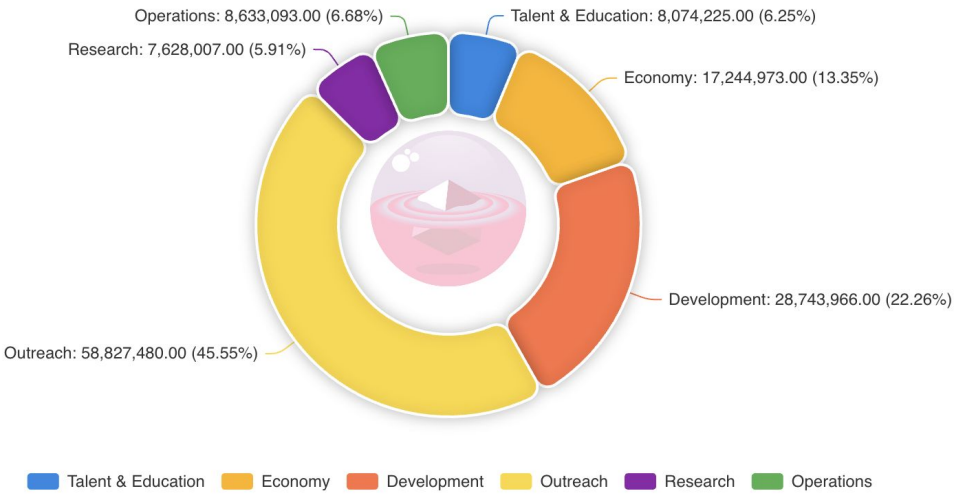
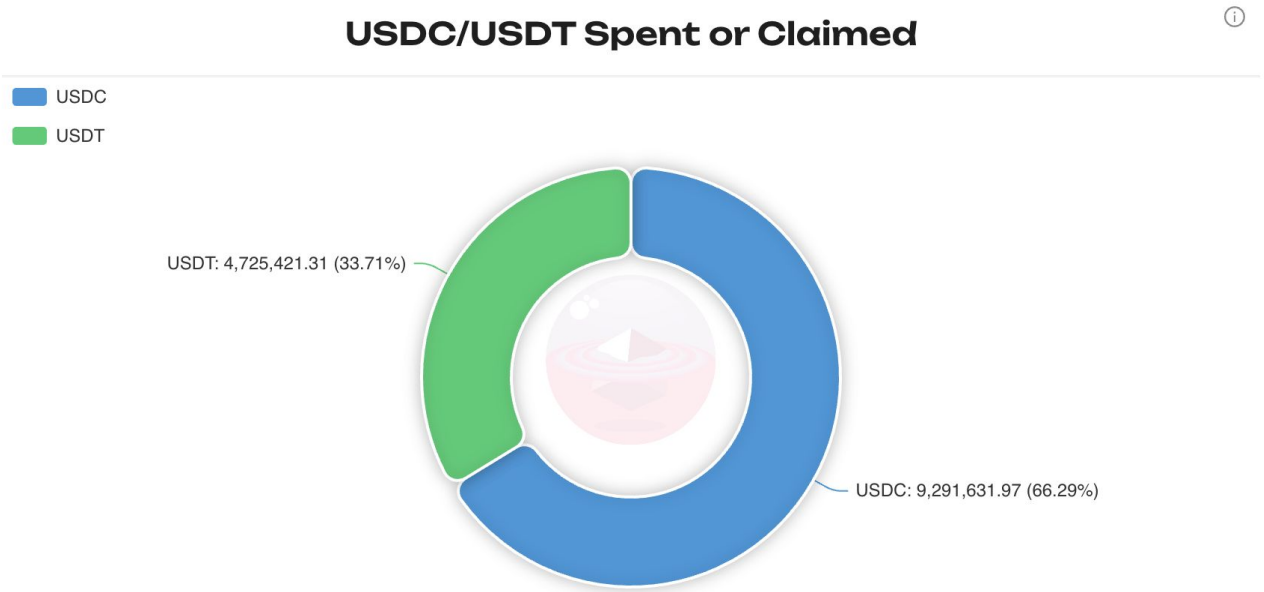
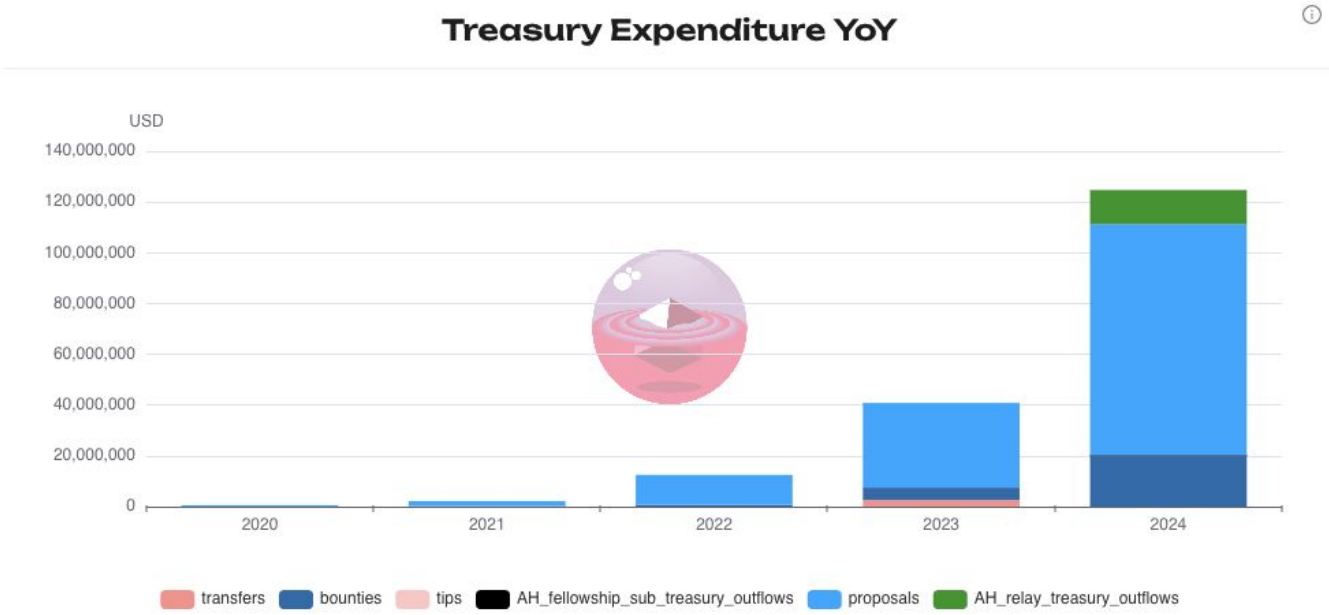
Treasury Spending by Category 2024



