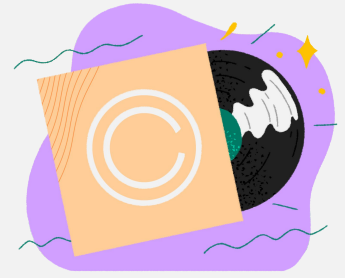


# Copyright Transparency Report

At YouTube, supporting the free flow of ideas and creativity is core to our mission to give everyone a voice and show them the world. With this in mind, we build tools that empower users to access, create, and share information like never before — giving them more choice, opportunity, and exposure to a diversity of viewpoints. Today, over 2 billion logged-in users come to YouTube every month and more than 500 hours of video are uploaded every minute.



YouTube has also given rightsholders opportunities to earn money both from their own and user-generated content through our subscription-based and advertising-supported models. Our partnerships with major record labels, performing rights organizations, a multitude of independent labels and music publishers, television networks, and movie studios generate substantial revenues for the creative industries. Over the last three years, we've paid more than \$30 billion to creators, artists, and media companies.

YouTube has over 50 million Premium and Music subscribers, including trialers, across 95 countries as of September 2021, and because of Content ID, YouTube has created an entirely new revenue stream from ad-supported, user generated content — paying more than \$5.5 billion to rightsholders from ads alone as of December 2020, from content claimed and monetized through the tool.

**\$30B** | To creators, artists, & media companies over last 3 years

**\$5.5B** | ad revenue paid to rightsholders as of December 2020 from content claimed and monetized through Content ID

## YouTube's Copyright Management Suite

There are three main tools that make up our Copyright Management Suite: the webform, Copyright Match, and Content ID. All of these tools use technology to prevent the reupload of matching content. We have invested hundreds of millions of dollars to develop and operate these tools.



### Webform

Users who hold few copyrights and scarcely find it on YouTube



### Copyright Match Tool

YouTube channels and other creators that are prone to reposting of their copyrighted content



### Content ID

Movie studios, service providers, and other publishers that have heavy reposting of copyrighted content

Frequency of Claims	Infrequent (A few times a year)	Occasional (A few times a month)	Scaled Daily
Resources	Self	Self	Dedicated team w/ expert knowledge
Block Reuploads	✓	✓	✓
Auto-Detect Reuse		✓	✓

Eligibility	Open to everyone	Be in YouTube Partner Program or demonstrate short history of takedowns	Demonstrated need of scaled tool, understanding of copyright, and resources to manage complex automated matching system
-------------	------------------	---	---

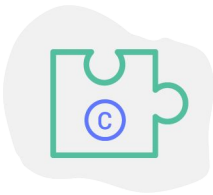
Access	Everyone 2+ billion channels	2+ million channels	9K+ partners
Abuse	High	Low	Low
Automation	Low	Medium	High



## Webform

All rightsholders have access to the webform, which we've built as a streamlined and efficient way to submit copyright removal requests, and it is available in 80 languages. It is designed for infrequent use, such as creators who hold few copyrights and occasionally find their content on YouTube. For the vast majority of rightsholders, the webform is the only tool they need.

While partners with access to Content ID can convert any match (see Content ID below) into a copyright removal request, some of these partners have access to a set of Studio Content Manager tools and among them is an "Enterprise Webform" that operates similarly to the public webform available to all channels. Additionally, a small number of rightsholders and anti-piracy vendors who do not have access to Content ID have access to this Enterprise Webform. They are known as members of the Content Verification Program (CVP.) While these are different entry points, the Enterprise Webform operates like the public webform where rightsholders or their representatives search YouTube and manually file a takedown request for content that potentially infringes their copyright.



## Copyright Match Tool

After extensive collaboration with creators, we found there was a segment of rightsholders who experienced a higher amount of reposting of their copyrighted content and needed to submit more frequent copyright removal requests. With this in mind, we built the Copyright Match Tool to safely bring the power of Content ID matching technology (described in detail below) to more creators and

rightsholders by providing access to those in the YouTube Partner Program. Creators who have access to the Copyright Match Tool through the YouTube Partner Program simply need to be the first to upload a video to YouTube (they can upload as public, private, or unlisted).

In October, we upgraded the Copyright Match Tool to also find reuploads of videos removed through the webform, so that the tool isn't only effective for and available to those willing to upload their video content onto YouTube. At the same time, we expanded access of this feature to any rightsholder who has submitted a valid copyright removal request through the webform, so that they will be shown subsequent reuploads of the videos they reported for removal. Since the expansion took place after the reporting period, the data in this report does not reflect these changes.

Those not in the YouTube Partner Program can apply for access to all Copyright Match Tool features and other tools through the [Copyright Management tools application](#).

For each video match, the Copyright Match Tool shows the user information on total views, the channel that uploaded it, what percentage of the video is made of their content, and a few screenshots of the video. We also label the matches to alert claimants if the match has different audio from their upload but the same video, which is often the case with "reaction videos," or if it's only a partial match, meaning their content may have been sampled but the video is not a simple re-upload. From this interface, users can choose to archive the match and leave the video up, file a takedown request, or contact the uploader.

