

Digital Asset Management Working Group Charter

FINAL

Approved by Oversight Committee February 22, 2023

1. Status and Change History

2022-10-22 - Initial Draft - Matt White

2022-11-21 - added comments on sec 8 “Delivery requirements”, and added to list of working groups under sec12 “Organization” - Rouslan Ovtcharoff

2023-01-29 - Incorporated all prior comments, added additional texts, restructuring and refining - Matt White

2023-02-03 - Exploratory group approval to present to oversight committee for working group approval

2023-02-22 – Approved by Oversight Committee

2. Officers

2.1. The Working Group will follow current [Forum Domain Group processes](#), with initial elected officer positions consisting of a minimum of 2 co-chairs.

2.2. Chairs Pro Tem (Appointed chairs until first election):

Alfred Tom, OMA3

Eric den Boer, Cardano NFT-DAO

Rouslan Ovtcharoff, Groovesetter

Matt White, Berkeley Synthetic/OMF

* The above officers will serve as pro-tem until the election of new officers as prescribed by the Metaverse Forum Domain Group Processes.

3. Motivation and Goals (and Non-Goals)

The motivations, goals and non-goals for establishing the Digital Asset Management working group are as follows:

GOALS

3.1. Communication and Collaboration

3.1.1. To foster cross-industry, cross-community, and cross-SDO communication and collaboration as it relates to digital asset management standards for the Metaverse.

3.1.2. Facilitate requirements gathering and diverse stakeholder input in collecting requirements that can be provided to the appropriate foundations and/or SDOs

3.1.3. Raise awareness when duplicate efforts are taking place in the industry and work towards ensuring that parties are working together to develop one common set of standards

3.2. Interoperability and Conformance

3.2.1. Identify open standards in development or already published which embrace openness and are not proprietary. Where a standard may be proprietary The working group would encourage the SDO to open the standard. The working group would not pursue efforts to enhance any proprietary solution.

3.2.2. Avoid SDO-level competition for standards that will create friction to adoption and slow the process of realizing the goals of establishing a truly open Metaverse.

3.2.3. Ensure interoperability and conformance of solutions by conducting plugfests.

3.3. Guiding Principles and Market Analysis

3.3.1. Establish guiding principles that will guide our work considering diversity, equity and inclusion.

- 3.3.2. Define the scope of digital asset management, what will be in-scope and what will be out of scope
- 3.3.3. Identify requirements & key criteria for our group to be successful in supporting the development of interoperable standards that allow for the free movement of digital assets in the Metaverse
- 3.3.4. Survey the market to assess all active work taking place to develop software and open standards for digital asset management.
- 3.3.5. Identify which SDOs and foundations may be the best to handle particular areas in developing standards and implementing standards in open-source software based on market analysis.
- 3.3.6. Propose a set of potential projects where there exists a market-gap.
- 3.3.7. Identify scope, potential overlap and integration points with other MSF working groups
- 3.3.8. To publish our work so that outside organizations including those concerned with financial governance can be informed of our work and incorporate any considerations for legislation that covers digital assets.
- 3.3.9. Make privacy and security an imperative with our work and encourage SDOs to adopt a strong security and privacy posture.

NON-GOALS

3.4. Creating Standards

- 3.4.1. The working group will not create any standards or specifications nor design any with the expectation that they will be adopted as standards. The working group will however discourage the creation of proprietary standards that benefit only a select few stakeholders and limit interoperability in the Metaverse
- 3.4.2. The working group will not prescribe outcomes and dictate roadmaps for standards but rather provide value through requirements gathering, use case analysis and other supportive activities for the SDOs.

4. Guiding Principles

To ensure the group's work is aligned with the goal of building an open and inclusive Metaverse, the group's efforts will be led according to a set of guiding principles. These guiding principles will serve as the foundation for our work and will help ensure that our deliverables align with the goal of creating an open and inclusive Metaverse.

- 4.1. **Openness:** WG's work will be guided by the principle of openness, which means that The working group will strive to create recommendations and solutions that are open, transparent, and accessible to all. The WG will also work with diverse stakeholders and not favor any particular organization or SDO.
- 4.2. **Portability:** the WG will prioritize portability in our work, which means that The working group will strive to create standard recommendations that allow for the seamless transfer of digital assets across different virtual worlds and platforms.
- 4.3. **Inclusivity:** The WG will work towards inclusivity by ensuring that our recommendations, findings, and solutions are accessible and usable by diverse groups of people, including underrepresented groups and marginalized populations.
- 4.4. **Privacy:** The WG recognizes the importance of privacy in the Metaverse and will strive to create recommendations and solutions that protect users' personal information and data.
- 4.5. **Security:** The WG's work will prioritize security by creating recommendations and solutions that protect against unauthorized access and protect the integrity of digital assets.
- 4.6. **Human-centric Design:** The WG will use human-centric and ethical design principles in its work, taking into consideration the effects of the group's decisions and solutions on people and society

- 4.7. **Fairness and Non-discrimination:** The WG will prioritize fair and non-discriminatory access to digital assets, services, and opportunities in the Metaverse.
- 4.8. **Compliance:** The WG will ensure that our proposed recommendations, solutions, and practices are compliant with laws and regulations that apply to digital assets and protect users' rights.