In **2024**, the Polkadot treasury invested $58.8M in **outreach** efforts to support community and ecosystem growth, followed by $28.7M in **development** and $17.2M in **economy** -related initiatives. Other categories, including **research, operations**, and **talent & education**, saw comparable funding levels, ranging between $7.6M and $8.6M.

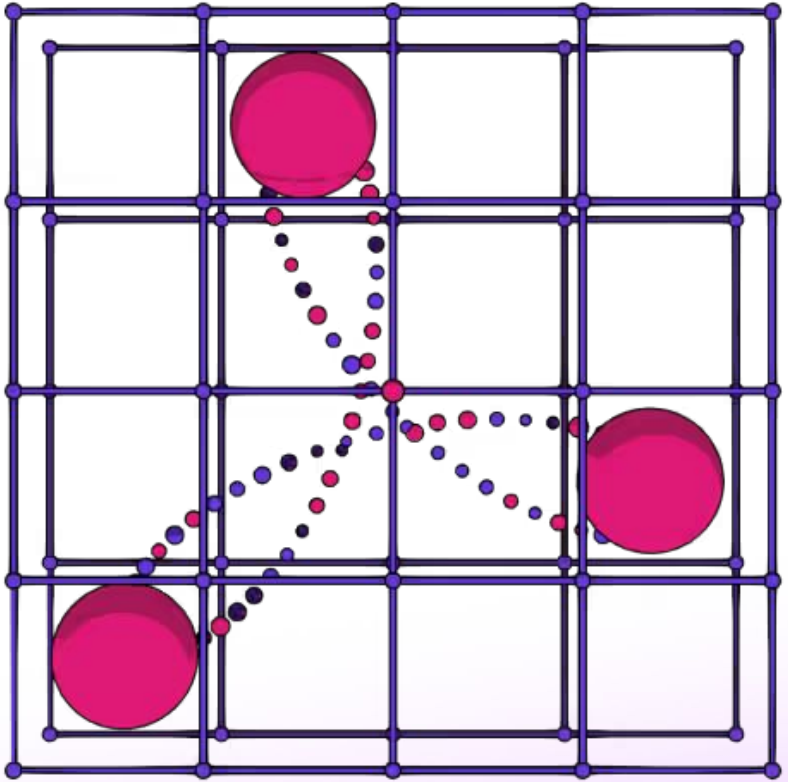


A new feature was introduced this year, **enabling DOT holders to request USDT and USDC from the treasury** , offering greater financial stability for project budgeting. Since its implementation, the treasury has funded proposals with approximately **9.3M USDC** and **4.7M USDT** , supporting diverse initiatives across the ecosystem while mitigating volatility risks.



Treasury expenditure has seen a significant rise, with a year-over-year increase from **40.8M** to **129.5M** - over **200%** from 2023 to 2024. This growth reflects the expanding scale and scope of initiatives funded through Polkadot's decentralized governance mechanisms.

Ecosystem Growth



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A thriving ecosystem

Specialized chains driving the ecosystem

Polkadot rollups, also known as “Parachains”, are specialized blockchains at the heart of Polkadot’s architecture, enabling scalability, interoperability, and customization. Designed for diverse use cases—from smart contracts and privacy to asset management—they empower teams to build tailored solutions while benefiting from the robust shared security of the Relay Chain.

Critical services for network growth

System chains provide essential network services, such as asset management, governance frameworks, identity management, and trustless bridging, ensuring the broader ecosystem has a scalable and secure foundation to keep growing.

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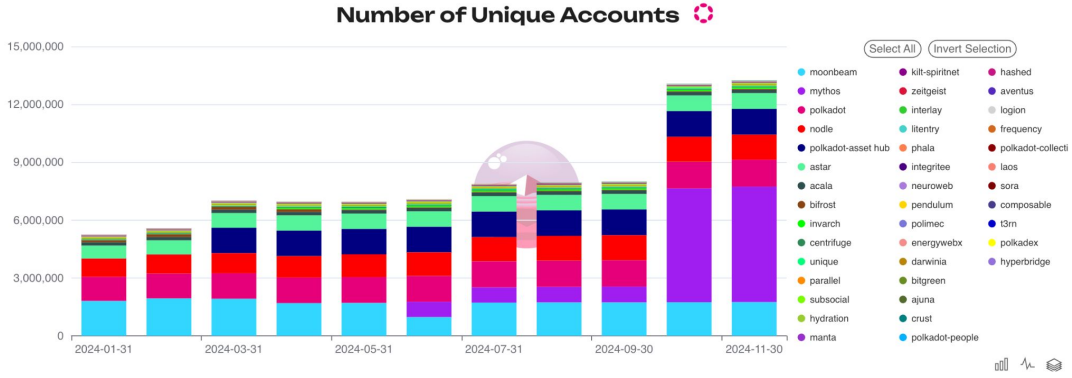

