

Decentralized Communication Infrastructure: Empowering DAOs and their Initiatives

A standardized decentralized method for DAO and Initiative
communication.

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The core problem addressed by this paper

The DAOs currently lack a standardized decentralized method for the coordinated release of articles and statements. As a result, each governing group resorts to their own communication methods or blogs, creating challenges for the average player to monitor progress on ongoing proposals and new initiatives.

The current communication landscape extends to funded projects within the Metaverse, where players often struggle to obtain comprehensive updates due to the absence of standardized communication protocols.

Additionally, players face challenges in determining which DAO aligns with their values and is likely to approve their proposals. This lack of clarity results in inefficient time utilization and frustration for both council members and proposers. The proposed solution involves a smart contract controlled by DAOs to address these communication challenges.

Overview

To overcome these challenges, I propose the implementation of a smart contract empowering DAOs to add, update, and delete published articles and statements. Additionally, planetary DAOs will have the capability to incorporate funded initiatives as sub-organizations. Sub-organizations, in turn, can update their identity and release news and statements themselves.

The utilization of a Smart Contract and MSIG technology ensures that all interested parties can access the data at any time, minimizing the risk of a centralized entity as a single point of failure.

Identities and Permissions

At the launch of the smart contract, only the six planetary DAOs of Alien Worlds will be listed as organizations. These DAOs exclusively possess the 'parent' permission level.

Initial identities

- eyeke.dac
- kavian.dac
- magor.dac
- naron.dac
- neri.dac
- veles.dac

Permission Level "parent"

- Can add and delete sub-organizations of their DAO
- Can add, update and delete articles of their DAO
- Can update the details of their identity

Permission Level "sub"

- Can add, update and delete articles of their organization
- Can update the details of their identity

This hierarchical structure empowers planets to incorporate sub-organizations, allowing them to independently administer their identity and publication releases.

Technical Details

Smart Contract Tables

Identities

The "Identities" table hosts the following data:

- identity (The wallet of the organization)
- parent_identity (The wallet of the organization that created this identity)
- permission_level (The permission level of the organization - parent or sub)
- timestamp_creation (The date and time at which the identity was added)
- timestamp_edit (The date and time at which the identity was last edited)
- name (The name of the identity)
- header_graphic (A link to the header graphic of the organization)
- logo (A link to the logo of the organization)
- description (A description about the organization)
- contact (An array of links for contacts for the organization)

Articles

The "Articles" table hosts the following data. Each identity can create as many entries in the Articles Table as they like. The table can be sorted by identity as well as the publishing date.

- article_id (An automatically increasing id for the article)
- identity (The wallet that created the table entry)
- timestamp_publish (The date and time at which the article was first added)
- timestamp_edit (The date and time at which this entry was last edited)
- title (The title of the article)
- description (A short description of the article)
- image (A link to the image that goes along with the article)
- link (A link to the article, which can be hosted anywhere)
- author (The name of the author of the article)

Smart Contract Actions

Add Identity

parameters: parent_identity, new_identity_wallet, initial_name, initial_description, initial_graphic, initial_logo, initial_contacts

This action can only be executed by identities with the permission 'parent'. The parent_identity needs to be the executing wallet.

Adding an identity will insert the values in the 'Identity' table with the set parameters. Adding an organization as a parent automatically sets the values for permission_level to 'sub'. The values for timestamp_creation and timestamp_edit are automatically set.

Update Identity

parameters: identity, name, description, graphic, logo, contacts

The identity needs to be the executing wallet.

Editing an identity will update the values in the 'Identity' table with the set parameters. The value for timestamp_edit is automatically set.

Delete Identity

parameters: parent_identity, identity

This action can only be executed by identities with the permission 'parent'. The parent_identity needs to be the executing wallet. Only identities with the permission_level 'sub' can be deleted.

Deleting an identity will delete all entries by this identity in the 'Articles' table as well as the entry in the 'Identities' table.

Add Article

parameters: title, description, image, link, author

The identity needs to be the executing wallet.

Adding an article will insert the values in the 'Articles' table with the set parameters. The values for article_id, timestamp_publish and timestamp_edit are automatically set.

Update Article

parameters: article_id, title, description, image, link, author

The identity needs to be the executing wallet.

Editing an article will update the values in the 'Articles' table with the set parameters. The value for timestamp_edit is automatically set.

Delete Article

parameters: article_id

The identity needs to be the executing wallet.

Deleting an article will delete the specified article_id from the 'Articles' table.

Author

This paper was submitted by 5thba.wam