

FAQs

What Exactly is MantlePlace? MantlePlace is the next-gen NFT marketplace featuring interNFT standard & Decentralized Identities (DIDs) built to redefine asset management. NFTs are so much more than JPEGs and Ape pics, jargon aside, we believe artists should be free to concentrate on their craft; while we will handle all the procedures related to digital & physical asset creation & management. [Click here for a short video summary...](#)

Our mission is to bring equity, consolidation, and democratization to a highly technical and fragmented sector by serving as a one-stop-shop connecting NFT Creators and Consumers in Web3 & IRL. MantlePlace, powered by CosmosSDK-based mantleChain and a genuinely sympathetic no-bullshit UI, makes it simple to upload & manage your assets on the blockchain without needing to write any code or be tech-savvy.

Launch Your Art Simply: To launch your NFT collection with MantlePlace, you only need two things: your artwork i.e., assets & its metadata, secondly, MantlePlace username & password. MantlePlace handles everything else, including the Collection homepage setup, creating New Collections & their NFT (metadata) schema, Creating NFTs, Whitelist creation & management, minting & trading, decentralization of information via provenance, list Private & Public sales on the NFT launchpad and much more.

We Deeply Empathize with the Collectors of Your Art: MantlePlace offers a full, cutting-edge service for creating and managing NFTs. No matter how many people are trying to mint your art, we have built a technology that will keep transaction costs low. MantlePlace is built around the idea of democratization to make sure that everyone in the community has an equal chance of mining and getting rare drops. In the same way, there are curation mechanisms in place to give priority to legitimate collectors and block malicious actors, scripts, and bots.

We Make Deployment Dirt-Cheap When deploying a collection on Ethereum or other Layer-1s, gas costs might be expensive; we've streamlined our code to make launching your NFT collection cheaper than any other deployment protocols. You do not need to pay three-digit gas fees to mint and trade NFTs, assuring a sustainable system that can be adopted by a diverse set of people, thus easing the entrance of users into the NFT market.

Manage Ownership Simply via NFT Wallet NFT Wallet within MantlePlace is a multi-faceted creator-centric dashboard facilitating NFT wallet & sales management mechanisms. A central location to gauge self-created NFT Collections; Add new NFT assets, Create New NFTs (metadata + assets), list Public and Private sales. It has a Whitelist facility for private and exclusive trades, as well as a Wishlist NFTs section to explore and purchase all the NFTs you've hearted while surfing MantlePlace.

Discoverability Finding an audience for your artwork in an increasingly diverse and complex market can be difficult, requiring lengthy hours of Twitter and Instagram browsing. MantlePlace leverages blockchain information, expert thought leaders, gamification mechanisms and data analytics to ensure that your artwork is found by the correct collectors.

Your Art (and its data) is Immortalized We progressively decentralize your artwork and metadata (always stored on-chain) so that it is never dependent on a single server for the preservation of an NFT. Your work will live on eternally due to decentralized storage systems embodying the provenance trait and larger sovereign philosophy, which are fully embraced by the team when developing on the mantleChain and therefore imbuing MantleProducts with the sovereign ethos.

FAQ

How do I list my collection on MantlePlace? If you already have a MantlePlace account, log in and go to the NFT Wallet section. There, you can create a Curated Collection, add metadata to relevant pieces (Create NFT), and set up a sale (public or private).

For Creators whose collections have been vetted and given the green light to be made 'live' by the MantlePlace team can list the collection for a Private or Public sale via the NFT launchpad. You can't list a sale unless you are a Genesis or Post Genesis Mantle Creator, However, the rest of the features, like making a collection or minting an NFT, are free to use.

What is a completed NFT asset? An NFT asset (audio, video, image, gif) is something that is uploaded within a NFT Collection which is later initialized with metadata (property-type & their values) as per defined NFT Collection schema via Create NFTs facility. Post which, it is a complete NFT that is ready to be minted via sales-listing.

Do you have a limit on how many art-pieces (per collection) can be uploaded? You can upload a total of 10,000 NFTs per Collection

Is it possible to stop my mint campaign? It's not possible to stop your Private or Public Sale (mint) as it is on-chain & their timeline & price metrics are immutable until the listing runs out, you will have to wait until the sales-listing has expired to re-list the NFTs according to new metrics

Is it possible to edit the NFT mint price and Collection-timeline (calibration) once collection goes live? It is not possible to edit the NFT mint-price or edit the mint-timeline once a Collection's Private or Public Sale Listing campaign is deployed, since it is on-chain – you will have to wait until the listing expires.