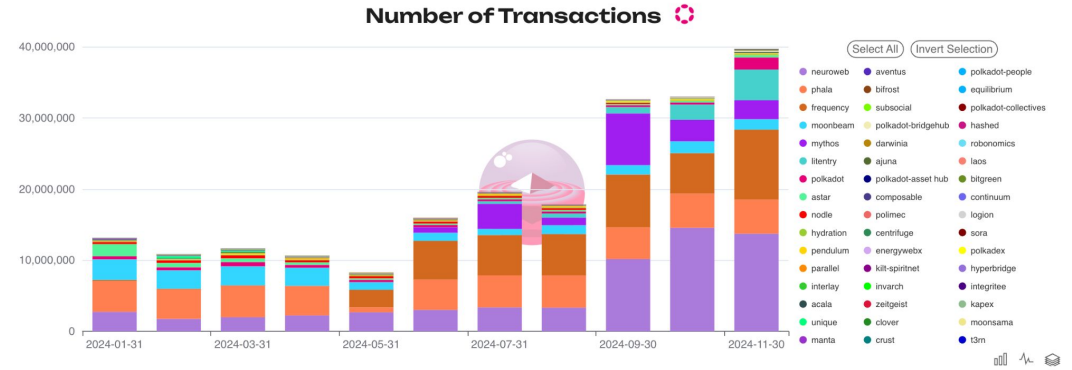

Growth driven by new rollups and higher throughput

The ecosystem saw a **150% increase in unique accounts** , growing from 5.2 million in January 2024 to 13.2 million in November 2024. Nearly 6 million of the new addresses are on the Mythos chain, which first joined the ecosystem this year, followed by a migration of these accounts to its rollup. **Mythos migrated from Ethereum to Polkadot** to leverage its throughput, low transaction costs, interoperability, ultimately supporting Mythical Games' expansion plans.

Total ecosystem signed **transactions surged by over 200%** , growing from 13.1 million in January 2024 to 39.6 million in November. This growth was driven in part by **Mythos** and **Frequency** , which began contributing mid-year with high transaction throughput. Other top chains for monthly transactions include **Neuroweb** , **Phala** , **Moonbeam** , **Litentry** , and **Polkadot** .

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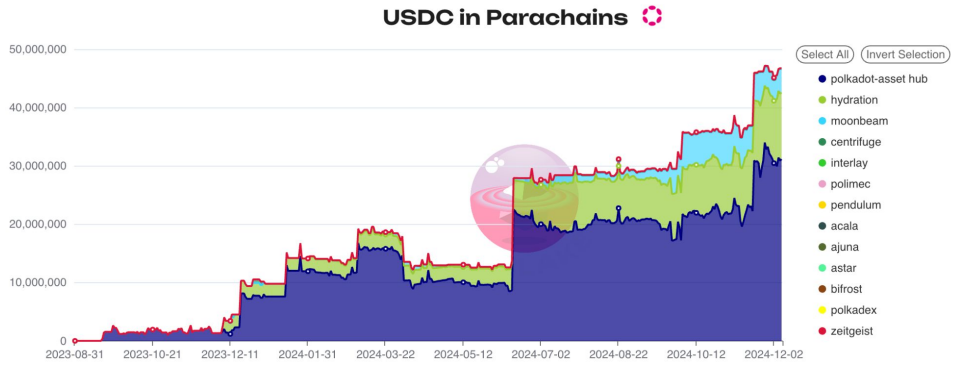

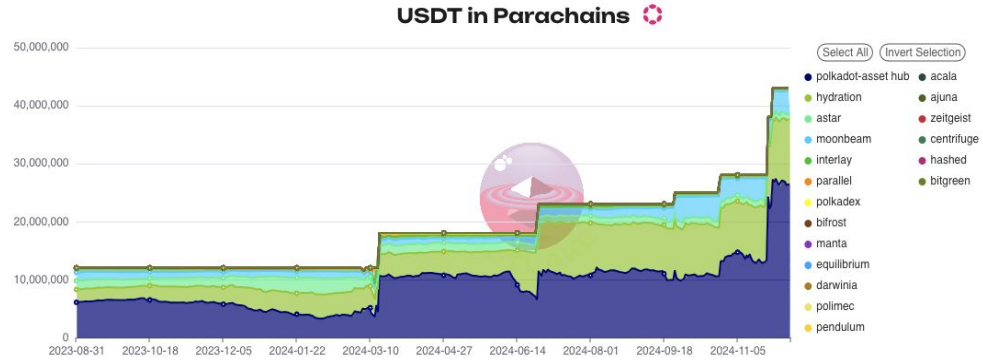

Stablecoins surge as Treasury expands utility

Stablecoins experienced significant growth in the ecosystem, with the **total USD value rising from approximately $22M at the start of the year to ca. $90M** .

The top three rollups by stablecoin holdings are Asset Hub, Hydration, and Moonbeam.

A new feature was introduced this year to allow DOT holders to request stablecoins from the treasury, providing more stability for project budgeting.

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Growth and Partnership Highlights

Mythical Games

Migration from **Ethereum to Polkadot** saw over **15M transactions** since June 2024. The chain is ready to expand growth further with their latest **FIFA** partnership.

Peaq

Peaq activated its mainnet on Polkadot. It's leading the global infrastructure revolution as the home of **DePIN**, **Machine RWA**, and **Machine DeFi**.

Mandala

Mandala launched a Polkadot rollup, aiming to onboard **100M+ users** in **Indonesia**, bringing government functions on-chain.

