

[Temp Check] ENS Referral Program

[NameHash Labs](#) is coordinating an effort to find consensus in the ENS DAO for how an ENS Referral Program should be designed and implemented.

Synopsis

1. .eth growth has stalled and is trending negative

- [ENS Daily \(Dune Dashboard\)](#)
 - ENS is experiencing a net loss of more than 2,800 .eth names per day for the period Nov 1 - Nov 26 of this year.
 - If this rate of net loss continues, more than 1,000,000 .eth names will be lost in 2024.
- [ENS Financial Reporting by Steakhouse Financial](#)
- [ENS Dune Dashboard by Steakhouse Financial](#)
- [ENS Dashboard \(Google Looker Studio\)](#)
- [ENS Secondary Market Dashboard](#)

2. Creating a referral program for .eth names is arguably the strongest opportunity to accelerate growth

The proposed referral program is permissionless and provides financial incentive to businesses, builders, marketers, and community organizers to invest their efforts into the growth of ENS.

The opportunity to incentivize businesses can be especially impactful. ENS has achieved a special milestone in its growth: the majority of ENS names are now issued through “Frontend Registrar” apps other than app.ens.domains. For example, Coinbase Wallet alone has issued [more than 4 million ENS names](#). Rainbow Wallet is another example.

The future of ENS growth will predominantly be driven by this trend. Our biggest growth opportunity is persuading more “Frontend Registrar” apps to issue ENS names directly to their audiences. Persuading apps that already have millions of users is especially valuable.

This is not just theory. Several apps and content creators with a captive audience of millions of MAU have expressed their interest to add ENS onboarding features directly to their product (ex: similar to [Rainbow Wallet](#)) on the condition that sufficient financial incentive was created to prioritize ENS onboarding features in their busy roadmap.

3. A referral program for .eth names has been discussed for more than three years

- [ENS Affiliate Marketing - Affiliate Program](#)
- ENSIP-14
 - [Optional Platform Source Parameter for Registrar Controller](#)
 - [ENS Improvement Proposal: Platform Source Parameter](#)
 - [ENSIP On Chain Source Parameter](#)
 - [ENSIP-14 Dune Dashboard](#)
 - [Proposal to replace ENSIP-14](#)
 - [Multiply ENS Integration Incentives](#)
- ENS Controller V2
 - [Adding Referral fees to EthRegistrarController.sol](#)
 - [ENS Controller V2 is ready for code review](#)
- Incentivizing ENS onboarding integrations & ENS builders
 - [ENS + Exchange Integrations](#)
 - [Temp Check - Business Partnership Manager Position](#)
 - [Supporting Professional ENS Developers](#)
- [Renewal Reminder Widget from May 2020](#)

4. The key issue blocking progress is concern of “self-refunds”

“Self-refunds” use referral rewards to discount the net cost of an ENS name below the standard (ex: \$5 / year). This conflicts with [Clause II of the ENS Constitution](#) that protects the ENS namespace against squatters / speculators.

5. Solutions are proposed in this document to all previously voiced concerns for creating an ENS Referral Program

Key ideas in this proposal include:

- ✓ Mitigations for all “self-refund” exploit concerns voiced in the past.
- ✓ Removal of referral program overhead costs from ENS name buyers.
- ✓ Elimination of any need to replace or update existing ENS contracts.
- ✓ Multiplication of potential referrer incentives across time by providing referral tracking for renewals and not just registrations.
- ✓ Proposal for calculating and distributing referral rewards.

Goals

1. Help ENS Grow

Bring the benefits of owning a decentralized identity (a .eth name) to more people across the world.

Generate more resources for the ENS DAO that can be used to further improve ENS and to help ENS reach more people.

Expand the long-term impact of ENS, which is proportional to the reach of its network effects. The more we can strengthen the network effects of ENS, the more we increase the long-term impact of ENS and ensure it remains the leading decentralized namespace provider. We are not guaranteed our success as the leader.