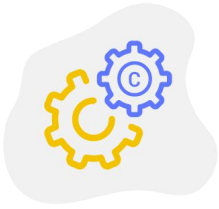
# 2M+

Channels on YouTube have access to the Copyright Match Tool

*Data as of June 2021. In October 2021, we further expanded Copyright Match Tool access to anyone who has removed a video through the webform.*

MATCHES 53	REMOVAL REQUESTS 13	MESSAGES 13	ARCHIVE 54			
Filter						
Matching videos	Total views	Date	Channel	% match	Frames	Actions
Jiggly Japanese Cheeseca... Soufflé Cheesecake Recipe (J...	3,001	Dec 1, 2018	Channel title 8.4K subscribers	80% of their video		
Day to Day Cook - Matcha... Matcha Panna Cotta (Japane...	4,432	Dec 1, 2018	Channel title 8.4K subscribers	30% of their video		
Tried and Tested - the Best... Cream Puffs (Choux Creme)...	2,014	Dec 1, 2018	Channel title 8.4K subscribers	100% of their video		

\*A sample of the interface for Copyright Match Tool. Not actual data.



## Content ID

This is our solution for those with the most complex rights management needs, such as movie studios, record labels, and collecting societies. Smaller, independent creators who do not meet the eligibility criteria for Content ID can still access these features through a number of service providers<sup>\*</sup>. These service providers manage rights through the system on behalf of others, on a daily basis.

YouTube and its Content ID partners enter into an agreement that sets the parameters for the use of the tool and allows YouTube to make appropriate use of the copyright owner's content for the purpose of making Content ID function. Partners provide YouTube with reference files for the works they own, along with metadata such as the title and detailed ownership rights. Based on these references, YouTube creates digital "fingerprints" for the copyright owner's works, and then conducts automated scans of the platform to determine when content in an uploaded video matches the reference content.

Copyright owners and service providers use YouTube's Studio Content Manager—the interface for managing the use of their content on the platform—to instruct the system to either block, monetize, or track matching content. The Content Manager interface provides highly granular access control to assist users who have specific, complex, or even conflicting ownership rights. For example, rights and policies may be specific to certain countries (e.g., a video may be monetized in one country, and blocked or tracked in another).

Reference files that reflect flawed or conflicting ownership data can create issues among Content ID partners. Content ID is designed to address these ownership conflicts among partners and manage disputes with uploaders. The system creates a queue of pending claims, for example, when the system is uncertain whether a claim should be made. As a result, Content ID requires users to make a high level of operational investment, without which other rightsholders could have their rights impaired and lawful expression could be inappropriately impacted.

<sup>\*</sup><https://servicesdirectory.withyoutube.com/>

# Everyone Has Access

YouTube has built a suite of Copyright Management tools for all rightsholders, and matches them with the appropriate tool based on the scale of their copyrighted work on YouTube and the resources they've dedicated to operate our tools.

*All data is from January 2021 - June 2021 unless otherwise noted*

## Key points



### Webform

Anybody with a YouTube account has access to the webform, which means over 2 billion monthly logged-in users. In the first half of 2021, over 70% of claimants who used a tool in YouTube's Copyright Management Suite sent removal requests through the copyright webform, which is designed to be an easy option for those with infrequent needs.



### Copyright Match Tool

As of July 2021, over 2 million channels have access to the Copyright Match Tool, which we built for those with more frequent copyright needs. It automatically detects copies of content uploaded to their channel. Following the expansion of the Copyright Match Tool in October 2021 to more users, now anybody with a YouTube account who is in the YouTube Partner Program or has submitted a valid copyright takedown notice is eligible for Copyright Match Tool access.



### Content ID

Content ID is for partners (such as movie studios, record labels, and collecting societies) and service providers who operate at an entirely different scale- over 9,000 partners have access and many have a dedicated team just to operate the tool.

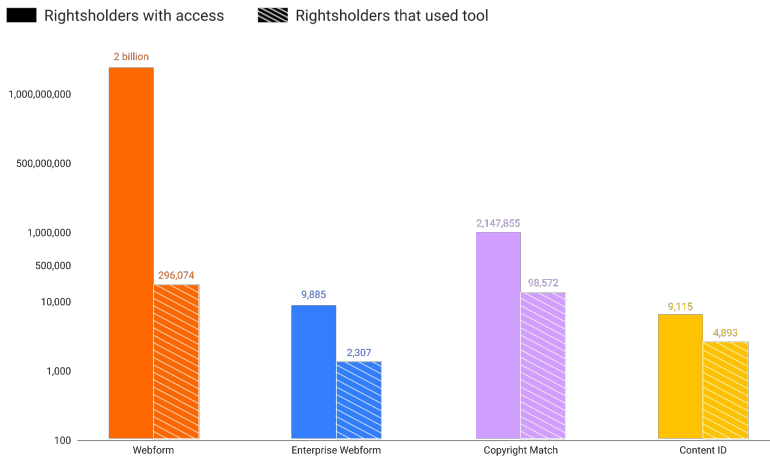
The scale of copyright needs for these partners is in a class all by itself, and their content - today's hit song, scenes from a new movie or the latest viral video - is at the heart of creative reuse on YouTube. Claims from Content ID partners represent over 99% of all copyright actions on YouTube.