Polimec

Decentralized **fundraising protocol** on Polkadot, revolutionizing traditional methods with regulatory-compliant, sustainable growth solutions using on-chain credentials.

Centrifuge

Expanding **tokenized RWAs** through partnerships with FinCred Global, Finoa, Celo, JHI Advisors, Anemoy Capital, and Polytrade Finance, driving innovations in trade receivables, treasury bills, and private credit markets.

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Growth and Partnership Highlights

Hydration

A leading DeFi protocol on Polkadot, announced **HOLLAR**, a new decentralized **stablecoin** for Polkadot and beyond, alongside a lending and borrowing platform forming the **Hydration Money Market**.

Hyperbridge

Launch of the world's first **verifiable**, **multichain bridge**, connecting blockchains like Polkadot, Ethereum, Optimism, Arbitrum, Base, BNB, and Gnosis without intermediaries or the need for trust.

Bifrost

Defi Liquidity protocol Bifrost launched **Tokenomics 2.0** with BBBNC, using profits for BNC buybacks and burns to create a deflationary supply.

Harbour's instant Euro on-ramp

Harbour's Magic Ramp: **Instant SEPA Euro → USDC** Polkadot on-ramp, stablecoin withdrawals, virtual IBANs, cross-border payments!

Ledger Universal Ledger App

Zondax and Ledger launched a Polkadot **Ledger App supporting all Polkadot chains**, enabling secure transactions without updates for runtime upgrades.

Telenova & Single Click Trades

Telenova enables DOT on **Telegram**; Nova Wallet offers **1-click swaps** for 180+ tokens.

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Growth and Partnership Highlights

Global Marketing

Polkadot showcased its branding globally by sponsoring IndyCar racer Conor Daly for the **Indy 500**, **Inter Miami CF**'s training kits, and partnering with **Heroic**, the pro esports team—all decided through its community-driven OpenGov platform.

Data Integrations

Dune

token terminal_

Artemis

Polkadot Ecosystem data is increasingly present on leading crypto analytics platforms through partnerships with **Dune**, **Token Terminal**, **Artemis Analytics** and more.

PBA-X

PBA-X

A new **online blockchain course** from the Polkadot Blockchain Academy, taught by leading Polkadot experts.

OpenZeppelin

Successful delivery of **open-source rollup runtimes and FRAME templates**, completing their Polkadot development project.

Polkadot App

Self-custodial **mobile wallet** for staking, transfers, and crypto purchases with cashback, using Passkeys for seamless access. Early access in Dec 2024 with a US launch, and global rollout in 2025.

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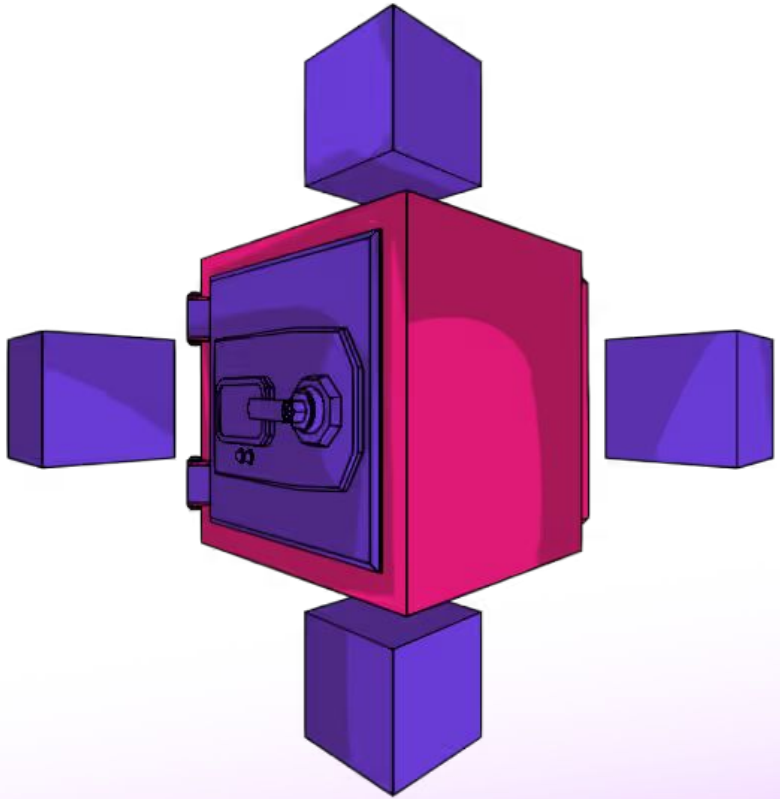
Interoperability



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DOTLAKE

Connecting ecosystems for a unified Web3

XCM enables seamless cross-chain interactions

Polkadot's Cross-Chain Message Passing (XCMP) protocol facilitates trustless communication across rollup. Using the XCM messaging format, rollup can exchange assets, data, and more in a secure and efficient manner.

XCM is not meant to be only specific to Polkadot, but rather its primary intention is to define a generic and common format amongst different consensus systems to communicate.

Building trustless links between blockchains

Three trustless bridges were launched: **Snowbridge, Hyperbridge, and the Polkadot <> Kusama bridge** , enabling secure, decentralized connections, to facilitate seamless asset transfers and communication with other blockchains.

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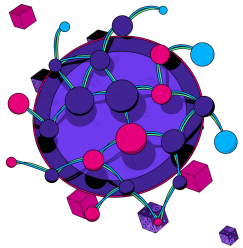
Trustless Bridges

Polkadot's ecosystem features several trustless bridges—Hyperbridge, Snowbridge, and the Polkadot-Kusama Bridge—facilitating seamless interoperability between blockchain networks.



