

A Preservationist's Guide to the DMCA Exemption for Software Preservation, 2nd Edition

November 2022

Kendra Albert and Kee Young Lee Cyberlaw Clinic @ the Berkman Klein Center, Harvard Law School

Recommended Citation: Albert, Kendra and Lee, Kee Young. (2022, November). A Preservationists Guide to the DMCA Exemption for Software Preservation, 2nd Edition. Software Preservation Network.

DOI: 10.5281/zenodo.7328909

This work is licensed under a <u>Creative Commons Attribution 4.0 International</u> <u>License</u>



In late 2021, the Library of Congress adopted several exemptions to the Digital Millennium Copyright Act (DMCA) provision prohibiting circumvention of technological measures that control access to copyrighted works. In other words, they created a set of exceptions to the general legal rule against cracking digital locks on things like DVDs, software, and video games. The exemptions are set out in regulations published by the Copyright Office. They went into effect on October 28, 2021 and last until October 28th, 2024. This guide is intended to help preservationists determine whether their activities are protected by the new exemptions. It includes important updates to the first edition to reflect changes in the rule to allow offsite access to non-game software, along with a few other technical changes.

The DMCA ordinarily prohibits activities that bypass technological protection measures (TPMs), which are used by copyright owners to prevent unauthorized access to their works.¹ These prohibitions interfere with software preservation because preservationists may not be able to meet the requirements of outdated TPMs or may need to transfer protected works between formats in order to effectively preserve them. Older software may require using obsolete operating systems, pinging non-existent authentication servers, or attaching discontinued hardware (for example, dongles and floppy disk drives), making preservation and access impossible unless digital protection measures can be broken to bypass these requirements. Exemptions to the DMCA enable preservationists to bypass these locks without legal risk, lowering the legal barriers to research.

Before we get started, please note that there are slightly different rules for video games and non-video game software. We'll note when things are different.

When Might You Need to Use the Exemption?

If you are circumventing a TPM to preserve software, you may need to use the DMCA exemption. Although TPM is the technical term in the statute, these kinds of measures are usually called DRM (digital rights management). But the category of TPMs includes things beyond just DRM, so here's an explanation of how to think of them.

¹ 17 U.S.C. §1201(a)(1)(A).

TPMs fall under two categories: access controls and copy controls. Access controls protect against unauthorized access to copyrighted works, while copy controls prohibit unauthorized reproductions. Though only access controls are regulated by § 1201(a)(1)(A), some types of DRM protect against both accessing and copying a copyrighted work at once, which makes circumvention legally risky.

Examples of software protection schemes that involve TPMs include:

Paywalls/Subscriptions: Requires the user to pay a certain amount of money to access certain features of a copyrighted work, such as general use of the work, offline use, and extra content. An example is Microsoft 365's business subscription plans that give access to different apps and services of Microsoft Office, depending on the plan.

Product Keys: Allows a program to recognize an authorized copy of a product with the input of a string of letters and numbers. An example is the CD-ROM box set of Rosetta Stone, which requires the user to enter a key to register an account.

Activation Limits: Limits the number of devices that can install content (e.g., phone, tablet, mac, etc.). An example is Adobe's Creative Cloud subscription, which allows the user to install Adobe apps on two or more devices, activate and remain signed in on two, but use on only one.

Persistent Online Authentication: Requires a user to remain connected to a server in order to access the software. Numerous video games require connection to an online server to launch play, even for single player games.

Encryption: Converts information into unreadable ciphertext. Can only be read by certain devices that contain the appropriate "key." Some software developers may choose to encrypt software in order to make other forms of DRM effective, and some storage formats require a key in order to decrypt their contents more generally.

Copy restrictions: Prevents product from unauthorized reproduction. Certain types of copy restrictions create access controls. Examples include floppy disks and CD-ROMS, which act as physical restrictions that work effectively as access controls because their actual possession is required, and they are only playable on systems that can read that physical copy.

Regional Lockouts: Uses methods like inspecting the Internet Protocol address of a user's computer to only allow use of service or access to software in certain regions or territories. For example, Kaspersky Lab uses regional lockouts to price its anti-virus software differently across regions.

Without an exemption, librarians or preservationists circumventing these TPMs may be subject to legal liability under § 1201 of the DMCA. Fortunately, the Software Preservation Network (SPN) has obtained temporary exemptions for digital preservation. These exemptions remove legal liability for bypassing a TPM, provided that certain conditions are met.

In short, if you are bypassing a protection mechanism like the ones described above, you should follow the directions in the rest of this guide to be able to effectively claim an exemption.