**Eligibility:** Channels in YPP automatically gain access to the Copyright Match Tool and see matches to their uploads. Those who have submitted a valid copyright removal request through our webform also gain access to the Copyright Match Tool and see matches for videos they've removed through the webform. They can also apply for all scaled copyright tools through our [Copyright Management tools application](https://support.google.com/youtube/contact/copyright_management_tools_form).\*

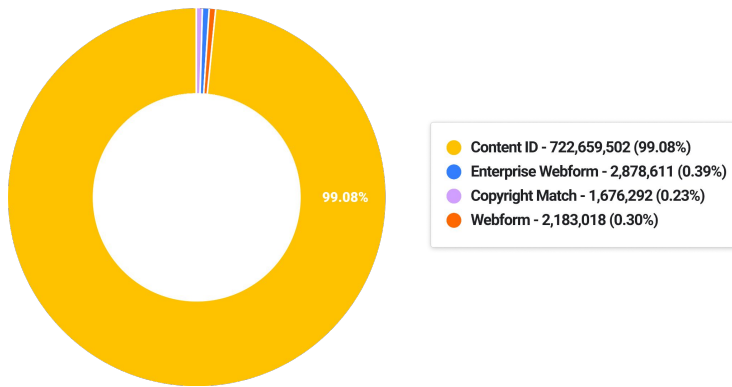
The following data demonstrates the relationship between how many people have access to a particular tool, how many people use that tool, and the scale of their need to manage their copyright on YouTube. We match rightsholders to the tool that best meets their needs, based in part on how much content on YouTube is subject to their copyright. The public webform is available to everyone, and used by more people than any other tool.

Those in the YouTube Partner Program and those who have used our public webform successfully become gain access to the Copyright Match and Tool and thus have the benefit of the most requested feature of Content ID - the ability to automatically detect potentially infringing content. This feature helps users better detect and manage their copyright through a user-friendly interface.

Content ID partners are managing content at an entirely different scale and sophistication. Though they represent the smallest number of users for any of our tools, their actions represent over 99% of all copyright actions on YouTube. This is because their content - today's hit song, scenes from a new movie or the latest viral video - is at the heart of creative reuse on YouTube and is the most likely to be re-uploaded.



\*January 2020 - June 2020



\*January 2021 - June 2021

## Eligibility and access

Every logged-in YouTube user, regardless of size or need, has access to the webform, which we built to be a streamlined and efficient way to submit claims. Google has invested considerable resources into making the webform easy to use and effective for the vast majority of use cases.

We automatically offer Copyright Match Tool access to channels in the YouTube Partner Program. For these channels, the tool finds potential matches of their uploads to YouTube. In October 2021, we extended automatic access to anyone who submits valid copyright removal requests through our webform - for these cases, the tool detects and surfaces potential matches of videos removed by the rightsholder. Rightsholders can also apply for all copyright tools via [YouTube's Copyright Management tools application](#).<sup>\*</sup> The eligibility criteria for each copyright management tool is described in [YouTube's Help Center](#).<sup>\*\*</sup>

A history of sending YouTube complete and valid copyright removal requests to remove allegedly infringing content serves as the primary indicator that an applicant both needs scaled tools and understands copyright. Abuse of our webform, or otherwise invalid use due to a lack of understanding about copyright, is very common.

When YouTube responds to an applicant who completes YouTube's Copyright Management tools application, YouTube always explains the tools available to a given applicant. We also indicate that, if the applicant believes they should be eligible for additional tools, they are welcome to apply again in 90 days. In the interim, **the best course of action for any rightsholder is to make use of the tools we do provide them in order to illustrate that there exists an issue for which they need a more scaled tool to fully address, that they own rights in the content, and that they understand copyright removal processes.** If an applicant wishes to appeal the initial decision and provide additional information for us to consider, they may respond directly to the email.

<sup>\*</sup>[https://support.google.com/youtube/contact/copyright\\_management\\_tools\\_form](https://support.google.com/youtube/contact/copyright_management_tools_form)

<sup>\*\*</sup><https://support.google.com/youtube/answer/9245819?hl=en>

### Exhibit 1.1 – Access and Usage of Copyright Tools

The chart shows the number of rightsholders who have access to each tool as of July 2021, along with how many actively used the tool in the first half of 2021. In October 2021, we expanded Copyright Match Tool access to anyone who has submitted a valid copyright takedown request. That expansion is not shown here.

