

The IC3 NFT License

James Grimmelmann

DISCUSSION DRAFT 1

July 18, 2022

The IC3 NFT License links an NFT with a copyright license to use a creative work. The license travels with ownership of the NFT, so that when the NFT is transferred, so is the license.

1 Introduction

The IC3 NFT License has been specifically designed to work with blockchain-based NFTs, e.g. with smart contracts that implement the standard defined in EIP-721. But it is not restricted to blockchain-based NFTs. The license uses the technology-neutral term “Ledger” to refer to the system that records information about NFTs and their owners. This could be a present-day blockchain, or another chain or system that could be created in the future. The license can be used with any underlying technology as long as it:

1. Supports NFTs based on persistent unique identifiers,
2. Associates those NFTs with specific owners,
3. Allows the owner of an NFT to control it with a cryptographic key, and
4. Allows an NFT to be linked to a creative work.

This system can be widely distributed (like a public blockchain), moderately distributed (like a private blockchain), or fully centralized (like a database with a single administrator). Use of the IC3 NFT License for other kinds of licensing is strongly discouraged.

The IC3 NFT License has also been specifically designed to work with NFTs that implement the interface defined in EIP-5222. This is a general smart contract interface that provides modular support for common features in copyright licensing, including transfer, sublicensing, and revocation. The IC3 NFT License can also be used with NFTs that implement the generic NFT interface defined in EIP-721, or with other NFTs, but the EIP-5222 interface is recommended to reduce ambiguity about when there has been a transfer, sublicense, or revocation.

2 Taking Effect

The IC3 NFT License is structured as a license, rather than a contract. The licensor unilaterally grants a copyright license to the current owner of the NFT. The owner does not need to do anything to accept the license; they receive it automatically. If the owner transfers the NFT to someone else, the license transfers with them. The previous owner is no longer licensed; the new owner receives a license on exactly the same terms. This too is automatic, the new owner does not need to do anything to accept the license.

Standard techniques used by lawyers to create binding terms of use for websites do not work for NFTs on blockchains. Consider the clickthrough agreements used by websites: when you create an account, you must check a box indicating that you agree to the website's terms of use. This works because you have taken an action (checking the box) that is clearly and specifically linked to the legal terms and nothing else. There is no question about whether you meant to agree when you checked the box, because there is no other reason to check the box.

But a blockchain does not have a checkbox or even a website. Someone who receives an EIP-721 NFT need not have done anything at all. They may never have visited the NFT sponsor's website, or even know about this. An NFT could migrate from one resale platform to another; someone who has agreed to one platform's terms need not have agreed to the other's. This means that any promises by the *licensee* in a license contract are illusory. The licensor has no guarantee that a downstream NFT owner has actually agreed to the license terms. Thus, the IC3 NFT License does not give the licensee any duties, so there is no need for them to agree to anything.

On the other hand, the IC3 NFT License does attempt to ensure that the *licensor* has clearly indicated their intent to be bound by the license terms. It does so by saying that the license becomes effective when the licensor "Invokes" it through a "Licensing Process," i.e., uses a technical process to connect an NFT with the IC3 NFT License. This definition includes (but is not limited to) the EIP-5222 interface.

The essential idea of EIP-5222 is to make it explicit when a licensor intends to create a copyright license. This signal is clearest when the licensor takes an act that (a) says that it creates a license, and (b) does not do anything else. Signing a licensing contract on paper meets this test, because the paper says that it creates a license and the only reason to sign it is to create the license. EIP-5222 is intended to be a smart-contract version of that piece of paper.

The IC3 NFT License can be used with any smart contract or other technical process that meets the definition of a Licensing Process. It is not intended to be used on a website or other off-chain setting where the on-chain transactions do not link out to the license. It is also not recommended to use the IC3 NFT License as part of a larger multi-step smart contract or process unless there is some individual step that meets the definition of a Licensing Process in which the licensor clearly indicates their intent to create a license.

3 License Terms

The actual license grant is the least important part of the IC3 NFT License. We have tried to capture the most common and important use cases in light of the NFT community’s responses to previous licenses. But our goal has been simplicity rather than perfection. We hope and expect that over time, others will build on and remix the ideas in the license to terms for more advanced use cases.