Is it possible to run 2 sales parallel to each other? Yes, you can list private sale (backed by whitelists) & public sale parallel to each other- but not of the same kind. No, you cannot run two parallel public sales, you would have to wait for one to expire and then re-list with new metrics. However, you can contingently schedule a new public sale for when the existing one expires.

What is the Maximum Number of wallets for the Whitelist? Maximum number of wallet address provision on the Watchlist is set to a ceiling of 100,000 wallet per Whitelist

Can I edit the Whitelist once it has been created? Yes, you can edit the whitelist metrics once it has been formalized

Do you have a burn mechanism? NFT assets on MantlePlace come with a pre-built burn mechanism, whose burn value or bond amount is directly proportional to the NFT metadata contained in it. Burning the NFTs will redeem the owner of the NFTs with MNTL that is equivalent to the metadata within the NFT asset (to know more about Bond Amount & NFT metadata - refer the section below) - if you desire to create burn-to-redeem experiences, or anything of the like, MantlePlace supports it.

I want to offer a certain number of mints for free, then the rest at a price I set. Is this possible? Yes, you can offer free mints on select number of NFTs via private sales-listing backed by Whitelists, setting the price as 0 (or 0.000001) on the whitelist price metric and propagating the whitelist link to be minted essentially for free. The rest of the NFTs in the collection can be publicly listed for a relevant average price & ADD

Can I randomize my minting order? The mint order for NFT Collections pools for Public and Private listings are always Randomized by Default for any Collection as per the protocol, hence deemed as Blind Mints, we do this to provide equal grounds for users to mint the rarest of NFTs on MantlePlace

What are the platform fees and other on-chain operational costs for creators? The platform fee is 2.5% per standard transaction. Currently, as part of the Early Access program, there is no transaction fee. In the future, all sales (minting) and secondary sales on MantlePlace will be levied the standard 2.5% platform fee.

How are the Bonding fees of an NFT asset calculated? Bonding Fee (Amount) is tied to the NFT asset (Metadata) which is directly proportional to its metadata(number of metadata & types of them present), on burning an NFT the owner will receive the bond amount in their MantlePlace wallet.

How do people mint my collection once its live (public)? The collectors and general users can access the Public Sales listing from the Explore page or Early Access Page or a similar campaign-based subsection on the MantlePlace Front-page UI. Private Sales & Whitelist can be accessed by the link provided to the collection by the Creator

Is my supply of NFTs public to users during mint? The supply of created NFT assets is publicly examinable (not the particular pieces) but the Randomized Collection Pool metrics. You can gauge the total NFT assets in the project, the NFT assets in a particular sale, NFT assets sold from a particular sale, their average token price and lastly, the sales timeline.

For Example, A Ferrari NFT Collection has a total of 444 NFT assets (30 are sold in a previous sale) of which 150 NFT assets from the Collection assets have been created into a completed NFT asset with their metadata (property name & property values), 80 are deemed set aside for Sales listing#2 . When you make a (default-randomized) Public or Private Sale with 80 NFT assets (Max NFTs '80' option – sales metrics) from the 444 Ferrari Collection (150 Completed NFT Randomized Pool)- the MantlePlace algorithm will Randomize the listing for the 80 NFTs out of from the total 150 COMPLETE NFT assets with their metadata. The stats will read the following: Total NFTs: 444 (30 already sold) Total 'Complete' & Ready-to-deploy NFT assets: 150 Total listed for Sale#2 : 80/150 Total Future NFT set after Sale#2 : 444-30-80 = 334 In the case that all 80 does not get minted during the sale, the unsold bunch will be rerouted to the randomized future sales-pool.

Can I add more pieces (assets) to my Collection after it's deployed ? Yes, you can add more NFT assets & completed NFTs (with metadata) to a Collection according to the pre-defined NFT schema once collection is live/deployed. Note you cannot add more NFT assets on the front ends before initializing the rest of the already added NFT assets with their metadata

Can I use a tablet, phone or iPad to upload images to MantlePlace? Yes, you can use a tablet or a phone to upload NFT Assets and their metadata onto MantlePlace. However, for a quality and seamless experience, we recommend creators to use the web-app version of MantlePlace

I hosted a drop with Whitelist but not all of my NFTs were minted in the Whitelist stage.

