

QA-DAO	
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Title	NFT-DAO
Subject	Test Strategy



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Blockchain Test Maturity Model

This is an adaption of KPMG's Blockchain Maturity Model oriented towards Test Maturity Models.

The challenge is adapting maturity levels to distributed autonomous organisations (DAO).

Maturity Levels

Level 1 – Initial

Ad-hoc testing.

Level 2 – Defined.

Testing does not start until products are completed, so the aim of testing is to compare products against requirements.

Level 3 – Integration

Testing is integrated into a software life cycle,

Level 4 – Management and measurement

Testing activities take place at all stages of the life cycle.

Level 5 – Optimization

Testing process itself is tested and improved at each iteration.

Risk Areas

Possible risk areas NFT-DAO may need to test.

1. Access and user management

1.1 Management of cryptographic keys.

Transparency of policy etc

1.2 Unauthorized access of participants

How to handle unauthorised or fraudulent access.
Cardano Registry has a legal team looking at this in their area.

1.3 How to uniquely identify users.

DID to avoid duplicate identities in shared auctions etc.

2. Authorization and provisioning management

2.1 Segregation of duties

Due diligence in assigning responsibility to stakeholders in NFT minting.

2.2 Incorrect authorizations

How to handle errors

2.3 Abuse of high privileged or over authorized users.

How to play fairly



3. Data management

Data confidentiality

Data integrity

Data availability

4. Interoperability

Integrating with legacy systems

For example, off-chain, web 3 and GitHub registry

5. Scalability and performance

Repeats earlier issues above in 1 and 2 (management of cryptographic keys, unauthorized access of participants and uniquely identifiable users) at scale.

6. Change management.

HOLON agreement on handover between tasks by all participants

Standards adoption in each HOLON

GitHub Version control: forking

7. Privacy

Append-only data structure (?)

The 'right to be forgotten'.

GDPR. (European Privacy Legislation)

8. Security

Coherence of the consensus mechanism chosen.

the number and location of nodes



NFT Release Roadmap

Token

Translate

Define token release as a User Acceptance Test.

Marketing/Engagement

Communicate UAT Token Release

Record

Capture UAT

Data

Analysis

Improve

Incorporate improvements.

Token

Token



NFT Test Platform

Plutus Test Platform?

How to launch a token to the public on a test platform?

User Acceptance Testing

Use Cases

How to design a test layer with token release.

What usability elements are being tested?

Development Support.

Sign-Off

User Surveys

Feedback

