

Net Neutrality



Dr. Jeremy Gillula

the **EVERYTHING ELSE SHOW LIVE STREAM**

everything-else-show.com

1
00:00:12,780 --> 00:00:09,740

[Music]

2
00:00:15,090 --> 00:00:12,790

hello and welcome to the show and I'm

3
00:00:16,710 --> 00:00:15,100

here with and I hope I pronounce his

4
00:00:21,900 --> 00:00:16,720

name correctly that's one thing I forgot

5
00:00:25,170 --> 00:00:21,910

to ask him is dr. Jeremy Gehl ulla right

6
00:00:27,929 --> 00:00:25,180

on it's close that's exact yep that's it

7
00:00:30,810 --> 00:00:27,939

all right hey welcome to the show thanks

8
00:00:34,110 --> 00:00:30,820

so much for coming on and talking about

9
00:00:37,650 --> 00:00:34,120

this controversial topic we're hearing

10
00:00:39,479 --> 00:00:37,660

it a lot in the news and so first of all

11
00:00:41,580 --> 00:00:39,489

before we get into what it is exactly

12
00:00:46,770 --> 00:00:41,590

we're gonna be talking about what is

13
00:00:48,869 --> 00:00:46,780

your background to begin with so my name

14

00:00:51,389 --> 00:00:48,879

is as I said I'm dr. Jeremy blue my

15

00:00:52,860 --> 00:00:51,399

backgrounds computer science and I made

16

00:00:56,520 --> 00:00:52,870

technologist that works at the

17

00:01:00,389 --> 00:00:56,530

Electronic Frontier Foundation okay and

18

00:01:04,079 --> 00:01:00,399

have you like always had an interest in

19

00:01:06,660 --> 00:01:04,089

in working with this type of

20

00:01:08,610 --> 00:01:06,670

organization or how long have you been

21

00:01:11,250 --> 00:01:08,620

there first of all I've I've been with

22

00:01:14,820 --> 00:01:11,260

EF F for uh gosh now it's been almost

23

00:01:17,940 --> 00:01:14,830

four years and I before I started

24

00:01:20,220 --> 00:01:17,950

working at EF f my backgrounds actually

25

00:01:23,490 --> 00:01:20,230

robotics and computer science so oh well

26

00:01:25,710 --> 00:01:23,500

in in high school in college in grad

27

00:01:28,820 --> 00:01:25,720

school I was always focused on robotics

28

00:01:31,920 --> 00:01:28,830

and building autonomous cars or drones

29

00:01:34,350 --> 00:01:31,930

but eventually I realized that you know

30

00:01:35,970 --> 00:01:34,360

all the fancy was you know gadgets and

31

00:01:38,880 --> 00:01:35,980

whiz-bang technology I create I can

32

00:01:40,620 --> 00:01:38,890

create don't mean anything if there

33

00:01:43,200 --> 00:01:40,630

aren't you know common-sense regulations

34

00:01:44,850 --> 00:01:43,210

and you know rules out there if we don't

35

00:01:46,770 --> 00:01:44,860

have politicians that understand this

36

00:01:51,300 --> 00:01:46,780

technology yeah and so that's why I

37

00:01:54,480 --> 00:01:51,310

ended up yeah well that's uh that's

38

00:01:57,090 --> 00:01:54,490

exciting stuff to what you I mean that

39

00:01:58,980 --> 00:01:57,100

out that fascinates me too autonomous

40

00:02:01,320 --> 00:01:58,990

cars and where they're going to go you

41

00:02:04,260 --> 00:02:01,330

know I have a late-model car that has

42

00:02:06,300 --> 00:02:04,270

radar cruise control and auto dimming

43

00:02:08,219 --> 00:02:06,310

lights and lane control and all that and

44

00:02:10,020 --> 00:02:08,229

it's great I love it and I can't wait

45

00:02:10,610 --> 00:02:10,030

till it advances but that's for another

46

00:02:15,330 --> 00:02:10,620

show

47

00:02:20,320 --> 00:02:15,340

yeah for right now I would like to I'm

48

00:02:23,590 --> 00:02:20,330

gonna play a clip that was during a live

49

00:02:26,980 --> 00:02:23,600

interaction with John Legere he is the

50

00:02:32,790 --> 00:02:26,990

CEO of t-mobile I'm gonna play this clip

51
00:02:36,160 --> 00:02:32,800
right here for everyone to hear hang on

52
00:02:38,020 --> 00:02:36,170
so what what binge on it includes a

53
00:02:40,360 --> 00:02:38,030
proprietary technology and what the

54
00:02:42,520 --> 00:02:40,370
technology does is not only detect the

55
00:02:46,390 --> 00:02:42,530
video stream but select the appropriate

56
00:02:48,460 --> 00:02:46,400
bitrate to optimize to the video the

57
00:02:50,200 --> 00:02:48,470
mobile device that's part of my answer

58
00:02:52,960 --> 00:02:50,210
Part B of my answer is who to fire you

59
00:02:56,500 --> 00:02:52,970
anyway PFF why are you stirring up so

60
00:02:59,740 --> 00:02:56,510
much trouble and who pays you alright so

61
00:03:03,130 --> 00:02:59,750
that was it and he says who the F are

62
00:03:06,790 --> 00:03:03,140
you who who is Electronic Frontier

63
00:03:10,180 --> 00:03:06,800

Foundation so we are a digital civil

64

00:03:11,980 --> 00:03:10,190

liberties nonprofit so we're a nonprofit

65

00:03:16,570 --> 00:03:11,990

organization we're a weird combination

66

00:03:19,120 --> 00:03:16,580

of technologists like myself who as well

67

00:03:20,950 --> 00:03:19,130

as we've got activists and lawyers and

68

00:03:23,620 --> 00:03:20,960

basically we work together to make sure

69

00:03:26,470 --> 00:03:23,630

that the internet stays open and free

70

00:03:29,260 --> 00:03:26,480

that you don't get bad laws that govern

71

00:03:32,710 --> 00:03:29,270

the internet that we you know keep

72

00:03:36,040 --> 00:03:32,720

maintain our privacy online we work on

73

00:03:39,280 --> 00:03:36,050

other issues like patent law so

74

00:03:41,560 --> 00:03:39,290

copyright trolling that sort of thing we

75

00:03:44,470 --> 00:03:41,570

basically if it comes to civil liberties

76

00:03:46,600 --> 00:03:44,480

or civil rights or privacy and

77

00:03:49,630 --> 00:03:46,610

technology it's something that we work

78

00:03:53,380 --> 00:03:49,640

on now the one thing that I can't

79

00:03:55,420 --> 00:03:53,390

understand is how how do you control

80

00:03:59,259 --> 00:03:55,430

something or regulate something that is

81

00:04:01,270 --> 00:03:59,269

worldwide yeah that's a good question

82

00:04:03,699 --> 00:04:01,280

and a big part of what we do is trying

83

00:04:06,729 --> 00:04:03,709

to convince governments worldwide that

84

00:04:10,060 --> 00:04:06,739

you cannot control something that you

85

00:04:12,370 --> 00:04:10,070

know so I should probably start by

86

00:04:14,860 --> 00:04:12,380

saying just throwing the disclaimer out

87

00:04:16,479 --> 00:04:14,870

there I'm not a lawyer because a lot of

88

00:04:19,150 --> 00:04:16,489

people who work at EF F are lawyers but

89

00:04:21,849 --> 00:04:19,160

I am not so nothing I say is even close

90

00:04:25,140 --> 00:04:21,859

to legal advice or legal opinions but

91

00:04:27,700 --> 00:04:25,150

you know there's Canada for example

92

00:04:29,200 --> 00:04:27,710

recently had a court Russ it basically

93

00:04:33,220 --> 00:04:29,210

the Canadian equivalent of the Supreme

94

00:04:35,920 --> 00:04:33,230

Court ruled that they could

95

00:04:37,660 --> 00:04:35,930

Google who censor certain search results

96

00:04:39,070 --> 00:04:37,670

worldwide so no matter where you're

97

00:04:41,920 --> 00:04:39,080

searching from no matter what country

98

00:04:44,860 --> 00:04:41,930

because Canada thinks that their law is

99

00:04:46,750 --> 00:04:44,870

supreme they should be able to do that

100

00:04:48,610 --> 00:04:46,760

and of course the that's a ridiculous

101
00:04:51,070 --> 00:04:48,620
idea because why should Canadian law

102
00:04:53,440 --> 00:04:51,080
affect what people in the US search can

103
00:04:56,560 --> 00:04:53,450
search for or vice versa and we see that

104
00:04:57,970 --> 00:04:56,570
all over the world in Europe there's

105
00:05:00,010 --> 00:04:57,980
this thing called the right to be

106
00:05:03,570 --> 00:05:00,020
forgotten where companies are supposed

107
00:05:05,350 --> 00:05:03,580
to censor certain results and

108
00:05:07,810 --> 00:05:05,360
governments in Europe are trying to

109
00:05:09,420 --> 00:05:07,820
argue that you know it should extend no

110
00:05:11,980 --> 00:05:09,430
matter where someone is searching from

111
00:05:15,460 --> 00:05:11,990
and it's it's yeah it's kind of silly

112
00:05:17,370 --> 00:05:15,470
yeah I spent some time in Russia this

113
00:05:21,700 --> 00:05:17,380

year and I just came from Canada

114

00:05:24,640 --> 00:05:21,710

yesterday actually and so I noticed this

115

00:05:27,790 --> 00:05:24,650

geo blocking and you know in certain

116

00:05:30,120 --> 00:05:27,800

websites and how does that how does that

117

00:05:33,220 --> 00:05:30,130

work I can't understand how that works

118

00:05:36,940 --> 00:05:33,230

so I basically the way it works is when

119

00:05:39,670 --> 00:05:36,950

you're accessing a website that website

120

00:05:41,590 --> 00:05:39,680

knows what your IP address is so this is

121

00:05:44,890 --> 00:05:41,600

the the address given to your computer

122

00:05:47,500 --> 00:05:44,900

basically it's kind of like the I mean

123

00:05:50,470 --> 00:05:47,510

the bad the imperfect analogy is that

124

00:05:52,560 --> 00:05:50,480

it's like your address your like postal

125

00:05:55,930 --> 00:05:52,570

address but in terms of the internet

126

00:05:57,700 --> 00:05:55,940

it's a bad analogy because you move

127

00:05:59,320 --> 00:05:57,710

around your computer might end up having

128

00:06:00,550 --> 00:05:59,330

different you know IP addresses

129

00:06:02,440 --> 00:06:00,560

depending on whether you're connecting

130

00:06:05,410 --> 00:06:02,450

from home or from work or from a coffee

131

00:06:07,270 --> 00:06:05,420

shop from an airport but that's the

132

00:06:10,360 --> 00:06:07,280

imperfect thing and in particular IP

133

00:06:12,850 --> 00:06:10,370

addresses generally correspond to

134

00:06:14,530 --> 00:06:12,860

certain geographic regions because your

135

00:06:17,010 --> 00:06:14,540

IP address comes from your internet

136

00:06:18,850 --> 00:06:17,020

provider and your internet provider

137

00:06:21,430 --> 00:06:18,860

generally only serves a certain

138

00:06:22,950 --> 00:06:21,440

geographic area so that's how the geo

139

00:06:25,600 --> 00:06:22,960

block works they know that you know

140

00:06:27,160 --> 00:06:25,610

these particular addresses come from

141

00:06:28,840 --> 00:06:27,170

United States they've been assigned to

142

00:06:30,700 --> 00:06:28,850

companies in the United States who then

143

00:06:32,710 --> 00:06:30,710

give it out to their customers or they

144

00:06:35,650 --> 00:06:32,720

know that this one comes from someone in

145

00:06:37,060 --> 00:06:35,660

Canada or someone in Russia and so then

146

00:06:38,650 --> 00:06:37,070

the website that's doing the geo

147

00:06:40,540 --> 00:06:38,660

blocking or if they've subscribed to a

148

00:06:43,060 --> 00:06:40,550

service that'll help them help do it for

149

00:06:44,590 --> 00:06:43,070

them they say we'd you know these are

150

00:06:46,390 --> 00:06:44,600

the certain regions these are certain

151
00:06:47,779 --> 00:06:46,400
countries where we can or cannot show

152
00:06:51,079 --> 00:06:47,789
certain result

153
00:06:52,609 --> 00:06:51,089
and that then those services know okay

154
00:06:57,320 --> 00:06:52,619
when you connected to us that's what IP

155
00:06:59,359 --> 00:06:57,330
address in camera so okay now so I was

156
00:07:01,669 --> 00:06:59,369
under the misconception and it's only

157
00:07:04,339 --> 00:07:01,679
because I'm I'm not tech savvy in any

158
00:07:06,379 --> 00:07:04,349
type of way but I was under the

159
00:07:09,139 --> 00:07:06,389
misconception that an IP address was

160
00:07:12,109 --> 00:07:09,149
linked to a computer but it's not it's

161
00:07:14,659 --> 00:07:12,119
linked to where it connects from yeah

162
00:07:17,329 --> 00:07:14,669
exactly so you know my laptop I take it

163
00:07:18,889 --> 00:07:17,339

to work and I go to Google Google will

164

00:07:20,929 --> 00:07:18,899

see an entirely different IP address

165

00:07:22,399 --> 00:07:20,939

than when I connect from home it's the

166

00:07:24,679 --> 00:07:22,409

same thing with your you know your smart

167

00:07:26,629 --> 00:07:24,689

phone if you're connecting over Wi-Fi

168

00:07:28,189 --> 00:07:26,639

it'll be a different IP address than

169

00:07:31,219 --> 00:07:28,199

when you turn off the Wi-Fi and you're

170

00:07:33,679 --> 00:07:31,229

connecting on your providers network so

171

00:07:34,909 --> 00:07:33,689

it it just changes depending on it is

172

00:07:37,820 --> 00:07:34,919

about the connection that you're

173

00:07:40,009 --> 00:07:37,830

connecting through I see I see okay so

174

00:07:43,309 --> 00:07:40,019

the elephant in the living room here is

175

00:07:46,040 --> 00:07:43,319

net neutrality and it's very confusing

176

00:07:48,679 --> 00:07:46,050