In this case, the NFTs on the Private-sales (Whitelist) that haven't been sold just go into the randomized NFT pool for contingent listing. For example, if you have a collection of 15 pieces and 10 of them are set aside for the Whitelist stage at 0 MNTL and 5 of them are set aside for the public sales listing. Post Whitelist-based Private-sale - say you only sold 5 NFTs on the Whitelist stage, then 10 (5 +5) NFTs will be available on the randomized listing for future sales listing - residue is always transferred into the randomized sales pool

Will the 'filename'#3 metadata that we put in the metadata sheet be shown on Platform for a specific NFT or is it just the 'Name' that will be shown? The NFT asset name 'Name' as per NFT Collection Schema aka sample metadata structure (Property / Metadata#1) will appear, not the entity's (NFT asset) filename.

Is it possible to change the metadata after the mint? No, it is not possible to edit the metadata after minting an NFT from a certain Collection or after Creating an NFT (initializing with metadata), metadata values can be altered during the NFT creation process according to the freedom provided by the Collection NFT schema on MantlePlace. Post creating, minting & trading an NFT; the property values (metadata) of the entity cannot be modified unless a certain metadata(s) (property type & value) has been made mutable as per Collections defined NFT schema by the issuer/creator of the NFT collection

Do you support video, Gifs and audio? MantlePlace allows the upload and NFT creation of assets in Audio, Video, GIF and Image formats.

Can I use your platform for airdrops? Yes, you can use the MantlePlace for airdrops through the Whitelist facility where you can curate crowds and schedule drops through calibrating timelines (can set price 0.00001 in public and private sale with max token per user set to 1 or more). 1v1 Airdrop facility for NFTs are in the build, mechanism will be appended with future chain upgrades

Can I reduce the size of my Collection after (Public / Private) sales-listing has been deployed? No, you cannot alter the size of Collection deemed for Listing (Private/Public) once the listing is live, you will have to wait for the sales-listing to expire, post which, you can set the MAX NFTs a lower number and re-list the same. However, while a certain sale is live, you can add more NFT assets to the Collection, initialize metadata (create NFT), which will increase the number of total NFTs in the Collection but these newly created NFTs would not be slotted into the already listed private/public sale randomized NFT pool, it would be available for future sales-listing in the randomized NFT pool.

How would someone change their launch date for their upcoming collection? Unless the sales-listing is live, creators can set the future timeline and schedule a sales-listing contingently. If the sales listing is live with the timeline already calibrated then one would have to wait out the duration until expiry and schedule a contingent sale for the same

Where can I preview my Collection page? You can preview the various (self-created) NFTs collections on the Collection's page that can be accessed from the NFT Wallet (creator dashboard)— click on User-symbol on the top right corner, from the drop-down menu click on NFT Wallet and then click on Created (sub-section) to see a list of all your Collections or Create new Collection or Add NFT assets to a created NFT collection

Can you promote my work on your Twitter? As a component of our creator support mechanism, AssetMantle provides a co-marketing strategy to nurture your community and helps push Creator works to the Mantle community via our high ROI yielding Socials, primarily Twitter, Telegram, Discord, and other secondary socials that we leverage for maximum network effect.

People are unable to mint the maximum mint I've set on my collection. What's going on? 1. Transaction failure 2. Insufficient funds 3. Server issues

Do you support free mints? What proceeds do you take in this case? Yes, we support free mints. All you have to do is input your price as 0 (or 0.00001 MNTL) within a Public or whitelist-based Private sales-listing. In a normal instance we accrue the platform fees which is set at a standard of 2.5% per transaction, currently there is no platform operation fee for minting or trading because of early-access initiative - subject to change with governance proposals & time.

How do I create Whitelist drop? Head on over to MantlePlace, sign in and arrive at the multi-facet Creator Dashboard via clicking the NFT Wallet option by hovering on the user-symbol on the top-right-corner. Next head on over to the Whitelist (sub-section) and click on Create New and input required information (Whitelist-name, description, member-cap and calibrating) and confirm to receive the Whitelist Invitation Link. Hurray, now you have a Whitelist created

Can I reduce the price of my Collection (NFT assets) once it has launched? No, you cannot reduce the average price once the sale is live, only after the sale has expired, you can re-launch a new sale with revamped prices.

