

Stylus Sprint

TLDR of updates made on October 3rd:

- Additional Evaluation Committee Members:

SEEDGov and JoJo have agreed to join the evaluation committee.

- Soft Request “Cap”:

Language was added to specify a soft request “cap” of 500k ARB (10% of the program budget), which is dependent on the total ARB requested in the program. Applicants requesting greater than 500k ARB may be sent to the DAO directly.

- MSS-controlled multi-sig:

Additional clarification has been added that funds will be managed by a MSS controlled multi-sig along with Entropy Advisors acting in an “approver” role to process payments to winning applicants once KYC has been completed.

- Flexibility in Milestone Structure:

Language has been revised to allow applicants to propose their own milestone structure.

Abstract

The [ArbOS 31 “Bianca”](#) onchain vote on Tally has passed and executed, activating Arbitrum Stylus on Arbitrum One and Nova. To bolster the impact of this upgrade, this proposal presents the one-time “Stylus Sprint” program, aimed at encouraging the early development of Stylus smart contracts and tooling by awarding up to 5,000,000 ARB to teams who build with Stylus. Applications will be open for 8 weeks with a 2 week review period and program length of 1 year. The Sprint will include a mix of open applications where teams are encouraged to be creative in their ideas as well as invitational/RFPs with strategically targeted objectives. The requested funding is intended to cover development costs, including hiring talent, training teams, adopting new tools, infrastructure expenses, and audits at the discretion of the recipient. This campaign’s primary objectives are to engage new and existing Arbitrum protocol teams with this novel technology, showcase use cases only feasible with Stylus, and create foundational Stylus building blocks for widespread use.

Interested teams must apply through a designated application process and grant recipients will be selected by an Evaluation Committee based on specific criteria detailed in this proposal. As the program progresses, participating teams will receive staged funding as they reach predefined and agreed-upon milestones, culminating in the deployment and long-term upkeep of their projects.

Motivation

Today, the Stylus ecosystem is promising but very nascent. At launch, the developer experience will be in its early stages, offering an opportunity for pioneers to shape and refine Stylus as they build with it. Teams building with Stylus today are early adopters of the technology and are pushing the limits of what is possible on the EVM.

The “Stylus Sprint” is strategically designed to accelerate the adoption of Stylus and help drive visibility into Stylus’ transformative potential to the broader crypto community. Launched in conjunction with Bianca passing, this program aims to strengthen the momentum of the upgrade, drawing significant adoption and attention to the technological advancements it introduces.

[Stylus](#) represents a pivotal innovation for the entire Ethereum ecosystem, setting Arbitrum apart from other platforms by enabling the use of multiple programming languages for smart contracts. This not only enhances the efficiency and capabilities of Arbitrum applications but also broadens the accessibility of Arbitrum’s ecosystem to a more diverse group of developers. By supporting smart contracts written in languages such as Rust, C, and C++, Stylus expands the scope of possible applications, unlocking untapped use cases for end users and making Arbitrum a more versatile and attractive platform for developers. This capability represents a tangible competitive advantage for Arbitrum, and it is crucial that this differentiator is prominently showcased via its use in high-value developments.

The “Stylus Sprint” will provide financial incentives to encourage the development of high-quality projects. This support aims to attract top-tier developers from within the Arbitrum, EVM, and Rust communities, targeting teams new to Arbitrum that can only realize their ideas with Stylus, existing Arbitrum projects with complex computation for migration, and developers from other WASM ecosystems (e.g., Solana Rust Devs), fostering a diverse range of applications. By demonstrating the practical benefits and performance enhancements Stylus offers, the program seeks to establish a robust portfolio of Stylus-based contracts, helping solidify Arbitrum’s position as a leader in the rollup race. The Sprint will also empower developers to create building blocks for a wide variety of projects building on Arbitrum such as reference contracts, Rust libraries, testing/development frameworks, and SDK contributions. Reference tooling and code are crucial to any development-based ecosystem’s staying power.