Hyperbridge

Designed for scalability and interoperability across multiple blockchains, Hyperbridge leverages trustless mechanisms to facilitate decentralized connections and seamless data and asset exchanges, further strengthening Polkadot's position as an interoperability hub.

Snowbridge

A trustless bridge connecting Polkadot to Ethereum, Snowbridge ensures decentralized and secure asset transfers and communication between the two ecosystems. It enhances Polkadot's interoperability with Ethereum's vast network of decentralized applications.

Polkadot-Kusama Bridge

A trustless bridge connecting Polkadot and Kusama, it enables secure and seamless asset transfers and communication between the two networks, allowing Polkadot's robust ecosystem and Kusama's innovation-focused network to complement each other while maintaining their unique roles.

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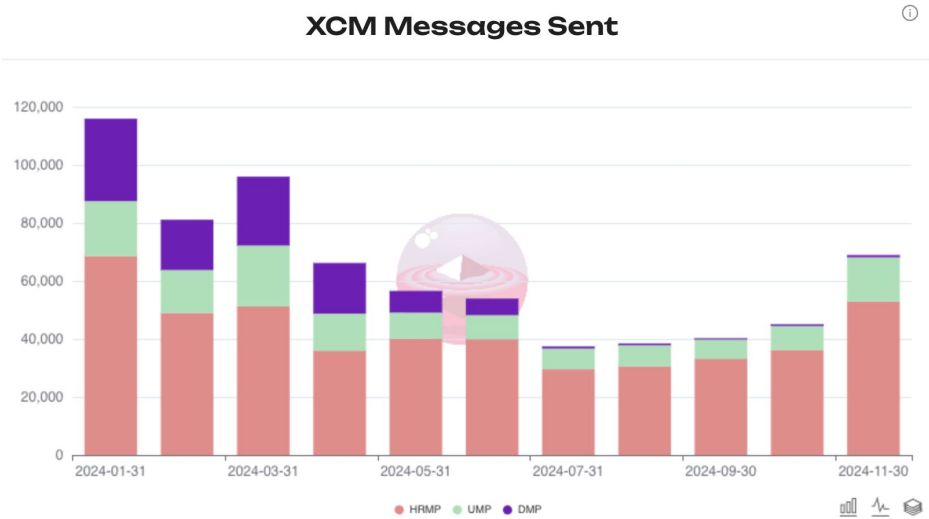
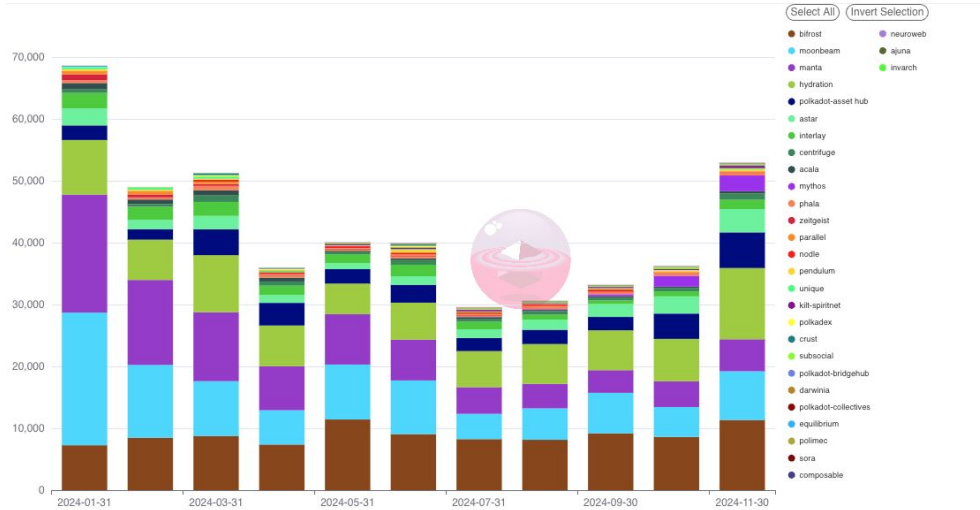
DOTLAKE

XCM messaging: Stable growth and future evolution

The number of XCM messages, while lower than the start of 2024, has rebounded, exceeding **40k messages** per month in October and showing further growth in November. This reflects consistent cross-chain activity within the Polkadot ecosystem, underpinned by reliable and scalable XCM messaging protocols.

In the future with the completion of Cross-Consensus Message Passing (XCMP) rollups will be able to communicate directly and the HRMP, UMP and DMP will be retired.





XCM enabling rollup communication

HRMP messages between rollups have been rising since September 2024 with over **30k HRMP** messages per month recorded and over **50k** in November. These interactions illustrate the interoperable nature of Polkadot, allowing rollups to interact and communicate.

As more projects integrate into the Polkadot ecosystem, the reliability of XCM ensures scalable and reliable connectivity between diverse rollups.

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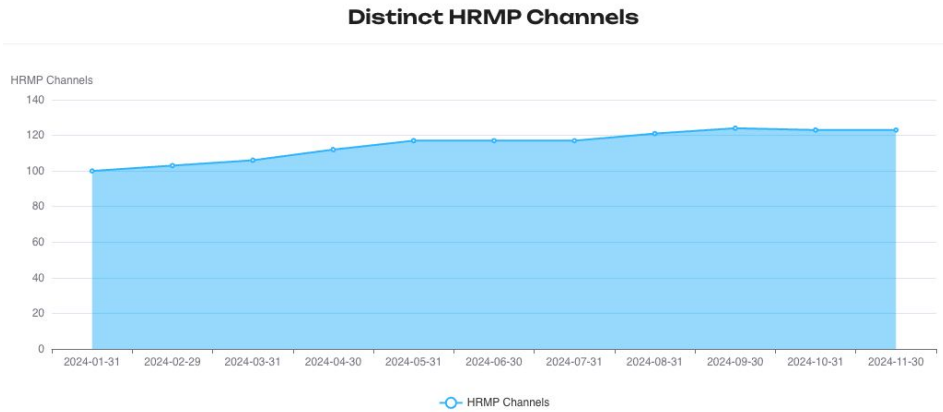
HRMP Channels increased

This year, **26** new HRMP channels were opened, creating new connections between previously unconnected rollups and raising the total to over **120**. These channels facilitate message exchange between rollups by routing messages through the relay chain, thereby enhancing interoperability within the network.

