CASE NO: 8:24cv02383

PETITIONERS:	IN THE UNITED STATES DISTRICT COURT	
JOSEPH DEAN, a Tampa resident		MIDDLE DISTRICT OF FLORIDA
DEFENDANTS:		
<b>ROKU INC</b> , a Delaware corporation headquartered in San Jose, California		
		TAMPA DIVISION

# APPENDIX TO SECOND AMENDED COMPLAINT OF ANTI-COMPETITIVE BEHAVIOR

#### **CERTIFICATION**

- I, Joseph Dean, declare under penalty of perjury:
  - 1. All statements in this appendix are true to the best of my knowledge
  - 2. All videos were either created by me or taken from YouTube videos referenced
  - 3. All screenshots were taken by me
  - 4. All dates and citations are accurate
  - 5. All web addresses were valid at time of filing

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**EXHIBIT 1**: USA TODAY 2009: Wood Announces Plans for Open App Store and

Third-Party Publishing

Format: Video Recording

Duration: 1:44

File Name: Exhibit\_1\_USA\_TODAY\_Wood\_Interview.mp4

Video URL: https://www.youtube.com/watch?v=Wu4N2HsYmMQ

Original Video Source: USA TODAY YouTube Channel

https://youtu.be/hI2hMvxVMt0?t=134

Date: June 15, 2009

Recording Method: Screen capture of portion of original broadcast, edited by Plaintiff with text to the bottom and at the end

Content: Wood announces plans for open app store, promises third-party publishing capabilities, describes platform expansion strategy

### Transcript:

Speaker: Anthony Wood, Roku CEO

[0:03-0:14] "So we just announced... we just started shipping Major League Baseball running on our box and we have other big content announcements later this year. So keep... what's next is to keep adding more and more TV on our box."

[0:14-0:31] "And then the other thing we want to do that we think will change things dramatically is an app store for TV. So just like the iPhone has an app store, we want later this year to launch an app store for our box. We'll let third parties publish content and applications that consumers can access directly from their TV."

**EXHIBIT 2**: Roku Founder and CEO Anthony Wood Details Roku's Control Over TV Platform Market and Content Distribution (2021)

Format: Video Recording

Duration: 8:43

File Name: Exhibit\_2\_Fortt\_Knox\_Wood\_Interview.mp4

Video URL: https://www.youtube.com/watch?v=3JdleFk3jWg

Original Source: Fortt Knox YouTube Channel

https://www.youtube.com/watch?v=v6NYUYb4DBk

Date: August 7, 2021

Content: Wood details platform control strategy, explains market dominance, discusses advertising framework, and reveals plans for The Roku Channel to become home screen

### Transcript:

[0:00-0:38] \*\*Interviewer\*\*: Let's talk about Roku today and how it's different from all the various options people have to stream content. I mean there's Apple TV, Amazon Fire TV, various Chrome sticks and dongles and boxes, there are internet connected TVs from Samsung etc., and then there's Roku's whole family of ways to connect including Roku TVs and dongles. How do you define Roku's difference between all of these other ways to get content?

[0:38-1:09] \*\*Anthony Wood\*\*: Roku is the leading streaming platform in the US by a wide margin. We stream a lot more hours than any of our competitors. The way I think about Roku is we are a platform for distributing content in the modern internet world, and we distribute our platform a bunch of different ways. Our business model's first part is we have to distribute our platform, build scale of our platform and we've got about 20 million active accounts at this point, growing 47% year over year, and then we monetize that platform.

[1:11-1:46] How do we build scale? We sell players - that's how we got into the business. We shipped the first Netflix streaming player, we shipped the first app store for television, we shipped the first Streaming Stick. And we've been competing with companies for a long time. I mean Apple had Apple TV before we shipped the first Netflix player - back then it had a hard drive in it. Android actually licensed Android TV to TV companies before we started licensing the Roku OS to TV companies, although today we have almost the entire market for licensed OS.

[1:49-2:03] The reason why is that we've built a platform for streaming television, whereas our competitors have all built platforms for mobile and imported them to TV. Roku actually has the only operating system purpose-built for television.

[2:05-2:49] If you take a step back and think big picture about when new computing platforms emerge, what's the pattern? Well, the pattern has never changed - a new software platform comes out and wins on new hardware platforms. If you go back to PCs - well before PCs there were mainframes operating and operating systems for mainframes. When PCs became their own computing platform, mainframe operating systems didn't make that transition - Windows became the operating system for PC. When phones became their own computing platform, Windows didn't make that transition. Android, purpose-built for phones, and iOS, also purpose-built for phones, won that transition.

[2:51-3:01] And then if you look at Smart TVs which are becoming computing platforms getting their own licensed operating system, those phone OSes have almost no market share whereas Roku has lot of market share because we've built a purpose-built platform for TV.

[3:04-3:43] Being purpose-built for TV means things like recognizing TVs are a brutally cost-competitive business, so we built a software platform that's designed to give great performance on very low-cost hardware. That's critical - that's why we can have a \$29 Roku streaming player, the lowest price point, yet still actually make a positive gross margin where our competitors all subsidize to come within striking distance.

[3:45-4:07] Another example is the ad model. Ads are super important in the TV business - a lot of the revenue for TV content companies comes from ads. So we built targeted ads, the ability to do ads into the Roku ad framework, which is sort of a first-class citizen of our operating system. All of our examples are around the fact that we built software for TVs first.

[4:12-4:35] \*\*Interviewer\*\*: What's the next big shift, maybe cultural, maybe technological, that's going to change the way we experience what today we're calling TV - video streaming entertainment?

[4:35-5:10] \*\*Anthony Wood\*\*: Well, I think there's a lot of things changing as TV moves to streaming. The main thing that's changed is competition. Before streaming, there was not a lot of competition in TV. Cable companies only had a couple hundred channels, only certain big networks had access to those channels. Streaming allows any company to publish content to television - anyone can make a streaming channel. Competition is driving the innovation in streaming and that's resulting in things like more content, lower cost, more choice for consumers.

[5:13-5:42] One of the reasons Roku has been successful is there's over 6,000 different apps on Roku where we call them streaming channels, but that's a hard way to find content in so many apps. I remember when someone at Apple once said "the future TV is apps" - well actually the future TV is not apps because people are tired of looking in 6,000 apps for content. So I think one of the next evolutions in TV is how do we make it easier for consumers to find content when there's so many different publishers of content.

[5:43-6:15] We have something called the Roku Channel which is just free ad-supported movies and TV shows. We just also added live news, we're going to keep adding more and more content. It's the sandbox where we bring content, make it into a content-first user interface, make recommendations, use our data platform and our machine learning platform to find content and recommend it to customers. So we think things like the Roku Channel will become the way content publishers end up publishing on platforms.

[6:17-6:33] \*\*Interviewer\*\*: Is it like an actual channel?

\*\*Anthony Wood\*\*: Yeah, it's an actual channel on Roku. But as it gets bigger and bigger and has more and more content, you can imagine someday it might become the Roku home screen. We're also going to publish it off Roku as well - we announced that the Roku Channel will be on Samsung TVs this summer as well.

[6:37-7:11] \*\*Interviewer\*\*: Why would you do that? I mean, you're trying to sell Roku - why give Samsung the Roku Channel?

\*\*Anthony Wood\*\*: We think of Roku as a large-scale publishing platform. If you're a content owner and you want to publish that content and monetize it, we can do that for you. That's what we do - we distribute content. A preferred way to do that is to be the operating system of your TV. There are some companies like Samsung that are probably not going to license our operating system, so taking the best of content on Roku, putting it in the channel and putting it on those kinds of platforms is another way for our content publishers to get broader distribution.

[7:13-8:34] \*\*Interviewer\*\*: Does Samsung pay you to carry the Roku Channel? Do you become sort of like an HBO or Showtime - a premium content offering that they're paying for and you're kind of getting that revenue stream and maybe a share of the advertising?