The Stylus Sprint aims to create a ripple effect of innovation and adoption, ultimately contributing to a more dynamic and capable Arbitrum ecosystem for developers, users, and token holders.

Rationale and Goals

1. Demonstrate the efficiency of, and untapped possibilities with, Stylus by showing how teams can build never-before-built protocols on Arbitrum and take advantage of Stylus' efficiency and compute advantages.
2. Support network growth and accelerate the distribution of capital to both EVM and non-EVM protocols that migrate to Stylus to further drive network and ecosystem growth. This includes infrastructure as well as applications.
3. Attract top protocols from other ecosystems drawn by Stylus' efficiency gains and multi-language support, which in turn will bring their user bases, increasing overall activity and transaction volume on the network.
4. Implement a strategy to distribute grants over extended periods and in alignment with the achievement of key milestones. This approach aims to cultivate enduring relationships with protocols and ensure sustained development and engagement.
5. Position Arbitrum as the most accessible, efficient, and powerful EVM-compatible ecosystem to build in.
6. Provide ample resources, support, and incentives to developers utilizing Stylus, fostering robust projects and vibrant communities. This will drive the long-term growth and success of Arbitrum.

Specifications

Application Process & RFP Details:

As mentioned, the Stylus Sprint program invites teams to submit applications either in the open-applications track or in response to lightweight Request for Proposals (RFPs, listed below) that target specific verticals, published by the Evaluation Committee. The below lists are non-exhaustive and serve as inspiration. Participants in the open track will have ample opportunity for innovation and creativity. All requests for both the open-application track and RFPs must be denominated in ARB.

For the open-application track, non-exhaustive categories may include:

- New developer-focused infrastructure or extensions of existing developer-focused infrastructure to improve the arsenal of tools available to Stylus builders;
- New applications that feature untapped use cases only made possible via Stylus, on Arbitrum One or new app chains using Stylus on Orbit chains;
- External WebAssembly (WASM) application or chain migrations (from ecosystems that use Rust for their smart contracts);
- Existing EVM application migrations from Solidity to Rust (e.g., an app rewriting a portion of their code using Stylus).

For the RFP track, the committee is excited to hear proposals from teams working on developing:

- Tooling to add support for new languages with Stylus to expand the reach and adoption of Stylus among developers. This can include new SDKs, EVM-tooling specific to the new language, and/or reference implementations and libraries for the new language. To get inspired for what languages might be interesting to see support get added for:
- [AssemblyScript](#) - a Typescript-based programming language optimized for, and statically compiled down to, WASM. Typescript is a widely used programming language, with 38.5% of all developers claiming to have used or currently use Typescript, compared to 12.6% for Rust [according to Statista](#).
- [Move](#) - a resource-oriented, strongly typed programming language that offers built-in support for formal verification of code correctness. Originally developed by Meta for their Libra/Diem stablecoin, this language has gained popularity among emergent L1s like Flow, Aptos, and Sui. Adding Move support to Stylus and by extension the EVM opens the opportunity for Move-based applications to tap into the already-massive Arbitrum ecosystem and the liquidity layer of Ethereum.
- [AssemblyScript](#) - a Typescript-based programming language optimized for, and statically compiled down to, WASM. Typescript is a widely used programming language, with 38.5% of all developers claiming to have used or currently use Typescript, compared to 12.6% for Rust [according to Statista](#).
- [Move](#) - a resource-oriented, strongly typed programming language that offers built-in support for formal verification of code correctness. Originally developed by Meta for their Libra/Diem stablecoin, this language has gained popularity among emergent L1s like Flow, Aptos, and Sui. Adding Move support to Stylus and by extension the EVM opens the opportunity for Move-based applications to tap into the already-massive Arbitrum ecosystem and the liquidity layer of

Ethereum.