what I want to talk about is what

177

00:07:50,779 --> 00:07:48,689

tonight is what net neutrality first of

178

00:07:53,869 --> 00:07:50,789

all is and the best way you can explain

179

00:07:56,989 --> 00:07:53,879

it and then second of all what would

180

00:08:01,419 --> 00:07:56,999

happened if all the regulations against

181

00:08:04,369 --> 00:08:01,429

that right right now are holding it back

182

00:08:06,769 --> 00:08:04,379

that can destroy net neutrality I want

183

00:08:12,109 --> 00:08:06,779

to talk about what would happen if that

184

00:08:14,419 --> 00:08:12,119

you know if they were robotic so so why

185

00:08:16,309 --> 00:08:14,429

does net neutrality so you know I've

186

00:08:17,749 --> 00:08:16,319

seen various definitions and you know

187

00:08:20,209 --> 00:08:17,759

there's you know really boring

188

00:08:23,600 --> 00:08:20,219

definitions about like an internet

189

00:08:26,449 --> 00:08:23,610

provider must not interfere with lawful

190

00:08:28,279 --> 00:08:26,459

traffic between the user and the users

191

00:08:30,379 --> 00:08:28,289

choice of destination or something like

192

00:08:33,409 --> 00:08:30,389

that but for me I just sort of ignore

193

00:08:35,569 --> 00:08:33,419

all these sort of boring definitions and

194

00:08:37,279 --> 00:08:35,579

I say for me net neutrality means that

195

00:08:39,230 --> 00:08:37,289

my internet provider so the company that

196

00:08:41,439 --> 00:08:39,240

I'm paying money to to get on the

197

00:08:44,509 --> 00:08:41,449

internet shouldn't mess with my traffic

198

00:08:46,670 --> 00:08:44,519

they shouldn't they shouldn't futz with

199

00:08:48,860 --> 00:08:46,680

it in any way so that means that if I'm

200

00:08:51,139 --> 00:08:48,870

sending you know if I'm trying to stream

201
00:08:54,050 --> 00:08:51,149
video that they shouldn't be throttling

202
00:08:55,790 --> 00:08:54,060
that video at least and and there's sort

203
00:08:57,230 --> 00:08:55,800
of this little asterisk there they

204
00:08:59,059 --> 00:08:57,240
shouldn't be doing it unless I ask them

205
00:09:00,500 --> 00:08:59,069
to do it on my behalf right like if I am

206
00:09:02,630 --> 00:09:00,510
a parent and I want my

207
00:09:04,310 --> 00:09:02,640
provider to do some sort of parental

208
00:09:07,130 --> 00:09:04,320
filtering that's fine you know if I'm

209
00:09:10,100 --> 00:09:07,140
asking them to do it that's a different

210
00:09:11,510 --> 00:09:10,110
story but absent that consent it

211
00:09:13,790 --> 00:09:11,520
basically means that your internet

212
00:09:15,410 --> 00:09:13,800
provider shouldn't be interfering in in

213
00:09:17,570 --> 00:09:15,420

what you do online they shouldn't be

214

00:09:19,820 --> 00:09:17,580

snooping through what you do online they

215

00:09:22,100 --> 00:09:19,830

shouldn't be deciding well we're gonna

216

00:09:24,680 --> 00:09:22,110

charge you for for some data but not

217

00:09:27,560 --> 00:09:24,690

other data because we like this data

218

00:09:30,830 --> 00:09:27,570

better because this company paid us to

219

00:09:32,810 --> 00:09:30,840

give you free data that's basically what

220

00:09:34,940 --> 00:09:32,820

it comes down to me it basically comes

221

00:09:36,590 --> 00:09:34,950

down to what you get on the internet you

222

00:09:38,780 --> 00:09:36,600

should be able to go wherever you want

223

00:09:41,990 --> 00:09:38,790

do whatever you want I mean that's

224

00:09:43,400 --> 00:09:42,000

lawful of course without any

225

00:09:45,140 --> 00:09:43,410

interference without your internet

226

00:09:48,080 --> 00:09:45,150

provider trying to think that they know

227

00:09:52,010 --> 00:09:48,090

what is best for you online okay and so

228

00:09:54,410 --> 00:09:52,020

how does that also play out to someone

229

00:09:56,840 --> 00:09:54,420

like me that I have a small website

230

00:09:59,180 --> 00:09:56,850

doesn't get a huge amount of traffic I

231

00:10:02,240 --> 00:09:59,190

have one website that gets a good amount

232

00:10:05,840 --> 00:10:02,250

of traffic you know maybe a hundred

233

00:10:08,360 --> 00:10:05,850

thousand you know visitors a month

234

00:10:12,230 --> 00:10:08,370

something like that and then I have one

235

00:10:14,450 --> 00:10:12,240

that you know is in the few thousand how

236

00:10:17,360 --> 00:10:14,460

would that affect a website or does that

237

00:10:19,310 --> 00:10:17,370

not even matter totally so one way that

238

00:10:20,720 --> 00:10:19,320

it affects it affects you know small

239

00:10:23,480 --> 00:10:20,730

businesses people who run their own

240

00:10:25,820 --> 00:10:23,490

websites is if these big corporations

241

00:10:28,040 --> 00:10:25,830

start to say well we're gonna have fast

242

00:10:29,300 --> 00:10:28,050

lanes and slow lanes and they don't like

243

00:10:31,220 --> 00:10:29,310

that terminology because it makes it

244

00:10:33,500 --> 00:10:31,230

sound bad but essentially that's what it

245

00:10:35,330 --> 00:10:33,510

comes down to if they say we're gonna

246

00:10:37,610 --> 00:10:35,340

have fast lanes and slow lanes then you

247

00:10:39,890 --> 00:10:37,620

can imagine that basically if you don't

248

00:10:41,930 --> 00:10:39,900

pay them you're in the slow lane and so

249

00:10:44,270 --> 00:10:41,940

then you have to for every internet

250

00:10:46,610 --> 00:10:44,280

provider that whose customers you now

251
00:10:48,350 --> 00:10:46,620
want to reach at a reasonable speed you

252
00:10:50,660 --> 00:10:48,360
have to go and pay them a little extra

253
00:10:52,100 --> 00:10:50,670
so you know when you when you set up

254
00:10:54,140 --> 00:10:52,110
your website you're paying someone to

255
00:10:55,280 --> 00:10:54,150
host it already you know connect it to

256
00:10:56,720 --> 00:10:55,290
the Internet you know you're already

257
00:10:58,610 --> 00:10:56,730
paying this and now the internet

258
00:11:00,860 --> 00:10:58,620
providers are saying well well well

259
00:11:02,720 --> 00:11:00,870
you know that's well and good but to you

260
00:11:05,000 --> 00:11:02,730
know really reach our you know all of

261
00:11:08,210 --> 00:11:05,010
the customers on Comcast or Verizon or

262
00:11:10,430 --> 00:11:08,220
AT&T you have to pay us the Internet

263
00:11:12,080 --> 00:11:10,440

provider to and it may not be a big

264

00:11:13,790 --> 00:11:12,090

amount but it's gonna be a hat I mean

265

00:11:14,269 --> 00:11:13,800

how many internet providers are out

266

00:11:19,069 --> 00:11:14,279

there

267

00:11:21,319 --> 00:11:19,079

are a whole ton of smaller ones and if

268

00:11:23,150 --> 00:11:21,329

you think to reach the entire world if

269

00:11:25,210 --> 00:11:23,160

every internet provider decided to start

270

00:11:27,860 --> 00:11:25,220

playing this you know this sort of game

271

00:11:29,360 --> 00:11:27,870

even if the cost isn't significant the

272

00:11:32,720 --> 00:11:29,370

cost in terms of your time and your

273

00:11:35,119 --> 00:11:32,730

effort to you know to do this would be

274

00:11:37,790 --> 00:11:35,129

huge and so that's one of the roadblocks

275

00:11:39,530 --> 00:11:37,800

that that net neutrality could introduce

276

00:11:41,150 --> 00:11:39,540

now if you ask the big providers they'll

277

00:11:44,960 --> 00:11:41,160

say well we're never gonna do this this

278

00:11:46,819 --> 00:11:44,970

isn't our plan and so from a small

279

00:11:49,460 --> 00:11:46,829

business perspective as long as they

280

00:11:52,759 --> 00:11:49,470

keep their word that's probably fine the

281

00:11:54,650 --> 00:11:52,769

scarier part is what what customers can

282

00:11:57,350 --> 00:11:54,660

do but you know you and I can do as

283

00:11:59,540 --> 00:11:57,360

people who get online on the Internet

284

00:12:01,069 --> 00:11:59,550

you know we have to go through I mean I

285

00:12:03,230 --> 00:12:01,079

don't know how many you choice how many

286

00:12:04,939 --> 00:12:03,240

choices you have where you live but if I

287

00:12:06,259 --> 00:12:04,949

want fast internet I basically have one

288

00:12:08,269 --> 00:12:06,269

choice and I live in a major

289

00:12:10,850 --> 00:12:08,279

metropolitan area like I can choose

290

00:12:12,530 --> 00:12:10,860

cable or DSL that's it you know one or

291

00:12:14,660 --> 00:12:12,540

the other and that's all my choices

292

00:12:16,610 --> 00:12:14,670

there are a few places that are lucky

293

00:12:18,799 --> 00:12:16,620

you know if you live in downtown San

294

00:12:21,139 --> 00:12:18,809

Francisco you have some pretty good

295

00:12:23,869 --> 00:12:21,149

choices if you live in you know the DC

296

00:12:26,540 --> 00:12:23,879

area you might have three choices but

297

00:12:29,240 --> 00:12:26,550

more or less you're stuck with one maybe

298

00:12:31,490 --> 00:12:29,250

two and if those companies decide to

299

00:12:33,019 --> 00:12:31,500

start saying that well some traffic is

300

00:12:35,299 --> 00:12:33,029

going to be faster than others or

301
00:12:36,530 --> 00:12:35,309
we're gonna charge you for some data but

302
00:12:40,490 --> 00:12:36,540
not others you don't really have a

303
00:12:43,910 --> 00:12:40,500
choice so if even though you know if I

304
00:12:46,340 --> 00:12:43,920
mean take a to me what is personally a

305
00:12:48,829 --> 00:12:46,350
scary example so I'm a I'm a big Star

306
00:12:51,679 --> 00:12:48,839
Trek fan all right ah I'm I'm

307
00:12:54,710 --> 00:12:51,689
unabashedly a nerd in a Trekkie and the

308
00:12:59,119 --> 00:12:54,720
new Star Trek show is only on available

309
00:13:01,129 --> 00:12:59,129
on CBS's online platform now Comcast on

310
00:13:04,340 --> 00:13:01,139
the other hand is a is jointly owned

311
00:13:07,249 --> 00:13:04,350
with NBC and so Comcast could say well

312
00:13:09,980 --> 00:13:07,259
you know we're gonna charge you extra to

313
00:13:11,929 --> 00:13:09,990

be able to access CBS's services you can

314

00:13:14,749 --> 00:13:11,939

access all the you know online NBC

315

00:13:16,819 --> 00:13:14,759

services you want you know for free

316

00:13:20,480 --> 00:13:16,829

they won't count against your data cap

317

00:13:21,949 --> 00:13:20,490

but CBS battles count against your data

318

00:13:23,689 --> 00:13:21,959

cap and so then I'm put in a position

319

00:13:25,490 --> 00:13:23,699

where the content that I want to get to

320

00:13:28,160 --> 00:13:25,500

I end up having to pay more for

321

00:13:29,660 --> 00:13:28,170

effectively and that's

322

00:13:31,240 --> 00:13:29,670

sort of thing where we've already seen

323

00:13:33,769 --> 00:13:31,250

this happen we've seen that Comcast

324

00:13:35,870 --> 00:13:33,779

doesn't charge customers to access its

325

00:13:37,519 --> 00:13:35,880

own content but if you want to go access

326

00:13:39,379 --> 00:13:37,529

someone else's it counts against your

327

00:13:42,139 --> 00:13:39,389

data cap so there's that sort of

328

00:13:45,199 --> 00:13:42,149

scenario where it's already happening

329

00:13:46,910 --> 00:13:45,209

and you know luckily so far the data

330

00:13:49,189 --> 00:13:46,920

caps have been generous particularly on

331

00:13:52,939 --> 00:13:49,199

you know fixed landline you know cable

332

00:13:55,400 --> 00:13:52,949

or DSL connections but if a company

333

00:13:58,220 --> 00:13:55,410

wanted to start you know flip that

334

00:13:59,840 --> 00:13:58,230

switch starts a throttling the video so

335

00:14:01,519 --> 00:13:59,850

that it took up less bandwidth because

336

00:14:02,960 --> 00:14:01,529

their network was too saturated and they

337

00:14:05,870 --> 00:14:02,970

didn't want to pay to upgrade their

338

00:14:08,810 --> 00:14:05,880

network you could see that that would

339

00:14:11,540 --> 00:14:08,820

cause a problem so there's lots of

340

00:14:12,949 --> 00:14:11,550

different ways that you know interfering

341

00:14:14,750 --> 00:14:12,959

with net neutrality treating some

342

00:14:17,870 --> 00:14:14,760

traffic different than others can be a

343

00:14:21,620 --> 00:14:17,880

problem now this this fast lane slow

344

00:14:23,720 --> 00:14:21,630

lane type of thing it's more of a slow

345

00:14:25,699 --> 00:14:23,730

lane than a fast lane right isn't it

346

00:14:28,460 --> 00:14:25,709

they're just throttling down or they're

347

00:14:30,620 --> 00:14:28,470

filtering down slowing down but it's oh

348

00:14:33,860 --> 00:14:30,630

it's always going to be just as fast as

349

00:14:36,500 --> 00:14:33,870

it would be otherwise do I have that way

350

00:14:38,120 --> 00:14:36,510

yeah so the argument they they've made

351

