

# AIP<sup>1</sup>-004: Blockchain Apps Meta-data

*platfowner 2020-03-20*

## Goals

- Allow apps meta-data to be added to the blockchain and integrated with Insight (or other blockchain viewers) for search engine optimization

## Problem Definition

We need a protocol to support the following scenario:

- Blockchain provides a path for applications (value:/apps)
- App data is shown on Database pages of Insight
- Usually apps have their own meta-data (e.g. home page, social link, logo, etc) (see How to [Update Token Information on Etherscan](#) for reference)

## Requirements

- Meta-data can be added or edited by only app owners
- Meta-data needs to be recognized and used by Insight
- Meta-data can contain SEO information

## Proposed Solution

### Blockchain-Side

- Store apps meta-data in blockchain with dot-property
- Adopt [JSON-LD](#) format and use [Product type](#) of [schema.org](#)
- Support both app-level and node-level meta-data

App data:

```
/apps/afan/.meta_data: {  
  "subtree": {  
    type: "application/ld+json",  
    value: {
```

---

<sup>1</sup> AI Network Improvement Proposal. Visit <https://docs.ainetwork.ai> for the full list.

```

    "@context": "http://www.schema.org",
    "@type": "product",
    "brand": "aFan",
    "name": "aFan",
    "description": "SNS for creators and fans",
    "url": "https://afan.ai",
    "logo": "https://afan.ai/static/favicon.png",
    "image": "https://afan.ai/static/favicon.png",
  }
}
}

```

State node data:

```

/apps/afan/.meta_data: {
  "node": {
    type: "application/ld+json",
    value: {
      "@context": "http://www.schema.org",
      "@type": "WebPage",
      "name": "aFan posting",
      "description": "<post text>",
      "image": "https://<post image URL>",
    }
  }
}
}

```

## Insight-Side

- Parse `.meta_data.subtree` if available and
  - Add it to the header of the database sub-node pages
  - Provide a link (w/ icon) to the app landing page
- Landing page for apps
  - Provide a link to the product web-site
  - Use name (or brand), and logo (or image), and description
- Parse `.meta_data.node` if available and
  - Add it to the header of the database state node page

## Conclusion

- Provided schema for defining app-level meta-data and node-level meta-data
- Defined an Insight feature set for meta-data from SEO perspective

## Reference

- Insight SEO design doc ([docs](#))
- How to Update Token Information on Etherscan ([link](#))
- JSON-LD ([wikipedia](#))
- JSON-LD Schema Generator ([link](#))
- schema.org ([link](#))
  - Product type ([link](#))
- Understand how structured data works ([link](#))

## Document History

Date	Who	Change	Notes
2020-03-17	platfowner	Initial draft	
2020-03-20	platfowner, minsulee2, liayoo, cshcomcom	Internal review	
2021-05-07	platfowner	Published	
2021-05-12	platfowner	Github IDs Link to full list	
2021-05-12	platfowner	Republished	