\*\*Anthony Wood\*\*: We haven't announced our business relationship with Samsung, but I think the trend is that we're going to see over time more and more aggregations to these big destination apps. Netflix is obviously the original destination app, and that's what the Roku Channel is as well. We're starting out from a different place - traditional OTT apps are subscription services, but consumers go to streaming because they want better value. They want to pay less, and free ad-supported content is very popular on Roku but it's an underserved market. There's not a good single place to go to get an aggregated experience with lots of great free content. So that's where we're starting out with the Roku Channel - trying to build a great aggregated experience of free content. But we think that over time it'll be a big destination app like some of these other big destination apps as well.

**EXHIBIT 3**: Anthony Wood Discusses Roku's Platform Control, Content Merchandising, and Strategy to Consolidate and Create a Double-Bind for Content Providers

Format: Video Recording

Duration: 1:36

File Name: <a href="mailto:Exhibit\_3\_Collusion\_Conference\_Wood\_Interview.mp4">Exhibit\_3\_Collusion\_Conference\_Wood\_Interview.mp4</a>

Video URL: <a href="https://www.youtube.com/watch?v=Ymq6sas7d4A">https://www.youtube.com/watch?v=Ymq6sas7d4A</a>

Original Video Source: How software is changing the next generation of TV

Anthony Wood & Nilay Patel - Collision Conference

https://www.youtube.com/watch?v=8cEWehPTyP4

Date: May 5, 2016

Content: Wood discusses platform evolution from Netflix player to app store, reveals merchandising strategy, admits using platform-wide data advantage, describes two-tier system for content providers

### Transcript:

[0:00-0:16] \*\*Anthony Wood\*\*: You know, it used to be that Roku was a Netflix player - there was one app, it was Netflix, it booted up into the Netflix app. Then it became an app store and a platform, and now there's over 3,000 different apps on Roku, 300,000 movies and TV shows. Just there's a lot of content.

[0:18-0:30] So the problem consumers have now is that they don't branch out a lot out of their top apps. There's a lot of great content, so how do we do a better job of merchandising all that content? I think that's the next phase of the UI.

[0:34-0:46] We're doing a better job of recommendations and we have already started with things like universal search - how can we help customers find content? And the flip

side is how can we help content owners merchandise their content to customers that want to watch?

[0:47-0:58] \*\*Interviewer\*\*: Doesn't that make you - when you disaggregate everybody else's UI into your own search or into your own recommendation - doesn't that create a tension between a company like ESPN that wants to build their own app and their own recommendation and keep you in that ecosystem?

[1:00-1:30] \*\*Anthony Wood\*\*: It can, but our job is to show them that because we have platform-wide data, we can do a better job of merchandising than they can do on their own. I think what will happen is for 90% of our customers, that will be the case - they will get more viewing and better economics by working with us directly. They'll still have their own app, but we'll also merchandise for them. But some companies like Netflix and Hulu and Amazon - what I call destination apps - they're probably always going to be primarily an app experience.

[1:32-1:36] \*\*Interviewer\*\*: The clock is going up now so we should just keep going... honestly I think we're out of time. Thank you.

### **EXHIBIT 4:** Roku Community Forum Post About Remote App Viability

Exhibit 4a: Plaintiff's Post in Roku Community Forum

Time period: Friday August 23, 2024 to Monday August 26, 2024

Saved as PDF to: <a href="Exhibit\_4\_Roku\_Community\_Forum.pdf">Exhibit\_4\_Roku\_Community\_Forum.pdf</a>

Screenshots below

Taken from:

https://community.roku.com/t5/Roku-mobile-app/Mobile-remote-app-viability/m-p/992430

Date taken: Monday August 26, 2024 8:58pm

Content: Forum discussion started by Plaintiff as joedean62 about API documentation titled 'Mobile Remote App Viability'

Note: Post by michalama posted on August 26 has been removed since these screenshots were taken





# Roku mobile app

Discover troubleshooting and helpful tips for the Roku mobile app. Learn how to use the Roku remote on your phone, add channels, privately listen, and more.

All community 🗸	Search		
-----------------	--------	--	--

Roku Community > Streaming Players > Roku mobile app > Re: Mobile remote app viability



Friday

### Mobile remote app viability%

DOES THIS MEAN THAT ALL THE MOBILE REMOTE APPS ARE NOT GOING TO WORK ANYMORE? (last sentence)

Support for sending ECP commands from within a Roku channel application has been discontinued. Channels may no longer include code in their channel application that is designed to issue any type of ECP command. <u>Static Analysis testing</u> has been updated to check channels for ECP commands. Channels that include ECP commands in their code will automatically be blocked from publishing to the Roku Channel Store.

In addition, ECP commands may not be sent from 3rd-party platforms (for example, mobile applications).



Reply

#### 9 RFPLIFS



Saturday

### Re: Mobile remote app viability

Sending ECP commands from within a Roku app running on a Roku device is not the same as sending an ECP command from an external non-Roku device. It's not a new limitation.

Where did you find any statement about ECP not being allowed from 3rd party platforms? That doesn't make any sense. If not from 3rd party platforms, then what good would ECP be?

#### **Roku Community Streaming Expert**

Help others find this answer and click "Accept as Solution." If you appreciate my answer, maybe give me a Kudo.

I am not a Roku employee.



Accept as Solution

Reply



Saturday

### Re: Mobile remote app viability %

@renojim

I believe it was from here. <a href="https://developer.roku.com/docs/developer-program/dev-tools/external-control-api.md">https://developer.roku.com/docs/developer-program/dev-tools/external-control-api.md</a>

There is a line that states "In addition, ECP commands may not be sent from 3rd-party platforms (for example, mobile applications)."

There was also a couple of older questions in the Developer forum that didn't really seem to make it any clearer. (at least to me).

#### **Roku Community Streaming Expert**

Just another Roku user... I am not a Roku employee. Insignia RokuTV, Ultra 4660, Premiere+ 3921, Express 4k+ 3941, Streambar 9102



Accept as Solution

Reply



Saturday

### Re: Mobile remote app viability %

Ah, I do vaguely remember that. I didn't understand it then and I don't understand it now. I only use a few ECP commands, but they're still working for me. I guess it's the "3rd-party platforms" part I don't get. I use <u>cURL</u> and maybe it's different somehow? They may be trying to kill off the numerous paid Roku remote apps that sometimes upset people that think Roku is charging for them (and are totally unnecessary if you ask me given Roku has an official app that's free).

#### **Roku Community Streaming Expert**

Help others find this answer and click "Accept as Solution." If you appreciate my answer, maybe give me a Kudo.

I am not a Roku employee.



Accept as Solution

Reply



Saturday

### Re: Mobile remote app viability

That's a good way to get \*\*bleep\*\* apps. One vendor blocks out all others. Should Roku be the only one we can discover content from?



Accept as Solution

Reply



### Re: Mobile remote app viability

<u>@joedean62</u>, I don't follow you; I feel like I must be missing something. How does not allowing ECP from 3rd-party platforms affect discovering content? I can understand people with Roku remote apps that were making money off of people that didn't know there was a free Roku app being upset, but that's about it.

#### **Roku Community Streaming Expert**

Help others find this answer and click "Accept as Solution." If you appreciate my answer, maybe give me a Kudo.

I am not a Roku employee.



Accept as Solution

Reply

Reply

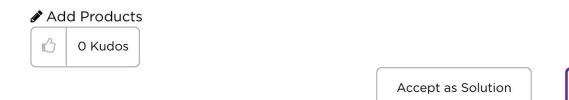


6 hours ago

### Re: Mobile remote app viability %

This video demos an app I am working on. I can see Roku's position that any app on your network having control of your TV could be problematic, but they should offer a program for developers that implements security. They should embrace this. There is huge revenue potential.

https://veamcast.com/veam? ownerid=cedf76f6ca144855b8e3c7b67b68e3c2&packageid=628f38cb0d7e4e8f8543840...





6 hours ago

Re: Mobile remote app viability

It looks like support for ECP commands from within Roku channel applications and other platforms, including mobile remote apps, has been discontinued. To adapt, you might want to explore alternative methods for controlling Roku devices, such as using the Roku mobile app's built-in features or updating your channel to comply with the new guidelines.