Strategy

Create an “ENS Referral Program” that will:

1. Increase Distribution

Currently, .eth names are generally all registered through only a few sources: the [ENS Manager App](#), [ENS.Vision](#), [GoDID.io](#), and [Rainbow Wallet](#).

ENS has a big opportunity to grow by incentivizing new distribution channels with millions of monthly active users, for example:

- **Wallets** (ex: Metamask, Coinbase Wallet, Brave Wallet, etc..)
- **Web3 apps** (ex: Uniswap, OpenSea, etc..)
- **Web3 games** (ex: mass-market web3 games, etc..)
- **Content creators** (ex: on YouTube, Twitter, etc..)

These distribution channels have bills to pay and a large roadmap of other features to build. Preliminary discussions with several large distribution channels suggest that the introduction of an ENS Referral program would create a material impact on how they would prioritize adding ENS onboarding and the promotion of ENS directly into their apps.

These large distribution channels often try to avoid playing “king maker” to specific protocols. However, representatives at many of these distribution channels have communicated a willingness to make an exception for ENS given its special utility and brand reputation, especially when doing so creates a meaningful recurring revenue stream.

2. Increase Diversity

There’s many types of people in the world with different needs and perspectives. It’s silly to put the burden on a single “official” ENS manager app expecting it to be a one-size-fits-all solution for everyone in the world and every marketing strategy. This doesn’t scale.

Encourage a self-sustaining community of diverse “ENS Registrar Frontends”, where each is specialized to specific demographics. Example specializations include:

- **Value proposition focus** (social identity vs. easy sending of crypto vs. hosting decentralized websites vs. ...)
- **Target user persona** (crypto expert vs. crypto newbie vs. social influencer vs. company brand manager vs. artsy creative vs. name collector vs. ...)
- **Brand energy** (“boomer corporate” vs. “funky and playful” vs. ...)
- **Language** (Spanish vs. Arabic vs. Chinese, vs. ...)
- **Marketing strategy focus** (Twitter vs. YouTube vs. SEO vs. ...)

Talented builders, educators, and storytellers bring deep knowledge of particular market segments & user personas.

ENS will improve growth by incentivizing those with specialized market knowledge to build specialized ENS onboarding journeys and ENS marketing that is tailored for the markets they deeply understand.

3. Increase Decentralization

What are the best ways to build ENS user journeys and marketing messages? No one knows yet.

The ENS ecosystem will benefit from increased decentralization of .eth Registrar Frontends. Creating this market competition is good for ENS. Each alternate registrar frontend can follow their own creative process and take inspiration from the work of others.

Sometimes a marketing campaign [goes bad](#), such as the cringe [“Ashley PSA”](#). ENS Labs and the ENS DAO have great brands that should be carefully protected. It’s best to distance ENS Labs and the ENS DAO from the creative risk taking of finding which marketing techniques perform well. If teams promoting their own .eth Registrar Frontends make a mistake, it’s their brand and marketing budget that’s affected.

There’s no need to put all pressure and responsibility on ENS Labs to be the sole promoter of the ENS protocol, and .eth names. We can do this together with performance based incentives for talented builders and marketers in the greater Web3 community. ENS Labs has other vital roles to play.

4. Increase Sustainability

Many builders & creatives who might be passionate about ENS are not choosing to dedicate their full time efforts into the growth of ENS. Existing pathways for dedicated efforts to be financially sustainable or financially competitive have been too limited.

An ENS Referral Program provides a sustainable, permissionless, and performance-based funding mechanism. If you believe you have the talent to help ENS grow and you deliver the results you can make a real living out of it.

Design Proposal

1. Backwards Compatibility

- a. No changes should be required to any of the existing ENS smart contracts.
- b. All existing ENS smart contracts, client libraries, and app integrations must continue working without issue.
- c. No complexity burdens should be added to future ENS protocol contracts that shouldn't need to know anything about an ENS Referral Program.