Does MantlePlace support auctions? Yes, we do support a slew of auctions such as Dutch & English auctions on the secondary marketplace of MantlePlace.

I want to do a 3000 items generative collection on Mantleplace Can I reserve a part of the supply (say 500 NFTs) for myself? Yes, you can reserve a portion of the NFTs from a said Collection for yourself; You would just have to list (a portion) 2500 of the 3000 NFTs in a sales-listing. However, the hindsight is you cannot save particular NFTs for yourself, the entire Collection is randomized during a sales-listing.

Can I launch more than one collection from my wallet? Yes, you can create and list numerous NFT Collections with diverse customizable metadata NFT (Collection) schema from the same wallet based decentralized identity (DID)

(In the airdrop phase, can I decide which specific NFTs to send? Not at this point! Unfortunately, traits of batch minting is as such that you cannot select specific NFTs)

Does the gas price change depend on the size of my collection? No gas-price does not vary according to Collections, it is standardized to be equitable, price-efficient, & Creator centric, MantlePlace charges negligible gas-fee (less than 0.10), being one of the lowest gas-gurgling NFT framework (marketplace) across the blockchain ecosystem

Why isn't my Collection showing up on marketplaces like Omniflix or Stargaze? AssetMantle uses a different NFT standard as compared to other Cosmos-hub chains such as Stargaze, or Irisnet. AssetMantle uses interNFT standard to mint and

facilitate NFT operations on MantlePlace whilst the likes of Omniflix (oNFT) and Stargaze (SG721) use a variation of the ICS 721 framework or CosmosSDK modules facilitation for NFT minting & management. When the CosmosSDK, IBCs interchain interoperable standards, modules & facilitations mature to a certain extent it will inherently be possible to inter-mingle marketplaces and NFT Collections within the Cosmos-hub (app-chains)

Can I update the artwork and name of my Collection once I have Deployed a Listing? No, you cannot update the Name of the NFT Collection once the Collection has been Deployed/sales-listed – on-chain, it is immutable once the NFT Collection Schema for a Collection is defined. If you want to re-name a Collection, advise is to delete the current Collection, re-create a New Collection with the required Name, Description & NFT Collection schema for the same & proceed given that you have not listed any NFTs under the said NFT Collection (& its NFT Collection Schema)

What is a DID (Decentralized Identity) & how is metadata separated from NFT (image asset)? DIDs are Identifiers and are separate the metadata (DID Subject) and the NFT (DID Object: image asset in PNG or JPEG) stored in IPFS or on-chain. Let's say x is the DID subject (metadata) & y is the DID object (NFT document). The DID document is just metadata about the x. NFT is the DID Object (y) and is not the DID or DID Subject metadata (x) but rather DID (denom) is a pointer, pointing towards the NFT (y) and metadata (x) is defining the NFT. Basically, DID (denom) points towards the NFT asset (x) and the metadata document (y) which defines the NFT (x), DID (denom) pointer is separate from the NFT asset (y) & its metadata (x).

Conceptual Understanding - Shortform ¶

What is a Blockchain? What are the various kinds of Blockchain? A blockchain is a distributed database that maintains a continuously growing list of transactions, ordered in intervals called blocks. These blocks are linked using cryptography technology. Each block contains a cryptographic hash of the previous block, a timestamp, and transaction data. A blockchain is a digital ledger of transactions that is duplicated and distributed across the entire network of computer systems on the blockchain. Each block in the chain contains a number of transactions, and every time a new transaction occurs on the blockchain, a record of that transaction is added to every participant's ledger. The decentralized database managed by multiple participants is known as a distributed ledger. The validation of new blocks on a blockchain is done through a consensus mechanism such as Proof-of-Work (PoW), Proof-of-Stake (PoS) & Delegated-Proof-of-Stake (dPoS). Bitcoin, Ethereum, and Cosmos-based AssetMantle are examples of cryptocurrencies that use blockchain consensus technology. There are Layer 1 (Bitcoin), Layer-2 (Polygon) and Layer-3 (Cosmos, AssetMantle) blockchains harboring their respective traits.