Who Can Claim an Exemption?

The exemption is directed to preservation activities by libraries, archives, and museums. But a library, archive, or museum must meet each of five criteria to be considered "eligible" to claim the exemption. The library, archive, or museum must:

- 1. Make its collections open to the public or routinely available to unaffiliated outside researchers.
- 2. Ensure that its collections are composed of lawfully acquired or licensed materials. The purpose of this requirement is to prevent copying or distribution of unlawfully acquired materials. For purposes of this exemption, our understanding is that the institution must have purchased, licensed, or received the contents of its collections via lawful donation.
- **3. Implement reasonable digital security measures for preservation activities.** The Copyright Office does not prescribe any particular security requirements, just that they be "reasonable" when compared to practices of similar peer institutions. Requirements may vary depending on the size and mission of the institution, as well as the types of materials kept in its collections.
- **4. Have a public service mission.** Institutions that only serve private interests are not eligible. This does not necessarily mean that all for-profit institutions are ineligible. As long as the values and goals of the institution are directed to the public, for-profit institutions may be covered as well.



But it may be more difficult for commercial entities to qualify because of other requirements discussed below.

5. Have trained staff or volunteers that provide services normally provided by libraries, archives, or museums.

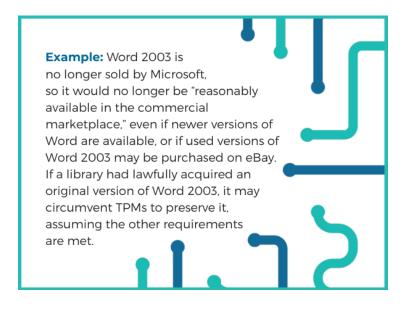
Individual hobbyists or collectors, as well as institutions that do not carefully oversee their collections, generally cannot claim the exemption. Depending on the type of institution, examples of normally provided services may include helping to manage the collections, answering questions from the public, or planning events.

What Type of Software is Covered?

In terms of genre, the exemptions encompass all types of computer programs, including operating systems, word processors, and creative design suites. But there are several requirements dealing with how the computer programs were acquired and what one can do with the computer programs once the TPMs have been circumvented to gain access to them.

For the exemption to apply, the following requirements must have been met:

- The computer program must have been lawfully acquired. This means that the initial copy of the software that the institution seeks to preserve must have been legally purchased, licensed, or donated.
- The software must no longer be reasonably available in the commercial marketplace. This requirement is probably met for obsolete computer programs where that particular version is no longer manufactured or sold by the software developer. While there may be other situations where computer programs may be considered no longer reasonably available, the Acting Register of Copyrights has said that software that can only be purchased in second-hand stores is considered no longer reasonably available.



Re-releases or remasters of video games are considered a different version of the software for 1201 purposes. So just because a game is available on a modern platform does not mean that it counts as reasonably available on the commercial marketplace.

What Can You Do With Preserved Software?

When you rely on an exemption to preserve software, you must comply with certain limitations on use of the unlocked version:

• The sole purpose of circumvention must be lawful

preservation. But preservation includes providing access for interested researchers (more on that below). Preservationists can circumvent TPMs on software either to preserve the software as a research object itself, or to provide access to digital files or materials that can only be opened using that software.

- The software cannot be used for commercial gain. Unlocked software cannot be used to help the institution or individual preservationists make profit. This is an analogue to the "public mission" requirement we discussed above. The institution's use of the computer programs must be to serve the public interest, not for private profit-making purposes.
- These rules only allow circumvention for non-infringing uses of the software. The exemptions only free you from complying with the DMCA's anti-circumvention provision; you still have to follow the rest of copyright law.

There are several ways for use of software to be non-infringing:

- **The software is not copyrighted.** In some limited cases, the software may not qualify for copyright protection in the first place, for example, because it is not sufficiently original or because it was produced by a federal government employee as part of their work. In other cases, the software may be in the public domain because the developer explicitly disclaimed copyright protection.
- You have permission to preserve the software. A collection of software donated by the copyright holder might include this permission, for example. Software available under an open license may also permit your uses under the license.
- Section 108 applies. Section 108 of the Copyright Act permits libraries and archives to make copies of in-copyright materials for certain limited purposes, including preservation, in some circumstances. For example, they can make up to three copies of a work, solely to replace a copy that is "damaged, deteriorating, lost, or stolen, or if the existing format in which the work is stored has become obsolete," if certain other requirements are also met. Migrating software stored on floppy disks to modern storage media is one example that may qualify for this exception. But Section 108 does not expressly provide for the modification of the software, and only applies in specific circumstances (such as when software is stored in an obsolete format). To learn more, check out <u>Section 108 and Software Collections: A</u> <u>User's Guide</u>.
- **The preservation is fair use.** The Acting Register of Copyrights found that copying or modifying computer programs for preservation and research purposes may qualify as fair use. The Association of Research Libraries, in collaboration with the Software Preservation Network has created a <u>code of best practices</u> to help preservationists determine if their activities may qualify as fair use. The Code is a helpful consensus document that addresses five common situations about which there is substantial agreement among practitioners. The five common scenarios are:
 - the internal preservation and documentation activities of software collections;