In some cases, an individual may make copyright removal requests or make claims using multiple tools (for example, if they are granted access to Copyright Match Tool after making successful copyright removal requests via the webform.) In these cases, they are counted as users of both tools.\*

### Exhibit 1.2 – Copyright Actions by Tool

This chart shows unique claims or copyright removal requests made in the first half of 2021. Note that some videos may be subject to multiple claims or removal requests, such as when an individual video features more than one copyrighted asset, or multiple parties share ownership.

*A Content ID claim can convert to a copyright removal request at the claimant's request. In these cases, we have counted them as two separate actions: one Content ID claim and one copyright removal request.*

# Creating a Balanced Ecosystem

As we work to expand access to more powerful tools in the YouTube Copyright Management Suite, we must balance the need to protect creators, viewers, and other rightsholders from the significant disruption that can result from the abuse or otherwise invalid use of our tools.

All data is from January 2021 - June 2021 unless otherwise noted, and is preliminary.

## Key points

YouTube takes steps to prevent abuse or otherwise invalid use of our rights management tools, and also empowers uploaders to push back on requests and claims they believe are wrongful. As is demonstrated by our public copyright webform, when we make a tool available to everyone without any eligibility requirements, we see high levels of abuse. This is why we must balance access to tools against the significant disruptions to the ecosystem they can cause.

**30x**

Higher abuse rate in webform than in takedown tools with limited access

Over 8% of videos requested for removal through the public webform in the first half of 2021 were the subject of abusive copyright removal requests, meaning these requests were assessed by our review team as a likely false assertion of copyright ownership. This abuse rate is more than 30 times higher than in other tools with limited access, like the Copyright Match Tool and Enterprise Webform, where it is 0.2% or lower.<sup>1</sup>

Similarly, the limited availability of Content ID also helps to limit abuse of that tool. This is especially important because claiming can happen automatically, and while **one copyright request removal made from the webform impacts only one (or a handful) of videos, just one invalid reference file in Content ID can impact thousands of videos and users**, stripping them of monetization or blocking them altogether.

Uploaders are empowered to push back on removals requests they believe are invalid by filing counter notifications, and they can push back on Content ID claims by disputing the claim. Like abuse, pushback from uploaders occurs most often on those tools that are available to more people. Uploaders have filed counter notifications in response to over 5% of removal requests from the first half of 2021 made through the webform, whereas it's fewer than 2% for both Enterprise Webform and for Copyright Match Tool. Fewer than 1% of all Content ID claims made in the first half of 2021 have been disputed, though when they are, over 60% of disputes were resolved in favor of the uploader.\*

**Invalid requests** often occur when someone incorrectly submits a copyright removal request due to a lack of understanding of either copyright law or our tools. Invalid requests can take many forms, such as filing a copyright request for a trademark or privacy issue, or simply failing to provide the necessary information required to constitute a valid copyright removal request. For Content ID partners, this occurs when partners unintentionally deliver low-quality reference files that contain incomplete metadata, insufficiently unique content, or pieces of content that they don't own exclusively - such as a news broadcast that contains public domain footage, or a song that uses a licensed beat.

**Abuse**, on the other hand, occurs when someone is deemed by our review team to have intentionally and maliciously used our tools in an attempt to remove content from YouTube through a likely false assertion of copyright ownership. Sometimes this takes the form of political actors attempting to censor political speech or companies stifling criticism of their products or practices. Other times individuals try to use our copyright processes to bully other creators, or to remove videos they may see as competing for the same audience.

Regardless of the intent, both invalid requests as well as abuse can cause significant disruptions to all members of the YouTube ecosystem - creators, viewers, and rightsholders. Just one bad copyright webform notice can result in a handful of videos being temporarily removed from YouTube. In Content ID the impact is multiplied due to its automated nature; one bad reference file can impact hundreds or even thousands of videos across the site. In one highly-publicized instance, a news channel uploaded public domain footage from NASA of a Mars rover and ended up making inappropriate claims against all other news channels and creators using the same footage, even against the NASA channel itself.



We have dedicated teams working to detect and prevent abuse or otherwise invalid use of each of our tools. We rely on a combination of humans and technology to detect suspicious behavior, request additional information where necessary, and remove reference files that are low-quality or invalid. We take abuse of our tools seriously—we terminate tens of thousands of accounts each year that attempt to abuse our copyright tools.

## Common types of abusers



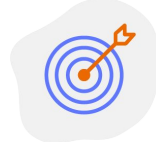
### Impersonator

Uses a fake name/ email address to get away with submitting fake requests



### Reputation Manager

Uses DMCA form to remove allegedly defamatory content



### Competitor

Submits requests on legitimate content to target their competitors



### Backdater

Pretends to have created content first (backdates) in order to remove other people's content

## Copyright removal requests through Copyright Webform, Copyright Match, and Content ID

Because it is available to everyone, our copyright webform is subject to a significant amount of abuse or otherwise invalid use. We have a team dedicated to processing copyright removal requests, and when necessary, we request additional information or deny the request altogether. Below you can see real world examples, anonymized for the report, to see how we respond to complaints we received.