What are DIDs - Decentralized Identities on MantlePlace? * Interchain Identifiers (IIDs) are a family of Decentralized Identifier methods which are purpose-designed to identify, refer to, and interact with digital assets within blockchain namespaces. * The IID specification builds on the Decentralized Identifier (DID) Core specification from the World Wide Web Consortium (W3C). IIDs are fully conformant DIDs and therefore are DIDs. IID Documents are DID documents. Unlike DIDs, IIDs only reference on-chain assets—which we will refer to as tokens—but should be taken as any type of tokens, such as NFTs, fungible tokens, tokenized namespace records, or other on-chain assets. `did:cosmos` is an IID method designed to refer to Cosmos-compatible on-chain assets.

- Restricted to on-chain assets, IIDs are a new class of identifier uniquely suited to the requirements of fungible tokens, non-fungible tokens, and other chain-native components. IID methods can be developed for any compatible blockchain, making them suitable for interoperable representations of assets (and the cryptography that secures those tokens) regardless of the underlying chain.
- This particular specification, `did:cosmos` applies the IID approach to assets on blockchains made with the Cosmos SDK. IIDs also introduce a few new features—conformant extensions to the DID Core specification—that provide for privacy-respecting options for the full range of expected token functionality, including Linked Resources, On-chain Service Endpoints, and Accorded Rights. We describe those here, capturing their definition at the time this specification was developed. See the IID specification for current normative definitions.
- DID Methods which conform to the IID specification resolve to a DID document representing how to securely interact with a uniquely identified digital asset, within a unique blockchain namespace. Because IIDs are DIDs, software applications that are conformant with the W3C specification will be able to inter-operate with IIDs and IID documents, although some IID-specific features may require additional tooling.
- `did:cosmos` DIDs are IIDs intended identify assets on Cosmos application chains.

What standard does MantlePlace use for NFTs, how is MantlePlace different than the other NFT Marketplaces? * AssetMantle is different from the NFT (Non-Fungible-Token) standards that dictate the platform operations such as Cosmos ecosystem-based ICS 721 or CW 721 or Ethereum-based ERC 721 or ERC 1155 & other less-mainstream NFT ERC formats. AssetMantle uses the interNFT standard coupled with DIDs to regulate platform operations on MantlePlace. * CW721 and ERC721 are NFT standards that have been implemented with smart contracts in mind and not interchain module-based implementation for NFTs or NFTs that can interact with applications on the other chains. CW721 and ERC721 are more focused on the use-cases that can interact with other smart contracts and not chain level applications. * MantlePlace is a multi-tenant interNFT standard & Decentralized Identities-based NFT marketplace framework that enables creators and collectors to securely mint, own, and trade digital assets on its fast finality blockchain. The interchain foundation ICF commissioned the research & development of the interNFT standard – ICF did this to implement an NFT standard that would essentially define the majority use-cases in Cosmos and make it interoperable with other app-chains in the Cosmos-hub. * The exact reason to adopt DIDs (coupled with interNFTs) was that the metadata associated with the NFTs could be variable and that the size of this metadata could be quite big. In some cases, the size could be bigger than what a block

could accommodate in a NFT mint transaction or an IBC transfer transaction. The volume of metadata could not be accommodated in the following in some cases. The metadata is implemented as a DID document while the ownership of the metadata is represented as a DID itself (DID identifier string). The metadata sits on the native chain itself. Since the ownership token is as simple as CosmosSDK coin for reference, the current implementation of IBC can be used to transfer the NFT ownership tokens without any changes in the IBC implementation. Any chain that supports CosmosSDK coins and have IBC enabled can transfer the NFT ownership via DIDs. DID (denom) points towards both NFT Asset (DID Object - image, audio, video, gif) and Metadata document (DID-subject - properties & their values). Through DID pointers referencing to form an Ownership token across chains: the metadata document (DID Subject) defines the NFT Asset (DID Object) that are amalgamated into an Ownership document/token via the DID (denom) pointer.

Assuming InterNFT was operationally on one chain, can it communicate with a chain that has partially implemented ICS721? Irrespective of any chain that communicates with ICS721, the interNFT specs are that we would be utilizing the bank module itself to issue the ownership tokens with denoms as DID and amount as the smallest deck if it is non splittable NFT and a decimal if it is splittable NFT. Any chain with a bank module should be able to receive this NFT. With ICS721 the NFTs would indirectly be interoperable with InterNFTs. ICS721 spec says that an IBC transfer of an NFT would transfer the metadata as well to the other chain. The transferring of the metadata to the other chain may not be the best idea as it could be an attack vector where chains can spin up and transfer over a large amount of metadata and increase the state size, reducing query and transaction speed.