Drawing on the success of the Creative Commons license suite, the IC3 NFT License can be customized to be either Commercial or NonCommercial (C vs. NC), and to allow Derivative works or to specify No Derivative works (D vs. ND). These two options can be set independently, for a total of four variations. We did not include a Creative Commons-style ShareAlike option for derivative works. A licensor who is interested in establishing a shared pool of creative works should use an open license that lets anyone make derivative works (such as the CC BY-SA license or the GPL), rather than a license tied to an NFT.

The IC3 NFT License applies to “Licensed Material” that is “Linked” to an NFT. The definition of Licensed Material is deliberately broad: it can include highly creative works like images or videos, but it also includes “other material” to include datasets, software, or other works that are not primarily artistic. The definition of Linked is also broad: it can be by hyperlink, by description, by IPFS CID, by hash value, by an on-chain reference, etc. What is important is that the NFT must be connected to specific licensed material in a way that cannot change over time. We do not attempt to solve the (very difficult) problems of creating a technical standard or a license for an NFT whose contents can change over time.

The core license grant in the IC3 NFT License is that the NFT owner can “Use” the licensed material, i.e. exercise all of the usual rights under copyright to make copies of the work and share them with the public. This is an unlimited grant: it covers all media, digital and analog, on-chain and off-chain.

The license grant is non-exclusive. It is not currently possible to guarantee that only one NFT has been made of a work, or that there are no other off-chain uses of the work.

If the license is NonCommercial, it excludes any uses directed to “commercial advantage or monetary compensation,” which includes any cases in which people are required to pay to get a copy of the work. The definition of the NonCommercial license option specifically *allows* the sale of the NFT itself. The resale of NFTs, like the resale of unique works of fine art, is a recognized and important use case. What the NonCommercial license option prohibits is the commercialization of the work by making and selling *other* copies of the work, such as selling posters of an image attached to an NFT, or creating a video series based on a character depicted in a work associated with an NFT.

Whether the license is Commercial or NonCommercial, no royalties are required. Under the Commercial license option, the NFT owner is allowed to keep all of their revenues from commercializing the work. Under the NonCommercial license option, such commercialization is not allowed at all, and constitutes a breach of the license allowing the licensor to sue for infringement. Royalties pose complicated computation and drafting problems, which we have not attempted to solve in the current draft. If a

platform charges a fee for an NFT listing or sale, this is neither required nor prohibited by the IC3 NFT License; it is an issue between the NFT owner and the platform, not between the NFT owner and the licensor.

Similarly, if the NFT owner sells the NFT, this is not an event that entitles the NFT owner to any royalties under the this license. This does not prevent the IC3 NFT License from being used with a smart contract that requires royalty payments. We merely have not attempted to make payment of royalties part of the copyright license. For example, a smart contract could tie invocation of NFT transfer functions to payment of required royalties. (But see EIP-2981 (NFT Royalty Standard) for discussion of the reasons why such requirements may not be effective in practice.)

If the licensor chooses to allow derivative works, then the license grant also allows the NFT owner to use “Adapted Material,” which uses language from the Creative Commons license suite to define what counts as a derivative work. To reflect the customs of the NFT community, we added language to make clear that simply reproducing the work in a different medium – e.g., printing T-shirts of a JPEG – doesn’t count as making a derivative work. Only new projects – such as modifying artwork, remixing a song, or making a TV series based on a character – are derivative works.

Regardless of which license option is used, all versions of the IC3 NFT License include two specific uses that are always allowed. First, the material can be used to sell the NFT, e.g. on an OpenSea listing. This is an essential part of truth in advertising; someone considering buying the NFT typically needs to be able to see what creative work they will actually be getting. A similar clause is present in many other NFT licenses, although we have attempted to generalize it so that it is less tied to the specifics of how any particular NFT marketplace works. Second, the IC3 NFT License generally allows free use of the material to identify the NFT owner publicly, e.g. in a Twitter profile hexagon. This too is widespread in the NFT community and widely allowed by other NFT licenses.