### Possible responses by YouTube to a copyright removal request, with examples

**Remove:** The URL was removed from YouTube

**Examples:**

*A removal request is accepted by YouTube and the video is removed for copyright under the owner name given in the request.*

*A removal request is received for a video that's already been removed from YouTube, either by the uploader or for violating another policy.*

**Abuse:** A webform submission that is deemed by our review team to be a likely false assertion of copyright ownership.

**Examples:**

*An individual falsely claiming to be a celebrity or a large company.*

*Creator trying to take down a video competing for the same audience.*

**Invalid Request:** There are a number of reasons that requests may be ruled invalid. This may be because the user submitting the request failed to demonstrate they represent the entity they claim to, they failed to consider fair use, fair-dealing or other international equivalents, or they are trying to address a non-copyright issue (like trademark or other content moderation issues) through the copyright form.

**Examples:**

*A fan requests a takedown on behalf of a creator, but doesn't appear to be authorized to make claims on their behalf.*

*An individual does not provide necessary information to process a request, for example they are not sufficiently clear about what content in the video they are claiming, or fail to provide the URL of the video that they claim is infringing.*

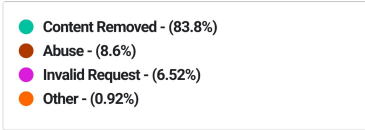
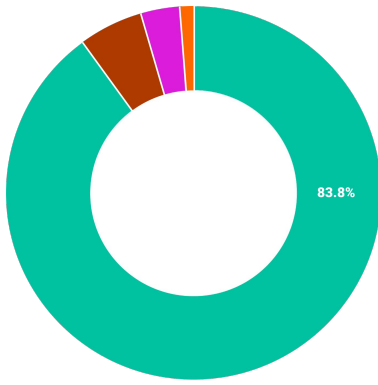
*A company asserts their logo is infringed, but the logo is a plain wordmark that is appropriate for a trademark removal notice.*

**Other:** In some cases, we hold a request for further review, send a one-off response, or follow a slightly different process because the content was provided to us under license. In these situations, we've categorized them as 'Other.'

**Examples:**

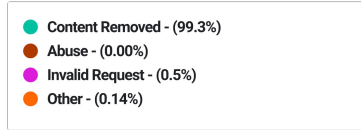
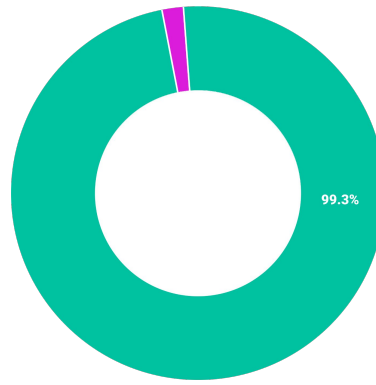
*A movie producer submits a takedown request for a movie, but the movie's distributor (who works with the producer) licensed that video to YouTube.*

# YouTube actions in response to copyright removal requests by tool



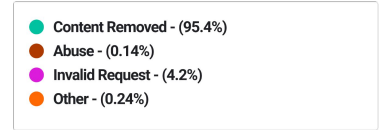
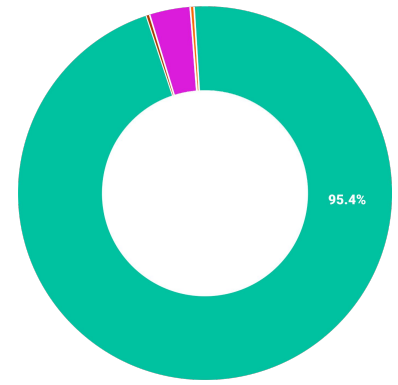
## Exhibit 2.1

This chart shows the video-level result of each copyright removal request made in the first half of 2021 through the **webform**.\*



## Exhibit 2.2

This chart shows the video-level result of each copyright removal request made in the first half of 2021 through the **Enterprise Webform**.\*



## Exhibit 2.3

This chart shows the video-level result of each copyright removal request made in the first half of 2021 through the **Copyright Match Tool**.\*

## How YouTube protects against wrongful claims

### Content ID claims

We also have a dedicated team that monitors for bad reference files delivered to Content ID. The team uses automated systems along with manual review to detect reference files (or segments of reference files) that may be causing an issue, and requests partners review them.

#### The rightsholder can choose to:

- Exclude the segment from the larger reference file
- Remove the entire reference file
- Ask our dedicated abuse team to re-review the suspicious flag

If the partner does not respond, the reference file is marked as invalid and removed from Content ID. When a reference file (or a segment) is removed from Content ID, all claims associated with that reference file (or segment) are released.

There are multiple reasons this can happen, but most often it occurs when partners deliver non-exclusive content, such as content in the public domain or content they've licensed but don't own. For example, an owner of a late night talk show may deliver a reference file of an entire episode of their show, which included a clip of a film that one of their interviewees is promoting, and that clip may inadvertently claim the filmmaker's official upload of the film. Alternatively, reference files may capture indistinct sound effects, nature sounds, or content that is in the public domain and not subject to copyright.