2. Program Activation

- a. A new "ENS Referrer Controller" smart contract should be created that manages all the new blockchain-level requirements described in this proposal.
- b. A new "ENS Referrer Portal" website should be created that provides referrer enrollment, referrer management, referrer performance dashboards, and other related functionality.
- c. Initialize the "ENS Referrer Controller" so that the owner of the contract is the ENS DAO, the state of the program is "pending activation", and all Reward Rates are 0.
- d. ENS DAO performs an executable vote to set the state of the ENS Referrer Program to "active" and define the initial Reward Rates.

3. Program Termination

- a. ENS DAO performs an executable vote to set the state of the ENS Referrer Program to "terminated". If terminated, set all Reward Rates to 0.

- b. Termination of this implementation of an ENS Referrer Program is a one way door. If this implementation of an ENS Referrer Program is terminated a new “ENS Referrer Controller” would need to be deployed and activated.

4. Program Policy and State Updates

- a. The ENS DAO must have the power to dynamically modify all policy parameters outlined in this proposal (such as Reward Rates).
- b. Each change to the state of the “ENS Referrer Controller” should emit appropriate events to support offchain indexing.

5. Permissionless Enrollment

- a. Those who wish to become an ENS Referrer should have no burden to seek permission or pass through a political process to become an ENS Referrer.
- b. No burden should be placed on the ENS DAO or ENS DAO representatives (ex: Stewards) to review applications to become an ENS Referrer.
- c. Permissionless enrollment as an ENS Referrer is achieved by claiming an available Referrer Id.
- d. Each Referrer Id is associated with 1 owner address.
- e. An ENS Referrer should have the ability to revoke their ownership of a Referrer Id, effectively removing themselves as an ENS Referrer and returning the Referrer Id as being available.

6. Referrer Treasury Addresses

- a. Each Referrer Id is associated with 0 or 1 treasury address.
- b. The owner of a Referral Id may update the associated treasury address.
- c. An ENS Referrer may elect to use the ENS Referral Program exclusively for referral tracking purposes and opt out of any referral rewards by setting their treasury address to null.

- d. *For consideration: ENS Referrers who are receiving dedicated funding streams from the ENS DAO outside the scope of the ENS Referral Program are encouraged to claim a Referrer Id and set their treasury address to null.*

7. Equal Opportunity Pricing

- a. Prices paid by end users for .eth names must not change with referrals. Ex: a \$5 / year name remains a \$5 / year name.
- b. Gas costs paid by end users must not change with referrals. These gas costs are already absurdly high.
- c. Referral rewards are exclusively paid out as a percentage of revenue captured by the ENS DAO.

8. Incentivize .eth User Retention (and not just user acquisition)

- a. Perform referrer tracking on all .eth registrations and renewals.
- b. Align incentives between ENS and referrers for user retention.
- c. Improve economic incentives to become a referrer by giving referrers upside for user retention / “lifetime customer value”.

9. Referral Attribution

- a. Referral attribution tracking must not be centralized offchain in a single “official” registration website such as the ENS Manager App. All .eth Frontend Registrars should have equal ability to participate through blockchain-level operations.
- b. It must be permissionless for a referrer to affix their Referrer Id to a referred .eth registration or renewal.
- c. Everyone must have an equal opportunity to audit referral attribution data.
- d. An ENS Referrer gains attribution by adding their Referrer Id to the duration parameter of .eth registration or renewal transactions.

