



Proof of Humanity Registry Policy

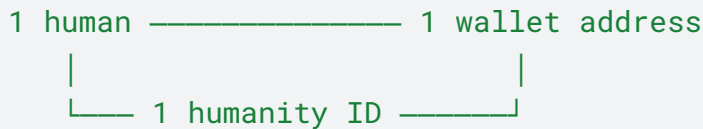
General Rules

Purpose

The **Proof of Humanity** curated registry of humans is a system combining social verification with video submission to create a *Sybil-resistant* list of humans.

Proof of Humanity links each registered human to a unique humanity ID across multiple chains. At any particular moment in the *unified registry* there must be a one-to-one relationship between each human, the wallet address and the *Humanity ID*. The wallet address can change, but the human to *Humanity ID* correlation must remain the same - it is the human that owns the *Humanity ID*, not the private key. **This policy serves the purpose of ensuring this:**

Unset



Acceptance Criteria

For a human to register into the *Proof of Humanity* registry, the following criteria must be satisfied:

1. The submitter is not already registered on Proof of Humanity's unified registry.
2. The submitter is a real and alive human being.
3. *The submitter must register using the default Humanity ID if registering for the first time, otherwise using the Humanity ID corresponding to the previous successful registration.*
4. The submitter must provide the below mentioned required elements for submission

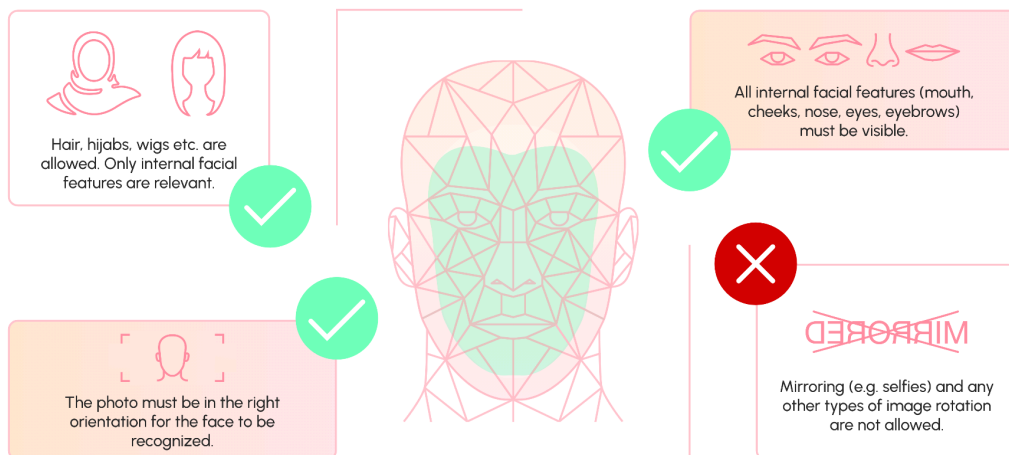
Required Elements for Submission



1. Submitter name - *Required*

- A. Any type of name under which the submitter wants to be known, consisting of any UTF-8 characters.

2. Front-facing photo of the submitter - *Required*



- A. The photo must be under 3 MB and have a minimum resolution of 256px by 256px.
- B. The accepted formats for the photo are *jpg, jpeg, png, and webp*.
- C. The photo must include the face of the submitter *facing* the camera.
- D. All internal facial features must be visible. Headcover not covering the internal facial features is acceptable.
- E. The photo must be in color and not contain any digital edits to the facial features.
- F. Permanent tattoos are permitted unless they hinder the visibility of internal facial features and make the face difficult to recognize.
- G. Neutral, soft and natural make-up without flashy lipstick, eyeliner, or eyeshadow is acceptable unless significantly alters or modifies the internal facial features.
- H. The photo must be in the right orientation for the face to be recognized. Mirroring (e.g. selfies) and any other type of image rotation is not allowed.