- A GUI for developers to inspect and interact with the [Stylus cache manager](#) on Arbitrum One. Extra consideration will be given to teams who make such a service/instance self-hostable to unlock widespread adoption and use among Stylus Orbit chains. Example user journeys that can be covered are:
 - How a developer inspects the contents of the cache;
 - How a developer gets the minimum bid price before bidding;
 - How a developer makes a bid for their contract to join the cache;
 - How a developer views the position of their contract within the cache, and/or;
 - How a developer can subscribe to events or changes to the cache as it pertains to their contract(s).
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- How a developer gets the minimum bid price before bidding;
- How a developer makes a bid for their contract to join the cache;
- How a developer views the position of their contract within the cache, and/or;
- How a developer can subscribe to events or changes to the cache as it pertains to their contract(s).
- A Solidity-to-WASM compiler to reduce the migration cost (for existing applications) of moving over to WASM. This in turn aims to help current Solidity projects reap the benefits of a more secure and performant WASM VM sooner and with less upfront work.
- General improvements to the current debugging workflow and developer experience for Stylus applications and Orbit chain developers. This can include compatibility enhancements and Stylus-specific improvements to how GDB is currently used to debug Stylus applications, or the introduction/integration of new tooling to elevate the UX of Stylus contract debugging.
- General enhancements and/or extensions to the existing Stylus Rust SDK, the cargo-stylus command line tool, and/or the WASM VM within Arbitrum Nitro itself.
- Stylus-specific education and developer relations materials to onboard the next generation of Web3 developers.
- Tools and frameworks to demonstratively help [CosmWASM](#) and Solana projects (as examples) to migrate to Arbitrum chains.

The application approach described above for both open applications and RFPs ensures a structured yet flexible framework for harnessing the potential of Stylus technology. Not all funds will necessarily be deployed, and even if an RFP has quotes, there is no guarantee that any will be deemed satisfactory and chosen. The above categories are non-exhaustive and meant to be viewed as examples. If this proposal passes, the Evaluation Committee will cement an official list before applications open.

Teams are required to submit a detailed application outlining their plans for utilizing the funding. These applications will be thoroughly reviewed by the Evaluation Committee, which will also approve them. Upon approval, milestone payments will be systematically allocated to the teams based on their progress. If no satisfactory applications are received, as decided at the discretion of the Evaluation Committee, 0 ARB will be spent, and all unspent funds will be returned to DAO.

Evaluation Committee and Committee Advisors

To effectively administer the program, it is essential to establish an Evaluation Committee composed of Stylus experts. Given the innovative nature and specific technical nuances of Stylus, we propose that the committee be primarily made up of members from Offchain Labs and OpenZeppelin, the two entities responsible for developing Stylus thus far. [@SEEDGov](#) and [@JoJo](#) bring extensive experience in DAO grant programs and will help round out the committee with additional perspective/backgrounds.

Evaluation Committee

1. Stylus Team Members - Offchain Labs (Waiving Payment)
2. Dev Team - Arbitrum Foundation (Waiving Payment)
3. Michael Lewellen - OpenZeppelin (5000 ARB per month)
4. Gustavo Gonzalez - OpenZeppelin (5000 ARB per month)

5. SEEDGov Org (5000 ARB per month)
6. JoJo (5000 ARB per month)
7. Entropy Advisors (Waiving Payment)

The committee will work collaboratively to provide feedback and access applications. In the event of a equally split opinion, the Arbitrum Foundation will serve as the tie-breaking opinion.

Committee Advisors

1. Entropy Advisors (Waiving Payment)

The Committee Advisors' main role will be facilitating discourse with the DAO, applicants, and general project management in order to reduce the burden on the Evaluation Committee where possible. Members of the Evaluation Committee and Committee Advisors will not be eligible to apply to the program in any capacity due to conflicts of interest.

Judges and Advisors will serve for approximately 14.5 months, with the Stylus Sprint expected to begin in November 2024 and conclude mid-January 2026. In the first 2 weeks, they will work together to refine the application and evaluation criteria as well as specifics around the RFPs to kickstart the process. The following 8 weeks will be used to review proposals as they come in. Subsequent 2 weeks will be taken to officially accept and reject projects. Both accepted and rejected applications will receive public rationale from the Evaluation Committee as to why the choice was made so that the DAO may have a view into the decisions and the teams can adjust accordingly in the future.