- e. *For background: 5+ character .eth names are \$5.00 USD / year. These durations are specified in seconds, not years. Therefore, when you register / renew a name for 1 year you actually register / renew the name for 31,536,000 seconds. A 5+ character .eth name is actually [\\$0.0000002 per second](#).*
- f. *For background: Specialized features have already been created by ENS.vision to synchronize the expiration time of multiple .eth names to the same calendar day.*
- g. For compatibility with features that synchronize the expiration time of multiple .eth names the maximum Referrer Id is the max uint16 value (65,535) which is below the number of seconds per day: 86,400. This allows a user to synchronize multiple names to expire on the same calendar day while simultaneously enabling the Referrer for these renewals to be attributed.
- h. In the highest case of adding 65,535 seconds of duration, this would [add only \\$0.01](#) to the price of the registration or renewal. The majority of cases would be below one cent. Absolutely none of these prices go to waste and the price to register or renew remains unchanged per unit of duration. Every single second of the duration would be time the domain was registered or renewed for.
- i. If we say that `DAYS_REQUESTED` represents the number of calendar days a user wants to register / renew a name for then the 'duration' parameter value used would be:

$$\text{DURATION} = (\text{DAYS_REQUESTED} * 86,400) + \text{REFERRER_ID}$$
- j. The Referrer Id for each registration or renewal transaction could be simply checked. Given the duration recorded on the blockchain for a registration or renewal:

$$\text{REFERRER_ID} = \text{DURATION} \% 86,400$$
- k. The Referrer Id 0 is reserved and unclaimable as it could be expected to be unfairly attributed with too many false positive referral attributions.
- l. Other false positive referral attributions are possible but are not a concern.

10. Referrer Id Namespace

- a. For background: Based on requirements in the section above a maximum of 65,534 Referrer Ids may be actively claimed.

- b. A `RENT_FEE` and `MINIMUM_RENTAL_DURATION` must be enforced, such that the minimum cost of `RENT_FEE * MINIMUM_RENTAL_DURATION` must be paid to claim a Referrer Id.
- c. The ownership of an actively claimed Referrer Id may be extended by anyone at any time by paying the necessary `RENT_FEE` per unit of duration.
- d. If the ownership of a Referrer Id expires then there is no grace period and it is immediately returned to the pool of available Referrer Ids.
- e. Any rent fees that are collected may be transferred to the ENS DAO Treasury.
- f. A `MAXIMUM_RENTAL_DURATION` must also be enforced, such that the total remaining duration of a Referrer Id may never exceed `MAXIMUM_RENTAL_DURATION`. This mechanism is suggested to improve flexibility for the ENS DAO to increase the `RENT_FEE` if available Referrer Ids are starting to become limited (a very good problem to have). Any attempt to extend the rental of a Referrer Id beyond `MAXIMUM_RENTAL_DURATION` will be refunded.
- g. *For consideration: Ownership of Referrer Id X is actually ownership of the subname `X.referrer.ens.eth`.*

11. Referral Id Forwarding

- a. The ENS Referral program provides incentives for Referrers who do not operate their own .eth Registrar Frontend, such as talented marketers, educators, and storytellers who do not specialize in application development.
- b. The owner of a Referrer Id may define an optional association with a “Forwarding Target” in the “ENS Referrer Controller”.
- c. When the Forwarding Target of a Referrer Id is defined it represents that the Referrer Id does not operate their own .eth Registrar Frontend and instead directs their audience to complete .eth registrations or renewals using the .eth Registrar Frontend associated with the Forwarding Target.
- d. .eth Registrar Frontends are recommended to check for a “ens-referrer-id” parameter when a visitor is directed to their app. When found, the .eth Registrar Frontend is recommended to use this provided “ens-referrer-id” (rather than their own Referrer Id) on .eth registration or renewal transactions initiated by that visitor.

- e. .eth Registrar Frontends have no requirement to follow the recommendations described above. The incentive to follow this recommendation includes building brand awareness that can translate into increased non-forwarded traffic in the future. If a .eth Registrar Frontend fails to follow these recommendations it is likely that the origin Referrer will begin redirecting their audience to a different “Forwarding Target” who does.
- f. The “Forwarding Target” has no influence on Referral Reward calculations. It exists purely for analytics purposes so that the market share of a .eth Registrar Frontend (relative to other .eth Registrar Frontends) may be more accurately calculated.