3. Video of the submitter - *Required*



- A. The video must be at most *2 minutes* long and have a minimum resolution of *352px* by *352px*.
- B. The accepted formats for the video are *webm*, *mp4*, *avi* and *mov*.
- C. The face of the submitter is bound to the same rules as those previously stated regarding the photo.
- D. The user must display his wallet address used for the submission on a physical surface (paper, screen etc.).
- E. Have good lighting conditions and recording device quality.
- F. The submitter must clearly say the phrase *"I certify that I am a real human and that I am not already registered in this registry"*.



Detailed Rules

In the event of any inconsistency or conflict between the provisions of the General Rules and those of the Detailed Rules, the terms of the Detailed Rules shall prevail.

Definitions

- **Default Humanity ID:** A Humanity ID that consists of the bytes20 representation of the blockchain address used at the time of the request.
Example: If a human registers with the address "0xE62765301fEd9103caD2b7FcCd24b2f120166e89" their Default Humanity ID is "E62765301fEd9103caD2b7FcCd24b2f120166e89".
- **Humanity ID:** Proof of Humanity's soulbound ID, consisting in an alphanumeric phrase that corresponds to a single human.
- **Humanity ID Reclaim:** A request made by a human to claim their Humanity ID, after revoking their own previous submission.
- **Internal Facial Features:** Facial region consisting of the mouth, nose, cheeks, eyes and eyebrows.
- **Request:** The action to solicit the registration of a human profile, renew it during the renewal period or try to revoke it.
- **Unified registry:** Proof of Humanity's registry of humans that extends to all chains Proof of Humanity is deployed on.

Acceptance Criteria

For a human to register into the *Proof of Humanity* registry, the following criteria must be satisfied:

1. **The submitter is not already registered on Proof of Humanity's unified registry.**
The submitter cannot register a second time while considered registered, except in the case of Humanity ID Reclaim. While the details related to the registration status of the human can be synchronized across chains, each registered human must have a unique home chain .
2. **The submitter is a real human being.**
The submitter must be a real human and not a computer-generated person or avatar.
3. **The submitter is an alive human being.**
The submitter can not be registered if deceased.
4. **The submitter applies for the correct Humanity ID.**
The submitter must register using the default Humanity ID if registering for the



first time, otherwise using the Humanity ID corresponding to the previous successful registration.

5. The submitter must provide the required elements for submission

The submitter must provide material necessary, following the rules detailed later in this document in order to register. The material must be provided in the registration transaction.

For example, a submitter cannot be registered if their video submission does not display their wallet address

Humanity ID

Each human registering in *Proof of Humanity* will be assigned a unique and personal *Humanity ID*. The assignment occurs upon successful registration in *Proof of Humanity*.

The *Humanity ID* must always correspond to the first human that successfully obtained it and this applies across the *unified registry*. Once a human has been assigned a *Humanity ID* assigned at some point in the protocol, whenever necessary to register again, they will have to reclaim the same *Humanity ID*.

Home chain

For the purpose of registration, the home chain of a *Humanity ID* is considered the chain it is registered on in the main registry contract.

This chain is unique per *ID* and if there are more home chains, only the one with the most recent accepted submission is considered valid.

Valid profiles in the process of being transferred are considered to be on the receiving chain, which will thus be considered as the home chain.

Required Elements for Submission Rules

Any submitter registering to the unified registry must provide evidence that they are compliant with the following acceptance criteria:

1. Submitter name - *Required*

- A. The name under which the submitter wants to be known, consisting of any UTF-8 characters.



- B. Can be any type of name, such as but not limited to, an official name (Federico Ast), a use name (Satoshi Nakamoto), a religious/monarch name (Benedict XVI), a name with the original non-latin characters (小明), a name with anglicized characters (Hayao Miyazaki), a political name (Nicolas Sarkozy), etc.