By establishing these additional channels, Polkadot strengthens its infrastructure, allowing for more diverse and efficient cross-rollup communications. This expansion supports the integration of a wider range of projects, contributing to a more interconnected and versatile Polkadot ecosystem.



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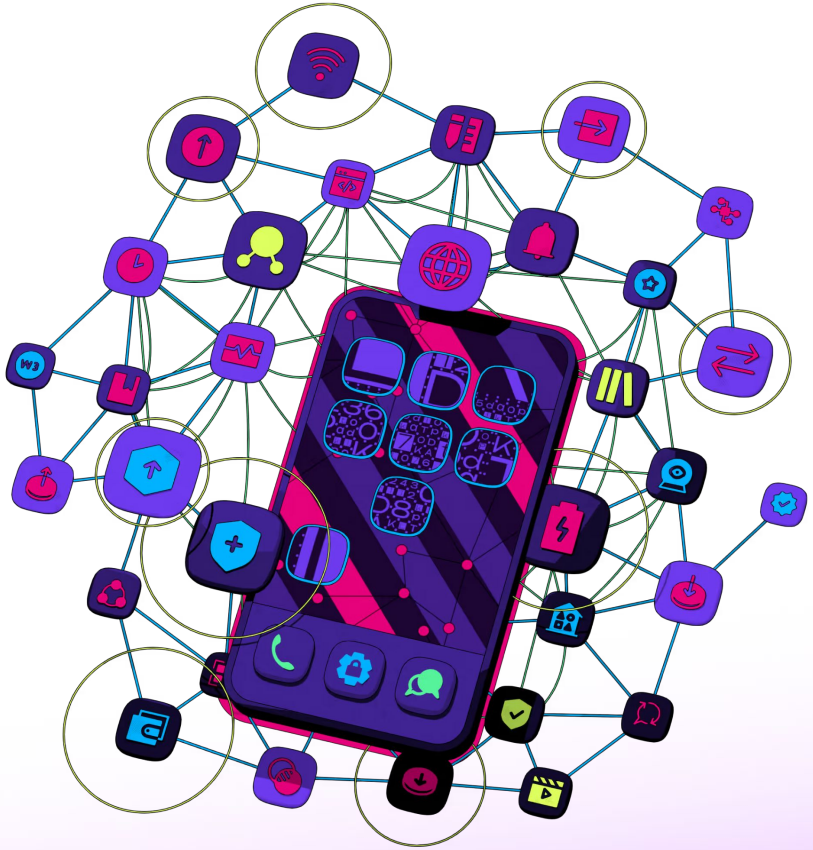
Ecosystem Developers



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Developers build the future of Polkadot

Active and diverse developer community

Polkadot's developer community remains among the most active in the blockchain industry. Contributions span key areas like chains and pallets, tools and APIs, wallets, smart contracts and more.

Advancing Polkadot through expertise

The Polkadot Technical Fellowship plays a key role in guiding technical decisions and innovation. Membership has doubled in the past year, and a dedicated sub-treasury now supports funding for critical technical proposals.

Investing in the next generation of blockchain builders

Polkadot's treasury supports impactful educational programs like the Polkadot Blockchain Academy (PBA), which aims to attract and nurture talent to drive ecosystem growth.

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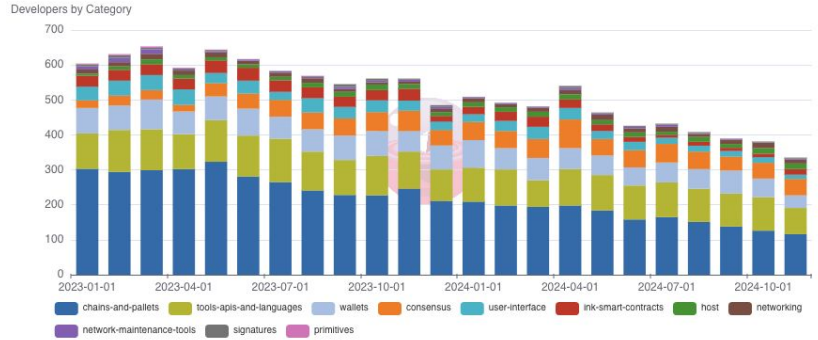
Open Source Polkadot Stack

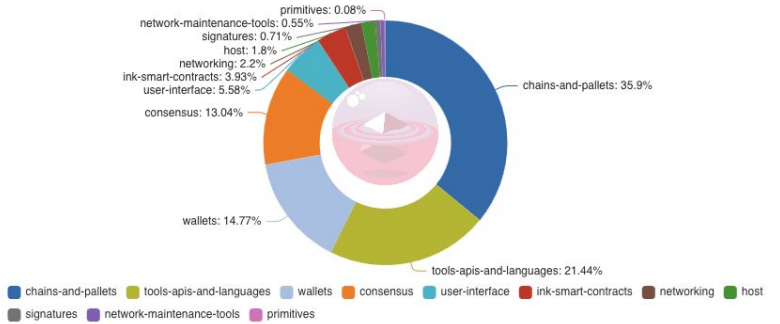
Tracking GitHub developers on the list of Polkadot Open Source Projects shows a wide array of work on projects building chains and pallets, wallets, tools, APIs and languages, consensus mechanisms, smart contracts and primitives. Among the key development areas, chains and pallets had the most active developers (457), followed by tools and APIs (273), and wallets (188), reflecting a focus on both infrastructure and user experience.