5. Project Deliverables and Requirements

The following sections detail the set of deliverables:

- 5.1. **Deliver Definition of Digital Assets**
 - 5.1.1. Develop a clear, concise and generally agreed upon definition of what is covered in digital asset management including digital identity in cooperating with the Standards Register working group. This is necessary to provide context for all working group work products.
- 5.2. **Create Engagement Plan**
 - 5.2.1. Identify internal MSF working group chairs and stakeholders.
 - 5.2.2. Identify all the relevant outside organizations from the market assessment and establish their function in relation to the DAM WG.
 - 5.2.3. Identify a prime from each organization and encourage them to become a member and participate or assign an internal working group prime to be a point of contact for the outside organization
- 5.3. **Conduct Market Assessment and Deliver Report**
 - 5.3.1. Perform an assessment of current and evolving standards and solutions in the industry.
 - 5.3.2. Evaluate current projects in the market that address digital asset management including existing cloud DAM solutions.
 - 5.3.3. Develop a well articulated report on current industry activities and their maturity, viability, timelines and other pertinent information.
- 5.4. **Create Use Case Document**
 - 5.4.1. Identify and document potential use cases related to digital assets
 - 5.4.2. Categorize use cases and attribute categories to particular SDOs
- 5.5. **Deliver Requirements & Key Criteria Document**

Define concise requirements needed to meet criteria for a system and/or protocols that support secure management of digital assets in the Metaverse which may not be limited to the following topics:

5.5.1. Distributed Ledger Considerations

- Role of the distributed ledgers (e.g. cross-chain asset exchange)
- Decentralization vs. Centralization
- Smart contracts
- System limiting features like gas fees
- Scalability and performance of the distributed infrastructure
- Interoperability with other distributed ledger protocols
- Consideration of regulatory compliance and legal requirements related to distributed ledgers and cryptocurrencies
- The role of centralized and decentralized exchanges
- Consumer protection

5.5.2. Market Competition

- Increasing competition, reducing barriers to entry
- Ensuring fair competition, increasing transparency between partnerships/virtual worlds

- Promoting open and competitive marketplaces for digital assets.

5.5.3. Asset Movement

- Free movement of assets between virtual worlds
- State management for persistence across virtual words and saved state
- Version control, authoring, introducing, updating and depreciating assets
- Issues related to compatibility and conversion between different virtual worlds
- Issues related to ownership transfer and trade of digital assets across virtual worlds.

5.5.4. Data Management

- Persistent storage, high availability, low latency
- Data movement performance (size of asset data, transfer speed)
- Security of data and assets
- Addressing issues related to data governance and data privacy
- Addressing issues related to data backups and disaster recovery

5.5.5. Asset Compliance

- Define public and private metadata requirements
- Authenticity and asset compliance
- Self-sovereign identity management
- Standard metadata fields
- Asset behavior, properties and admissibility
- Safety, security, age appropriateness
- Addressing issues related to intellectual property rights and copyright
- Addressing issues related to regulatory compliance and legal requirements

5.6. Create Possible Projects List

- 5.6.1. Possible projects could include interoperability and benchmark testing.
- 5.6.2. Developing a test suite to validate protocols, platforms and implementations.
- 5.6.3. Create and deliver a project report.

6. Milestone Plan

Table 1 provides definition and duration of phases in the development of the DAM WG.

Activity	Description	Milestone	Duration
1	<i>Setting up for success, getting oriented</i> Establish guiding principles Define digital asset management areas and scope of the working group activities Agreement on all deliverables and detailed project plan development	Deliver detailed project plan.	3 months
2	<i>Oversight approval and funding/resources secured</i>		
3	<i>Exploratory Working Group Kickoff</i>	Review approved charter and schedule out meetings and map against the milestone plan.	1 month