Unlike webform requests that are rejected, which only affect one or a handful of videos, the impact of reference files in Content ID is multiplied.



# How YouTube empowers uploaders to fight wrongful claims

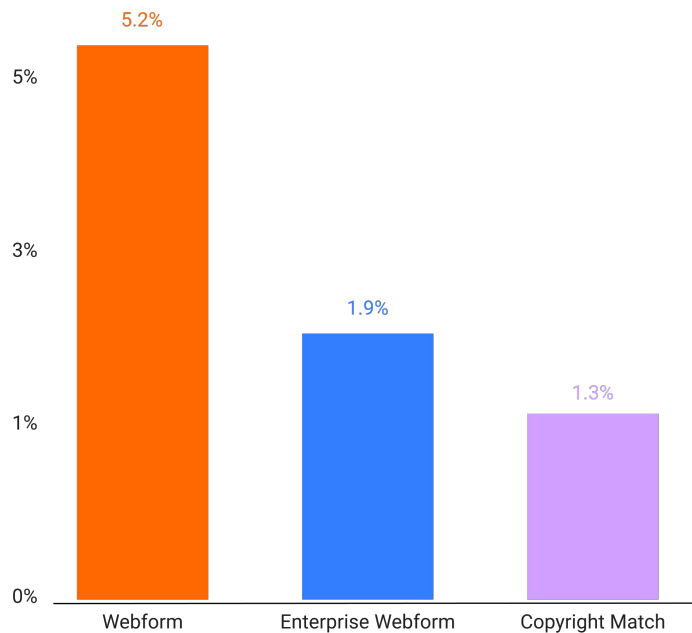
## Counter notifications

Beyond the work YouTube does to prevent abuse or otherwise invalid use, there are also disputes that can only be resolved between rightsholders. YouTube is not in a position to know whether re-use of content has been authorized by a license, whether ownership is shared by multiple parties, or held by different parties in different regions. In these cases, recipients of copyright removal requests or Content ID claims have the ability to counter notify or dispute, respectively.

The ability to counter notify is a requirement of the U.S. DMCA. If an uploader believes they have the required license to use content or are subject to an exception such as fair use, they can file a counter notification. YouTube is not in a position to mediate this type of dispute as we are not a court of law; however, counter notifications are reviewed for completeness and to ensure they have a clear explanation for why the uploader believes they have all necessary rights for the removed video. If we accept the counter notification, a copy of the notice is sent to the claimant who requested removal of the video(s). After receiving a counter notification, the claimant has 10 business days to provide evidence they've initiated a court action to keep the content down, otherwise we will reinstate the content. This time period is a requirement of copyright law.

### % Counter notifications received

This represents the % copyright removal requests submitted in each tool, where the uploader had responded with a counter notification asserting that they do have the right to keep the video up (as of July 2021).



## Content ID claim resolution

We offer a number of methods for uploaders to address Content ID claims they receive. As of March 2021, uploaders are notified through our Checks functionality during the video upload process whether there is material in their video that may result in a Content ID claim.\* Before they publish the video, they may edit out\*\* the content or use the dispute process described below. These options are also available after a video is published and claimed.

If uploaders feel that their use of claimed content is valid, the Content ID dispute process allows recipients of Content ID claims to push back and assert their right to upload the content in question. Claimants can respond to disputes by releasing the claim or upholding it. If a claimant does not respond to a dispute, the claim automatically expires after 30 days. Claims that are upheld after dispute can be appealed by the uploader, which gives the claimant another 30 days to decide whether to release the claim or issue a removal request. If the video is removed through this process, uploaders can further pursue remediation by filing a counter notification or seeking a retraction from the claimant.

No system is perfect, and despite the fact that access to Content ID is limited to partners with a demonstrated need for a scaled solution, working knowledge of copyright, and the necessary resources to manage a complex tool, there are still errors. Fewer than 1% of all Content ID claims made in the first half of 2021 had been disputed as of July 2021. When disputes take place, the process provided by YouTube provides real recourse, and over 60% of these disputes were resolved in favor of the uploader.

## Total Content ID claims

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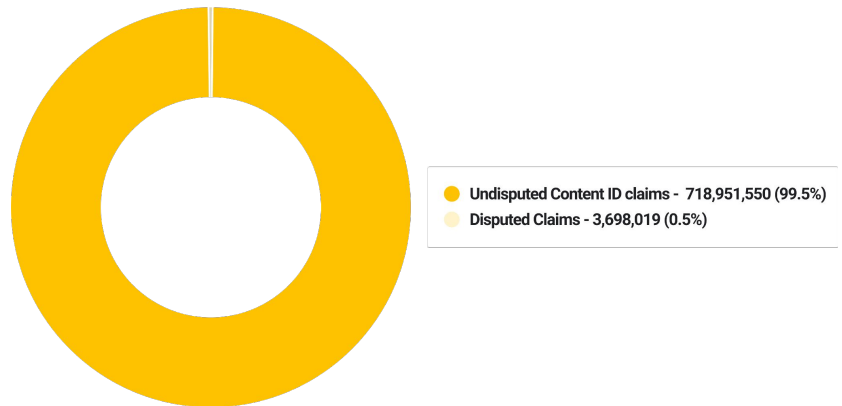
# 722,649,569

Total # of Content ID claims made in the first half of 2021

### Total Content ID claims vs total disputes

This chart shows the total number of Content ID claims, and the proportion of those claims that are disputed by the uploader.