00:14:39,800 --> 00:14:38,130

sometimes as well it's not fast lanes

352

00:14:42,620 --> 00:14:39,810

and slowly it's it's fast lanes and

353

00:14:44,120 --> 00:14:42,630

superfast lanes but regardless of how

354

00:14:46,400 --> 00:14:44,130

you put it they're talking about having

355

00:14:48,710 --> 00:14:46,410

two different tiers of traffic mm-hm and

356

00:14:51,019 --> 00:14:48,720

which tier it is doesn't depend on what

357

00:14:52,490 --> 00:14:51,029

say I'm paying as a customer you know

358

00:14:55,340 --> 00:14:52,500

net neutrality isn't about you know I

359

00:14:57,530 --> 00:14:55,350

can pay \$30 a month for you know the

360

00:14:59,780 --> 00:14:57,540

slow tier of service \$50 a month for

361

00:15:02,120 --> 00:14:59,790

medium \$100 a month for superfast

362

00:15:03,590 --> 00:15:02,130

internet you know that's still fine

363

00:15:05,720 --> 00:15:03,600

under net neutrality it's not about that

364

00:15:09,139 --> 00:15:05,730

sort of thing it's about once i've got

365

00:15:10,910 --> 00:15:09,149

i've you know chosen that then the my

366

00:15:12,980 --> 00:15:10,920

internet provider saying well now that

367

00:15:15,139 --> 00:15:12,990

you've got that you know whatever you

368

00:15:17,930 --> 00:15:15,149

know you've paid for our medium tier

369

00:15:19,730 --> 00:15:17,940

package that is you know 30 megabits per

370

00:15:21,050 --> 00:15:19,740

second instead of a hundred megabits per

371

00:15:22,970 --> 00:15:21,060

second but that's fine you're on a

372

00:15:24,980 --> 00:15:22,980

budget you know it's the internet

373

00:15:27,199 --> 00:15:24,990

provider than saying well you've paid

374

00:15:29,990 --> 00:15:27,209

for that but now beyond that we're gonna

375

00:15:32,090 --> 00:15:30,000

choose how fast things get to you so

376

00:15:33,980 --> 00:15:32,100

some things may get to you at that 30

377

00:15:36,290 --> 00:15:33,990

megabit per second speed some things may

378

00:15:38,689 --> 00:15:36,300

go slower some things may go faster it

379

00:15:41,639 --> 00:15:38,699

may still all averaged out to 30

380

00:15:43,199 --> 00:15:41,649

megabits per second but again

381

00:15:45,780 --> 00:15:43,209

bigger thing we're seeing them do is

382

00:15:47,699 --> 00:15:45,790

because there was such you know uh you

383

00:15:50,970 --> 00:15:47,709

know net neutrality this issue has been

384

00:15:53,040 --> 00:15:50,980

around for a while and so they've

385

00:15:55,230 --> 00:15:53,050

realized that doing that sort of

386

00:15:57,210 --> 00:15:55,240

throttling has gotten there's a lot of

387

00:16:00,119 --> 00:15:57,220

sort of pushback from customers because

388

00:16:01,739 --> 00:16:00,129

customers understand like oh my God why

389

00:16:03,449 --> 00:16:01,749

are you controlling the speeds when I've

390

00:16:05,609 --> 00:16:03,459

already paid you to give me fast every

391

00:16:08,579 --> 00:16:05,619

night so instead what they're really

392

00:16:10,439 --> 00:16:08,589

looking at is this idea of charging you

393

00:16:11,910 --> 00:16:10,449

and not charging you for data so they

394

00:16:14,400 --> 00:16:11,920

mask it and saying oh you're getting

395

00:16:16,049 --> 00:16:14,410

some data for free but what they're not

396

00:16:18,419 --> 00:16:16,059

saying is we're choosing what type of

397

00:16:19,889 --> 00:16:18,429

data you can get for free you don't get

398

00:16:21,840 --> 00:16:19,899

to choose what the ad you get for free

399

00:16:24,059 --> 00:16:21,850

and then we're gonna charge you for all

400

00:16:26,040 --> 00:16:24,069

the rest of the data and so if you've

401
00:16:28,710 --> 00:16:26,050
got data caps you hit those data caps

402
00:16:30,389 --> 00:16:28,720
then you have to pay more and so they're

403
00:16:32,730 --> 00:16:30,399
they're doing a really good you know

404
00:16:34,290 --> 00:16:32,740
marketing PR job of trying to cloak it

405
00:16:37,079 --> 00:16:34,300
in something that's good for customers

406
00:16:39,569 --> 00:16:37,089
right when it's still fundamentally

407
00:16:42,239 --> 00:16:39,579
taking away customer choice Wow

408
00:16:46,470 --> 00:16:42,249
now you know in a in a case like this

409
00:16:50,129 --> 00:16:46,480
it's always the term comes up follow the

410
00:16:51,749 --> 00:16:50,139
money I I think that you know this is

411
00:16:54,949 --> 00:16:51,759
just my own thoughts and I haven't heard

412
00:16:59,069 --> 00:16:54,959
anyone say this but it seems to me that

413
00:17:01,139 --> 00:16:59,079

someone is liable to make billions and

414

00:17:03,509 --> 00:17:01,149

billions and billions of dollars on this

415

00:17:07,500 --> 00:17:03,519

in just a few people I'm not done

416

00:17:08,970 --> 00:17:07,510

talking is that is that correct well

417

00:17:10,799 --> 00:17:08,980

it's it's certainly true that for the

418

00:17:13,380 --> 00:17:10,809

internet providers this is all about the

419

00:17:15,210 --> 00:17:13,390

money they they see you know they're

420

00:17:17,069 --> 00:17:15,220

already getting paid by their customers

421

00:17:21,120 --> 00:17:17,079

and then they see this opportunity to

422

00:17:22,649 --> 00:17:21,130

either I mean to to the internet

423

00:17:24,449 --> 00:17:22,659

providers essentially they want to start

424

00:17:28,590 --> 00:17:24,459

differentiating the markets they can

425

00:17:30,090 --> 00:17:28,600

extract the most money from from all of

426

00:17:34,080 --> 00:17:30,100

their customers so that you know some

427

00:17:36,180 --> 00:17:34,090

customers excuse me will say oh I don't

428

00:17:38,490 --> 00:17:36,190

need the special package that lets me

429

00:17:40,110 --> 00:17:38,500

see Netflix and Facebook because I don't

430

00:17:41,580 --> 00:17:40,120

use those services whereas someone else

431

00:17:44,070 --> 00:17:41,590

might say yes I'll pay the extra five

432

00:17:45,990 --> 00:17:44,080

dollars a month to use those services or

433

00:17:49,649 --> 00:17:46,000

to have those not count against my data

434

00:17:51,180 --> 00:17:49,659

cap or something like that and so for

435

00:17:53,279 --> 00:17:51,190

them it really is about trying to

436

00:17:55,080 --> 00:17:53,289

extract the maximum amount amount of

437

00:17:56,700 --> 00:17:55,090

money from their business from the

438

00:17:59,700 --> 00:17:56,710

customers but then also on the website

439

00:18:02,640 --> 00:17:59,710

side saying you know we could also

440

00:18:04,770 --> 00:18:02,650

extract money from websites because we

441

00:18:07,110 --> 00:18:04,780

have all these customers and if websites

442

00:18:08,940 --> 00:18:07,120

don't pay us then they will not reach

443

00:18:11,730 --> 00:18:08,950

our customers or they'll reach them at a

444

00:18:13,230 --> 00:18:11,740

slower rate or their data the data that

445

00:18:15,630 --> 00:18:13,240

comes from your website will count

446

00:18:17,370 --> 00:18:15,640

against my customers data caps and so

447

00:18:18,720 --> 00:18:17,380

they'll be less likely to want to use

448

00:18:20,430 --> 00:18:18,730

your website because they're worried

449

00:18:21,660 --> 00:18:20,440

about hitting their data caps so it's

450

00:18:24,510 --> 00:18:21,670

definitely about the money in the end I

451
00:18:28,170 --> 00:18:24,520
mean Comcast has you know Verizon have

452
00:18:30,540 --> 00:18:28,180
no you know no reason to really and well

453
00:18:31,950 --> 00:18:30,550
I should step back so for the most part

454
00:18:34,080 --> 00:18:31,960
it's about the money the other scary

455
00:18:36,630 --> 00:18:34,090
thing about net neutrality is it gives

456
00:18:40,080 --> 00:18:36,640
companies like Comcast and Verizon AT&T

457
00:18:43,050 --> 00:18:40,090
the opportunity to start censoring what

458
00:18:45,620 --> 00:18:43,060
their customers can see we haven't seen

459
00:18:48,110 --> 00:18:45,630
this happen thankfully so much in the US

460
00:18:50,850 --> 00:18:48,120
but we did see an example of this in

461
00:18:54,090 --> 00:18:50,860
Canada actually and I don't know why I'm

462
00:18:55,410 --> 00:18:54,100
ragging on Canada so much so I apologize

463
00:18:59,070 --> 00:18:55,420

I love Canada

464

00:19:01,080 --> 00:18:59,080

a wonderful place but we did see that

465

00:19:02,820 --> 00:19:01,090

there was an isp there was an internet

466

00:19:05,610 --> 00:19:02,830

provider in Canada which was in a

467

00:19:08,520 --> 00:19:05,620

contract dispute with one of its unions

468

00:19:10,020 --> 00:19:08,530

and that exactly which union it was but

469

00:19:12,270 --> 00:19:10,030

it was one of the unions that were a

470

00:19:15,030 --> 00:19:12,280

large swath of the employees came from

471

00:19:17,040 --> 00:19:15,040

that union and they decided to block

472

00:19:21,930 --> 00:19:17,050

their customers access to the union's

473

00:19:24,480 --> 00:19:21,940

website and you know one day it's an

474

00:19:26,430 --> 00:19:24,490

internet provider you know say you know

475

00:19:29,850 --> 00:19:26,440

again I don't think it's likely the

476

00:19:31,740 --> 00:19:29,860

Comcast or you know AT&T NBC or Verizon

477

00:19:33,090 --> 00:19:31,750

they're gonna start getting into the

478

00:19:35,460 --> 00:19:33,100

political game because they know it

479

00:19:37,890 --> 00:19:35,470

would be suicide for themselves but you

480

00:19:41,120 --> 00:19:37,900

can see a small ISP a small internet

481

00:19:42,960 --> 00:19:41,130

provider you know in the rural South

482

00:19:45,540 --> 00:19:42,970

deciding well we're going to start

483

00:19:48,120 --> 00:19:45,550

blocking access to pro-choice websites

484

00:19:51,090 --> 00:19:48,130

and you can see a similar small internet

485

00:19:53,580 --> 00:19:51,100

provider in you know in Boston saying

486

00:19:55,590 --> 00:19:53,590

we're gonna start blocking access to

487

00:19:57,180 --> 00:19:55,600

pro-life websites you know it goes both

488

00:19:59,160 --> 00:19:57,190

ways it doesn't matter which side of the

489

00:20:01,110 --> 00:19:59,170

aisle you're on you don't want to give

490

00:20:02,640 --> 00:20:01,120

your internet provider the power to

491

00:20:04,590 --> 00:20:02,650

start deciding what you can and can't

492

00:20:07,980 --> 00:20:04,600

access on the Internet

493

00:20:09,660 --> 00:20:07,990

now again that is much that

494

00:20:11,370 --> 00:20:09,670

a much smaller reason that internet

495

00:20:13,740 --> 00:20:11,380

providers have said they want to get rid

496

00:20:15,930 --> 00:20:13,750

of net neutrality the big part of it is

497

00:20:17,730 --> 00:20:15,940

definitely money but it's something to

498

00:20:21,060 --> 00:20:17,740

sort of keep in mind in the back of our

499

00:20:22,680 --> 00:20:21,070

heads right right about 2010 I don't

500

00:20:24,660 --> 00:20:22,690

know if you know this gentleman do you

501
00:20:28,140 --> 00:20:24,670
happen to know Dan Carlin he does a show

502
00:20:32,760 --> 00:20:28,150
called common sense on top of my head

503
00:20:35,790 --> 00:20:32,770
and okay anyway he has a real popular he

504
00:20:37,770 --> 00:20:35,800
has it's up in the top ten I think it's

505
00:20:39,240 --> 00:20:37,780
called hardcore history goes deep into

506
00:20:41,610 --> 00:20:39,250
history and things that happen in

507
00:20:44,280 --> 00:20:41,620
history as well so he has one of the top

508
00:20:46,440 --> 00:20:44,290
websites I interviewed him back in 2010

509
00:20:47,790 --> 00:20:46,450
and I remember he was all the way back

510
00:20:50,100 --> 00:20:47,800
then he was talking about net neutrality

511
00:20:53,100 --> 00:20:50,110
and if it was rolled back and the

512
00:20:55,590 --> 00:20:53,110
changes and basically he said to me

513
00:20:58,110 --> 00:20:55,600

during the show that he said someone

514

00:20:59,610 --> 00:20:58,120

like us if we go to upload a podcast

515

00:21:01,380 --> 00:20:59,620

while our listeners won't be able to

516

00:21:03,419 --> 00:21:01,390

listen to it for a couple of days is

517

00:21:05,220 --> 00:21:03,429

that is that something also can it

518

00:21:06,000 --> 00:21:05,230

affect something like that I mean I

519

00:21:08,460 --> 00:21:06,010

don't know if it'd work

520

00:21:11,100 --> 00:21:08,470

it would work like quite like that I

521

00:21:13,620 --> 00:21:11,110

mean it could be that you know you end

522

00:21:15,750 --> 00:21:13,630

up because your internet provider

523

00:21:18,360 --> 00:21:15,760

detects that you're uploading a podcast

524

00:21:21,570 --> 00:21:18,370

that they slow it down and say that's

525

00:21:23,460 --> 00:21:21,580

not important traffic and so it's slowed