Is there a reason/use case where someone will use InterNFT over ICS721? * There are 6-7 ERC (ERC1155, ERC-223, ERC-827, ERC777 etc.) standards but we all stick to 721 because it is the most used standard. ICS721 spec says that an IBC transfer of an NFT would transfer the metadata as well to the other chain. There could be confusion over ICS721 implementation NFT and interNFT implementation of NFT. Someone can act maliciously to exploit it or accidentally have two representations of the same NFT. * At a core level, ICS721 wallet will look very different from interNFT wallet. ICS721 NFT will require a more specialized wallet. So, there is enough differentiation in the UX/UI for people to differentiate. One of the main aims of the interNFT working group spearheaded by AssetMantle and commissioned by Inter-Chain Foundation ICF is to implement a standard to incorporate the majority of the use-cases that projects are building NFTs around into one standard that we all can use. It can go onto the standardization track to contribute back to ICS721 and/or CosmosSDK. There are some use-cases that cannot be solved with the current implementation of ICS721. Some use-cases like IXO's impact bound use-case, comdex's shipfi, carbon credit use-cases, and some AssetMantle use-cases etc... cannot be solved with current existing implementations of NFT. Hence new standards will emerge to be adopted, standardized and solves use-cases currently unfathomable.

What is NFT Asset (Image) and its related Metadata? * NFT metadata refers to the additional information that is stored on the blockchain alongside the unique identifier of a non-fungible token (NFT). The metadata of an NFT document can include a variety of information about the asset, such as the artist's name, the title of the work, a description of the asset, and the date it was created. Other information that can be included in the metadata of an NFT might be the digital file type, the resolution, the dimensions, layers/property of the art and any other relevant technical details. * According to the interNFT standard-based NFT Collection schema provisions on MantlePlace ; for metadata - there are allotment for 22 total properties of which [#1](#) (Image Name), [#2](#) (Image Description), [#3](#) (fileHash) and [#4](#) (Classification ID) are initialized during the NFT (schema) Collection creation process. Metadata-properties [#1](#) and [#2](#) are part of the Basic Information NFT schema-editable when creating an NFT & Property [#4](#) and 5# are part of the Advanced Information NFT schema (not editable). Similarly, 18 additional Metadata-properties (type: Boolean, String, Number) can be added, which can then be initialized when creating NFT's within the respective collection with respect to the defined NFT Collection schema. * An NFT can have many elements or layers with various property types & values within it, for example in a BAYC NFT there are Apes with accessories, Chains (shiny black) being one of the many accessories (layer with a metadata) of the Collection NFT schema. There can be more than one trait/layer/metadata in the form of accessories, background, entities etc... for a single NFT such as Red-background, Guns, Cap, Cigarette, Chain, Sun, Pets & side-kick and other layers serving as a Layer of metadata (with property-type & property-value) to be initialized which will demarcate NFTs within a Collection. And for NFT Collections that don't have a plethora of layer-based metadata, you can define the NFT Collection schema with the standard (4) basic & advanced properties which will serve as the metadata-base. * Overall, NFT metadata plays a crucial role in verifying the authenticity and uniqueness of an NFT, and it can provide important information about the asset's provenance, ownership, and technical details. You should ideally add complete information about each of your NFTs to tell collectors more about the individual assets and to facilitate future utility.

Metadata or Properties can also be made to have a default value such as, if its Boolean type it can always be true or false, if it is an integer and it is of a rare category it can always say 1 or if it is a string with color red, it can be set red for all future NFT creations by default. Metadata (property-type-name & it's value) can also be made to be hidden from consumer view and can also be set to mutable which will entail that the particular metadata is subject to change-based evolution in the future timelines.