5 hours ago

### Re: Mobile remote app viability

<u>@joedean62</u>, thanks for sharing. Looks interesting, but it seems that anytime Roku opens up their devices to external apps they get burned by some douche bag that takes over a Roku device with some kind of scheme to show ads or otherwise make the douche bag money. I'm sure it's easier for them to just ban such uses than to implement some kind of security. A better place for this discussion is probably the developer section where I see you've also posted.

#### **Roku Community Streaming Expert**

Help others find this answer and click "Accept as Solution." If you appreciate my answer, maybe give me a Kudo.

I am not a Roku employee.





4 hours ago

### Re: Mobile remote app viability %

The L word is not allowed on this forum.

https://veamcast.com/veam? ownerid=cedf76f6ca144855b8e3c7b67b68e3c2&packageid=f97b852099a746fc93ca138...



#### Exhibit 4b: ECP - Roku API documentation

## **External Control Protocol (ECP)**

The External Control Protocol (ECP) enables a Roku device to be controlled over a local area network by providing a number of external control services. The Roku devices offering these external control services are discoverable using SSDP (Simple Service Discovery Protocol). ECP is a simple RESTful API that can be accessed by programs in virtually any programming environment.

Support for sending ECP commands from within a Roku channel application has been discontinued. Channels may no longer include code in their channel application that is designed to issue any type of ECP command. Static Analysis testing has been updated to check channels for ECP commands. Channels that include ECP commands in their code will automatically be blocked from publishing to the Roku Channel Store.

In addition, ECP commands may not be sent from 3rd-party platforms (for example, mobile applications).

Channels may still include code for handling incoming ECP commands sent by the Roku OS for deep links, voice controls, and so on.

To further leverage ECP commands for testing a channel's performance and behavior, it is recommended that developers integrate **Roku's automation test software** in their test suite.

#### Source:

https://developer.roku.com/docs/developer-program/dev-tools/external-control-api.md

Content: Roku's API documentation on the External Control Protocol (ECP)

**EXHIBIT 5:** Veamcast Roku demo for Roku Forum

Format: Video Recording

Source: Created by Plaintiff

File Name: <a href="mailto:Exhibit\_5\_Veamcast\_Roku\_demo\_for\_Roku\_Forum.mp4">Exhibit\_5\_Veamcast\_Roku\_demo\_for\_Roku\_Forum.mp4</a>

Video URL: <a href="https://www.youtube.com/watch?v=q6vg5-Gzoaw">https://www.youtube.com/watch?v=q6vg5-Gzoaw</a>

Original Video Source:

https://veamcast.com/veam?ownerid=cedf76f6ca144855b8e3c7b67b68e3c2&pac kageid=628f38cb0d7e4e8f8543840bfe7e5c49

Content: Video about Veamcast platform recorded and posted by Plaintiff and linked to from the Roku Forum in Exhibit 4a on August 26, 2024. Video demonstration of the Veamcast platform's Roku integration and functionality in the Veamcast apps.

### Transcript:

[0:01-0:25] This is Veamcast, and this is the Roku function of it. I have three Roku [devices] and you can just control your Roku from here, but the real purpose of this app is to share things.

[0:30-0:42] What I envisioned was people sharing what they're watching and even possibly purchasing things for other people like gifts.

[0:45-1:01] So... also, what'll happen is when you can send - you can send anything with this software, you can attach web links. Some of this stuff cannot be played on Roku, but the things that can, can be cast to it.

[1:12-1:42] So, let me see if I have something... Ok...Take this guy- Ramon, good show if you get the chance to watch it... Ramon Ray.... Okay, so you can watch it here or I can

cast it. Ok, so you can see it's streaming on my 32, and I'm going to press the Veamcast button.

[1:42-2:04] I'm actually taking this video on the mobile Veamcast app, which also has the Roku functions that have been deprecated. And now I'm going to show you the other functions in the app that have been deprecated - or no, they're obsolete, don't work anymore.

[2:18] Screen Overlay Text: This app was never published because we deep linked into other apps and used the search functionality, both removed but search still exists in the API doc. Now it seems all Roku functionality third party apps will be removed?

[2:21-2:52] I'm going to use the app to control it... and this...this is people can send each other these things.... This was interesting... this one wouldn't work because this is only a web page, so you couldn't see that one.

[2:52-3:12] But, the article is about Roku saying the first quarter was about... the word was 'programmatic'. So, I'm hoping I'm going to hear from somebody from Roku here because I put considerable amount of work into this thing. My app works without Roku but I thought it was a good addition.

[3:20-4:21] Okay so now I'm just using my webcam to show you the mobile app... so get the full remote here but also can go in my inbox and I can cast messages... so I'll just cast the one I just showed you... okay so you can see I'm streaming on my 32, so there we are.

**EXHIBIT 6:** Can't Post the Word 'Lawyer' on Roku Forums

Format: Video Recording & Screenshots

Date: August 24, 2024

Source: Created by Plaintiff

Video URL: <a href="https://www.youtube.com/watch?v=aeluHdchFsE">https://www.youtube.com/watch?v=aeluHdchFsE</a>

File Name: Exhibit\_6\_Cant\_Post\_Word\_Lawyer\_On\_Roku\_Forum.mp4

### Original Video Source:

https://veamcast.com/veam?ownerid=cedf76f6ca144855b8e3c7b67b68e3c2&packageid=f97b852099a746fc93ca1387304610db

Content: Video recorded and posted by Plaintiff and linked to from the Roku Forum in Exhibit 4a on August 26, 2024. Video recording and screenshots showing Plaintiff's experience attempting to post the word 'lawyer' on the Roku forums and then posting a screenshot of him posting the word 'lawyer' and getting error messages.

### Transcript:

[0:00-0:15] All right, so I have this thread on Roku support, and it's because they deprecated everything I was doing - basically wasted my time in using their platform.

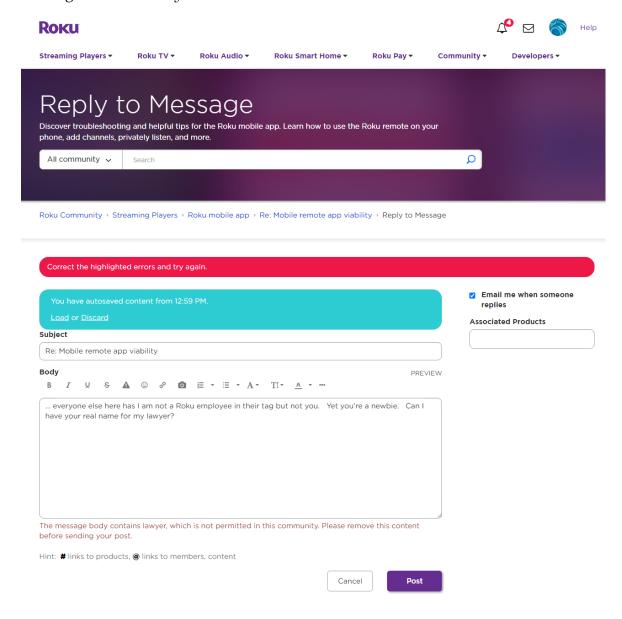
[0:21-0:38] But, I get to the bottom here and I sent them a video and I showed it to them, and if you'll notice everybody here has this "I am not a Roku employee." That's me here, here's another guy "not a Roku employee, just another Roku user," "I'm not a Roku employee."

[0:42-0:53] The last one doesn't have that so I guess it's a Roku employee, but he's a newbie and he posted three minutes after I posted, but the video is five minutes long so he didn't even watch it. So, that's just [cut]

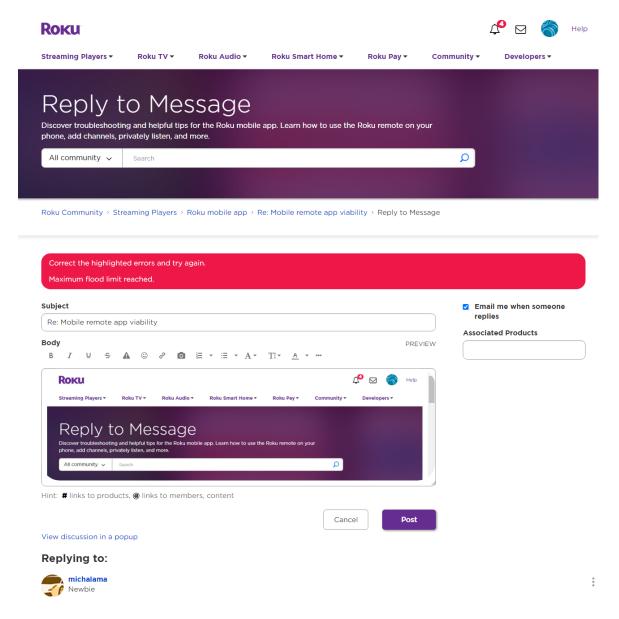
[1:00-1:30] So, I go to reply and I said "Everyone else here has 'I am not a Roku employee' in their tag but not you - you're a newbie. Can I have your real name for my lawyer?" And it won't let me post because it has the word "lawyer" which is not permitted in this community. Please remove this content before sending your post.