12. Reward Accrual Periods

- a. Each calendar month represents a distinct reward accrual period.
- b. *For consideration: Reward Rates could be a fixed rate. Alternatively, to incentivize higher-impact referrers, Reward Rates might be defined to scale as a function of the total “reward eligible revenue” attributed to a Referrer within a Reward Accrual Period.*

13. Referral Reward Accounting

- a. Referral Reward Accounting (the work to aggregate all referral data and calculate reward balances) must be performed offchain to satisfy other requirements in this design proposal.
- b. Referral Rewards Accounting should be decentralized, such as through enhancements to the [ENS Subgraph](#) (or similar indexing solutions).

14. Referral Reward Distributions

- a. Option A: Fully Automated Distributions:
 - i. Preliminary discussions have begun with [Axiom](#) who may offer a solution to automated referral reward distributions. We are coordinating together with the Axiom team to evaluate if this is a good fit.
- b. Option B: Semi Automated Distributions:

- i. Ideally we find an elegant solution for fully automated distributions. A fallback option is to build a set of scripts that would need to be manually executed once per month by a representative of the ENS DAO. In other words, once per month someone would need to “press the button”.
- c. Referral Reward Distributions must be passed through the “Referral Controller” contract. Each reward distribution should emit events so that referral rewards accounting may be accurately updated.
- d. The Referral Reward Distribution for a Reward Accrual Period is sent to the treasury address of a Referrer as of the last second of the Reward Accrual Period.

15. Referrer Code of Conduct

- a. A Referrer Code of Conduct must be defined. Suggested policies include:
 - i. Rules that ENS Referrers must follow.
 - ii. Consequences ENS Referrers face if they break the rules. For example: revoking an ENS Referrer such that they surrender any unpaid Referral Rewards and any remaining Referrer Id rental period.
 - iii. Agreement that the ENS DAO retains the right to modify or terminate the program at any time. This includes the right to publish changes to the Referrer Code of Conduct.
 - iv. Agreement to all ENS Referral Program policies, including the calculation and distribution of rewards.
- b. All Referrers must sign their agreement to the current “ENS Referrer Code Of Conduct” when enrolling as a referrer.
- c. Enable the ENS DAO to publish new versions of the Referrer Code of Conduct.
- d. Whenever the owner of a Referrer Id has not signed the most recently published version of the Referrer Code of Conduct that Referrer Id becomes ineligible for accruing any Referral Rewards until they sign the latest version.

16. Regulating Compliance with the Referrer Code of Conduct

- a. *Option A: Referrer Community Regulates Themselves*

- i. *Observation: Referrers have a lot to lose if there is a “race to the bottom” of .eth pricing from “Indirect” self refunds. This destroys their margin and also puts the existence of the entire Referrer Program at risk of being terminated by the DAO. The overall community of Referrers can therefore be a useful resource for finding compliance violations.*
 - ii. *Observation: Care must be taken to protect from false acquisitions. In the event that something bad is done in association with a particular Referrer Id it may not guarantee it was actually done by that Referrer. It might be a “false flag” attack from one Referrer to another to damage or eliminate competition.*
- b. *Option B: ENS Ecosystem Working Group (or another defined ENS DAO role) Regulates Referrers*
 - i. *The practicality of this option is attractive. Options A and B might also be combined such that Referrers generally take on the burden of finding and documenting Referrer conduct violations, while Ecosystem Working Group Stewards might then serve as “judges” who review cases and enforce penalties.*
 - ii. *Options A and B might be combined. For example: Anyone (including referrers) might be required to stake some value to file a complaint about a Referrer violating the Code of Conduct. If stewards find the complaint valid the staked value would be returned, otherwise the staked value might be surrendered to the ENS Treasury.*
 - iii. *Concern: The ENS Ecosystem Working Group is getting more and more responsibilities added over time. How do they feel about adding this as another responsibility? What if the DAO gave them more resources to help with the added responsibility?*
- c. *Option C: The ENS DAO Regulates Referrers*
 - i. *Concern: This option doesn’t seem attractive. It might put an inappropriate burden on delegates.*
- d. *Option D: The nuclear option*
 - i. *If a problem is severe enough and no resolution can be found the ENS DAO always retains the ability to completely terminate the ENS Referral Program.*