The OSS data set is maintained on the Polkadot-Wiki - if you wish to add your project open a PR by following the instructions here.

OSS Developers by Category



OSS Developers by Category 2024



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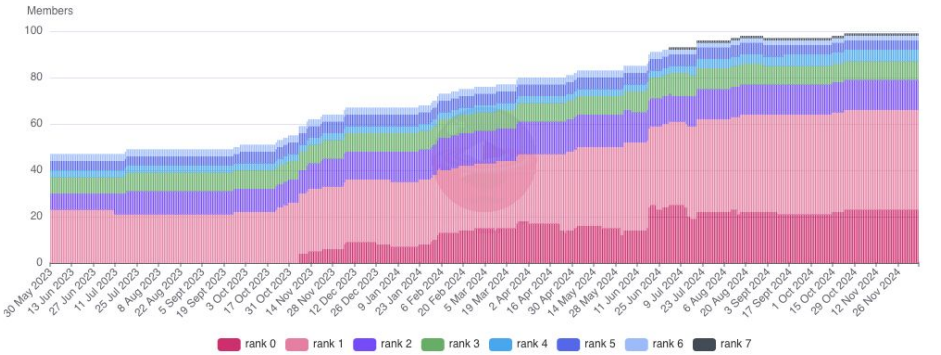
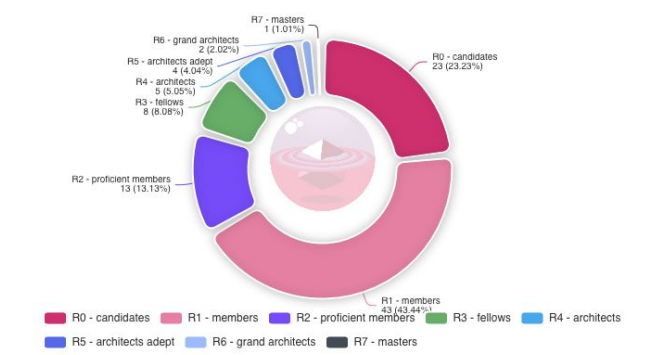
Fellowship membership doubled from 47 to 99 members since May 2023

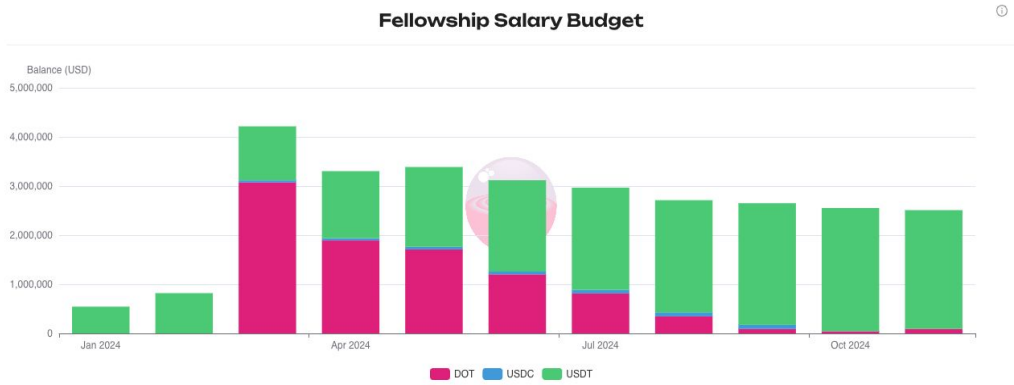
The increase in members reflects the growing involvement of technical experts in Polkadot's governance. The Polkadot Technical Fellowship, which operates both on-chain via the Polkadot Collectives system chain and off-chain through the Polkadot Fellows repository, plays a key role in driving technical decisions. The Fellowship has the authority to whitelist referendums for faster governance cycles and also manages its own membership, contributing to the evolving technical direction of the Polkadot ecosystem.

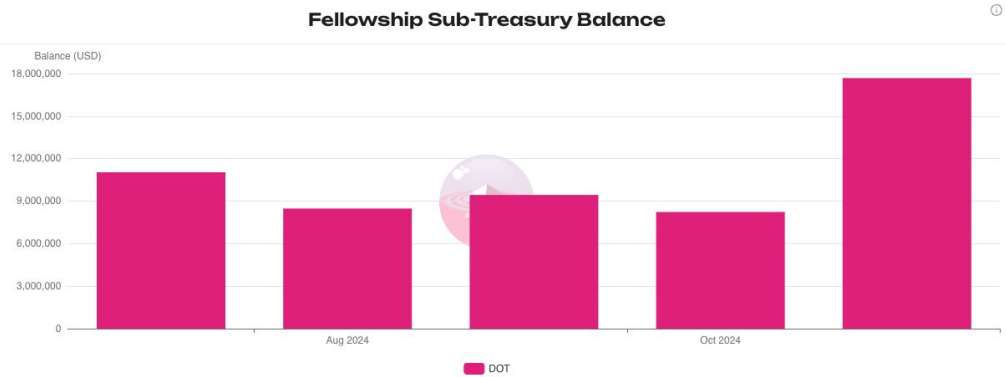
Fellowship Members All Time



Fellowship Members







Fellowship members are receiving salaries

With compensation for their contributions, Fellowship members are becoming even more integrated into Polkadot's decentralized governance model. An approved OpenGov proposal allocated **469,000 DOT** to fund these salaries. This chart tracks the balance of the address that distributes these funds to Fellowship members. The USD balance as of November 2024 was around 2.5 Million.