In the next 12 months, contributors will greenlight milestone payments as projects achieve their goals and periodically give guidance to participants. Advisors will report back to the DAO through monthly updates over the lifespan of the program. These updates will be posted to a dedicated Stylus Sprint forum channel.

Recommended Application Structure and Framing

Applications for the program will be rigorously evaluated based on a set of clearly defined criteria. To ensure a thorough assessment, grantees are encouraged to provide detailed information about their plans and objectives for the grant. Each application should include:

- What their plans are to grow their protocols within the Arbitrum ecosystem;
- How closely the team's mission aligns with those of Arbitrum;
- Whether or not they clearly demonstrate how they will utilize Stylus;
- An appropriate spending plan for how the grant will be used;
- A reasonable development plan and timeline.

Judges and advisors may also consider other relevant metrics tailored to the specifics of each application. These could include innovation potential, the experience of the team, market readiness, user engagement strategies, or any other factors deemed relevant.

The recommendations above are designed to ensure that the selected projects are coming to the committee with a high-quality plan and to ensure that the application ideas are not only viable, but also poised to make significant contributions to the Arbitrum ecosystem. By adhering to this application structure, the evaluation process aims to foster transparency, fairness, and alignment with the strategic objectives of the Arbitrum network. The judges and advisors will work together to create the application and evaluation criteria.

Questbook will be utilized for hosting the Stylus Sprint, accepting/rejecting applications, and giving public reasoning for the choice.

Application Evaluation Criteria

While we strongly believe each application will be unique and should therefore be evaluated on a case-by-case basis, a baseline framework and evaluation criteria are outlined below to give teams a feel for what to keep in mind when applying and building.

Overall, the Evaluation Committee will be on the lookout for, and prioritize evaluating applications, that:

- Can scale, or help scale

, Stylus usage over the long run. Examples include tooling and frameworks that can be extended, built upon, and leveraged by many teams all at once.

- Contribute to the young, but growing, ecosystem of Stylus tooling and infrastructure

, rather than direct contributions to individual Stylus applications and Stylus Orbit chains.

- Focus on projects that aim to be self-sustainable in the medium to long term

, rather than one-off projects that can only exist/survive for the short duration of the program.

- Directly highlight core Stylus benefits and strengths with excellent creativity

, including the efficient use of computational and storage resources or security primitives that Stylus bolsters and shines at.

- Fill a specific, unique niche in the market

, as opposed to re-implementing an existing application, tool, or chain in Stylus for the sake of using Stylus (and not the other purported benefits one gets with Stylus).

- Come from outside the Arbitrum and/or Ethereum ecosystem

to effectively “grow the pie” of Web3 projects and users.

Note that applications may be rejected for a variety of reasons as there are a limited number of resources to allocate to a near-infinite pool of great ideas/applicants that can emerge. Out of scope are projects that are already being funded by the ArbitrumDAO, Offchain Labs, or the Arbitrum Foundation, or are otherwise nearing completion by the time this program's evaluation period ends. Examples of this include the development of the Stylus Rust SDK that is already being scoped out and developed by Offchain Labs.

Multisig Setup

The Stylus Sprint specific MSS multi-sig will be created and allocated 5M ARB for the Stylus Sprint Program, 300K ARB for payments to judges, and 30k ARB for payment to Questbook. Funds will be sent to an MSS-secured multisig.

Entropy Advisors will function in the “approver” role working with the MSS and the Arbitrum Foundation to process payments to winning applicants once KYC has been completed.

Funding Levels and Disbursement

Teams will apply for their appropriate levels of funding. Suggested levels in ARB are 1M, 750K, 500K, 250K, 100K, or 50K. If teams want a different amount of funding, they must specify why in their application. These funding levels have been set to streamline the review process. However, teams are encouraged to request specific amounts of funding best suited to their needs. Teams will have 1 year to deploy their project and meet their 2 post-deployment milestones. There is no maximum request amount, but requests over 500k that are deemed quality, have a likelihood of being sent to the DAO instead of included in the program depending on the total ARB requested in the program and quality of the applications. All requests for both the open-application track and RFPs must be denominated in ARB.