Claimants have 30 days to review the dispute and decide whether to release the claim, uphold the claim, or issue a removal request. If they don't respond within 30 days, the claim expires.



## Total number of disputes

---

# 3,698,019

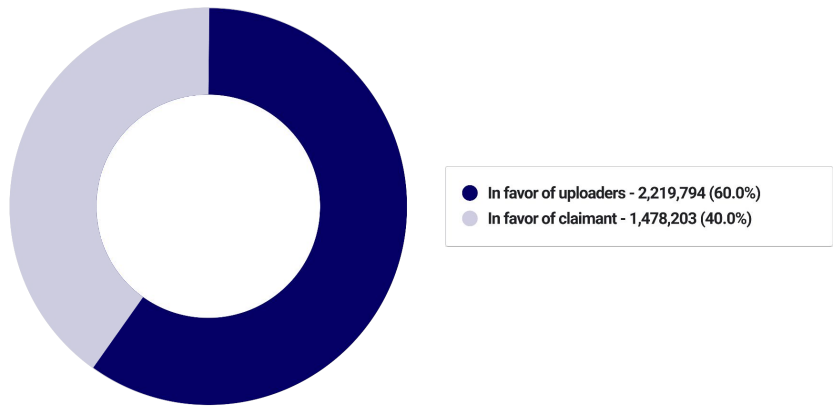
Total # of disputes of claims above as of July 2021

\*<https://support.google.com/youtube/thread/102365314?hl=en>  
\*\*[https://support.google.com/youtube/answer/2902117?hl=en&ref\\_topic=9257784](https://support.google.com/youtube/answer/2902117?hl=en&ref_topic=9257784)

## Resolution of disputes

If the claimant chooses to uphold their claim or file a copyright removal request in response to a dispute, the claim is considered to have resolved in favor of the claimant.

Alternatively, after receiving a dispute the claimant may choose to release the claim, or may allow the claim to expire after 30 days. In either case, the claim is removed from the video and is considered to have resolved in favor of the uploader.



# 38,864

Total # copyright removals originating from the disputes above

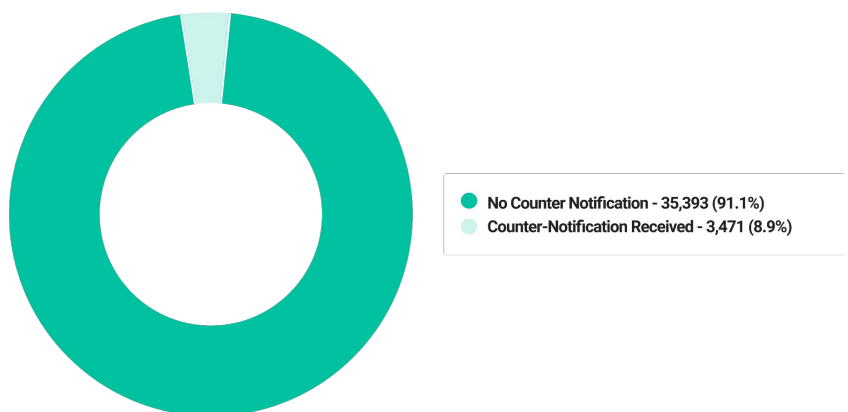
If a claimant upholds their claim after the uploader has disputed, the uploader can appeal that decision. At this point the claimant can no longer re-assert their Content ID claim, and must instead choose to either release the claim or file a legal copyright removal request. Additionally, in some cases, disputes may directly result in a copyright removal request.

At this stage, the ownership issue has exited the Content ID claim and dispute system built by YouTube, and enters the legal removal and remediation process defined by the DMCA and similar applicable laws.

## Counter notifications received

As is the case with all copyright removal requests received by YouTube, uploaders have the ability to file a counter notification in response to the removals above, which is a legal request for YouTube to reinstate a video.

If we receive a valid counter notification the claimant will have 10 business days to provide evidence that they've initiated a court action to keep the content down. (see below)



## Lawsuits

# <1%

Lawsuits from the counter notifications above

Some claims ultimately have to be adjudicated by a court if the claimant and uploader still disagree after going through our robust dispute and counter notification processes. As shown, of the 720 million claims we started with, we're notified of very few that result in a lawsuit.

# Our Tools Are Cutting Edge

We've invested hundreds of millions of dollars to develop powerful tools to help rightsholders manage their content on YouTube. We've also accumulated over a decade of learnings on how to best balance the needs of rightsholders and creators, and continue to iterate on our tools accordingly.