526

00:21:25,799 --> 00:21:23,470

down compared to everyone else's traffic

527

00:21:27,780 --> 00:21:25,809

now again another thing because there's

528

00:21:31,470 --> 00:21:27,790

a lot of sort of technical nuance here

529

00:21:33,750 --> 00:21:31,480

you know if you as a user Seder in our

530

00:21:37,220 --> 00:21:33,760

internet provider yes it's okay if you

531

00:21:40,560 --> 00:21:37,230

slow down my podcasts compared to say my

532

00:21:42,600 --> 00:21:40,570

you know live videoconferencing because

533

00:21:44,220 --> 00:21:42,610

I want that to be snappy but if I'm

534

00:21:45,780 --> 00:21:44,230

uploading a podcast in the background

535

00:21:48,630 --> 00:21:45,790

it's okay if you slow that down in

536

00:21:50,130 --> 00:21:48,640

comparison to my other traffic again net

537

00:21:51,720 --> 00:21:50,140

neutrality says that's fine because

538

00:21:53,730 --> 00:21:51,730

you've asked them to do it and it's your

539

00:21:55,710 --> 00:21:53,740

traffic but if they say we're always

540

00:21:58,220 --> 00:21:55,720

gonna slow down all podcast uploads

541

00:21:59,850 --> 00:21:58,230

compared to say other people's

542

00:22:01,650 --> 00:21:59,860

videoconferencing even though you're

543

00:22:04,410 --> 00:22:01,660

paying the same amount for the same

544

00:22:06,330 --> 00:22:04,420

speed the same internet um you know your

545

00:22:08,160 --> 00:22:06,340

internet provider doesn't know if that

546

00:22:10,040 --> 00:22:08,170

podcast is an urgent you know breaking

547

00:22:13,220 --> 00:22:10,050

news you want to get up there or not

548

00:22:16,049 --> 00:22:13,230

they can't detect that automatically and

549

00:22:17,909 --> 00:22:16,059

so I don't know if it would do this sort

550

00:22:19,799 --> 00:22:17,919

of keeping it from being seen for a few

551
00:22:21,240 --> 00:22:19,809
days but there's definitely ways they

552
00:22:24,450 --> 00:22:21,250
could interfere with it for sure

553
00:22:28,409 --> 00:22:24,460
now what about sites I know Netflix

554
00:22:31,190 --> 00:22:28,419
takes a lot of bandwidth like 30 percent

555
00:22:33,990 --> 00:22:31,200
I've heard but what about like YouTube

556
00:22:37,230 --> 00:22:34,000
you know I mean will would that affect

557
00:22:39,990 --> 00:22:37,240
YouTube or would that could say Netflix

558
00:22:41,580 --> 00:22:40,000
and YouTube be part of a package that

559
00:22:43,200 --> 00:22:41,590
you'd have to buy if you wanted to visit

560
00:22:45,270 --> 00:22:43,210
them I mean is that one thing they could

561
00:22:47,010 --> 00:22:45,280
do something like that it's that's

562
00:22:49,380 --> 00:22:47,020
exactly the sort of thing they could do

563
00:22:51,779 --> 00:22:49,390

now now again there's a lot of pushback

564

00:22:54,270 --> 00:22:51,789

because once people start realized that

565

00:22:55,680 --> 00:22:54,280

what they're talking about when you

566

00:22:58,230 --> 00:22:55,690

think about a package like that is

567

00:23:00,180 --> 00:22:58,240

essentially the the cable TV if vacation

568

00:23:02,220 --> 00:23:00,190

for lack of a better word of the

569

00:23:03,750 --> 00:23:02,230

Internet where it's oh my god now I have

570

00:23:05,940 --> 00:23:03,760

to pay an extra five bucks to get this

571

00:23:08,700 --> 00:23:05,950

channel and an extra ten bucks for this

572

00:23:10,740 --> 00:23:08,710

package and extra 10 bucks to get this

573

00:23:12,270 --> 00:23:10,750

package but I only want that one part of

574

00:23:14,070 --> 00:23:12,280

this package you know I only really use

575

00:23:16,350 --> 00:23:14,080

YouTube not Netflix or something I don't

576

00:23:18,299 --> 00:23:16,360

even pay for Netflix but I still have to

577

00:23:19,500 --> 00:23:18,309

get both of them and you know that's the

578

00:23:21,180 --> 00:23:19,510

sort of thing they've realized there's a

579

00:23:22,649 --> 00:23:21,190

lot that I the internet providers who

580

00:23:24,899 --> 00:23:22,659

realized there's a lot of push back on

581

00:23:26,970 --> 00:23:24,909

and so instead what they've decided to

582

00:23:29,190 --> 00:23:26,980

start doing is saying you know we're

583

00:23:31,320 --> 00:23:29,200

gonna throttle all of the video

584

00:23:35,880 --> 00:23:31,330

this is particularly mobile providers

585

00:23:38,789 --> 00:23:35,890

you know t-mobile AT&T Mobile Verizon

586

00:23:41,240 --> 00:23:38,799

Wireless they've said well we're just

587

00:23:44,640 --> 00:23:41,250

gonna throttle all of the video because

588

00:23:46,320 --> 00:23:44,650

most of our customers are only you know

589

00:23:48,419 --> 00:23:46,330

watching clips of YouTube on their

590

00:23:51,510 --> 00:23:48,429

screens or on their you know small cell

591

00:23:53,279 --> 00:23:51,520

phone screens and what it doesn't take

592

00:23:55,470 --> 00:23:53,289

into account is that there are also

593

00:23:57,210 --> 00:23:55,480

plenty of customers for whom their

594

00:23:58,860 --> 00:23:57,220

mobile connection is their only internet

595

00:24:00,450 --> 00:23:58,870

service and they might plug it into

596

00:24:03,180 --> 00:24:00,460

their TV and want to be able to watch

597

00:24:04,830 --> 00:24:03,190

something in HD and there and they know

598

00:24:06,840 --> 00:24:04,840

that that's gonna eat a lot of data so

599

00:24:09,029 --> 00:24:06,850

they've paid for the data but despite

600

00:24:10,560 --> 00:24:09,039

that they still can't watch it at high

601
00:24:13,919 --> 00:24:10,570
quality because this video is being

602
00:24:17,279 --> 00:24:13,929
throttled and in some of these plans

603
00:24:18,600 --> 00:24:17,289
there's no way to opt-out of that and so

604
00:24:19,799 --> 00:24:18,610
that's a scenario where we're seeing

605
00:24:23,149 --> 00:24:19,809
that the internet providers are

606
00:24:25,230 --> 00:24:23,159
basically declaring war in some sense on

607
00:24:27,029 --> 00:24:25,240
customer choice when it comes to what

608
00:24:30,600 --> 00:24:27,039
level of video you can access on your

609
00:24:33,260 --> 00:24:30,610
mobile plan we haven't seen this happen

610
00:24:35,190 --> 00:24:33,270
on on you know landline connections yet

611
00:24:37,310 --> 00:24:35,200
but that is the sort of thing

612
00:24:39,750 --> 00:24:37,320
we're definitely you know if I'm a

613
00:24:42,810 --> 00:24:39,760

someone who specializes you know if I

614

00:24:45,450 --> 00:24:42,820

make a podcast that criticizes you know

615

00:24:47,669 --> 00:24:45,460

critiques special effects in movies I'm

616

00:24:49,169 --> 00:24:47,679

gonna want it to be seen in HD because I

617

00:24:50,490 --> 00:24:49,179

want to you know show how awesome this

618

00:24:50,820 --> 00:24:50,500

special effect was or something like

619

00:24:56,340 --> 00:24:50,830

that

620

00:24:59,220 --> 00:24:56,350

it's really gonna sort of cut down into

621

00:25:02,129 --> 00:24:59,230

the popularity of my podcast right now

622

00:25:06,320 --> 00:25:02,139

who pays for the general overall

623

00:25:09,560 --> 00:25:06,330

infrastructure of the internet ah

624

00:25:12,810 --> 00:25:09,570

essentially everybody is the right way

625

00:25:14,879 --> 00:25:12,820

to describe it I mean so there are you

626
00:25:16,919 --> 00:25:14,889
know you and I pay our internet provider

627
00:25:18,990 --> 00:25:16,929
to get on the Internet and so we're

628
00:25:20,610 --> 00:25:19,000
paying them and that and of course you

629
00:25:21,419 --> 00:25:20,620
know internet providers it takes a lot

630
00:25:23,850 --> 00:25:21,429
of money to build out that

631
00:25:26,580 --> 00:25:23,860
infrastructure to run all the cables to

632
00:25:29,399 --> 00:25:26,590
our houses to our buildings to our you

633
00:25:31,590 --> 00:25:29,409
know to you know work places to put up

634
00:25:35,340 --> 00:25:31,600
cell towers it's it's a lot of I mean

635
00:25:37,409 --> 00:25:35,350
it's I mean it's a big big operation and

636
00:25:39,810 --> 00:25:37,419
on the other side if you if you have a

637
00:25:42,600 --> 00:25:39,820
website you're paying some company to

638
00:25:45,389 --> 00:25:42,610

host the website you're paying them you

639

00:25:47,909 --> 00:25:45,399

know to connect your website to the

640

00:25:52,019 --> 00:25:47,919

Internet and as part of that they will

641

00:25:54,110 --> 00:25:52,029

then either pace their either the

642

00:25:59,460 --> 00:25:54,120

hosting company has a direct connection

643

00:26:00,810 --> 00:25:59,470

to other Internet networks or their

644

00:26:03,330 --> 00:26:00,820

pings they're paying an internet

645

00:26:04,950 --> 00:26:03,340

provider to it's probably not a Comcast

646

00:26:09,060 --> 00:26:04,960

or Verizon although it could be it

647

00:26:10,980 --> 00:26:09,070

depends and then there are these other

648

00:26:12,659 --> 00:26:10,990

larger companies called transit

649

00:26:14,159 --> 00:26:12,669

companies and these are the companies

650

00:26:19,680 --> 00:26:14,169

you don't really hear about they've got

651
00:26:21,509 --> 00:26:19,690
names like level 3 actually Verizon AT&T

652
00:26:23,970 --> 00:26:21,519
and Comcast have all gotten to some

653
00:26:25,289 --> 00:26:23,980
degree into the transit business and

654
00:26:27,450 --> 00:26:25,299
this is these are the companies that

655
00:26:30,480 --> 00:26:27,460
connect internet providers together I

656
00:26:31,950 --> 00:26:30,490
mean I'm I'm this is for those who are

657
00:26:33,330 --> 00:26:31,960
watching the show and know the the

658
00:26:34,950 --> 00:26:33,340
nitty-gritty technical details I

659
00:26:38,009 --> 00:26:34,960
understand that I'm trying to keep it at

660
00:26:40,289 --> 00:26:38,019
a pretty high level and then so when a

661
00:26:43,950 --> 00:26:40,299
company like Comcast or someone else

662
00:26:45,360 --> 00:26:43,960
wants to get online sometimes depending

663
00:26:48,810 --> 00:26:45,370

on the size of the company they will

664

00:26:49,110 --> 00:26:48,820

either pay for access or they'll do it

665

00:26:50,910 --> 00:26:49,120

in

666

00:26:52,740 --> 00:26:50,920

a settlement freeway which means that

667

00:26:54,600 --> 00:26:52,750

they'll agree with the one of these

668

00:26:57,720 --> 00:26:54,610

transit companies that we won't pay you

669

00:27:00,540 --> 00:26:57,730

to connect to our customers but also you

670

00:27:02,970 --> 00:27:00,550

don't have to pay us and so that way

671

00:27:05,930 --> 00:27:02,980

we'll just exchange the Internet traffic

672

00:27:07,920 --> 00:27:05,940

without paying each other and so

673

00:27:09,720 --> 00:27:07,930

basically what it comes down to is

674

00:27:11,880 --> 00:27:09,730

there's lots of different companies in

675

00:27:14,640 --> 00:27:11,890

the internet ecosystem and they're all

676
00:27:16,230 --> 00:27:14,650
you know Netflix and Google are part of

677
00:27:19,049 --> 00:27:16,240
paying for this infrastructure because

678
00:27:21,240 --> 00:27:19,059
when Netflix wants to connect one of its

679
00:27:24,690 --> 00:27:21,250
data centers to say an Internet provider

680
00:27:26,910 --> 00:27:24,700
network or put a caching service inside

681
00:27:29,780 --> 00:27:26,920
an internet providers network they may

682
00:27:32,220 --> 00:27:29,790
arrange a payment system they may not

683
00:27:33,840 --> 00:27:32,230
when Google wants to put up a data

684
00:27:35,490 --> 00:27:33,850
center somewhere there they're gonna

685
00:27:38,419 --> 00:27:35,500
have to pay for the infrastructure for

686
00:27:41,790 --> 00:27:38,429
that data center so it really is just

687
00:27:43,500 --> 00:27:41,800
essentially everyone is paying little

688
00:27:45,840 --> 00:27:43,510

bits here and there and it all goes into

689

00:27:51,020 --> 00:27:45,850

this Internet infrastructure now when I

690

00:27:54,150 --> 00:27:51,030

have my podcast I have to use a separate

691

00:27:57,480 --> 00:27:54,160

server like Amazon for instance I use

692

00:28:00,860 --> 00:27:57,490

Amazon 3 I think it's called and I pay

693

00:28:03,900 --> 00:28:00,870

per month I'll pay a bandwidth charge so

694

00:28:07,620 --> 00:28:03,910

that's one of the ways of paying out

695

00:28:10,230 --> 00:28:07,630

there now how how does a company like

696

00:28:13,020 --> 00:28:10,240

Netflix they must you know they must

697

00:28:15,060 --> 00:28:13,030

have to I mean is that a am I talking

698

00:28:17,910 --> 00:28:15,070

about two different things or do they

699

00:28:21,180 --> 00:28:17,920

have to pay for every time someone you

700

00:28:23,520 --> 00:28:21,190

know watches a movie so no it's it's the

701
00:28:26,220 --> 00:28:23,530