Fellowship sub-treasury has been funded

This sub-treasury increases the Fellowship's autonomy, allowing it to fund and implement specialized governance initiatives. An approved OpenGov proposal allocated **2 million DOT** to fund the sub-treasury. The USD balance as of November 2024 was almost 18 Million.

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2025 Roadmap

Smart Contracts

Upgrading Asset Hub to include EVM compatibility and the ability to run Solidity based Smart Contracts

PVM

A lightweight, RISC-V-based VM enabling fast, secure, and scalable smart contracts on Polkadot

Elastic Scaling

Allowing for use of multiple cores to handle increased on-chain demand on Polkadot

Unified Address Format

Introducing a singular address for use on Polkadot and all rollups

XCM v5

Upgrading cross-chain messaging communication for enhanced interoperability

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2025 Roadmap

Fast Unstaking

Reducing wait times for unstaking DOT

DOT as universal fee token

Improving user experience by enabling DOT fee payments across rollups

JAM SDK

Releasing the JAM SDK for seamless development of scalable services on Polkadot

Omni Node

A unified node solution for Polkadot rollups

SAFROLE

Optimizing Polkadot's block production with zkSNARK technology

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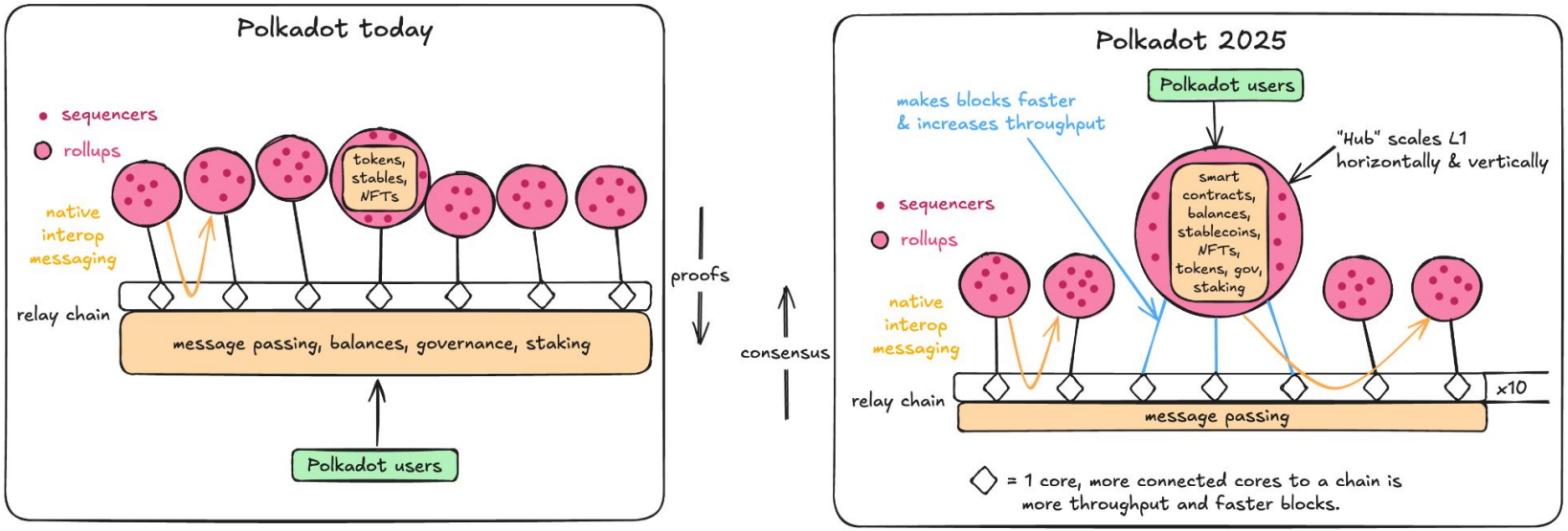
Polkadot in 2025



How are we scaling the Polkadot L1?

We can use a novel solution unique to Polkadot and simply move all Polkadot features to a Polkadot native rollup.
All Polkadot rollups share the same economic security as the relay chain, so this is possible.
Polkadot rollups also have decentralized sequencers, maintaining decentralization while not sacrificing security.
Smart contracts will now be able to control other features of Polkadot such as governance and staking.

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Infographic by https://x.com/byteboro

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Closing thoughts on a productive year....

In 2024, Polkadot has achieved remarkable milestones, bringing innovations such as **Async Backing, Agile Coretime** , and **Elastic Scaling** (on Kusama) to fruition. **The Spammening** proved that over 140k+ TPS on a live network is possible with room for further scaling. Access to blockspace has become easier than ever as the Slot Auction model has been phased out with the shift to **Coretime** and on-demand purchasing of Cores. The increase in the validator set has led to a rising Nakamoto coefficient and greater decentralization and over 50% of the DOT token has been locked in **Staking** throughout year, showcasing the user and community support. Furthermore, **strategic partnerships** and onboardings have underscored Polkadot's expanding and dynamic ecosystem.

These advancements demonstrate that Polkadot is successfully driving towards a scalable, secure, decentralized and vibrant future. It is keeping on track to deliver developments set on the 2024 roadmap and continues to lead the way in blockchain innovation, fostering an environment where emerging projects can build, scale and thrive.

Looking ahead to 2025 with the launch of **Smart Contracts** on Asset Hub, the **PVM - Polkadot Virtual Machine, XCM V5**, the **OminNode** and **Elastic Scaling** on Polkadot among other developments, there is a lot to look forward to and much to build!

We invite you to explore our Monthly Report, learn more about Polkadot or dive straight into the Wiki and start your journey.

The Data Team

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