[1:33-1:48] So what I did - I took a screenshot of this, this screenshot here, and I tried to attach that and then I get this "maximum flood limit reached" so I caused flood. So this company is... uh, I don't know what to say.

Posting the word 'lawyer' is not allowed:



Posting a screenshot of the above screenshot results in a 'Maximum flood limit' reached error:



**EXHIBIT 7:** Roku Blog Post About Sharing Photos Using the Roku Mobile App with Photo Streams

Format: Roku website screen shot

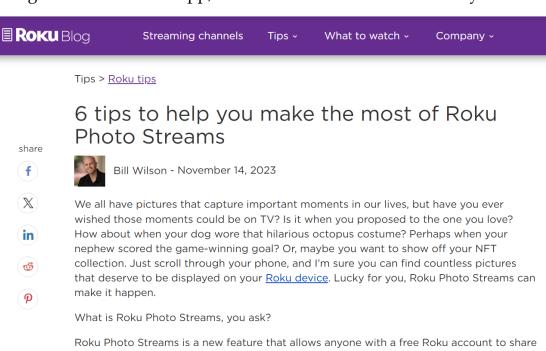
Post Date: November 14, 2023

Screenshot Date: November 9, 2024

https://www.roku.com/blog/roku-photo-streams?srsltid=AfmBOoqpPrDJIyHkWgqGEPEmN3BOgyNbrfZOrNx9ovgoThC38r7Qt8UN

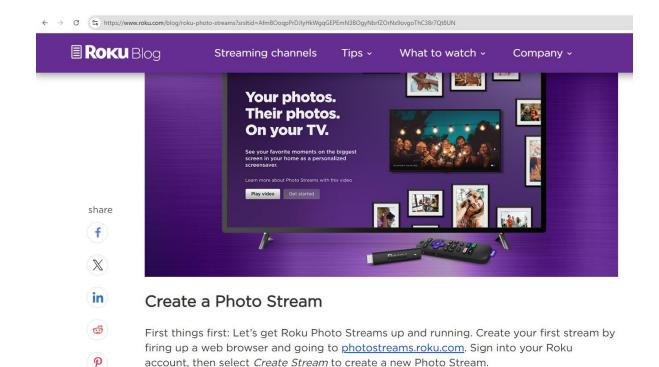
Source: Roku Official Blog Post

Content: Blog post about how to use your cell phone to share photos on Roku using the Roku Mobile App, a subset of Veamcast functionality.



Roku Photo Streams is a new feature that allows anyone with a free Roku account to share their favorite photos onscreen, turning your TV into a giant personalized digital photo frame. You can create digital albums, known as Streams, found on the Photo Streams channel on your Roku home screen. From unforgettable family reunion photos to embarrassing prom pictures, Roku Photo Streams helps you share moments by uploading up to 1,000 photos per Stream (JPG, PNG, HEIC and WEBP formats). You can also invite up to 25 family members and friends to join and contribute to each Stream with their Roku account, and you can also link your albums from Google Photos too.

So, without further ado, here are six ways you can make the most of Roku Photo Streams.



Do you have the <u>Roku mobile app</u>? Even better! Turn your Photo Streams into a reality by launching the app, then tapping on the user icon in the top corner. Once you are signed in, tap *Photo Streams*, then select *Create Stream*.

. . .

### Bottom of page:

share You can also make screensaver changes from your mobile app or photostreams.roku.com. f Use the Roku mobile app X Don't forget to upload your most memorable shots to the Roku mobile app while you're in on the go. Thanks to the app, you can still use the Roku Photo Streams feature even when you're away from the couch. You can easily launch your own Stream and/or contribute to ණ other Streams from the palm of your hand, letting you share even more special moments with family and friends. P Did you miss some breaking news while reading this post? Here's how to watch news channels for free on your Roku device. Happy Streaming! Tags: US



**EXHIBIT 8**: Anthony Wood Admits He Didn't Invent or Predict Fast Channels but Now Dominates Them

Format: Video Recording

Duration: 1:15

File Name: Exhibit\_8\_Fast\_Channels\_Interview.mp4

Video URL: <a href="https://www.youtube.com/watch?v=I6hY\_QC0zMQ">https://www.youtube.com/watch?v=I6hY\_QC0zMQ</a>

Original Video Source: Streaming Into the Future: Anthony Wood on the

Evolution of Digital Entertainment | SXSW 2024

https://www.youtube.com/watch?v=7ehjpBP0Vk0

Date Posted: Mar 20, 2024

Content: Interview with Roku CEO Anthony Wood discussing the company's dominance of the fast channels market, which he did not originally predict or invent.

### Transcript:

[0:00-0:11] \*\*Anthony Wood\*\*: Ads/advertising is a big trend. A lot of what we're focused on is helping services transition to advertising, helping them be successful with that.

[0:11-0:29] One of the big things is just engagement. If you have ads in your TV shows, the more people watch the ad, the more you can sell the ads for. And one of the best ways to get people to watch your TV show with an ad is to put an ad on a Roku home screen, for example.

[0:31-0:52] Another big trend right now - I was surprised by this - is what the industry calls FAST channels. These are basically linear television but on streaming, and it's just exploded. Like everyone's launching FAST channels. FAST channels are... it's a bad name, but it just means like a TV channel but on streaming instead of on linear.

[0:55-1:07] \*\*Interviewer\*\*: When streaming first came out, it was all on-demand.

\*\*Anthony Wood\*\*: Yeah, and I thought 'well that's a much better way to watch TV, why would you watch linear channels?' But turns out people don't want to decide what to watch, they just want to flip on a channel, let it play.

[1:10-1:13] So that's huge - that's a big driver of growth for us actually. We're the biggest FAST channel distributor.

### **EXHIBIT 9:** Roku TV Gives THE ROKU CHANNEL Unfair Advantage

Format: Screen Recording

Date: October 5, 2024

Duration: 2:40

File Name: Exhibit\_9\_Roku\_Channel\_Treatment.mp4

Video URL: https://www.youtube.com/watch?v=ZxYZWINn64I

Original Video Source:: Created by Plaintiff

Content: Screen recording demonstrating how Roku's user interface and design decisions give an unfair advantage to The Roku Channel

#### Key points:

Some key points the exhibit highlights:

- Roku Screensaver Ads: The screen recording shows that the Roku screensaver displays ads exclusively for content from The Roku Channel.
- Automatic Loading of The Roku Channel: When the Roku TV is powered
  on, it automatically loads the "Live TV" feature, which prominently
  features and defaults to content from The Roku Channel. Users have to
  take additional steps to access the home screen and other apps.
- Demotion of Third-Party Apps: The exhibit demonstrates how recently
  used third-party apps are demoted and harder to access, making it more
  difficult for users to navigate back to them. This contrasts with the
  preferred placement and visibility given to The Roku Channel.
- Search Functionality Favoring Roku Channel: The screen recording shows that when searching for content, third-party apps and services are not readily available, with The Roku Channel content taking priority.

• Interface Changes Advantaging Roku Channel: The user interface has been systematically redesigned to funnel users towards content and features from The Roku Channel, such as making it the default for "Live TV" and "Sports" sections.

### Transcript:

[0:01-0:13] Okay so this is the Roku screen saver and you can see this ad is from the Roku Channel.