2. Front-facing photo of the submitter - *Required*

- A. The photo must be under 3 *megabytes* and have a minimum resolution of 256px by 256px.
- B. The accepted formats for the photo are *jpg, jpeg, png* and *webp*.
- C. The photo must include the face of the submitter *facing* the camera.
- D. All internal facial features must be visible.
- E. The photo must be in color and not contain any digital edits to the facial features (e.g. editing with photoshop or adding social media filters).
- F. Permanent tattoos are permitted unless they hinder the visibility of internal facial features and make the face difficult to recognize.
- G. Neutral, soft and natural make-up without flashy lipstick, eyeliner, or eyeshadow is acceptable. Any make-up product or item that significantly alters or modifies the internal facial features is not allowed.
- H. The photo must be in the right orientation for the face to be recognized. Mirroring (e.g. selfies) and any other types of image rotation are not allowed.
- I. Headcover not covering the internal facial features is acceptable (e.g. a hijab is acceptable but a niqab is not).

3. Video of the submitter - *Required*

- A. The video must be at most 2 *minutes* long and have a minimum resolution of 352px by 352px.
- B. The accepted formats for the video are *webm, mp4, avi* and *mov*.
- C. The face of the submitter is bound to the same rules as those previously stated regarding the photo.
- D. The user must display their wallet address used for the submission on a physical surface (paper, screen, etc.). The sign has to display in a readable manner the full address of the submitter (not ENS or ellipsis). The submitter must show the sign in the right orientation to be read on the video. A single one of the following errors occurring once will be tolerated in the displayed address:
 - i. *omitted character*: a character is omitted from the address: "abcd" → "abd".



- ii. *mistaken character*: a different character has been written in place of the one expected in that position: "abcd" → "ab9d".
 - iii. *swapped adjacent characters*: two characters adjacent to each other have been swapped: "abcd" → "acbd", but not "adcb".
 - iv. *additional character*: an additional character has been inserted anywhere in the address: "abcd" → "abc0d".
- E. Lighting conditions and recording device quality must be sufficient to discern internal facial features and characters composing the address displayed.
 - F. The submitter must say the phrase *"I certify that I am a real human and that I am not already registered in this registry"*.
 - G. Submitters must speak in their normal voice and must not attempt mimicking someone else's voice.
 - H. Speaking before or after the required sentence is acceptable.
 - I. Poor English accents, mispronunciations, and the switch or oversight of words in that sentence are not grounds for rejections.
 - J. The video must have audio of sufficient quality to ensure the speaker can be understood. Minor background noises or audio issues are acceptable as long as they do not interfere with comprehending the speaker.

Files

The elements required for registration must be stored on a decentralized storage (IPFS).

None of the provided information must be purposely offensive or hateful (ex: a painted Hindu swastika is acceptable for picture, even if it can be offensive to some people unfamiliar with its meaning, but "I hate Jews" as a name/bio is not).

Challenge Types

In order to curate this registry, any user can challenge submissions requests in *"pending"* state that they deem non-compliant with this policy. A user challenging a pending submission request must specify a challenge type.

The challenges types are the following:

1. **Sybil attack** - Applies when the submitter is already registered in the unified registry (duplicate submission), when the person present in the evidence media is not a real human being or is not the one controlling the wallet used for registration. In case of duplicate submission, the challenger has to provide a reference to the identity already registered or to a duplicate submission at



the moment of challenge.

If someone tries to register multiple times simultaneously, all submissions are to be rejected. This takes into account the unified registry of all chains Proof of Humanity is deployed on, and the state of cross-chain interactions.

In case the person present in the evidence media is not the one controlling the wallet used for registration, the challenger must provide appropriate evidence. In case of a. deepfake photo/video, the challenger must demonstrate that the submitter is not an existing, alive, human being.

Correct challenge: Bob challenges Alice's submission arguing that Alice is not a real human being and adds as evidence an analysis report proving that this video is deep-fake.