- the production and circulation of the documentation of software functioning;
- providing controlled access to software in support of research, teaching, and learning;
- institutions making software available on a cooperative basis to broaden research opportunities; or
- the preservation of source code and the availability for research use.

Each of these determinations are highly context-dependent. This is particularly true for fair use, where determining whether someone is engaging in fair use of the software depends on the particular circumstances of the use. So it is difficult to say categorically that all uses of software for preservation would qualify as non-infringing uses. You should consult an attorney if you have questions about copyright infringement and software preservation.

Where Can You Use the Software?

The Register of Copyrights concluded that access to commercially unavailable software outside of the physical premises of the library, archives, or museum is likely to be non-infringing. So institutions can provide off-site access to works preserved under the exemption for non-video game software. However, the work must be accessible to only one user at a time and for a limited time. This can be accomplished through technical restrictions (i.e., a reading room style portal) or by contractual provisions and record keeping, if those are easier to implement.

Note that video games are different – access to video games preserved using the DMCA exemption must be limited to the physical premises of the institution.

One Last Thing...

The 2021 DMCA exemptions are temporary and only last for three years. In 2024 the software preservation community must petition the Copyright Office to renew or expand the exemption for software preservation. Evidence of software preservationists' use of the exemption is crucial for maintaining it, and evidence of

any continuing burden on lawful uses is also important to help us petition for updates to the exemptions.

Please let us know if you use this guide or the exemption, or if you are still encountering barriers to preservation from TPMs! You can contact Kendra Albert via email at kalbert@law.harvard.edu.

Acknowledgements

The Cyberlaw Clinic thanks Anne Kim and Stephen Young for their assistance with the production of this guide.



DMCA Exemption for Software Preservation Checklist

Can you circumvent DRM on software you are preserving? If you check all the boxes on this list, then you fall within the software preservation exemption obtained by the Software Preservation Network!

Is the Computer Program Protected?

□ There is DRM, such as a password, paywall, product key, or encryption preventing you from accessing the work.

If yes, read on. If no, the DMCA doesn't apply, but you should still consider how copyright may impact your use of this software.

Are You Eligible?

- □ I'm doing the preservation for a library, archive, or museum.
- □ The institution meets each of these criteria:
 - Its collections are open to the public or routinely available to outside researchers;
 - □ Its collections are composed of lawfully acquired or licensed materials;
 - □ It implements reasonable digital security measures for preservation activities;
 - □ It has a public service mission;
 - □ It has trained staff or volunteers that provide services normally provided by libraries, archives, or museums.

Is the Computer Program Eligible?

- □ I/my institution lawfully acquired the original copy.
- □ The software is no longer reasonably available on the commercial marketplace.
- □ The preservation is not for commercial advantage.

How Are You Using It?

- □ I'm using it for lawful preservation of the computer program, or for lawful preservation of digital files that can only be opened with the computer program.
- □ My use is non-infringing because (must have at least one):
 - □ The software is not copyrighted.
 - □ I have permission.
 - □ My use is covered by 17 U.S.C. § 108..
 - □ My use is fair.
 - □ Some other reason.
- □ I have only made the work available outside the premises of the institution if:
 - □ The software is not a video game;
 - \Box Access to the work will be:
 - □ restricted to one user at a time;
 - □ for a limited time;
 - □ and there is no indication that the copy will be used for any purpose other than private study, scholarship or research.

If you have checked all of the boxes, congratulations! Your software preservation activities are likely covered by the DMCA exemption. If you are not completely confident that you can check off each one of these boxes, please consult your friendly neighborhood attorney.

This checklist is meant to be used with the Preservationists' Guide to the DMCA Exemption for Software Preservation, which contains a more detailed explanation of each of the criteria. You can find the Preservationists' Guide at: <u>http://www.softwarepreservationnetwork.org/1201-exemption-guide-for-softwarepreservationists</u>.