same sort of thing I mean next I mean

702
00:28:28,560 --> 00:28:26,230
now Netflix probably has some fancier

703
00:28:29,850 --> 00:28:28,570
more complicated deals but you know if

704
00:28:31,650 --> 00:28:29,860
you were to think back in the day when

705
00:28:34,169 --> 00:28:31,660
Netflix was first getting started it's

706
00:28:36,240 --> 00:28:34,179
probably a little simpler example they

707
00:28:38,810 --> 00:28:36,250
had to pay someone to get onto the

708
00:28:41,160 --> 00:28:38,820
internet the same way you and I do and

709
00:28:43,220 --> 00:28:41,170
so they would pay some company to

710
00:28:46,049 --> 00:28:43,230
connect their servers to the Internet

711
00:28:50,460 --> 00:28:46,059
and then that company it could have been

712
00:28:53,130 --> 00:28:50,470
a transit company or a large ISP would

713
00:28:54,870 --> 00:28:53,140

take the money and connect them up and

714

00:28:57,870 --> 00:28:54,880

then you know roll that money into

715

00:29:00,000 --> 00:28:57,880

paying for infrastructure upgrades now

716

00:29:02,550 --> 00:29:00,010

Netflix probably has some fancier deals

717

00:29:03,030 --> 00:29:02,560

they deal directly with because so much

718

00:29:04,950 --> 00:29:03,040

of their try

719

00:29:07,500 --> 00:29:04,960

it goes directly to home internet users

720

00:29:10,110 --> 00:29:07,510

they have you know specific deals with

721

00:29:13,320 --> 00:29:10,120

the Comcast's and the Verizon's and you

722

00:29:14,790 --> 00:29:13,330

know the the charters of the world but

723

00:29:16,560 --> 00:29:14,800

certainly if you're talking about

724

00:29:19,410 --> 00:29:16,570

someone like you or me or someone trying

725

00:29:22,110 --> 00:29:19,420

to set up a small business you know a

726

00:29:23,820 --> 00:29:22,120

startup something like that it's the

727

00:29:25,530 --> 00:29:23,830

same sort of thing you pay someone to

728

00:29:28,110 --> 00:29:25,540

get you on the internet and that person

729

00:29:30,570 --> 00:29:28,120

either connects you directly or pace or

730

00:29:33,480 --> 00:29:30,580

they pay someone else who then connects

731

00:29:35,220 --> 00:29:33,490

them directly and that's that's

732

00:29:36,360 --> 00:29:35,230

essentially how it all sort of rolls in

733

00:29:39,270 --> 00:29:36,370

now

734

00:29:41,820 --> 00:29:39,280

what about how would roll backs on the

735

00:29:44,880 --> 00:29:41,830

regulations affect the music industry I

736

00:29:47,070 --> 00:29:44,890

know that's mostly digital now would

737

00:29:49,830 --> 00:29:47,080

there be any effects to them as well I

738

00:29:52,170 --> 00:29:49,840

mean I think again one thing you could

739

00:29:54,660 --> 00:29:52,180

see is different internet providers

740

00:29:57,240 --> 00:29:54,670

treating different music services in

741

00:29:58,830 --> 00:29:57,250

different ways and so if you're an

742

00:30:01,740 --> 00:29:58,840

artist who happens to be on one music

743

00:30:04,650 --> 00:30:01,750

service but not another you know it

744

00:30:06,720 --> 00:30:04,660

could affect dramatically affect you

745

00:30:08,070 --> 00:30:06,730

know the popularity of you know where

746

00:30:10,620 --> 00:30:08,080

your music gets to it you know it's not

747

00:30:13,560 --> 00:30:10,630

gonna affect someone big it's not gonna

748

00:30:16,920 --> 00:30:13,570

affect the Rihanna's and the you know

749

00:30:20,400 --> 00:30:16,930

the the you know the the big artists of

750

00:30:22,980 --> 00:30:20,410

the world but most of the music industry

751

00:30:24,150 --> 00:30:22,990

or at least people wise it's not big

752

00:30:25,770 --> 00:30:24,160

artists there are only so many big

753

00:30:27,330 --> 00:30:25,780

artists and you know if you're trying to

754

00:30:30,450 --> 00:30:27,340

get your music out there and all of a

755

00:30:32,580 --> 00:30:30,460

sudden because the company that you were

756

00:30:35,640 --> 00:30:32,590

distributing your music through couldn't

757

00:30:38,850 --> 00:30:35,650

get that deal with Comcast or couldn't

758

00:30:40,530 --> 00:30:38,860

get that deal with Verizon and now the

759

00:30:42,060 --> 00:30:40,540

if someone is trying to listen to your

760

00:30:44,250 --> 00:30:42,070

music it's gonna count against their

761

00:30:45,480 --> 00:30:44,260

data cap and people are gonna say well

762

00:30:47,850 --> 00:30:45,490

I'm not going to use that service I'll

763

00:30:49,500 --> 00:30:47,860

go somewhere else I'll find someone that

764

00:30:52,040 --> 00:30:49,510

doesn't count against my data cap and

765

00:30:55,710 --> 00:30:52,050

we've we've already seen this t-mobile

766

00:30:56,640 --> 00:30:55,720

has this program I'm already used to

767

00:30:59,210 --> 00:30:56,650

have this program I guess they were

768

00:31:01,980 --> 00:30:59,220

phased it out by now called binge on

769

00:31:04,530 --> 00:31:01,990

which was a sort of a successor to their

770

00:31:05,850 --> 00:31:04,540

stream on program where certain music

771

00:31:08,010 --> 00:31:05,860

services wouldn't count against your

772

00:31:10,080 --> 00:31:08,020

data cap but there were plenty of

773

00:31:11,520 --> 00:31:10,090

independent music services that tried

774

00:31:13,740 --> 00:31:11,530

that went to t-mobile and said can we

775

00:31:15,900 --> 00:31:13,750

please get a be part of this so that

776

00:31:17,010 --> 00:31:15,910

people can access our music you know the

777

00:31:20,840 --> 00:31:17,020

mute the artists that

778

00:31:24,210 --> 00:31:20,850

you know are part of our collection and

779

00:31:25,980 --> 00:31:24,220

it would take t-mobile months to get

780

00:31:27,360 --> 00:31:25,990

them through the process if they did it

781

00:31:29,970 --> 00:31:27,370

all there were plenty where t-mobile

782

00:31:31,740 --> 00:31:29,980

just never got around to it and you know

783

00:31:34,890 --> 00:31:31,750

that's a scenario where again this is

784

00:31:36,360 --> 00:31:34,900

t-mobile you know theoretically they're

785

00:31:37,680 --> 00:31:36,370

say they're trying they're claiming

786

00:31:39,150 --> 00:31:37,690

they're doing something that's great for

787

00:31:39,750 --> 00:31:39,160

users because now users don't have to

788

00:31:42,150 --> 00:31:39,760

account

789

00:31:44,520 --> 00:31:42,160

music against their data caps but the

790

00:31:46,530 --> 00:31:44,530

the sort of asterisk is it's the music

791

00:31:48,390 --> 00:31:46,540

that t-mobile has chosen to prioritize

792

00:31:51,000 --> 00:31:48,400

that doesn't count against your data

793

00:31:53,040 --> 00:31:51,010

caps Wow Wow isn't that something

794

00:31:58,290 --> 00:31:53,050

so as far as the US government and

795

00:31:59,940 --> 00:31:58,300

regulations what is title - oh yeah yeah

796

00:32:01,950 --> 00:31:59,950

so this is where it gets more arcane

797

00:32:04,290 --> 00:32:01,960

important so basically uh

798

00:32:07,620 --> 00:32:04,300

let me see how I can make this slightly

799

00:32:08,670 --> 00:32:07,630

well at least not as boring so there is

800

00:32:10,350 --> 00:32:08,680

this part of the federal government

801
00:32:12,150 --> 00:32:10,360
called the Federal Communications

802
00:32:15,600 --> 00:32:12,160
Commission now traditionally that the

803
00:32:18,360 --> 00:32:15,610
FCC is the government body that

804
00:32:20,070 --> 00:32:18,370
regulates the the airwaves so they're

805
00:32:21,240 --> 00:32:20,080
the ones that decide who gets what part

806
00:32:23,730 --> 00:32:21,250
of the spectrum

807
00:32:25,290 --> 00:32:23,740
they hold auctions on spectrums so that

808
00:32:27,600 --> 00:32:25,300
if you know Verizon wants to roll out

809
00:32:29,790 --> 00:32:27,610
more cell phone service they can bid on

810
00:32:32,070 --> 00:32:29,800
it and then because this the airwaves

811
00:32:34,470 --> 00:32:32,080
are a limited commodity there's only so

812
00:32:36,720 --> 00:32:34,480
much bandwidth so much you know spectrum

813
00:32:39,480 --> 00:32:36,730

in the airwaves in the radio waves that

814

00:32:41,610 --> 00:32:39,490

people can use and so that's why we

815

00:32:43,590 --> 00:32:41,620

needed I mean you know one disagrees

816

00:32:45,270 --> 00:32:43,600

that you need some government entity to

817

00:32:46,980 --> 00:32:45,280

be able to regulate that otherwise

818

00:32:49,440 --> 00:32:46,990

you'll just get you know Verizon trying

819

00:32:51,180 --> 00:32:49,450

to transmit over AT&T trying to transmit

820

00:32:52,200 --> 00:32:51,190

over some pirate radio station or

821

00:32:56,120 --> 00:32:52,210

something like that which is not a

822

00:33:02,160 --> 00:32:56,130

scenario but more recently so the FCC

823

00:33:05,820 --> 00:33:02,170

FCC also regulates cable television and

824

00:33:08,220 --> 00:33:05,830

in broadcast television you know that's

825

00:33:13,020 --> 00:33:08,230

why that's why you know if when there

826
00:33:17,250 --> 00:33:13,030
was whatever it was the the Super Bowl

827
00:33:19,710 --> 00:33:17,260
halftime show you know issue with Janet

828
00:33:22,200 --> 00:33:19,720
Jackson several years back I knew you

829
00:33:24,980 --> 00:33:22,210
wrote complaints to the FCC you know

830
00:33:28,020 --> 00:33:24,990
because it's you know the you know the

831
00:33:30,870 --> 00:33:28,030
obscenity of whatever so but the the

832
00:33:32,760 --> 00:33:30,880
other thing the FCC does

833
00:33:34,860 --> 00:33:32,770
or has started to look into basically

834
00:33:36,030 --> 00:33:34,870
they regulate telecommunications

835
00:33:38,130 --> 00:33:36,040
providers so they also regulate

836
00:33:41,970 --> 00:33:38,140
telephone the regular old telephone

837
00:33:43,950 --> 00:33:41,980
networks and basically the FCC is

838
00:33:45,390 --> 00:33:43,960

supposed to regulate telecommunications

839

00:33:47,520 --> 00:33:45,400

providers they're supposed to be what's

840

00:33:50,340 --> 00:33:47,530

called common carriers which means that

841

00:33:52,140 --> 00:33:50,350

they accept traffic from anyone and they

842

00:33:54,210 --> 00:33:52,150

you know basically you give them the

843

00:33:55,440 --> 00:33:54,220

money they carry the traffic that's what

844

00:33:57,360 --> 00:33:55,450

a common carrier means it means they

845

00:33:59,220 --> 00:33:57,370

don't look at and say you know well we

846

00:34:01,080 --> 00:33:59,230

like you or we don't like you or we're

847

00:34:02,760 --> 00:34:01,090

giving you no special packages to these

848

00:34:04,710 --> 00:34:02,770

types of people but not those types of

849

00:34:05,760 --> 00:34:04,720

people these types of companies but not

850

00:34:07,260 --> 00:34:05,770

those types of companies

851

00:34:12,270 --> 00:34:07,270

it's basically supposed to be

852

00:34:14,810 --> 00:34:12,280

essentially neutral and so title 2 is

853

00:34:18,990 --> 00:34:14,820

the part of the Telecommunications Act

854

00:34:21,149 --> 00:34:19,000

that is regulates how the FCC is

855

00:34:22,800 --> 00:34:21,159

supposed to treat common carriers and it

856

00:34:24,899 --> 00:34:22,810

also says what common carriers are

857

00:34:27,869 --> 00:34:24,909

supposed to do it but it says you know

858

00:34:29,790 --> 00:34:27,879

if you're AT&T you can't just decide I'm

859

00:34:31,740 --> 00:34:29,800

not gonna you know carry phone calls

860

00:34:33,570 --> 00:34:31,750

that are coming in from Verizon

861

00:34:35,490 --> 00:34:33,580

customers anymore because I only want

862

00:34:37,560 --> 00:34:35,500

people on AT&T to call other people on

863

00:34:39,350 --> 00:34:37,570

AT&T you can't do that because it would

864

00:34:43,409 --> 00:34:39,360

just break the telephone network right

865

00:34:46,800 --> 00:34:43,419

and it would stand and so about two

866

00:34:48,090 --> 00:34:46,810

years ago the FCC said that well you

867

00:34:49,889 --> 00:34:48,100

know it's gotten to the point where

868

00:34:53,580 --> 00:34:49,899

we've realized that internet providers

869

00:34:56,129 --> 00:34:53,590

are the common carriers - so there they

870

00:34:57,960 --> 00:34:56,139

also count as telecommunications

871

00:35:00,180 --> 00:34:57,970

providers because they're providing a

872

00:35:03,630 --> 00:35:00,190

telecommunication service when you go to

873

00:35:06,420 --> 00:35:03,640

your internet provider you're not saying

874

00:35:07,980 --> 00:35:06,430

you know I you're basically when your

875

00:35:10,560 --> 00:35:07,990

computer talks to your internet provider

876

00:35:12,180 --> 00:35:10,570

it's saying here's some data send it to

877

00:35:14,760 --> 00:35:12,190