Incorrect challenge: Bob challenges Alice's submission arguing that she is already registered with another Humanity ID and adds the Humanity ID as evidence. However, Alice argues that the ID belongs to her twin and she proves she is another person by submitting a video of both her and her twin interacting and their social media profiles showing pictures of them together.

2. **Identity theft** - Applies specifically when the submitter applies for a Humanity ID that corresponds to another human.

Correct challenge: Charlie's profile expires, and several months later, someone claims his Humanity ID. Bob discerns that the individual in the evidence is not Charlie attempting to reapply but Alice. Bob challenges this submission, presenting as evidence both the initial resolved Humanity ID Claim obtained by Bob and the current Claim for the same Humanity ID. He argues and proves that the pictures and videos depict different individuals.

Incorrect challenge: Charlie is an AI and submits a claim for his Humanity ID, but the submission fails due to a challenge for Sybil Attack, rendering the Humanity ID available. Subsequently, Alice claims the same Humanity ID, prompting Bob to challenge it for Identity Theft, asserting that it belongs to Charlie. However, Alice provides evidence demonstrating that Charlie never successfully obtained the Humanity ID in the first place by referencing his failed submission.

3. **Incorrect submission** - This kind of challenge applies when the other stated challenge types do not apply and the required elements for submission or other policy rules are not complied with. (i.e. mirrored image, hateful name, same video used for renewal as was used in registration, etc.).

Correct challenge: Bob challenges Alice's submission, alleging that the television in the background displays phrases written in reverse, suggesting evidence of a mirrored video.

Incorrect challenge: Bob challenges Alice's submission, claiming that her chin is blocked by the phone she uses to display her address, thus violating submission rules. Alice refutes this by correctly asserting that the chin is not considered part of the internal facial features, and therefore her video adheres to the required elements for submission rules.



4. **Deceased** - The challenger must provide evidence that the submitter is dead such as a death certificate, an obituary, or public records. The challenged submitter can provide a video of himself reading a recent block hash. Submitters not able to give recent proof of life are to be considered deceased.

Correct challenge: Bob challenges Alice's submission after recognizing her from the news and recalling her tragic death in a car accident. He then obtains her death certificate from Portugal's government website and provides it during the evidence period of the dispute, along with the link to the government site, and news article.

Incorrect challenge: Bob challenges a submission made by someone named "Alice S" because he came across an obituary in the newspaper for an individual named "Alice Smith," providing the obituary as evidence. However, Alice counters by presenting a video of herself reading a recent block hash and arguing that she is not Alice Smith.

Challenge types are categorized as follows:

- "Sybil attack" and "Identity theft" challenges are both **aggravated challenges**
- "Incorrect submission" and "Deceased" challenges are **simple challenges**.

Wrong challenge type: If the challenge is deemed correct but the selected challenge type is incorrect, the challenge must be accepted if both the selected and correct challenge types belong to the same category.

Example: If Bob challenges Alice for Sybil attack but jurors determine it to be an identity theft, jurors must accept the challenge.

Example: If Bob challenges Alice for Sybil attack but jurors determine it to be an incorrect submission, jurors must reject the challenge.

Multiple correct challenges: If two challenge types from the same category are correct, the challenger must select any challenge type from that category. However, if challenge types from different categories are correct, the challenger must always select an **aggravated challenge**.

Example: Alice is already registered in PoH (sybil attack) and applies to the humanity ID of another human (Identity Theft). If Bob challenges the submission for Sybil attack or Identity Theft then it must be accepted, but if Bob challenges the submission for Deceased or Incorrect Submission, jurors must reject the challenge.

Example: Alice is already registered in PoH and applies again (sybil attack) using a veil that covers some of her internal facial features (Incorrect submission). If Bob challenges the submission for Incorrect submission or Deceased then it must be rejected, but if Bob challenges the submission for Sybil Attack or Identity Theft, jurors must accept the challenge.