17. Mitigate “Direct Self-Refunds”

- a. *For background: In this context a “Direct Self-Refund” represents someone attempting to act as their own referrer to receive net discounts on .eth names.*
- b. Increase the costs and risks of “self-refunds”:
 - i. Enforce costs of $(\text{RENT_FEE} * \text{MINIMUM_RENTAL_DURATION}) + \text{gas fee}$ for claiming a Referrer Id. This results in a net loss for smaller scale self-refund attempts.
 - 1. *For consideration: We can price the RENT_FEE in Ether or perhaps there’s an opportunity to price it in \$ENS?*
 - ii. Enforce that payment of rewards are always delayed by at least 1 full $\text{REWARD_ACCRUAL_PERIOD}$.
- c. Decrease the benefits of “self-refunds”:
 - i. Define “reward eligible revenue” to be distinct from “referred revenue”.
 - ii. Exclude all short name premium and temporary premium revenues from “reward eligible revenue”.
 - iii. Exclude all revenues from registrations or renewals with a duration greater than $\text{MAX_REWARD_ELIGIBLE_DURATION}$ from “reward eligible revenue”.
 - iv. Exclude all revenues from a specific origin payer account beyond $\text{MAX_REWARD_PER_REFERRED_PAYER}$ within a $\text{REWARD_ACCRUAL_PERIOD}$ from “reward eligible revenue”.
 - v. Exclude all revenues associated with names owned by a particular account beyond $\text{MAX_REWARD_PER_REFERRED_OWNER}$ within a $\text{REWARD_ACCRUAL_PERIOD}$ from “reward eligible revenue”.
 - vi. Enforce that a referrer must achieve at least $\text{MIN_REWARD_ACCRUAL_BALANCE}$ of “reward eligible revenue” within a $\text{REWARD_ACCRUAL_PERIOD}$ to be eligible for any payout for the associated period.

18. Mitigate “Indirect Self-Refunds”

- a. *For background: In this context an “Indirect Self-Refund” represents someone coordinating with / influencing a group of others to receive net discounts on .eth names.*
- b. *An example “Indirect Self-Refund” attack could theoretically make “self-refunds” through the following process:*

- i. *The operator of the .eth Registrar Frontend aggregates registrations from multiple people across time.*
 - ii. *1+ months later (after referral reward distribution) the operator of the .eth Registrar Frontend distributes a percentage of the referral rewards they receive back to the same people who used their app.*
- c. *Observation: Referral rewards for a Referrer Id are distributed to a single treasury address. If we consider a naive "Indirect Self-Refund" attempt, gas costs would have to be paid (either by the .eth Registrar Frontend or by each person seeking a refund from the .eth Registrar Frontend) to distribute these reimbursements. These gas costs might often surpass the value of any reimbursement.*
- d. *Observation: The 1+ months of delay for referral reward distribution removes any "immediate gratification" from indirect self refunds.*
- e. Allow the regulating authority for compliance with the Referrer Code of Conduct to revoke a Referrer for breaking the rules.
- f. When a Referrer is revoked they lose:
 - i. Their Referrer Id (which becomes available for anyone to claim)
 - ii. Any rent fees paid for whatever duration may remain on their Referrer Id.
 - iii. Any reward accrual balances that haven't been distributed yet.
- g. *Observation: The ability to revoke a Referrer influences game-theory optimal behavior. If Referrers regulate themselves it is likely any large scale exploit would get attention, get reported, and become revoked all before the 1+ months of delay for referral reward distribution. Large scale "self-refund" exploits require time and money to create & promote but are likely to be revoked before getting any reward. Therefore, the incentive to create such an exploit is mitigated.*