this destination and that's it that's

878

00:35:16,110 --> 00:35:14,770

really all your computers doing and

879

00:35:19,050 --> 00:35:16,120

that's basically what a common carrier

880

00:35:21,480 --> 00:35:19,060

does it gets some communications from

881

00:35:23,400 --> 00:35:21,490

the user of the customer and carries it

882

00:35:26,250 --> 00:35:23,410

to some final destination and then maybe

883

00:35:28,500 --> 00:35:26,260

carries some reply data back it used to

884

00:35:29,970 --> 00:35:28,510

be that with you know hundred years ago

885

00:35:31,980 --> 00:35:29,980

that was just phone calls well now it's

886

00:35:34,500 --> 00:35:31,990

phone calls and data and an internet

887

00:35:36,630 --> 00:35:34,510

traffic so that's basically when you

888

00:35:39,540 --> 00:35:36,640

hear people talking about title 2 versus

889

00:35:41,910 --> 00:35:39,550

title 1 title 1 regulates what's called

890

00:35:43,350 --> 00:35:41,920

information services so this if you

891

00:35:44,700 --> 00:35:43,360

think about it you know information

892

00:35:47,070 --> 00:35:44,710

services are more

893

00:35:49,680 --> 00:35:47,080

like what the bulletin board systems

894

00:35:52,950 --> 00:35:49,690

that people dialed into 20 years of God

895

00:35:55,520 --> 00:35:52,960

25 years ago were back and you know

896

00:35:58,680 --> 00:35:55,530

before the web even existed

897

00:36:00,960 --> 00:35:58,690

you know AOL or prodigy back when they

898

00:36:03,329 --> 00:36:00,970

were you know brand-new in the mid 90s

899

00:36:06,900 --> 00:36:03,339

probably counted as information systems

900

00:36:08,640 --> 00:36:06,910

because they they didn't just their

901
00:36:11,820 --> 00:36:08,650
selling points essentially where look we

902
00:36:14,160 --> 00:36:11,830
have all this content that is only for

903
00:36:15,570 --> 00:36:14,170
subscribers to our network only for AOL

904
00:36:17,670 --> 00:36:15,580
subscribes if you remember back in the

905
00:36:19,530 --> 00:36:17,680
day you know if you wanted to get on AOL

906
00:36:22,800 --> 00:36:19,540
chat rooms or you wanted to look at a oh

907
00:36:24,839 --> 00:36:22,810
you know AOL would have articles you

908
00:36:26,670 --> 00:36:24,849
know certain features games that you

909
00:36:28,800 --> 00:36:26,680
could play only if you subscribe to a o

910
00:36:31,230 --> 00:36:28,810
L if you subscribe to copy serve you

911
00:36:34,859 --> 00:36:31,240
couldn't get to that sort of stuff and

912
00:36:36,780 --> 00:36:34,869
that's essentially what happened was

913
00:36:39,780 --> 00:36:36,790

because that's what internet providers

914

00:36:41,970 --> 00:36:39,790

evolved out of they were for a very long

915

00:36:44,070 --> 00:36:41,980

time regulated as these information

916

00:36:45,060 --> 00:36:44,080

services because they were essentially

917

00:36:47,250 --> 00:36:45,070

in those service of providing

918

00:36:48,810 --> 00:36:47,260

information to users but then when the

919

00:36:51,329 --> 00:36:48,820

internet came around and web you know

920

00:36:53,430 --> 00:36:51,339

the web became big and people stopped

921

00:36:55,890 --> 00:36:53,440

using their internet providers stuff I

922

00:36:57,349 --> 00:36:55,900

mean what internet provider do you know

923

00:36:59,550 --> 00:36:57,359

of that it's still providing you know

924

00:37:02,099 --> 00:36:59,560

specific functionality you're you know

925

00:37:04,200 --> 00:37:02,109

chat rooms that people really use on a

926

00:37:06,240 --> 00:37:04,210

wide scale it's it's just not how the

927

00:37:08,099 --> 00:37:06,250

internet works anymore now your internet

928

00:37:10,800 --> 00:37:08,109

provider is someone you pay to get to

929

00:37:13,410 --> 00:37:10,810

the rest of the Internet right right so

930

00:37:17,280 --> 00:37:13,420

that's what title 2 is about oh okay now

931

00:37:20,460 --> 00:37:17,290

we have a chatroom question this person

932

00:37:24,329 --> 00:37:20,470

wants to know will the FCC ever regulate

933

00:37:27,570 --> 00:37:24,339

YouTube at one point so the chances of

934

00:37:29,820 --> 00:37:27,580

that are pretty unlikely certainly

935

00:37:30,480 --> 00:37:29,830

that's the sort of thing that if it got

936

00:37:33,359 --> 00:37:30,490

to that point

937

00:37:35,730 --> 00:37:33,369

that's a line the e FF would draw on the

938

00:37:38,430 --> 00:37:35,740

sand and say no no no no it's one thing

939

00:37:39,450 --> 00:37:38,440

to be talking about you know how you

940

00:37:42,390 --> 00:37:39,460

know because there isn't a lot of

941

00:37:44,220 --> 00:37:42,400

customer choice how people can get

942

00:37:45,270 --> 00:37:44,230

online in the first place and make sure

943

00:37:48,060 --> 00:37:45,280

they're free to do what they want online

944

00:37:50,700 --> 00:37:48,070

but FCC is not likely to regulate

945

00:37:53,820 --> 00:37:50,710

YouTube it's they'd have a hard time

946

00:37:58,560 --> 00:37:53,830

justifying that as within the scope of

947

00:38:01,260 --> 00:37:58,570

their authority the you know the

948

00:38:03,810 --> 00:38:01,270

you might see something I mean yeah I

949

00:38:06,480 --> 00:38:03,820

can't think of another scenario where

950

00:38:09,630 --> 00:38:06,490

the FCC would say you know really in any

951
00:38:11,790 --> 00:38:09,640
successful way be able to say we're

952
00:38:14,250 --> 00:38:11,800
gonna tell YouTube how to operate you

953
00:38:16,470 --> 00:38:14,260
know it's pretty unlikely slippery slope

954
00:38:18,870 --> 00:38:16,480
and then there's then what about V Moe

955
00:38:21,120 --> 00:38:18,880
and all those other you know it's

956
00:38:22,140 --> 00:38:21,130
exactly and that's that's a big that's a

957
00:38:23,790 --> 00:38:22,150
big difference to I think which is

958
00:38:25,560 --> 00:38:23,800
important to remember is that as we talk

959
00:38:27,630 --> 00:38:25,570
about four internet service you

960
00:38:29,220 --> 00:38:27,640
basically have one maybe two choices if

961
00:38:31,380 --> 00:38:29,230
I'm going online and I want to post a

962
00:38:35,640 --> 00:38:31,390
video somewhere I can post it on YouTube

963
00:38:37,620 --> 00:38:35,650

I can post it on Vimeo I can post it on

964

00:38:40,290 --> 00:38:37,630

Facebook directly I can host it myself

965

00:38:42,240 --> 00:38:40,300

on my own website there's a bajillion

966

00:38:43,800 --> 00:38:42,250

different you know ways that I can get

967

00:38:46,200 --> 00:38:43,810

my video out there mm-hmm

968

00:38:47,730 --> 00:38:46,210

but only one you know company that I can

969

00:38:49,200 --> 00:38:47,740

sign up with to get it to actually

970

00:38:52,440 --> 00:38:49,210

upload onto the Internet in the first

971

00:38:54,840 --> 00:38:52,450

place and so it's that it's that sort of

972

00:38:56,610 --> 00:38:54,850

bottleneck that gatekeeper effect that's

973

00:38:58,620 --> 00:38:56,620

what we're really worried about when it

974

00:39:03,390 --> 00:38:58,630

comes to net neutrality all right say

975

00:39:06,810 --> 00:39:03,400

that this the regulations stay rolled

976

00:39:09,960 --> 00:39:06,820

back that they don't and I want to talk

977

00:39:14,100 --> 00:39:09,970

about them and why there is a potential

978

00:39:17,100 --> 00:39:14,110

change but just say that they are kept

979

00:39:18,810 --> 00:39:17,110

the way they are also I should clarify

980

00:39:21,060 --> 00:39:18,820

right now they are in place right now

981

00:39:23,160 --> 00:39:21,070

right now the net neutrality regulations

982

00:39:25,980 --> 00:39:23,170

are in place what's happening is the

983

00:39:29,240 --> 00:39:25,990

current head of the FCC has a proposal

984

00:39:31,410 --> 00:39:29,250

to roll them back I Bennett he's very

985

00:39:33,150 --> 00:39:31,420

strongly committed to rolling them back

986

00:39:36,330 --> 00:39:33,160

so that's the danger of them and is

987

00:39:39,870 --> 00:39:36,340

there anything coming up that may be

988

00:39:41,520 --> 00:39:39,880

voted on so the so they haven't

989

00:39:43,620 --> 00:39:41,530

announced a vote yet so what the way

990

00:39:45,780 --> 00:39:43,630

it's again you get into this arcane

991

00:39:49,200 --> 00:39:45,790

process of how the federal government

992

00:39:50,760 --> 00:39:49,210

works so they've put out the FCC has put

993

00:39:52,800 --> 00:39:50,770

out what's called a notice of proposed

994

00:39:54,570 --> 00:39:52,810

rule baking which is a fancy way of

995

00:39:55,620 --> 00:39:54,580

saying they've put out there what they

996

00:39:57,090 --> 00:39:55,630

think they want to do and they're

997

00:39:59,280 --> 00:39:57,100

required to do this by law they have to

998

00:40:01,950 --> 00:39:59,290

put out basically here's what we think

999

00:40:05,010 --> 00:40:01,960

we want to do and give people the chance

1000

00:40:06,810 --> 00:40:05,020

to comment and then after that they can

1001
00:40:08,790 --> 00:40:06,820
either decide to move forward or decide

1002
00:40:10,440 --> 00:40:08,800
to adjust what they want to do or decide

1003
00:40:12,090 --> 00:40:10,450
you know oh god this was a terrible idea

1004
00:40:13,830 --> 00:40:12,100
in the first place so

1005
00:40:15,990 --> 00:40:13,840
they put that out and they basically

1006
00:40:18,090 --> 00:40:16,000
said our plan is to roll back these

1007
00:40:22,740 --> 00:40:18,100
rules and have companies commit to

1008
00:40:25,860 --> 00:40:22,750
voluntary pledges that they promise you

1009
00:40:27,840 --> 00:40:25,870
know cross my heart and hope to die

1010
00:40:31,200 --> 00:40:27,850
you know swear on my mother's grave that

1011
00:40:32,910 --> 00:40:31,210
we won't you know start interfering with

1012
00:40:35,250 --> 00:40:32,920
customers traffic I mean the problem is

1013
00:40:36,600 --> 00:40:35,260

they've already done it in the past so

1014

00:40:39,450 --> 00:40:36,610

there's no reason to believe them and

1015

00:40:44,400 --> 00:40:39,460

also if they decide to break the promise

1016

00:40:46,590 --> 00:40:44,410

there's no enforcement mechanism now the

1017

00:40:48,300 --> 00:40:46,600

reply period has finished for that the

1018

00:40:51,870 --> 00:40:48,310

comment period is finished for that so

1019

00:40:54,900 --> 00:40:51,880

the FCC is gotten I want to say it's now

1020

00:40:56,490 --> 00:40:54,910

in like the 8 million plus range of

1021

00:41:00,360 --> 00:40:56,500

comments although even that number may

1022

00:41:02,550 --> 00:41:00,370

not be quite high enough and now the

1023

00:41:05,070 --> 00:41:02,560

ball is essentially in the FCC's Court

1024

00:41:08,990 --> 00:41:05,080

the FCC so it's there's a the Commission

1025

00:41:11,400 --> 00:41:09,000

is made up of five commissioners it's

1026

00:41:14,090 --> 00:41:11,410

three it's traditionally three of

1027

00:41:17,400 --> 00:41:14,100

whatever party is in power and Congress

1028

00:41:19,770 --> 00:41:17,410

or sorry and in the White House I should

1029

00:41:21,300 --> 00:41:19,780

say and two of whatever party is not in

1030

00:41:24,270 --> 00:41:21,310

power so there's currently three

1031

00:41:25,650 --> 00:41:24,280

Republicans and two Democrats I don't

1032

00:41:27,810 --> 00:41:25,660

know why this is a partisan issue but

1033

00:41:29,880 --> 00:41:27,820

for some reason the push to rollback and

1034

00:41:33,360 --> 00:41:29,890

neutrality has been spearheaded by

1035

00:41:35,400 --> 00:41:33,370

Republicans I feel like you know these

1036

00:41:37,170 --> 00:41:35,410

issues affect people of either party

1037

00:41:40,380 --> 00:41:37,180

equally so I don't understand it but

1038

00:41:44,640 --> 00:41:40,390

that's the way it's it's it has shaken

1039

00:41:47,070 --> 00:41:44,650

out so it was a Republican FCC that has

1040

00:41:49,110 --> 00:41:47,080

been pushing this and they haven't

1041

00:41:51,060 --> 00:41:49,120

scheduled a vote yet but it could happen

1042

00:41:53,760 --> 00:41:51,070

they could schedule a vote at any time

1043

00:41:56,490 --> 00:41:53,770

and it would be a vote in the FCC so

1044

00:41:58,920 --> 00:41:56,500

this is a situation where it's out of

1045

00:42:01,080 --> 00:41:58,930

Congress's hands unless Congress were to

1046

00:42:04,020 --> 00:42:01,090

go ahead and pass a new law that said

1047

00:42:06,750 --> 00:42:04,030

actually FCC this is the new law that

1048

00:42:08,850 --> 00:42:06,760

says this is what you must do and the

1049

00:42:13,440 --> 00:42:08,860

chances of that happening are pretty low

1050

00:42:16,350 --> 00:42:13,450

unfortunately now okay so what about the

1051
00:42:19,590 --> 00:42:16,360