Wrong arguments: If the challenge type is correct but for reasons other than the ones argued by the challenger, the challenge must still be accepted.

Example: Alice challenges Bob's submission and selects "incorrect submission" as the challenge type. Bob's video fails to display his wallet address, a required element for submission, thus the challenge type is appropriate. However, Alice incorrectly asserts that Bob is already registered, presenting evidence of a profile that jurors determine not to be a duplicate of Bob. Despite Alice's misidentification of the issue, since the selected challenge type is correct, even for reasons different from those argued by the challenger, the challenge must still be accepted.

Renewal

The registration status and the correlation of the *Humanity ID* to the human's wallet address are valid for a specific amount of time, after which they are considered *expired*. Before expiration, there is another specific period (*renewal period*) during which the registered human has the chance to reapply to renew his state in the registry.

This reapplication is identical to a normal registration and the same rules apply to this request. However,;

1. The photo and video must not be the same as those used before.
2. The phrase spoken by the submitter must be *"I certify I am a real human and I reapply to keep being part of this registry"*.

During the *renewal period*, the human must reapply on the *home chain*, otherwise their request must be challenged for "Sybil attack". After *expiration*, the human can claim their Humanity ID and register on any chain.

Correct renewal: Alice requests the renewal of her profile by uploading a new video and photo that adhere to the applicable policy rules.

Incorrect renewal: During the renewal period, Alice requests the renewal of her profile on Gnosis, but her Home Chain is Ethereum Mainnet. Therefore, she is challenged by Bob for Sybil Attack.

Revocation

A request to revoke a submission considered to be *registered* from the registry can be made at any time by anyone submitting a deposit.

Someone can request the revocation of a person from the registry:



- A. if the acceptance criteria are not fulfilled by the last request that obtained the *Humanity ID*. If the revocation request is based on an “Incorrect Submission” challenge, but the submission was compliant with the policy version that was in force at the time of submission, the revocation request must be rejected.

Correct revocation: Bob requests to revoke Alice’s profile because she is already registered with a different Humanity ID.

Incorrect revocation: Bob requests to revoke Alice’s profile because the submitted photo is in a format which is not permitted by the most updated policy. However, Alice challenges the revocation and proves that the policy in force at the time of submission allowed for that specific format. Therefore, the revocation is not accepted.

- B. if a human requests their own revocation from the registry, either to not be part of the registry anymore or to reclaim the *Humanity ID* with another wallet address. In case the submitter requests revocation using the same wallet as the one registered for the corresponding registration state, evidence with description “*I am the submitter as proven by my address and I want to revoke this submission*” is enough. If requesting revocation from another address, the person must submit a video as evidence saying the sentence “*I want to revoke my own submission from the Proof of Humanity registry*”.

Correct revocation: Alice loses her wallet address seed phrase and cannot access her Proof of Humanity profile. Therefore, she wants to reclaim her Humanity ID with a new address. For that, she requests a revocation of her Humanity ID with her new wallet address and says, “*I want to remove my submission from the Proof of Humanity Registry.*” Although she says “*remove*” instead of “*revoke*”, omits the word “*own*”, and her pronunciation is not perfect, those are minor and permitted mistakes and it is still understandable that she is a real human and the owner of the ID. Therefore, the revocation is accepted.

Incorrect revocation: Alice intends to delete her own profile, but mistakenly requests to revoke the Humanity ID of Bob. He challenges the revocation and proves that he is the rightful owner of that Humanity ID.

If the revocation is correct but for reasons other than the ones argued by the requester, the revocation must still be accepted.

Example: Alice requests the revocation of Bob’s profile, citing it as a case of a sybil attack. She provides evidence demonstrating that the Humanity ID obtained by Bob originally belonged to her, constituting instead a case of identity theft. Bob challenges the revocation, arguing that it is not a case of a sybil attack. However, the revocation must still be accepted.