*All data is from January 2021 - June 2021 unless otherwise noted and is preliminary*

## Key points

**99%**

Content ID claims that are made automatically

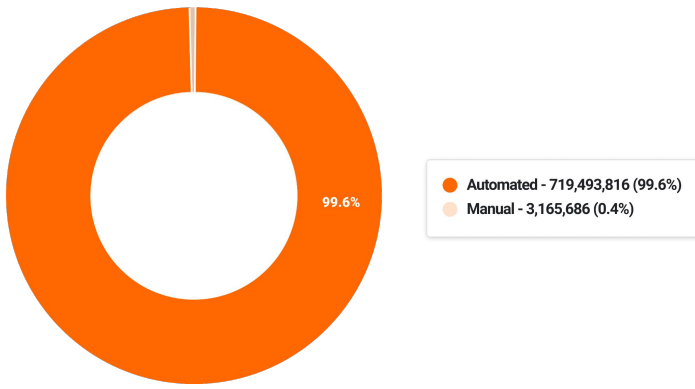
Content ID's systems automatically detect potential infringement, and additionally some rightsholders can manually search for and claim content not automatically detected. Over 99% of Content ID claims from the first half of 2021 were made through automated detection, with partners' usage of manual options being exceedingly rare (fewer than 0.5% of total claims.)

When partners do make manual claims on videos not detected by our systems, uploaders are more likely to dispute the claim's validity (fewer than 0.6% of automated claims from the first half of 2021 were disputed\*, vs. over 1% for manual claims)

Based on reference files provided by Content ID partners, YouTube creates digital "fingerprints" for the copyright owner's works, and then conducts automated scans of the platform to determine when content in an uploaded video matches the reference content. When a match is found, Content ID automatically claims the content. Because of continued investment in our matching technology, over 99% of all claims made by Content ID in the first half of 2021 were automatic.

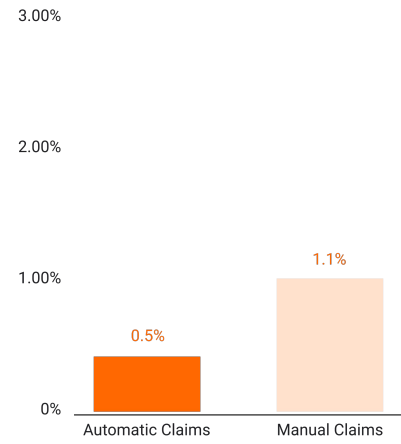
Despite the power of technology, there are some cases where Content ID fails to identify a match with a user video. This can be due to uploaders' efforts to evade Content ID, or due to the fleeting use of the copyrighted work. For videos missed by automated identification, many Content ID partners have the ability to issue claims manually. While this tool covers an important gap, it accounted for fewer than 1% of Content ID claims made in the first half of 2021. For music rightsholders in particular, the automation rate is even higher. Finally, all channels on YouTube also have access to our copyright removal webform to request removal of any content not captured by another tool to which they have access.

We've spent years tuning our automatic tools to automatically detect reuse of licensed content when appropriate. That said, it's impossible for matching technology to take into account complex legal considerations like fair use or fair dealing. Despite that, claims made manually by partners are more than twice as likely to result in a dispute than claims made automatically.



**Exhibit 3.1 – Automated vs. Manual Content ID Claims**

The exhibit above shows the number of Content ID claims that were made by automated systems vs. those that were made using manual tools. Out of 720 million claims made in the first half of 2020, 99.6% were automated and .4% were manual.



**Exhibit 3.2 – % Disputes on Automated vs. Manual Content ID Claims**

This exhibit shows the % of claims from Exhibit 3.1 that had been disputed as of July 2021, divided between whether or not the claim was made by Content ID’s automated systems, or was made by a rightsholder using Content ID’s manual claiming feature.

**Tackling new challenges by continuing to refine our tools**

Whether it be fans making reaction videos, aspiring musicians singing covers, or pirates attempting to re-stream a championship soccer game, we understand that there are countless scenarios where rightsholders need a tool that is powerful enough to quickly detect reuse and apply the appropriate policy.

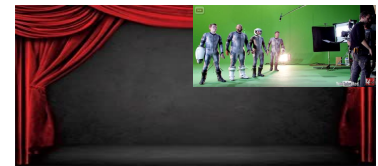
Unfortunately, some individual channels attempt to circumvent the system by transforming the content they upload. This can take many forms, from shifting the pitch of audio, to altering the color, orientation, or surroundings of a video. Below are some examples of the types of manipulations channels engage in.



**Original**



**Flipped / Mirrored**



**Framed**



**Color shifted**



**Aspect ratio change**



**Light effects**

Content ID’s match technology must continually adapt to such efforts, without sacrificing its precision. In other words, in the effort to locate transformed copies of a given work, it cannot extrapolate so far that it begins to inaccurately sweep in similar works.

For more information about YouTube’s approach to rights management, please visit [How YouTube Works](#).