future though I mean there should be no

1052
00:42:22,260 --> 00:42:19,600
unrest and watching what happens with

1053
00:42:25,280 --> 00:42:22,270
net neutrality from administration to

1054
00:42:29,120 --> 00:42:25,290
administration that's that's

1055
00:42:30,980 --> 00:42:29,130
the the disturbing part in some sense is

1056
00:42:33,710 --> 00:42:30,990
that so we had these net neutrality

1057
00:42:36,350 --> 00:42:33,720
regulations they were passed under the

1058
00:42:38,000 --> 00:42:36,360
Obama administration so they're passed

1059
00:42:39,440 --> 00:42:38,010
under a democratic administration now

1060
00:42:41,510 --> 00:42:39,450
there's a Republican in power in the

1061
00:42:43,760 --> 00:42:41,520
White House and so now it seems like

1062
00:42:45,830 --> 00:42:43,770
they're gonna get repealed but it seems

1063
00:42:47,030 --> 00:42:45,840

kind of silly for this to bounce every

1064

00:42:49,520 --> 00:42:47,040

four eight years

1065

00:42:51,110 --> 00:42:49,530

you know and companies I mean even the

1066

00:42:53,150 --> 00:42:51,120

internet providers as much as they want

1067

00:42:54,650 --> 00:42:53,160

to roll back net neutrality they're also

1068

00:42:56,210 --> 00:42:54,660

not gonna want to play this game where

1069

00:42:57,530 --> 00:42:56,220

every four years they have to or every

1070

00:42:59,540 --> 00:42:57,540

eight years depending on you know

1071

00:43:02,690 --> 00:42:59,550

re-elections they have to do this dance

1072

00:43:05,840 --> 00:43:02,700

to try angry net neutrality rollback or

1073

00:43:08,000 --> 00:43:05,850

fight it off from being you know put in

1074

00:43:12,590 --> 00:43:08,010

place again I mean it's it's really not

1075

00:43:16,370 --> 00:43:12,600

the right way to run the country and so

1076

00:43:18,460 --> 00:43:16,380

you know it's it's a scenario where you

1077

00:43:21,560 --> 00:43:18,470

know in the end to be perfectly honest

1078

00:43:23,780 --> 00:43:21,570

Congress writing you know covering this

1079

00:43:28,700 --> 00:43:23,790

in law instead of leaving it to the the

1080

00:43:30,440 --> 00:43:28,710

you know not whim but the the choice of

1081

00:43:32,060 --> 00:43:30,450

whoever's in the White House isn't the

1082

00:43:34,070 --> 00:43:32,070

right way to do it really Congress

1083

00:43:35,540 --> 00:43:34,080

should pass a law it's just it's so

1084

00:43:38,000 --> 00:43:35,550

difficult for Congress to do anything

1085

00:43:39,770 --> 00:43:38,010

day these days given the the partisan

1086

00:43:41,150 --> 00:43:39,780

divides in Washington mmm-hmm then it

1087

00:43:42,920 --> 00:43:41,160

just doesn't seem like it's gonna happen

1088

00:43:44,360 --> 00:43:42,930

but you know in a perfect world that's

1089

00:43:46,100 --> 00:43:44,370

what we would want we what about

1090

00:43:48,200 --> 00:43:46,110

Congress to say net neutrality is the

1091

00:43:51,200 --> 00:43:48,210

law of the land these are the you know

1092

00:43:52,160 --> 00:43:51,210

the you know simple basic rules don't

1093

00:43:55,340 --> 00:43:52,170

block traffic

1094

00:43:58,220 --> 00:43:55,350

don't throttle traffic don't interfere

1095

00:44:00,320 --> 00:43:58,230

with traffic here are the privacy rules

1096

00:44:02,330 --> 00:44:00,330

associated with that and you know and

1097

00:44:03,470 --> 00:44:02,340

that's it and after that run your ISP

1098

00:44:04,730 --> 00:44:03,480

however you want we're not gonna

1099

00:44:07,280 --> 00:44:04,740

regulate you we're not gonna you know

1100

00:44:08,960 --> 00:44:07,290

set prices or anything like that it's

1101
00:44:12,050 --> 00:44:08,970
just you know don't block don't throttle

1102
00:44:15,250 --> 00:44:12,060
simple rules and go forward

1103
00:44:19,340 --> 00:44:15,260
don't treat don't treat data differently

1104
00:44:23,000 --> 00:44:19,350
but that's yeah it's anybody's guess how

1105
00:44:25,430 --> 00:44:23,010
this will end up so what is in it for

1106
00:44:28,340 --> 00:44:25,440
them why are they trying to change

1107
00:44:32,210 --> 00:44:28,350
things so the FCC is trying to change

1108
00:44:36,200 --> 00:44:32,220
things because the current chair of the

1109
00:44:38,810 --> 00:44:36,210
FCC was a former lawyer for Verizon and

1110
00:44:41,540 --> 00:44:38,820
I guess that's I mean on for

1111
00:44:43,640 --> 00:44:41,550
that's how well there's a lot of you

1112
00:44:46,100 --> 00:44:43,650
know actually EF F for a long time was

1113
00:44:48,800 --> 00:44:46,110

very much against so-so

1114

00:44:50,720 --> 00:44:48,810

against the FCC trying to enforce a net

1115

00:44:53,090 --> 00:44:50,730

neutrality because we were worried that

1116

00:44:55,610 --> 00:44:53,100

the FCC is essentially what you what you

1117

00:44:57,110 --> 00:44:55,620

call a captured agency so what that for

1118

00:44:59,270 --> 00:44:57,120

those who aren't you know don't know the

1119

00:45:02,720 --> 00:44:59,280

the political jargon it basically means

1120

00:45:04,730 --> 00:45:02,730

a federal agency that is run by a

1121

00:45:07,670 --> 00:45:04,740

revolving door people from the industry

1122

00:45:09,320 --> 00:45:07,680

it's supposed to regulate and that's

1123

00:45:10,670 --> 00:45:09,330

essentially how the FCC has been now

1124

00:45:12,260 --> 00:45:10,680

sometimes that's useful because the

1125

00:45:13,730 --> 00:45:12,270

people in industry know what's going on

1126

00:45:16,370 --> 00:45:13,740

and so they know what types of

1127

00:45:17,870 --> 00:45:16,380

regulations do and don't make sense you

1128

00:45:19,970 --> 00:45:17,880

know if they're going to be regulating

1129

00:45:21,500 --> 00:45:19,980

how the spectrum works I sure hope they

1130

00:45:23,540 --> 00:45:21,510

know what the different companies want

1131

00:45:25,820 --> 00:45:23,550

to do with the spectrum but on the other

1132

00:45:27,920 --> 00:45:25,830

hand you also get scenarios where you

1133

00:45:30,310 --> 00:45:27,930

get Verizon former Verizon lobbyists

1134

00:45:34,010 --> 00:45:30,320

former you know cable industry lobbyists

1135

00:45:37,100 --> 00:45:34,020

and so we said you know we can't trust

1136

00:45:39,380 --> 00:45:37,110

the FCC eventually it got to the point

1137

00:45:42,140 --> 00:45:39,390

where just there was so little market

1138

00:45:43,850 --> 00:45:42,150

power in terms of customers being able

1139

00:45:46,160 --> 00:45:43,860

to choose different internet providers

1140

00:45:49,610 --> 00:45:46,170

that we said look it's getting bad and

1141

00:45:52,010 --> 00:45:49,620

we need something and the FCC is the

1142

00:45:54,230 --> 00:45:52,020

least bad option and it's still sort of

1143

00:45:56,840 --> 00:45:54,240

is that's why we want Congress to go

1144

00:45:59,570 --> 00:45:56,850

forward with something you know but

1145

00:46:03,080 --> 00:45:59,580

essentially it's a captured agency and

1146

00:46:04,580 --> 00:46:03,090

there's big business that is pressuring

1147

00:46:06,650 --> 00:46:04,590

I mean it's like you said you follow the

1148

00:46:09,560 --> 00:46:06,660

money it all goes back to the money and

1149

00:46:12,290 --> 00:46:09,570

these big businesses want to extract as

1150

00:46:14,150 --> 00:46:12,300

much money as possible now my son and I

1151

00:46:17,630 --> 00:46:14,160

were talking about this quite a few

1152

00:46:21,650 --> 00:46:17,640

months ago and he said that before the

1153

00:46:24,320 --> 00:46:21,660

regulations that Obama administration

1154

00:46:25,970 --> 00:46:24,330

put in place there was a good example of

1155

00:46:29,570 --> 00:46:25,980

what can happen do you know what he's

1156

00:46:32,690 --> 00:46:29,580

talking about I mean there's a bunch of

1157

00:46:34,970 --> 00:46:32,700

example so at one point Comcast was

1158

00:46:36,500 --> 00:46:34,980

interfering with BitTorrent that was in

1159

00:46:39,020 --> 00:46:36,510

some sense what kicked off this whole

1160

00:46:40,730 --> 00:46:39,030

thing so BitTorrent does you know if

1161

00:46:43,640 --> 00:46:40,740

those who don't know it's a protocol for

1162

00:46:45,440 --> 00:46:43,650

peer-to-peer downloading it does have a

1163

00:46:48,260 --> 00:46:45,450

reputation for being used a lot for

1164

00:46:49,910 --> 00:46:48,270

copyright infringement but for tech

1165

00:46:52,310 --> 00:46:49,920

nerds like me it's also the way that if

1166

00:46:52,640 --> 00:46:52,320

I want to get a new Linux distribution

1167

00:46:54,380 --> 00:46:52,650

the new

1168

00:46:56,170 --> 00:46:54,390

operating system for my computer that's

1169

00:47:00,410 --> 00:46:56,180

how i download it is through BitTorrent

1170

00:47:02,809 --> 00:47:00,420

if I want to share you know public

1171

00:47:08,150 --> 00:47:02,819

domain material you can share it through

1172

00:47:10,760 --> 00:47:08,160

BitTorrent and so Comcast was basically

1173

00:47:12,829 --> 00:47:10,770

just basically resetting people's

1174

00:47:15,170 --> 00:47:12,839

BitTorrent connections because they

1175

00:47:17,210 --> 00:47:15,180

thought that that was a good way to

1176

00:47:18,859 --> 00:47:17,220

manage their network and deal with

1177

00:47:20,599 --> 00:47:18,869

congestion and sort of instead of

1178

00:47:23,000 --> 00:47:20,609

actually dealing with congestion by

1179

00:47:24,740 --> 00:47:23,010

either upgrading with our network or not

1180

00:47:27,529 --> 00:47:24,750

over promising the bandwidth that they

1181

00:47:29,120 --> 00:47:27,539

could deliver to people or making sure

1182

00:47:30,620 --> 00:47:29,130

that people got the bandwidth each

1183

00:47:33,019 --> 00:47:30,630

individual got the bandwidth that they

1184

00:47:34,819 --> 00:47:33,029

were allocated and so that was an

1185

00:47:36,710 --> 00:47:34,829

example where you know people were doing

1186

00:47:38,510 --> 00:47:36,720

perfectly legal legitimate things you

1187

00:47:41,420 --> 00:47:38,520

know I'm trying to download a new copy

1188

00:47:43,670 --> 00:47:41,430

of some open source software and I can't

1189

00:47:47,059 --> 00:47:43,680

because Comcast is interfering because

1190

00:47:50,269 --> 00:47:47,069

of the protocol that I'm using we've

1191

00:47:51,950 --> 00:47:50,279

seen other examples so it's hard me so

1192

00:47:54,140 --> 00:47:51,960

you're saying you're trying to do

1193

00:47:57,170 --> 00:47:54,150

something that's perfectly legal but

1194

00:48:00,200 --> 00:47:57,180

you're using something that is also used

1195

00:48:02,210 --> 00:48:00,210

for something illegal like copyright

1196

00:48:06,769 --> 00:48:02,220

infringement but you can't access it

1197

00:48:08,510 --> 00:48:06,779

because of that well and even that it

1198

00:48:09,980 --> 00:48:08,520

wasn't the Comcast was doing it because

1199

00:48:12,049 --> 00:48:09,990

of copyright infringement they were

1200

00:48:14,420 --> 00:48:12,059

doing it because because at the time

1201

00:48:16,789 --> 00:48:14,430

BitTorrent was taking up a lot of the

1202

00:48:18,470 --> 00:48:16,799

bandwidth of their network I see and

1203

00:48:20,269 --> 00:48:18,480

they thought that was the way to do it

1204

00:48:22,069 --> 00:48:20,279

not to actually you know make sure that

1205

00:48:24,650 --> 00:48:22,079

individual users got the bandwidth they

1206

00:48:26,210 --> 00:48:24,660

were allocated they thought oh well if

1207

00:48:28,549 --> 00:48:26,220

someone using BitTorrent that just means

1208

00:48:30,940 --> 00:48:28,559

they're a data hog and so poof we're

1209

00:48:33,710 --> 00:48:30,950

gonna mess with BitTorrent I get it that

1210

00:48:36,349 --> 00:48:33,720

was essentially their rationale and you

1211

00:48:38,359 --> 00:48:36,359

know it's it's a little little flaky

1212

00:48:42,140 --> 00:48:38,369

there are other examples at one point

1213

00:48:44,870 --> 00:48:42,150

there was a ISP in North Carolina that

1214

00:48:48,170 --> 00:48:44,880

started blocking VoIP calls voice over

1215

00:48:51,079 --> 00:48:48,180

Internet Protocol so if you used

1216

00:48:52,609 --> 00:48:51,089

something like Skype at the time for

1217

00:48:56,630 --> 00:48:52,619

your home phone system because you

1218

00:48:59,960 --> 00:48:56,640

didn't want to pay you just couldn't do

1219

00:49:03,490 --> 00:48:59,970

it they just block you there's been

1220

00:49:06,410 --> 00:49:03,500

examples where what's another good one

1221

00:49:08,329 --> 00:49:06,420

for a while AT&T wouldn't

1222

00:49:12,440 --> 00:49:08,339

allow people to use FaceTime on their

1223

00:49:14,299 --> 00:49:12,450

iPhones but you know other networks had