Activity	Description	Milestone	Duration
4	Define Digital Asset Management Definition and Taxonomy	A complete definition and taxonomy of digital assets	1 month
5	Engagement Plan Develop engagement plan on how to work with outside organizations and other working groups	Release engagement plan internally	1 month
5	Market Assessment Conduct an exhaustive assessment of existing standards, specs, projects, open source software Author a final report	Publish DAM Market Assessment Report	2 months
6	Use Case Document Develop an exhaustive list of domain specific use cases for digital assets that will drive out and organize requirements.	Publish use case document to internal WGs and SDOs	3 months
4	Requirements and Key Criteria Collect and organize all digital asset management system requirements and key criteria Vote on completeness before publishing	Publish DAM requirements and key criteria document	3 months
6	DAM Projects List Compile a list of possible projects that the DAM WG could work on to bring value to the development and verification of digital asset management interoperability standards	Publish a project list for digital asset management	1 month

Table 1 – DAM WG Milestone Plan

7. Coordination

Primary points of contact will need to be established with outside organizations, whether they be SDOs, foundations, alliances or any other group involved in developing open and interoperable standards.

Coordination may need to be established with the following MSF working groups:

- 3D Asset Interoperability Working Group
- Avatars and Apparel Working Group
- Real-Virtual World Integration Working Group
- Privacy, Security and Identity Working Group
- Interoperable Characters/Avatars Working Group
- Other working groups as formed

Coordination may need to be established with the following external organizations:

- OMA3
- Open Metaverse Foundation (OMF)
- OpenWallet Foundation (OWF)
- Internet Engineering Task Force (IETF)
- Open Metaverse Interoperability Group (W3C Community Group)
- W3C Decentralized Identifiers (DID) Working Group
- W3C Web of Things (WoT) Working Group



- W3C Verifiable Credentials
- IEEE P2874 Working Group
- Spatial Web Foundation (SWF)
- Next G Alliance
- Academy Software Foundation (ASWF)
- Ethereum Foundation
- Enterprise Ethereum Alliance
- Decentralized Identity Foundation
- EIDR
- DDEX.net
- 3GPP SA1 WG (22856)

8. Communication Plan

- 8.1. **Documents:** The DAM working group will use the Causeway portal for all publishing of documents, schedules, meetings, polls and important notices.
- 8.2. **Important Communications:** The DAM WG will use the digital asset management working group email distribution list for all important conversations.
- 8.3. **Meetings:** The DAM WG will use Zoom for all meetings on a bi-weekly basis occurring at a date and time agreed upon by consensus of the WG (as it relates to holidays or other conflicts.)
- 8.4. **Conversations:** The DAM WG will use the MSF Discord and hold conversations in the #digital-asset-management channel. All conversations that are considered to be important should be moved to the working group meetings or the email distribution list.
- 8.5. **Motions & Votes:** All motions and voting will be conducted in accordance with MSF policies and procedures for all voting matters. In the event where consensus cannot be achieved issues will be brought to the oversight committee. Results are captured in meeting minutes.
- 8.6. **Polls:** The Causeway portal polling feature will be used to take general polls.
- 8.7. **Reports:** Meeting reports will be published to the Causeway portal and distributed via email to the working group members. A semi-annual progress report will be issued to the Oversight committee on the progress of the working group. An annual report will be published and distributed to the overall forum at the end of each year of the working group's operation.

9. Risk Factors

- 9.1. Not being able to establish a line of communication (either by a representative included in the DAM WG or communicating with a point-of-contact) with all SDOs, foundations, alliances and organizations actively involved in developing industry-wide standards is a considerable risk towards not being able to work towards a common open set of interoperable standards, open source software and open frameworks.
- 9.2. Not finding clear lines of demarcation with other working groups in terms of scope, feature and functionality will present a risk to not having interoperable standards.
- 9.3. Attempting to take on too much scope and responsibility will lead to failure.
- 9.4. Losing industry engagement and momentum will present risk to the survival of the DAM WG.

10. Working Group Renewal

The working group will run for 24 months before coming up for renewal unless circumstances demand a sooner review.

11. Project Funding and Resources

Any funding or resource requests can be made at any time based on any reasonable need. A better understanding of funding and resources will be established after the working group is approved.

12. References

Domain Group Processes

<https://portal.metaverse-standards.org/wg/General/document/previewpdf/4057>

Causeway Portal:

<https://portal.metaverse-standards.org/wg/Digital Asset Manage/dashboard>

Discord:

<https://tinyurl.com/metaversestandardsforumdiscord>

Channel: Exploratory Groups: #digital-asset-management

Digital Asset Management Github:

<https://github.com/MetaverseStandards/Digital-Asset-Management>

Annex A. Other Terms and Abbreviations

these are acronyms, abbreviations and any specific symbols that The working group may want to use in our documents

DWG	Domain Working Group
EG	Exploratory Group
FOC	Forum Oversight Committee
MSF	Metaverse Standards Forum
WG	Working Group (includes DWG and EG)
DAM	Digital Asset Management
SDO	Standards Development Organization