[0:33-0:51] Another one... I don't know how long I'm going to do this for. There are several I've seen already, so I'm pretty sure every one of them in the screen saver is the Roku Channel.

[0:57-1:13] So Roku has decided that Roku Channel is the place to be.

[1:13-1:35] Okay so now I'm at the home screen, and power off... TV is off, then I'm going to power back on again and Live TV... I'm back in the Roku Channel.

[1:37-1:55] So I guess home screen isn't really a home screen... Okay so this is the Roku home screen and on my TV I turn it on, it goes to Live TV and I have to hit home to get here.

[1:58-2:36] And so the Charlie Puth show - we've seen that already on the Roku Channel. Live TV is definitely the Roku Channel. Sports is not, not sure about "What to Watch" and all that, but the top here - these are Roku Channel's top picks for me. I don't think it picks anything else out of the Roku Channel. Like if I choose Veamcast, it won't go up there, I know that. Not sure about the other apps, but this has been redesigned so that it's definitely advantage to Roku Channel, no question about it.

[2:41-3:34] So it's November 14th, it's about a month since I recorded the last video and I just wanted to do a follow-up because in the last video I said that Sports was not going to the Roku Channel but now it does. This is the Roku Channel I think they all are on the top row but I'll demonstrate this one and come back... yes goes to Live TV and you are in the Roku Channel. Roku Channel opening the Roku Channel.

[3:35-4:31] So go back... home, Live TV we know is the Roku Channel, then Sports now is the Roku Channel, go back here I think they all are... see if this is... so it's on the Roku Channel. So you do see the other apps here.

[4:17-5:25] I'll go back home and I will go to featured free and [demonstrates multiple selections] Roku Channel, Roku Channel, Roku Channel... To say that they've deprecated everybody else's apps is an understatement.

[5:25-6:22] So I'm going to show you... just pick one at random here... let's go to ABC Action News, I know that has a Roku Channel. Okay now it's downloading their app... now we're watching their app. This is not the Roku Channel and you can see ABC weather, very different interface.

[6:22-6:49] Okay now I'm going to go back home... alright and Action News is at the top. I'm going to hit the home button again and it's gone. Now if you want to get back to Action News you have to find it in the list again.

[6:49-7:15] So where is it... did they move it to the top... no it's... ABC there it is Action News. Okay I found it again. Okay so now I'm going to enter the Roku Channel here and pretty sure this is what Anthony Wood means when he says will be the new Roku homepage. He says that in one of the videos and the evidence, and this one here you can see very much favors the Roku Channel almost in every way.

[7:15-8:38] [Demonstrates multiple navigation attempts] And there are ways to get into other apps here like premium... I'm sure there's a deal somewhere where he gets paid something out of this... TV series let's try this... okay that would take you out into another... nope it's the Roku Channel... So his plan is to get rid of all third party apps definitely... just to continue on that so you see what I mean... I'm in the Roku Channel I'm going to do a search... and I want to search for ABC because we just watched the ABC channel right? The ABC News and their app isn't here... ABC app is nowhere to be found in here but we're in the Roku Channel, how about that.

**EXHIBIT 10:** Anthony Wood On Giving Back

Format: Video Recording

Date: May 15, 2024

Duration: 2:41

File Name: <a href="mailto:Exhibit\_10\_Wood\_Philanthropy.mp4">Exhibit\_10\_Wood\_Philanthropy.mp4</a>

Video URL: https://www.youtube.com/watch?v=mN98761g1ck

Original Video Source: Streaming Into the Future: Anthony Wood on the

Evolution of Digital Entertainment | SXSW 2024

https://www.youtube.com/watch?v=7ehjpBP0Vk0

Content: Interview with Roku CEO Anthony Wood discussing the company's philanthropic efforts and his attitude toward giving back, displaying corporate culture and leadership attitudes

### Transcript:

[0:05-0:23] \*\*Interviewer\*\*: I think just having people like yourself here is going to attract more people like that. Since you've been successful, I know that you've launched a foundation and you've got some very important initiatives there. How are you thinking about giving back and what are the areas that are most important to you?

[0:24-0:53] \*\*Anthony Wood\*\*: We give a fair amount to philanthropy. The areas we focus on - one is poverty alleviation, mostly focused on trying to help kids make good choices so they don't end up poor, so after-school programs, things like that. We give money to mental health and homelessness. Homelessness is an intractable problem, there's no good solution. You can help sort of on the edges because people have to help themselves.

[0:59-1:19] Mental health, and then science - we give a fair amount of money to science, both like medical research but also hard science. That's the more fun areas. For example, I give some money to McDonald Observatory for one of their Dark Energy projects, trying to figure out what dark energy is.

[1:23-1:40] We give money for cancer and that kind of stuff, but I was like, "What can I do that's interesting?" Yes, we can contribute a little bit to helping cure cancer, but the government gives lots of money and it's just going to be a small bit. So what can I do that's interesting?

[1:40-1:54] I thought about it and I go, "You know what I hate the most is jet lag - it ruins my vacation." So I fund two labs to cure jet lag. I thought, no way they're not going to cure jet lag, but I can try, we'll see what happens.

[1:56-2:25] And it turns out they're making good progress. One is at University of Pittsburgh, and they can replace a gene in mice so that they don't get jet lag. So if you want gene replacement therapy, you can avoid jet lag - it's a little bit extreme. And then the other one is at Texas A&M, and they're doing... they found compounds that you can take pills that will help eliminate jet lag.

[2:26-2:40] I joke with them when I visit the lab - they test these compounds on mold first, seems to work on mold, then they start testing on mice, seems to work on mice, so I'm like "Okay, start testing on college students next."

#### **EXHIBIT 11:** Roku Market Position Documentation

Format: Corporate Communications

Source: Roku's public SEC filings.

Content: Platform dominance and market power statements

#### A. Official Market Share Statistics (2020-2024)

Sources: Roku Form 10-K Annual Reports and Form 10-Q Quarterly Reports

- 1. Q1 2024 Market Share (Form 10-Q)
  - 48.3% of U.S. smart TV operating system market
  - Active TV manufacturer relationships: 15+ TV brands
  - #1 TV streaming platform by hours streamed (North America)
- 2. Historical Market Share Growth (Form 10-K)
  - 2020: 33% market share
    - o Q4 2020 Active Accounts: 46.1 million
    - o TV manufacturer partners: 11
  - 2021: 38% market share
    - o Q4 2021 Active Accounts: 55.1 million
    - o TV manufacturer partners: 13
  - 2023: 43% market share
    - o Q4 2023 Active Accounts: 70.2 million
    - o TV manufacturer partners: 15
  - 2024 Q1: 48.3% market share
    - o Q1 2024 Active Accounts: 80.1 million
    - TV manufacturer partners: 15+

#### **B. Platform Growth Metrics**

Sources: SEC Filings (Form 10-K and 10-Q)

- 1. Active Account Growth
  - 2020 Q4: 46.1 million accounts
  - 2021 Q4: 55.1 million accounts
  - 2022 Q4: 64.6 million accounts
  - 2023 Q4: 70.2 million accounts
  - 2024 Q1: 80.1 million accounts
- 2. Streaming Hours
  - 2020: 58.7 billion hours
    - Q4 2020: 17.0 billion hours
  - 2021: 73.2 billion hours
    - o Q4 2021: 19.5 billion hours
  - 2022: 87.4 billion hours
    - o Q4 2022: 23.9 billion hours
  - 2023: 95.2 billion hours
    - o Q4 2023: 25.1 billion hours
  - 2024 Q1: 27.3 billion hours
- 3. Platform Revenue Growth (Year-over-Year)
  - 2020: \$1.3 billion
  - 2021: \$2.3 billion (+77%)
  - 2022: \$2.7 billion (+17%)
  - 2023: \$3.1 billion (+15%)
  - 2024 Q1: \$850 million (+19% YoY)

**EXHIBIT 12:** Roku's mission is to power every TV in the world

Format: Video Recording

Date: Apr 11, 2017

Duration: 0:11

File Name: Exhibit\_12\_Roku\_Mission.mp4

Video URL: https://www.youtube.com/watch?v=f1MpyHxN4N8

Original Video Source:

What it's like working at Roku

https://www.youtube.com/watch?v=7EQ6bHoSn7c

Content: Global dominance goals and monopolistic intent

Transcript from YouTube:

[0:00-0:10] Anthony Wood: One key to being a successful company is really being focused on one singular mission. Roku's mission is to power every TV in the world - that's what we're focused on, and that's one of the reasons we're really good at it.