4 Transfer

The IC3 NFT License tries to deal sensibly with the many complications that can arise due to the unrestricted transferability of NFTs. Most existing NFT licenses have not taken this possibility seriously, even though it is arguably the defining characteristic of NFTs and the one that makes them most appealing to users.

The first major issue is that NFTs can be, and frequently are, stolen. A hacker or phisher gains access to an NFT owner’s private key and uses it to transfer the NFT to themselves, frequently turning around and immediately reselling it. Under these circumstances, should the *copyright* license go to the new NFT owner or stay with the previous NFT owner?

- Many blockchain technologists believe that the first answer is obviously correct. The license follows whoever is the owner of the NFT according to the blockchain. The previous NFT owner’s license terminates, and the new NFT owner receives a license. This approach makes the blockchain reliable, but it also makes it difficult for NFT owners to commercialize derivative works of their NFTs unless they take extreme security measures.

- Many lawyers believe that the second answer is obviously correct. The license stays with the true owner of the NFT according to property law. The previous NFT owner retains their copyright license, and the thief takes nothing. This approach protects NFT owners against theft, fraud, and duress, and makes the NFT copyright licensing more consistent with the rest of the legal system, but it makes the blockchain non-authoritative and can require additional investigation on the part of buyers and licensees.

This is an irreconcilable difference of views about how ledgers ought to operate, and a copyright license cannot resolve this deeper split of opinion within the NFT community. Instead, the IC3 NFT License provides both options, and the licensor can choose which one to use by choosing an appropriate variant of the license. The first option is called “Authoritative,” because it makes the ledger authoritative as to ownership. The second option is called “Non-Authoritative,” because the ledger is not guaranteed to be authoritative; To keep the distinction clear, the license uses the term “Controller” for the person who has control of an NFT via a private key, and “Owner” for the person who is legally entitled to the license. Option (1) is implemented by defining the Owner to be the Controller (so the two concepts are the same), and option (2) by defining the Owner to be the “person or entity who is legally entitled to be its Controller.” (In theory, it would be possible for a license to fine-tune the circumstances under which it does and does not transfer by stating its own rules, but at the cost of decreased compatibility with both the blockchain and with the legal system. The IC3 NFT License does not attempt this task.)

5 Revocation

The IC3 NFT License can be revoked, but it does not define the conditions under which it can be. This may seem paradoxical, but it reflects the design goal of making the license itself simple and modular. Instead, the license *defers* to the smart contract that invoked it in the first place. If that contract says that the license has been revoked, it has been.

The reasoning for this design choice can be illustrated by considering the EIP-5222 interface, which defines a generic `revokeLicense()` method that can be called by a `_revoker` address designated by the creator of the license. Thus, the following are all possible:

- The `_revoker` is the licensor. The license can be freely revoked at any time.
- The `_revoker` is the licensee. The license can only be revoked with the consent of the licensee.
- The `_revoker` is the zero address. The license is irrevocable.
- The `_revoker` is a smart contract which can be invoked to call the EIP-5222 `revokeLicense()` method after the passage of 30 days from the time the license is issued. The license is for a limited time.

- The `_revoker` is a smart contract which can be invoked to call the EIP-5222 `revokeLicense()` method upon the payment of a specified amount to the licensee. The licensor has an option to buy out the licensee.

In other words, the EIP-5222 is completely generic in supporting arbitrary licensing logic, and because the IC3 NFT License defers to the Licensing Process (e.g., smart contract), it is also completely generic. Once again, the license is designed to work with the EIP-5222 interface, but it is drafted so that any technical process serving the same function can be used instead.

6 Sublicensing

The IC3 NFT License takes a similarly broad and deferential attitude toward sublicensing. In practice, sublicensing is likely to be particularly useful in two scenarios. First, the owner may wish to contract with others to produce goods embodying the work, like T-shirts or song downloads. Here, a sublicense is practically necessary in a world where people don't personally print T-shirts and host downloads, but instead hire professionals to do it for them. Second, sublicensing is necessary for many derivative works: producing an animated video series, for example, will require a sublicense to a production company. Thus, the license generally allows for the free sublicensing of any of the rights held by the NFT owner.