Bond Amount (Fees):

- Bonding fees, also called Bond Amount is the inherent value of an NFT, measured intrinsically by the metadata contained within the asset. Burning of the NFT document i.e., to send the NFT (asset) to an empty/non-existent address will 'burn' the NFT and return the inherent bond-amount to the creator/owner.
- Metadata within an NFT document (Asset) is the number of layers which holds a property-name and property value attached to it. There are 3 types of properties within metadata structure, namely;
- A. String - occupies 256 bytes B. Boolean - occupies 1 byte C. Integer - occupies 4 bytes

- An NFT document schema on MantlePlace can have 22 properties initialized within them. First 2 are basic (predefined & mutable) property - name of the asset(string) and Description of the asset (string), Next 2 are Advanced (predefined & immutable properties resolved by the protocol) which are fileHash and ClassificationID. AssetMantle's MantlePlace Assets can have a maximum of 22 properties including the 4 previously mentioned properties defined while creating an NFT document. The rest of the 16 property additions are optional whose types are extended to String, Boolean & Integer, additionally these properties can be made to have default values, mutable and hidden from user-view.

For example, if an NFT document Y has 7 total properties, 4 of which are (Basic & Advanced) pre-defined and 3 are further initialized according to their type String (1), String (2) and Integer (3). As you have observed above string takes up a lot more space than Integers or Boolean, burning this particular NFT document Y will return the bond-amount that is proportional to the property type & value attached to the many metadata inherently baked into it.

Modalities of uploading NFT Assets & Metadata

A. MantlePlace Frontend (NFT Asset &) Metadata Upload:

Frontend NFT assets upload and initializing NFT assets with metadata requires no structuring and done with a sense of ease, the template for initializing metadata into NFT assets to make it into a complete NFT is facilitated via the Create Collection NFT Schema. Once you create a collection and have added the NFT assets, you can click on various NFT assets within a said collection and initialize their metadata one-by-one while inputting the value for property-types according to NFT Collection schema. Frontend uploads are recommended for NFT Collection with less than 100 NFT assets. For more than > 100 assets MantlePlace backend upload via Assetmantle team is recommended or via the structured-upload through web3.storage or nft.storage.

B. Backend (NFT Asset &) Metadata upload structure: * Image Asset source-link & its filename (required): This tells us which NFT asset you're referring to values should be the name of the file for the NFT image and Json file (metadata) in an accurate order

Structure the collection for metadata upload alongside the image assets in the following manner: * Make a project folder and within it make two sub-folders with one being Image (assets) and the JSON file containing the metadata of the image asset. Arrange the Asset file and JSON File in an accurate & parallel-sequential format - the Image asset and JSON file (metadata) relating to each other. For example, if the collection has 7 properties, in excess to the 4 (Basic & Advanced), make 3 columns, heading of the Column containing the Property-number, Property-name and Property-type with the image-file link/name in the row section. For each image-file input the property values of... [#1](#) property-name & its value (Basic Metadata-property) [#2](#) property-description & its value (Basic Metadata-property) [#5](#) property-Name-type & its value (Addon Metadata-property) [#6](#) property-Name-type & its value (Addon Metadata-property) [#7](#) property-Name-type & its value (Addon Metadata-property)

Structuring metadata for backend upload: * AssetMantle recommends metadata submission via .csv file (synthesized by an Excel sheet). For structure, refer image below. First, Input Trait Category & their Metadata-property-type. Next, input the additional properties of the various NFTs in addition to the * ADD #1NAME, #2DESCRIPTION (BASIC 2 PROPERTIES) * CAN LEAVE THE #3FILEHASH & #4CLASSIFICATIONID (ADVANCED 2 PROPERTIES) * As defined during the NFT Schema – Make as many Columns for the pre-defined meta data property-name and input their respective values (string/Boolean/number). Property[#3](#) (fileHash) & [#4](#) (ClassificationID) will be churned automatically by the algorithm, creators do not have to input it either on the front/backend * On MantlePlace' interNFT standard creators have the freedom of instantiating 18 novel properties (optional) in addition to the 4 properties (Basic & Advanced) pre-defined while the Collection was created. * Fill in all the NFT asset links and initialize them with property values according to Collection's defined NFT schema, post which you can extract the sheet into a .csv file and send it to the AssetMantle team alongside the image files. Within 24 hours you can see your full Collection with its metadata ingrained into the image mobilized and ready for sales-listing.

Self-Upload via Shared Storage Mechanisms * Once the NFT assets and metadata files are ready, the next step is to upload the same via a storage mechanism given that you have a big NFT Collection and you are not going with MantlePlace front-end or backend-based upload. It is recommended to use a decentralized storage solution such as IPFS as a modality to upload NFT assets in a distributed format. Highlighting the pathways of uploading NFT assets and their metadata to IPFS; via 1. NFT.Storage (with UI and script) and 2. Web3.Storage (with UI and script). 3. Pinata & NFT.UP Upload coming soon... * For NFT collections with a large number of assets, using a script is ideal via the following mechanisms or can send the sequenced images (image-file) & .csv file (containing ordered metadata) to the AssetMantle team who will do the upload from the backend.