**EXHIBIT 13**: CNBC Roku CEO On IPO: Our Goal Is to Power Every TV In the World

Format: Video Recording

Date: September 28, 2017

Duration: 5:09

File Name: Exhibit\_13\_Roku\_IPO\_Interview.mp4

Video URL: https://www.youtube.com/watch?v=\_beHxVc\_VVg

Original Video Source: CNBC

https://www.youtube.com/watch?v=WgM-Xt8zIu8

Content: Interview with Roku CEO Anthony Wood discussing the company's IPO and goal to power every TV in the world

Transcript:

[0:00-0:08] \*\*Wood\*\*: Well obviously it's a huge milestone for Roku becoming a public company but yeah our goal is to power every TV in the world and we have 15 million active customers but there's a lot more to go.

[0:10-0:22] \*\*Interviewer\*\*: So for those people who don't totally understand the Roku model, there is the device itself but also there is the advertising and services piece of it and I don't think that everyone totally understands the breakdown of how that works.

[0:22-0:45] \*\*Wood\*\*: Yeah well so we've done an awesome job of letting people know about the Roku experience and when people think of Roku they think of the Roku home, the devices, the Roku TVs, but that's you know from an investor's point of view that's not our business - those are how we acquire active accounts. Our business is selling advertising, being a Next Generation ad platform, distributing content, being a Next Generation scale distribution content distribution platform.

[0:47-1:04] \*\*Interviewer\*\*: So your Revenue breakdown doesn't reflect that. I mean 74% of your revenues according to your S1 for 2016 was from the device right and then the rest of it is from the services platform revenue and two-thirds of the platform Revenue are from ads so you're talking a lot about the services component but that's actually a much smaller part of the business.

[1:04-1:22] \*\*Wood\*\*: Well 80% of our gross profit in the first half of this year came from our platform business which is advertising and content distribution. Advertising is the biggest part of our - I mean advertising is our bread and butter. That's you know as the world moves to streaming that means all TV advertising is moving to streaming there's a huge opportunity to become the next Generation Advanced TV.

[1:25-1:47] \*\*Interviewer\*\*: So the big question mark right now is where does Roku fit within the ecosystem if you will among this competitor set of much better funded dare I say companies like Apple, like Google and like Amazon and also what's the potential that some of those folks and others actually at some point decide they don't want to put their stuff on your service?

[1:50-2:14] \*\*Wood\*\*: Roku's position in ecosystem is being the platform that ties together the customers, the advertisers, the users and we've been competing with big companies for a long time very successfully. You know we have 15 million active accounts, it grew 42% year-over-year and we do that by not spending a lot of money on marketing. Obviously those guys have a lot more money - we do it by winning customer reviews. We have built a purpose-built operating system for TV, it's the best way to stream.

[2:17-2:37] \*\*Interviewer\*\*: So just this week Google pulled YouTube from the Amazon Echo right? You are Switzerland right now for most of these guys - they don't necessarily consider you to be in the same competitor set. Is there a chance at some point that one of these guys decides you know what we won't allow you to actually run some of our content?

[2:39-2:52] \*\*Wood\*\*: I don't know why they would do that. We're the largest platform for distributing content in the United States. If you want to reach the OTT audience at scale you need to be on Roku. That's why we're partners with Amazon, we're partners with Google, we're partners with all content providers.

[2:52-3:00] \*\*Interviewer\*\*: And are they all locked into a contract with you for a certain duration of time or could they pull at any time? How does that work given that all of them are jumping into this space?

[3:02-3:14] \*\*Wood\*\*: Well they've been in the space for a long time, they're strong partners of ours, all these companies. We do have contracts but really what they really want is to distribute their content to our customers which are the most engaged active customers in the streaming world.

[3:14-3:26] \*\*Interviewer\*\*: So as a Roku user what do I get for putting up with ads because right now we're in a world where people don't want ads - that's why I use Amazon as my platform to gain access to Netflix and to Hulu and to all the other apps that I have.

[3:28-3:58] \*\*Wood\*\*: Well people like free content - free is one of the most top search terms on our website when people are trying to decide what to buy. And you know people leave the traditional pay TV ecosystem for a couple reasons - OTT is a much better experience but it's also less expensive. And so customers don't want to pile on you know \$10 subscription over \$10 subscription - they want to have a few high-quality SVOD subscriptions for premium content and they want to lay on a bunch of free content. And we're seeing that happening - free content ad-supported content is the fastest growing segment on Roku today. Actually 40% of all viewing on Roku has ads in it.

[4:02-4:11] \*\*Interviewer\*\*: When you wake up in the morning and think about your competitors are you more worried about Apple Google and Amazon or are you more worried about Samsung and smart TVs that try to incorporate some of this kind of functionality themselves?

[4:14-4:43] \*\*Wood\*\*: When I wake up in the morning I don't think about my competitors. I'm focused on how can we make our experience better, how can we allow our partners to make more money, how can we get scale on our platform. And smart TVs are actually the best way for us to build scale - one in five smart TV sold in the first half of this year ran the Roku operating system where Roku TVs and that's going to keep growing. As you know just like smartphones have an OS they have Android, a phone company doesn't make their own operating system, the same phenomenon is happening on TVs.

[4:44-4:57] \*\*Interviewer\*\*: Correct so that's part of your Revenue stream - you license your software?

\*\*Wood\*\*: We do license but for us licensing to TV manufacturers is a way for us to bring more customers into our ecosystem and then we monetize them with our ad platform and our content distribution platform.

#### EXHIBIT 14: Roku, Inc. 2024 Annual Report (Form 10-K)

Format: SEC Filing

Filing Date: February 26, 2025

Filename: Exhibit\_14\_Roku\_2024\_10K.pdf

Content: Roku's official annual report filed with the Securities and Exchange Commission containing business overview, market position statements, platform strategy, revenue models, risk factors, and financial results.

Key sections include "Platform Segment: Growing and Monetizing User Engagement," "The Roku Experience," "The Roku Channel," "Competition," and "Risk Factors" related to developer relationships and platform dependencies.

## Key Quotes:

- "Roku, the #1 selling TV OS in the U.S., Canada, and Mexico, has surpassed 90 million streaming households"
- "We had 89.8 million and 80.0 million Streaming Households as of December 31, 2024 and 2023, respectively, reflecting an increase of 12%."
- "Beginning with our Q1 2025 earnings results, we will no longer report quarterly updates on Streaming Households and, by extension, ARPU"
- "Roku is in nearly half of all U.S. broadband households"
- "The Roku Channel benefits from its integration throughout the Roku Experience"
- "Our direct relationship with customers provides us with insights about their behavior on our streaming platform... This first party data enables us to develop actionable insights"
- "A key competitive advantage that continues to drive our success is the combination of our significant scale and the Roku Experience, which begins with the Roku Home Screen."
- "Owning and operating both The Roku Channel and our streaming platform creates unique value, making us a leader in free content, positioning us to be a valuable partner to content partners, and providing a large source of advertising inventory."

- "The Roku Channel benefits from its integration throughout the Roku Experience, which has features such as Live TV, Sports, What to Watch, and more that can surface content to our viewers directly."
- "Our significant scale, ability to reach highly engaged viewers, tools that enable seamless signups, and marketing/discovery features make us an attractive platform to content partners."
- "We are always seeking new ways to innovate to expand the role the Roku Experience can play in helping viewers find what to watch, which simultaneously benefits our content partners and advertisers while creating monetization opportunities for Roku."
- "We earn revenue by acquiring subscribers for certain of our content partners activated on or through our streaming platform, including Premium Subscriptions on The Roku Channel, which allow our users to pay for content from various content partners. If users reduce their use of our streaming platform for these purchases or subscriptions for any reason, including opting to pay for services directly with content partners or by other means for which we do not receive attribution, our business may be harmed."
- -"If our users sign up for offerings and services outside of our streaming platform or through other apps on our streaming platform, our business may be harmed.