The IC3 NFT License does not attempt to enforce the requirement that a sublicense be compatible with the license it is issued under. The sublicense need not be the IC3 NFT License; indeed, it usually will not be. It is up to the sublicensor to choose license terms that are appropriate and are within the scope of their own license. What the EIP-5222 standard can do is ensure that a party checking the licensing status of an NFT can see all of the licenses and sublicenses in force. But in general, the sublicenses may be arbitrary human-readable documents, rather than standardized machine-readable ones; it is up to the human reading them to understand their terms. (Future versions of the IC3 NFT License and technical standards may fill in more sublicensing options and provide technical mechanisms to describe them; we have not attempted to solve these problems here and now.)

As with revocation, the IC3 NFT License allows for a sublicense to be recorded on the blockchain, and as with revocation, these sublicenses are specifically supported by the EIP-5222 interface. Again, the support is generic; the sublicense must include a link to its terms, and the EIP-5222 interface does not attempt to verify that the sublicense's terms are compatible with the license's terms. Indeed, the license does not require that all sublicenses be explicitly recorded in the smart contract; for a T-shirt vendor or a web host, this is overkill.

Instead, the advantage of recording a sublicense on the blockchain is that it makes the sublicense transfer with the NFT. The IC3 NFT License provides that all sublicenses that have been recorded this way carry over and remain as sublicenses from the new owner of the NFT. Someone who wants to make a substantial investment in an NFT – e.g., a filmmaker creating a movie based on an NFT-licensed work – can record this license using an EIP-5222 smart contract. This puts everyone in the world (including

potential buyers of the NFT) on notice of their sublicense and that it will carry over. (This is similar to how recording systems for copyrights and real property work, and the EIP-5222 interface has been designed to make this notice straightforward.) Sub-licenses do not themselves need to be NFTs and typically will not be, although it is possible to tokenize one if desired.

7 Boilerplate

The IC3 NFT License includes a section advising courts on how to interpret it in the event of a dispute. Although the license itself does not force the copyright license to keep in sync with ownership on the blockchain, it advises courts that maintaining the reliability of blockchain records is an important goal, encouraging them to pick interpretations that make the blockchain a useful and authoritative source for understanding the status of a copyright license. In addition, the interpretation clause encourages courts to promote other common legal policies, such as fairness, uniformity, and predictability.

The severability clause and the disclaimer of warranties and limitation of liability are based on the text of the Creative Commons license suite. These licenses are also intended to create licenses in members of the public (including people who may be unknown to the licensor), so their use cases are broadly similar. Several other clauses and definitions, including disclaimer at the start of the license text, are also adapted from language used in the Creative Commons licenses.

8 Human-Readable Summary

This is a human-readable summary of the IC3 NFT [Derivatives — No Derivatives] [Commercial — Non-Commercial] [Authoritative — Non-Authoritative] License. It is not a substitute for the license, and you should carefully review the license to understand its terms and how they may apply to you.

This license gives you the following rights to use a creative work associated with an NFT on a ledger (such as a blockchain):

- **Use and Share:** You can make copies of the work, use them personally, and share them with others [If Non-Commercial:, but not for commercial purposes].
- [If Derivatives: **Derivatives:** you can make new works that include and build on the work, use them, and share them with others [If Non-Commercial:, but not for commercial purposes].]
- **Ownership:** You can use the work to show that you own the NFT.
- **Sale:** If you sell the NFT, you can use the work to show people what the NFT is.

You have these rights as long as you own the NFT, but when you sell or transfer the NFT, your rights will end and the new owner will have these rights instead. [If

Authoritative: For purposes of this license, the owner of the NFT is whoever the ledger says owns it. This means that if the NFT is stolen, your rights under this license will pass to the new owner.] [If Non-Authoritative: For purposes of this license, the owner of the NFT is whoever the legal system says owns it. This means that if the NFT is stolen, you will retain your rights under this license.]

Your rights to the work are not guaranteed to be exclusive. The copyright owner who made an NFT of the work may have the right to allow others to use the work, as well.