Reserved Properties: The following properties are reserved at the protocol level so creators are requested to avoid using the following properties as the metadata-property(trait) while naming property-name to avoid conflict of interest. [Deep Dive Into Filer Structuring Here](#) * Authentication * Burn * Expiry * ExchangeRate * Lock * MaintainedProperties * MakerOwnableSplit * NubID * Permissions * Supply * MakerID

1. NFT.Storage NFT.Storage is a service that lets you upload off-chain NFT data for free with & without a script, with the goal to store all non-fungible tokens as a public good. The user's uploaded content will be permanently stored in IPFS aka Filecoin's decentralized storage network and made available over IPFS via its unique content ID so it can easily persist across different versions of THE website or mobile application (if any). Creators are able to upload a virtually unlimited amount of NFT assets & its metadata. However, there currently exists a limit of 31 GB per individual upload.

There are namely 2 modes of operations entailed below; A. Using [\[NFT.Storage UI\]](#) B. Using [\[NFT.Storage via Scripts\]](#)

2. Web3.Storage Web3.Storage provides a simple way (with a script) for developers to integrate IPFS aka Filecoin's decentralized storage system into their apps and websites without having any technical knowledge of how it all works. Just upload the content once using the platform's client libraries, then pin it on different nodes around the world! The data is protected by 3 redundant copies that can be cryptographically verified. There are namely 2 modes of operations entailed below; A. Using [Web3.Storage UI](#) B. Using [Web3.Storage Script](#)

Deployment & Decentralizing the Metadata, what does it mean?

- The majority of the services you use today keep their data on servers managed by third-party corporations like Amazon, Google, or Microsoft. In actual use, it performs flawlessly. They rarely experience outages and have been around long enough to alleviate any concerns about their potential disappearance tomorrow along with your data.
- What would occur if, for example, one of these mega-cloud-based enterprises failed tomorrow? Who would maintain their servers? Where does your info go? Or, to put it another way, what would happen if the individual whose NFT Collection I purchased ceased paying their monthly storage fees to one of these organizations or altered or erased the data?
- For NFTs and Web3 in general, we prefer to explore more deeply due to NFT assets and their metadata, which contain vital info about an NFT and its programmability and must be held on-chain. We desire for the metadata to be stored as securely and in a decentralised manner as feasible, and to be immutable; hence, on-mantleChain.
- Decentralizing your metadata by putting it on-chain via NFT creation: If you decentralize your NFT asset, you will no longer be able to change it. You will only be able to look at it and trade it with previously inputted property-values(metadata) according to NFT Schema that is now immortalized unless subjected to unioque metadata mutations. This is where progressive decentralization of metadata comes in. Metadata that is stored across multiple endpoints is permanent and can't be changed or taken down, even by the person who put it there in the first place. We can't take it down or change it, and it's currently stored in different end-points that have nothing to do with each other. This kind of behavior makes metadata pertaining to NFTs less risky for the other party to manage and trade with.
- Put your collection out there; It's time to send your NFTs on-chain with all of the information you've initialized up to this point, which will be used to get your Collection ready to be minted. Create Public or Private Sale (Whitelist) and list your Collection live. To make your collection live on MantlePlace via listing it in a Private or a Public sale your Collection would have to be vetted & verified by the AssetMantle team to be given backend approval to list the same.
- FYI, up until this point in building your Collection I.e., adding images to your collection, the image-metadata (property-values) for your Collection (Frontend / backend-via-team / web3-share-storage) has been stored on Amazon servers owned by AssetMantle and the associated metadata on-chain (mantleChain). After NFT deployment as Private or Public sale, most of your information about your Collection (metadata properties) will no longer be able to be changed unless it is programmed to evolve (mutable metadata) via Collections NFT schema. Changes to details such as the price of NFT in a Listed Private / Public Sale in your collection cannot be edited until the sale has expired since it is on-chain, post which a new Sale with revamped prices with the leftover NFTs from expired sales and newly added-NFTs to the Collections randomized general-pool can be re-listed.

[Previous Using Web3.Storage \(with Script\)](#) [Next Flows](#)