We earn revenue by acquiring subscribers for certain of our content partners activated on or through our streaming platform, including Premium Subscriptions on The Roku Channel, which allow our users to pay for content from various content partners. If users reduce their use of our streaming platform for these purchases or subscriptions for any reason, including opting to pay for services directly with content partners or by other means for which we do not receive attribution, our business may be harmed.

In addition, certain apps available on our streaming platform allow users to purchase additional streaming services from within those apps. The revenue we earn from these transactions, if any, is not always equivalent to the revenue we earn from sales of such additional services on a stand-alone basis through our streaming platform. If users increase their spending on such in-app transactions at the expense of stand-alone purchases through our streaming platform, our business may be harmed."

**EXHIBIT A: Roku Developer Communications** 

A1. Roku Developer Email

Filename: Exhibit\_A1\_Roku\_Dev\_Email\_Feb\_6.pdf

From: Roku Developers <roku@email.roku.com>

Date: Thursday, February 6, 2025 2:04 PM

Subject: Roku crosses 90M streaming households, new Tax Withholding report, new requirements for ECP commands, and more!

Key Quotes:

"This incredible growth is largely due to our amazing developers, who work hard to deliver intuitive, high-performance experiences filled with great content that delights streamers."

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A2. Press Release Linked to from Roku Developer Email (A1)

Email link: "Roku Rings in the New Year with 90 Million Streaming

Households"

Filename: Exhibit A2\_Roku\_Press\_Release\_Jan\_7.pdf

**Key Quotes:** 

- "Roku, the #1 selling TV OS in the U.S., Canada, and Mexico, has surpassed 90

million streaming households"

- "Roku is in nearly half of all U.S. broadband households"

- "Roku's extensive scale sets us apart in the streaming industry, with more

engagement than any other TV OS platform in the U.S."

- "Thanks to our laser focus on simplifying and enhancing the streamer's journey,

Roku is the preferred choice for millions of viewers."

- "Roku's features like universal search, What to Watch, and Live TV Guide make

it easy to find your favorite content across multiple apps"

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# A3. API Documentation Linked from Roku Developer Email (A1)

Email Link: "New requirements added to ECP commands"

campaign=20250206-Developer-US-Newsletter\_Q4\_2024

URL: <a href="https://developer.roku.com/docs/developer-program/dev-">https://developer.roku.com/docs/developer-program/dev-</a>

tools/external-control-

api.md?lid=guu5b3t3ka6g&utm\_source=marketing&utm\_medium=email&utm\_

## **External Control Protocol (ECP)**

The External Control Protocol (ECP) enables a Roku device to be controlled over a local area network by providing a number of external control services. The Roku devices offering these external control services are discoverable using SSDP (Simple Service Discovery Protocol). ECP is a simple RESTful API that can be accessed by programs in virtually any programming environment.

As of Roku OS 14.1, the Settings > System > Advanced system settings > Control by mobile apps feature must be set to "Enabled" for a Roku device to receive the following ECP

- keypress
- keydown
- keydow
   keyup
- query/icon
- query/tv-channelsquery/tv-active-channel

In addition, the following ECP commands require the Roku device to be in developer mode and the Control by mobile apps setting to be "Enabled"

- query/chanperf
- query/r2d2-bitmaps
- query/sgnodes
- query/sgrendezvous and sgrendezvous
- query/registry
- query/graphics-frame-rate
- query/fwbeacons and fwbeacons
- query/app-object-countsquery/channel-state
- exit-app

As of Roku OS 12.0, the "search" command is no longer available.

Support for sending ECP commands from within a Roku app has been discontinued. Apps may no longer include code in their app that is designed to issue any type of ECP command. Static Analysis testing has been updated to check apps for ECP commands. Apps that include ECP commands in their code will automatically be blocked from publishing to the Streaming Store.

In addition, ECP commands may not be sent from 3rd-party platforms (for example, mobile applications).

# Key Quotes:

- "As of Roku OS 14.1, the Control by mobile apps setting must be Enabled for a Roku device to receive ECP commands" [New requirement added]

- "In addition, ECP commands may not be sent from 3rd-party platforms (for example, mobile applications)" [Unchanged from previous documentation]
- "As of Roku OS 12.0, the 'search' command is no longer available" [New retroactive announcement of changes made in 2023]

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#### (copy for comparison):

Exhibit 4b: ECP - Roku API documentation

# External Control Protocol (ECP)

The External Control Protocol (ECP) enables a Roku device to be controlled over a local area network by providing a number of external control services. The Roku devices offering these external control services are discoverable using SSDP (Simple Service Discovery Protocol). ECP is a simple RESTful API that can be accessed by programs in virtually any programming environment.

Support for sending ECP commands from within a Roku channel application has been discontinued. Channels may no longer include code in their channel application that is designed to issue any type of ECP command. Static Analysis testing has been updated to check channels for ECP commands. Channels that include ECP commands in their code will automatically be blocked from publishing to the Roku Channel Store.

In addition, ECP commands may not be sent from 3rd-party platforms (for example, mobile applications).

Channels may still include code for handling incoming ECP commands sent by the Roku OS for deep links, voice controls, and so on.

To further leverage ECP commands for testing a channel's performance and behavior, it is recommended that developers integrate **Roku's automation test software** in their test suite.

# **EXHIBIT B: Roku Developer Forum - Search API Discussion**

Format: Forum Thread
Source: Roku Developer Forum
Date Range: October 12, 2023 - August 22, 2024
URL: <a href="https://community.roku.com/t5/Roku-Developer-Program/Did-12-5-">https://community.roku.com/t5/Roku-Developer-Program/Did-12-5-</a>
break-search-browse-ECP/m-p/991582#M53771
Filename: Exhibit_B_Search_API_Discussion_Roku_Community.pdf
Content: Developer discussion documenting Roku's undisclosed removal of
search API functionality and pattern of maintaining misleading documentation
Key Posts:
October 12, 2023 [Initial Report]
October 12, 2023 [mittal Report]
DP_Tech (Binge Watcher):
"Did 12.5 break search/browse ECP? It appears this is no longer functioning"

October 12, 2023 [Official Response] RokuBen (Community Moderator): "Yes, this is not currently supported. Roku has replaced the search system with a new implementation that's based on the same services that power What to Watch and Live TV." October 15, 2023 jksalvo (Reel Rookie): "Do you know if there is a plan to re-implement the API search feature in the future?" November 21, 2023 user442 (Reel Rookie):

"Yes! Please update the documentation. I just spent hour trying to figure out why I couldn't do this and then I found this thread. Absolute BS."

December 22, 2023

zpelkey (Newbie):

"I registered a username in the forums just to say how angry I am and how unacceptable this is... This is frankly shameful, you have devs out hear wasting hours and have an API in prod that's deprecated/broken without any information."

August 22, 2024

"Unreal you still haven't updated this. Anybody home Roku?"

# Significance:

- Documents removal of search functionality without announcement
- Shows pattern of maintaining misleading documentation
- Demonstrates multiple developers affected
- Establishes timeline of API restrictions
- Confirms Roku's awareness through moderator response

# **EXHIBIT C: Veamcast Repo Analysis for Damages Evidence**

Format: Video Recording with Text Panels created by Plaintiff January 2025

Note: Video has no audio

File Name: <a href="mailto:Exhibit\_C\_Veamcast\_Repo\_Analysis.mp4">Exhibit\_C\_Veamcast\_Repo\_Analysis.mp4</a>

Can also be viewed at: <a href="https://www.youtube.com/watch?v=ogVIIIIFa1w">https://www.youtube.com/watch?v=ogVIIIIFa1w</a>

Content: Screen recording of Veamcast's development repository with explanatory text panels, demonstrating development history, technical investment, and lost market opportunities.