This license terminates if the technical process that created it says that it has been terminated. You should check that process to see whether the license is still in effect and how it can be terminated. If this license does terminate, your rights under it will end, and you must stop using the work.

9 License Text

The Initiative for Cryptocurrencies and Contracts (IC3) is not a law firm and does not provide legal services or legal advice. Publication of the text of the IC3 NFT License does not create a lawyer-client or other relationship. IC3 makes this text and related information available on an “as-is” basis. IC3 gives no warranties regarding this license, any material licensed under its terms and conditions, or any related information. IC3 disclaims all liability for damages resulting from their use to the fullest extent possible.

The IC3 NFT License (the “License”) grants you certain intellectual property rights with respect to Licensed Material associated with an NFT. When you acquire the NFT, you own the personal property rights to the token underlying the NFT (e.g., the right to freely sell, transfer, or otherwise dispose of that NFT), but you do not own the associated Licensed Material. Instead, the Licensor grants you a specified limited license to use the Licensed Material, as set forth below:

Definitions

Ledgers and NFTs

- A “Unique Identifier” is information that is sufficient to distinguish one digital record from other digital records.
- A “Ledger” is a blockchain, database, or other digital system that records information about Unique Identifiers.
- A “Private Key” is a cryptographic key, the use of which is necessary to modify the information about a Unique Identifier recorded in a Ledger.
- An “NFT” is a Unique Identifier in a Ledger that is Associated with a person or entity when that person or entity has substantially exclusive control over the Private Key necessary to modify the information about that Unique Identifier in that Ledger.

- The “Controller” of an NFT is the person or entity with whom the NFT is Associated.

Licensing

- “Copyright and Similar Rights” means copyright and/or similar rights closely related to copyright including, without limitation, performance, broadcast, sound recording, and sui generis database rights, without regard to how the rights are labeled or categorized.
- “License” means the intellectual property license granted under the terms of this document.
- “Licensed Rights” means the rights granted to You subject to the terms and conditions of this License, which are limited to all Copyright and Similar Rights that apply to Your use of the Licensed Material and that the Licensor has authority to license.
- A “Licensing Process” is a technical process (including a smart contract that implements EIP-5222 or any update, revision, new version, or successor thereof) designed to allow authorized parties to specify the current status of intellectual property license terms associated with an NFT and any related material, including the text of a license. A Licensing Process can (but need not) specify whether the license has been sublicensed, transferred, and/or revoked.
- An NFT “Invokes” this License when the NFT refers to the verbatim text of this License by means of a Licensing Process.
- The “Licensor” means the individual or entity that causes an NFT to Invoke this License.
- The “License NFT” is the NFT that Invokes this License. If more than one NFT Invokes this License, each such NFT is a separate License NFT resulting in a separate and distinct license grant with respect to the Licensed Material respectively associated with each such NFT.

Licensed and Adapted Material

- An NFT is “Linked” to material when the NFT contains a description of or hyperlink to that material, and that description or hyperlink is substantially immutable in the ordinary course of operation of the Ledger,
- “Licensed Material” means the creative work or other material to which the License NFT is Linked.
- “Adapted Material” means material subject to copyright and similar rights that is derived from or based upon the Licensed Material and in which the Licensed

Material is translated, altered, arranged, transformed, or otherwise modified in a manner requiring permission under the copyright and similar rights held by the Licensor. For purposes of this License, where the Licensed Material is a musical work, performance, or sound recording, Adapted Material is always produced where the Licensed Material is synched in timed relation with a moving image. For purposes of this License, the exact reproduction of the Licensed Material in a different medium in a manner not requiring original creative effort (such as printing a photographic or pictorial work on paper) does not produce Adapted Material.

- “Commercial” means primarily intended for or directed towards commercial advantage or monetary compensation. For purposes of this License, activity is Commercial if direct or indirect payment is required as a condition of access to the Licensed Material or Adapted Material. For purposes of this License, the sale and advertising for sale of the License NFT (including the rights granted under this License) is not Commercial.
- “Non-Commercial” means not Commercial.
- To “Use” material is to copy, display, distribute, make available to the public, or perform it.