Unallocated funds will be returned to the DAO treasury after all applications have been reviewed and grant sizes have been determined. An additional dispersal to the DAO could occur if projects don't manage to hit their goals within the 1-year timeline and if the budget has remaining ARB. There is absolutely no need to allocate all funds, and it will only be done if more than 5M in exemplary proposals are received during the 8-week application cycle.

Funding will be distributed based on achieving certain development milestones. The number of checkpoints, percentage of funds unlocked, and criteria for each will be proposed by the applicant. This is to grant additional flexibility as a one size fits all milestone structure is not the best approach given the wide-range of potential applicants and the volatile nature of ARB requests. While the milestone structure is flexible, the evaluation committee will prioritize applicants that backload payment distribution over those that request high percentages upfront.

The below milestone structure is recommended; however, it is not required:

1. 10% - Planning
2. Building: Creation of a Development Plan, Architecture Design, Prototyping, Implementation, Optimization.
3. 40% - Deployment

: Testing, Auditing, Deployment. *Projects will be eligible but not guaranteed admission into the subsidy program per the ADPC

1. 25% - Checkpoint 1
2. 25% - Checkpoint 2

All projects will be required to use milestones in order to ensure progress is being made before funds are fully allocated. For RFPs, custom milestone payments can be included in the quotes provided by service providers. Approved projects will

submit requests as they reach milestones. The judges, with help from their advisors, will be responsible for ensuring validity and greenlighting payment to be sent as milestones are hit, in accordance with the Evaluation Criteria mentioned above.

The evaluation committee will have the autonomy and authority to expel projects from the program at any point in their life cycle and stop all future milestone payments.

Grant Eligibility Requirements

- Grantees must participate in a case study that highlights their Stylus development experience
- Grantees must build their projects open source, but not necessarily free to use. Free to use however will be a factor in the evaluation committee criteria.
- Grantees must participate in co-marketing activities to promote their protocol and Stylus.
- Grantees must outline a spending plan, provide a pro forma, and state the grant's objective.
- Grantees must agree to share all contract addresses being used to judge progress.
- Grants are not to be used in DAO governance.
- Grantees must not encourage or partake in sybil attacks against the forum to sway community opinion.
- Grantees must agree to KYC with the Arbitrum Foundation in order to receive funds.
- Grantees must apply using the approved program application template.

Timeline

1. Stylus Sprint Forum Post - August 20, 2024
 2. Snapshot Vote Begins - August 29, 2024
 3. On-Chain Vote - Oct 10th, 2024
 4. Stylus Sprint Begins - Oct 28, 2024
 5. Open Application Period Begins - Nov 11th, 2024
 6. Open Application Period Ends - Jan 6th, 2025
 7. Application Review Period Ends - Jan 20th, 2025
- a. 1 year timeline for selected applicants begins
 - b. KYC/Compliance process with the Arbitrum Foundation begins

The program will begin on the Monday following the onchain proposal's passing. The first 2 weeks will be used to refine and post the RFPs, followed by open applications for 8 weeks, then a 2-week application review process. Feedback between the Evaluation Committee and applicants will be conducted on an ongoing/continuous basis till the end of the Review Period (Jan 20th). Applicants will receive feedback on a first come, first serve basis. Those that apply early will likely have an edge over late applicants who will have less opportunities for feedback. KYC with the Arbitrum Foundation will begin after the review period and first milestone payments may be allocated upon completion. The MSS chairs, Arbitrum Foundation, and Entropy Advisors will work closely to ensure a strict payment process.

Overall Cost

5,330,000 ARB

- Up to 5M to be awarded to projects building on Stylus.
- 75,000 ARB payment in total over 14.5 months per committee member for 4 committee members = 300,000 ARB. Committee members will be paid in monthly increments of 5000 ARB.
- 30,000 ARB paid up front to Questbook.