## **Transcript:**

[00:00] [Title Screen displays]:

#### VEAMCAST PLATFORM DEVELOPMENT

**Software Repository Analysis 2010-2025** 

# **Demonstrating:**

- Verified Development History
- Quantifiable Technical Investment
- Professional Software Development
- Platform Innovation Timeline
- Documented Business Value

[00:18] [Screen shows Veamcast Azure DevOps About Page] [Text Panel displays]:

Veamcast code repository on Azure DevOps (goes back to 2012, 2 years into the project)

[00:24] [Screen shows navigation through code base] [Text Panel displays]:

Microsoft/Azure DevOps can authenticate this information in several ways:

**Official Records:** 

You can request a formal data export from Microsoft

**Expert Testimony:** 

Microsoft engineers can testify Chain of Custody:

Microsoft can verify data authenticity:

All Azure DevOps data is stored with timestamps and digital signatures

[00:38]

[Screen shows navigation to SyncStor folder] [Text Panel displays]:

This solution represents the bulk of the work but there are 3 others.

We also have considerable business plans and docs that are not under source control.

In 2012, the code (882 files) was imported from another repository that was used from 2010 till then.

[00:54] [Screen transitions to History view, showing most recent changeset from Jan 9 12:12 AM at the top and it begins scrolling downward rapidly through the changesets...Text Panel explains]:

Each entry is a Changeset which represents one or more files in the Solution being edited.

They can range from small changes to major revisions.

The API exposes how many files were changed, added and deleted.

[01:18] [Scrolling continues...Text Panel displays]:

Azure DevOps provides an API to allow developers to analyze this data.

[01:28] [Scrolling continues...Text Panel displays]: Joe Dean developed a program to loop through the changesets and get some statistics. [01:34] [Screen shows repository analysis]: REPOSITORY ANALYSIS REPORT \_\_\_\_\_ Analysis Period: 08/21/2012 to 01/09/2025 Total Duration: 4523.8 days (646.3 weeks) **REPOSITORY METRICS Total Changesets: 2,132** Average Changes per Week: 3.3 **Total File Operations: 34,741** - Added: 8,244 - Modified: 24,907

- Deleted: 1,340

[02:00] [Screen pauses on 2019 changesets showing many Roku-related entries in the history labeled 'Roku Changes', 'Roku Projects', 'Roku Stuff', 'Roku Changes – works well', and various other similar Check-In Comments containing 'Roku']

[02:20] [Scrolling continues... Text Panel displays]:

#### PLATFORM VALUE PROPOSITION & MARKET OPPORTUNITY

\_\_\_\_\_

**Veamcast Innovation Points:** 

- First platform to combine:
  - \* Social content sharing
  - \* Direct TV casting control
  - \* Cross-platform deep linking
  - \* Multi-device synchronization
  - \* Unified content discovery

**Technical Architecture Value:** 

- Cloud-native design
- Cross-platform development
- Real-time communication

- Content delivery network

- Scalable infrastructure

Business Model Innovation:

- User-driven content sharing

- Social TV interaction

- Gift/purchase capabilities

- Cross-platform monetization

- Network effect multipliers

[02:54] [Text Panel displays]:

**Lost Market Opportunities:** 

- 1. Social TV Integration:
- \* No platform currently combines social and TV effectively
- \* Growing market for shared viewing experiences
- \* Remote viewing coordination needs unmet
- \* Social commerce potential untapped
- 2. Content Discovery Revolution:
  - \* Cross-platform content finding

* Social recommendation engine
* Unified viewing experience
* Personalized content streams
3. Platform Economic Potential:
* Network effect scalability
* Multi-sided platform model
* Transaction fee potential
* Advertising opportunities
* Premium feature upsells
* Network effect potential
* First-mover advantage
* Platform ecosystem value
* Developer community potential
[03:34] [Screen continues showing repository] [Text Panel displays]:
Lost Opportunities (continued):
Similar Platform Valuations (At Acquisition/IPO):

- WhatsApp: \$19B (Facebook, 2014)
- Instagram: \$1B (Facebook, 2012)
- Discord: \$15B (Valuation, 2021)
- Slack: \$27.7B (Salesforce, 2020)
- Twitch: \$970M (Amazon, 2014)
- YouTube: \$1.65B (Google, 2006)
- TikTok: \$50B (Valuation, 2020)
- Snapchat: \$24B (IPO, 2017)
- Pinterest: \$12.7B (IPO, 2019)
- LinkedIn: \$26.2B (Microsoft, 2016)
- Skype: \$8.5B (Microsoft, 2011)
- Zoom: \$9.2B (IPO, 2019)
- Roku: \$1.3B (IPO, 2017)
- Pluto TV: \$340M (Viacom, 2019)

[04:00] [Text Panel displays]:

**CONCLUSION: DOCUMENTATION OF** 

- 12+ years continuous development

- 2,132 documented code changes

- 34,741 total file operations

- Microsoft-authenticated timeline

- Multiple repository history not included here

- Another repo prior to 2013 not included here

- Add business development, graphic arts and now legal work

The development history shows sustained, professional platform development reaching across multiple technology shifts - from the early days of streaming through mobile revolution to today's integrated TV platforms. Each development phase built upon previous work, creating a comprehensive platform combining social interaction, content discovery, and multi-device integration.

This wasn't just code being written - it was platform architecture evolving to meet changing user needs and technological capabilities. The repository shows careful consideration of scalability, user experience, and platform integration

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at every stage. The work represents thousands of architectural decisions, careful technical planning, and continuous refinement based on emerging technologies and user needs.

The abrupt platform access restrictions didn't just stop ongoing development they invalidated years of careful platform evolution and technical integration.

Features that had been refined over years through thousands of code changes
became impossible to implement. The authentic development history, verified
by Microsoft's Azure DevOps platform, demonstrates how systematic API
restrictions eliminated not just current functionality, but years of platform
development and future market potential.

When you see industry-standard repository metrics showing this level of sustained, professional development - with thousands of code changes and continuous refinement over many years - you're looking at the core technical foundation of a serious platform business. The damage wasn't just to current operations - it was to years of verified platform development and future market opportunities.

[05:18] [Final text panel]:

Thank you for watching.

[05:34] [The end]

#### **Citations**

#### FTC v. Meta Platforms, Inc., Case No.: 1:20-cv-03590-JEB (Aug 19, 2021)

Source: First Amended Complaint

¶131: "[Platform] drove significant benefits to app and web developers and users — and to Facebook," resulting in Facebook becoming "important infrastructure for third-party apps" before obtaining "immense power over apps' developmental trajectories"

¶8: "Facebook actively invited app developers onto its platform, granting them open access to critical application programming interfaces ("APIs") and tools needed to interconnect with Facebook. This open access policy drove developer and user engagement with Facebook, which in turn helped to fuel Facebook's massive advertising profits. But as developers expanded popular offerings, Facebook came to view them as a threat, recognizing that some could aid emerging rivals or even challenge Facebook directly. In response, Facebook retooled its API policies into an anticompetitive weapon."

FTC v. Meta, No. 20-3590 (JEB) (D.D.C. Nov. 13, 2024) page 61 referencing United States v. Google LLC, 2024 WL 3647498, at \*114 (D.D.C. 2024)

"The loss of nascent competitors is a clear anticompetitive effect."

# United States v. Microsoft Corp., 253 F.3d 34, 61 (D.C. Cir. 2001), ¶411

Quote: "Microsoft placed an oppressive thumb on the scale of competitive fortune, thereby effectively guaranteeing its continued dominance in the relevant market."

Quote: "the loss of nascent, albeit unproven, competitors is a harm that is cognizable under the Sherman Act".

## Ohio v. American Express Co., 585 U.S. 529, 542 (2018)

"reduced output, increased prices, or decreased quality in the relevant market" serve as "[d]irect evidence of anticompetitive effects."

## Areeda & Hovenkamp, Antitrust Law ¶ 801d (5th ed. 2022)

 $\P$  701a: "A dominant firm's exploitation of control over an 'essential facility' or other critical input can violate the Sherman Act's prohibitions on monopolization and attempts to monopolize."

"Restrictions on access to application programming interfaces (APIs) that are necessary for interoperability can constitute unlawful monopolization."

¶ 776b: "A monopolist's refusal to deal with or to provide access to a rival can violate Section 2 when it serves no legitimate business purpose and appears designed solely to maintain the monopolist's market dominance."

"Limiting access to critical inputs like APIs can be anticompetitive when there is no valid business justification."

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