Ownership and Transfers

- The “Owner” of an NFT is [OPTION 1: the person or entity who is legally entitled to be its Controller.][OPTION 2: its Controller.]
- “You” and “Your” refer to the person receiving rights under this License as the Owner of the License NFT.
- An NFT “Revokes” this License when the NFT indicates that it has been revoked by means of a Licensing Process.
- An NFT is “Sublicensed” when the NFT indicates that it has been sublicensed by means of a Licensing Process.
- To “Transfer” an NFT is to change, modify, or update the Ledger such that the identity of the Owner of that NFT changes, by any legally sufficient means, including sale, barter, gift, bequest, or operation of law.

License Grant

Subject to the terms and conditions of this License, and for as long as You are the Owner of the License NFT, the Licensor hereby grants to You a worldwide, royalty-free, sublicensable, non-exclusive, license to exercise the Licensed Rights to:

- Use the Licensed Material [If Non-Commercial: for Non-Commercial purposes only],

- [If Derivatives: Create and Use Adapted Material [If Non-Commercial: for Non-Commercial purposes only],]
- Identify You as the Owner of the License NFT.
- Use the Licensed Material in connection with the sale and advertising for sale of the License NFT,

This License becomes effective when the Licensor causes the License NFT to Invoke it. Because this is a unilateral license grant and not a contract, Your assent is not required for it to become effective.

All rights granted under this License last for the full duration of the Licensor's Licensed Rights, except that if the License NFT Revokes this License, Your rights under this license grant will terminate, along with all sublicenses granted hereunder.

This license grant is non-transferable, except that if the License NFT is Transferred, Your rights under this license grant will terminate, and such rights will automatically transfer to the new Owner of the License NFT. Any sublicenses granted hereunder that are Sublicensed will continue in force as sublicenses from the new Owner. If You have become the Owner of the License NFT as a result of a Transfer, you automatically grant any such sublicenses that are Sublicensed. This License does not by itself require you to continue or grant any sublicenses given by a previous Owner that were not Sublicensed, but it does not prohibit other law from doing so.

Interpretation

By adopting this License, the Licensor intends to enhance the clarity and predictability of intellectual-property licensing via digital transactions. In cases of doubt or ambiguity, the terms of this license should be interpreted and applied to promote the goals of (1) making the information in the Digital System accurately reflect the licensing relationships it describes, and vice versa, (2) providing clear, simple, and unambiguous mechanisms for parties to express their licensing intentions, (3) protecting parties from duress, fraud, forgery, and mistake, and (4) achieving uniformity and consistency in the application of this License to different transactions, at different times, and in different jurisdictions.

To the extent possible, if any provision of this License is deemed unenforceable, it shall be automatically reformed to the minimum extent necessary to make it enforceable. If the provision cannot be reformed, it shall be severed from this License without affecting the enforceability of the remaining terms.

Disclaimer of Warranties and Limitation of Liability

Unless otherwise separately undertaken by the Licensor, to the extent possible, the Licensor offers the Licensed Material as-is and as-available, and makes no representations or warranties of any kind concerning the Licensed Material, whether express, implied, statutory, or other. This includes, without limitation, warranties of title, merchantability, fitness for a particular purpose, non-infringement, absence of latent or other defects, accuracy, or the presence or absence of errors, whether or not known or discoverable. Where disclaimers of warranties are not allowed in full or in part, this disclaimer may not apply to You.

To the extent possible, unless otherwise separately undertaken by the Licensor, in no event will the Licensor be liable to You on any legal theory (including, without limitation, negligence) or otherwise for any direct, special, indirect, incidental, consequential, punitive, exemplary, or other losses, costs, expenses, or damages arising out of this License or use of the Licensed Material, even if the Licensor has been advised of the possibility of such losses, costs, expenses, or damages. Where a limitation of liability is not allowed in full or in part, this limitation may not apply to You.

The disclaimer of warranties and limitation of liability provided above shall be interpreted in a manner that, to the extent possible, most closely approximates an absolute disclaimer and waiver of all liability.