1224

00:49:18,230 --> 00:49:14,309

no problems with it so it clearly wasn't

1225

00:49:20,230 --> 00:49:18,240

a technical issue theirs let me see what

1226

00:49:23,870 --> 00:49:20,240

else have we got

1227

00:49:26,329 --> 00:49:23,880

in the past companies have hijacked when

1228

00:49:28,370 --> 00:49:26,339

people did searches online so if you

1229

00:49:29,900 --> 00:49:28,380

were in your browser and you just and

1230

00:49:33,410 --> 00:49:29,910

you know in the URL bar typed in a

1231

00:49:36,289 --> 00:49:33,420

search like the everything show they

1232

00:49:39,710 --> 00:49:36,299

might hijack that search and say well

1233

00:49:42,440 --> 00:49:39,720

someone some company has paid us to when

1234

00:49:47,150 --> 00:49:42,450

we see these queries go directly to a

1235

00:49:50,059 --> 00:49:47,160

certain web page so a good example is if

1236

00:49:51,680 --> 00:49:50,069

you were you know actually a better

1237

00:49:54,260 --> 00:49:51,690

example is you know you're looking up

1238

00:49:55,520 --> 00:49:54,270

the local Apple Festival at your you

1239

00:49:58,190 --> 00:49:55,530

know County Fair or something like that

1240

00:50:00,620 --> 00:49:58,200

so you type in Apple into your search

1241

00:50:03,410 --> 00:50:00,630

browser into your search bar if that if

1242

00:50:05,450 --> 00:50:03,420

Apple had paid your ISP to redirect all

1243

00:50:07,250 --> 00:50:05,460

searches for Apple directly to the Apple

1244

00:50:08,660 --> 00:50:07,260

website you wouldn't even see the search

1245

00:50:10,400 --> 00:50:08,670

results you'd go directly there and

1246

00:50:14,319 --> 00:50:10,410

you'd be like wait a second wow I was

1247

00:50:18,349 --> 00:50:14,329

searching not trying to go to apple.com

1248

00:50:18,770 --> 00:50:18,359

you know things like that I mean I could

1249

00:50:21,740 --> 00:50:18,780

go on

1250

00:50:24,440 --> 00:50:21,750

there's plenty more examples Krypton

1251

00:50:26,900 --> 00:50:24,450

yeah it's bad enough as it is I do a lot

1252

00:50:28,099 --> 00:50:26,910

of research and fine arts and antiques

1253

00:50:29,930 --> 00:50:28,109

and a lot of times I'm trying to

1254

00:50:33,289 --> 00:50:29,940

research something and if someone's like

1255

00:50:35,000 --> 00:50:33,299

popular like an artist name also matches

1256

00:50:37,670 --> 00:50:35,010

like a celebrity's name forget it you'll

1257

00:50:39,500 --> 00:50:37,680

never find out any information at least

1258

00:50:40,970 --> 00:50:39,510

there you can look at the search results

1259

00:50:42,710 --> 00:50:40,980

right I mean this was we don't even get

1260

00:50:47,260 --> 00:50:42,720

to see the search results right right

1261

00:50:50,690 --> 00:50:47,270

now how does net neutrality as it stand

1262

00:50:55,520 --> 00:50:50,700

does it help our privacy the way it is

1263

00:50:58,640 --> 00:50:55,530

so sort of so as part of the

1264

00:51:02,420 --> 00:50:58,650

reclassification of internet providers

1265

00:51:04,160 --> 00:51:02,430

as common carriers another thing common

1266

00:51:06,289 --> 00:51:04,170

carriers have to do is their specific

1267

00:51:09,170 --> 00:51:06,299

privacy rules so for example your

1268

00:51:11,089 --> 00:51:09,180

telephone provider can't you know sell

1269

00:51:14,240 --> 00:51:11,099

what numbers you've been calling to

1270

00:51:17,120 --> 00:51:14,250

whoever wants to you know see them it's

1271

00:51:19,490 --> 00:51:17,130

just that's a common sense privacy thing

1272

00:51:20,210 --> 00:51:19,500

so when they when internet providers got

1273

00:51:22,940 --> 00:51:20,220

classified

1274

00:51:24,230 --> 00:51:22,950

common carriers that also meant that

1275

00:51:25,820 --> 00:51:24,240

there were going to be some privacy

1276

00:51:27,710 --> 00:51:25,830

rules that we're going to be imposed

1277

00:51:29,570 --> 00:51:27,720

upon them that they couldn't sell your

1278

00:51:32,300 --> 00:51:29,580

data your browsing history they couldn't

1279

00:51:35,150 --> 00:51:32,310

use it to market advertisements at you

1280

00:51:37,790 --> 00:51:35,160

that sort of thing now some of your

1281

00:51:39,500 --> 00:51:37,800

listeners may remember that earlier this

1282

00:51:44,089 --> 00:51:39,510

year in the beginning probably I guess

1283

00:51:47,420 --> 00:51:44,099

it was March April of 2017 the US

1284

00:51:49,849 --> 00:51:47,430

Congress ended up blocking these privacy

1285

00:51:52,370 --> 00:51:49,859

rules from going into effect so the FCC

1286

00:51:54,260 --> 00:51:52,380

had written some privacy rules that came

1287

00:51:55,670 --> 00:51:54,270

along with this reclassification that

1288

00:51:59,780 --> 00:51:55,680

was necessary to get a net neutrality

1289

00:52:01,130 --> 00:51:59,790

but Congress said uh no actually I think

1290

00:52:03,560 --> 00:52:01,140

that companies can do whatever they want

1291

00:52:04,790 --> 00:52:03,570

with your data or sorry internet

1292

00:52:06,320 --> 00:52:04,800

providers can do whatever they want with

1293

00:52:07,670 --> 00:52:06,330

your data so you don't get these privacy

1294

00:52:12,560 --> 00:52:07,680

protections when it comes to your

1295

00:52:13,880 --> 00:52:12,570

internet browser so in that sense we

1296

00:52:15,530 --> 00:52:13,890

could have had better privacy

1297

00:52:17,390 --> 00:52:15,540

protections as sort of a side effect of

1298

00:52:19,160 --> 00:52:17,400

getting net neutrality enshrined in'

1299

00:52:21,290 --> 00:52:19,170

into the federal regulations but we

1300

00:52:24,410 --> 00:52:21,300

didn't and again for some reason it

1301
00:52:27,079 --> 00:52:24,420
became a partisan issue it was entirely

1302
00:52:28,640 --> 00:52:27,089
a republican it was an entirely party

1303
00:52:30,980 --> 00:52:28,650
line vote with the exception of a few

1304
00:52:32,480 --> 00:52:30,990
Republicans in the House who voted

1305
00:52:34,849 --> 00:52:32,490
against it but all the Republican

1306
00:52:37,220 --> 00:52:34,859
senators voted to kill these privacy

1307
00:52:39,859 --> 00:52:37,230
rules all the Democratic senators voted

1308
00:52:41,510 --> 00:52:39,869
to keep them again for reasons I don't

1309
00:52:45,050 --> 00:52:41,520
understand I imagine both Republicans

1310
00:52:47,720 --> 00:52:45,060
and Democrats like privacy um you know

1311
00:52:49,579 --> 00:52:47,730
it seems like a it's money again I'm

1312
00:52:54,079 --> 00:52:49,589
sure but I guess that's what it comes

1313
00:52:57,950 --> 00:52:54,089

down to um so ya know so if someone like

1314

00:53:00,950 --> 00:52:57,960

myself or yourself wants to have privacy

1315

00:53:04,339 --> 00:53:00,960

from the internet you know your

1316

00:53:06,589 --> 00:53:04,349

interpret internet provider how does how

1317

00:53:08,359 --> 00:53:06,599

do you go about that doing that so

1318

00:53:11,890 --> 00:53:08,369

there's a couple ways I mean there's

1319

00:53:14,450 --> 00:53:11,900

various tools you can use online I mean

1320

00:53:16,070 --> 00:53:14,460

EFS actually makes a couple of software

1321

00:53:19,550 --> 00:53:16,080

tools they're browser extensions that

1322

00:53:21,829 --> 00:53:19,560

you can install HTTPS Everywhere and

1323

00:53:24,079 --> 00:53:21,839

privacy badger if you just go to the EFS

1324

00:53:26,300 --> 00:53:24,089

org website and look up in the the top

1325

00:53:29,030 --> 00:53:26,310

right there's a little Tools menu that

1326

00:53:30,800 --> 00:53:29,040

you can look at you can use a VPN a

1327

00:53:32,720 --> 00:53:30,810

virtual private network they trick there

1328

00:53:33,829 --> 00:53:32,730

though is you're basically just shifting

1329

00:53:37,130 --> 00:53:33,839

the trust from your intern

1330

00:53:38,950 --> 00:53:37,140

provider to the VPN provider so that

1331

00:53:41,660 --> 00:53:38,960

just depends on who you trust more

1332

00:53:43,279 --> 00:53:41,670

certainly if your VPN provider is free I

1333

00:53:46,819 --> 00:53:43,289

don't think you should be generally

1334

00:53:48,680 --> 00:53:46,829

speaking that doesn't if the if it's

1335

00:53:50,539 --> 00:53:48,690

free they're making money somehow and

1336

00:53:54,049 --> 00:53:50,549

it's probably by mining the data that

1337

00:53:56,390 --> 00:53:54,059

goes through the VPN the the biggest

1338

00:53:58,789 --> 00:53:56,400

thing is that although the rules got

1339

00:54:00,920 --> 00:53:58,799

blocked at the federal level several

1340

00:54:03,170 --> 00:54:00,930

states have tried to pass basically the

1341

00:54:05,959 --> 00:54:03,180

exact same rules on the state level and

1342

00:54:09,890 --> 00:54:05,969

so one thing you could do is we've seen

1343

00:54:12,049 --> 00:54:09,900

this in gosh I mean I want to save I

1344

00:54:13,819 --> 00:54:12,059

mean California for sure I think

1345

00:54:17,329 --> 00:54:13,829

something came up in New York New Jersey

1346

00:54:20,900 --> 00:54:17,339

but also again but it's both blue states

1347

00:54:22,940 --> 00:54:20,910

and red states and Idaho Montana

1348

00:54:25,819 --> 00:54:22,950

I think Iowa but I'd have to

1349

00:54:27,620 --> 00:54:25,829

double-check so talk to your state

1350

00:54:29,630 --> 00:54:27,630

legislators talk to your state you know

1351
00:54:31,069 --> 00:54:29,640
representative your state senator and

1352
00:54:32,749 --> 00:54:31,079
tell them that you thing can be a good

1353
00:54:34,849 --> 00:54:32,759
idea if your state took the lead on

1354
00:54:36,259 --> 00:54:34,859
broadband privacy because this is the

1355
00:54:37,880 --> 00:54:36,269
thing where you know we talked at the

1356
00:54:40,249 --> 00:54:37,890
top of the show about regulating the

1357
00:54:41,989 --> 00:54:40,259
entire internet regulating internet

1358
00:54:43,579 --> 00:54:41,999
providers is not the same thing as

1359
00:54:45,529 --> 00:54:43,589
regulating the entire internet because

1360
00:54:48,319 --> 00:54:45,539
you're regulating you know Comcast

1361
00:54:51,380 --> 00:54:48,329
operates in my local vicinity right they

1362
00:54:54,579 --> 00:54:51,390
have to have a franchise agreement with

1363
00:54:57,349 --> 00:54:54,589

my you know city or my County my town

1364

00:54:59,269 --> 00:54:57,359

they have to have you know a business

1365

00:55:00,589 --> 00:54:59,279

license to operate in my state because

1366

00:55:02,359 --> 00:55:00,599

they're connecting there they have

1367

00:55:05,900 --> 00:55:02,369

customers that they're directly working

1368

00:55:08,690 --> 00:55:05,910

with in you know your locality and so

1369

00:55:11,029 --> 00:55:08,700

there this is we think this is a where

1370

00:55:12,859 --> 00:55:11,039

states can pass laws that say if you

1371

00:55:14,749 --> 00:55:12,869

want to provide an internet service in

1372

00:55:16,489 --> 00:55:14,759

our state then because you're doing

1373

00:55:19,180 --> 00:55:16,499

business with customers who physically

1374

00:55:21,709 --> 00:55:19,190

live in our state and only with them

1375

00:55:23,509 --> 00:55:21,719

then you have to have some privacy

1376

00:55:25,130 --> 00:55:23,519

protections so talk to your state

1377

00:55:27,319 --> 00:55:25,140

legislators let them know that you think

1378

00:55:28,989 --> 00:55:27,329

that you want to maintain your privacy

1379

00:55:31,279 --> 00:55:28,999

with respect to your internet provider

1380

00:55:33,589 --> 00:55:31,289

I've got a question for you you may or

1381

00:55:35,420 --> 00:55:33,599

may not be able to answer but I have a

1382

00:55:40,299 --> 00:55:35,430

couple of different news apps on my

1383

00:55:43,719 --> 00:55:40,309

iPhone and and I'm in the process of

1384

00:55:47,150 --> 00:55:43,729

selling my home I have it on the market

1385

00:55:48,860 --> 00:55:47,160

but even before that just like a few

1386

00:55:51,230 --> 00:55:48,870

before I actually signed the papers and

1387

00:55:53,480 --> 00:55:51,240

all that all of a sudden on one of the

1388

00:55:55,310 --> 00:55:53,490

news apps I get this these

1389

00:55:59,110 --> 00:55:55,320

advertisements how much is your home

1390

00:56:01,430 --> 00:55:59,120

worth and on and on and on how on earth

1391

00:56:03,530 --> 00:56:01,440

did they know that I was thinking of

1392

00:56:05,090 --> 00:56:03,540

selling my house or was that just a

1393

00:56:08,210 --> 00:56:05,100

fluke it that they're still on there now

1394

00:56:09,920 --> 00:56:08,220

uh it's possible it was a fluke I mean

1395

00:56:11,630 --> 00:56:09,930

the question is what sort of searches

1396

00:56:13,070 --> 00:56:11,640

were you doing what sort of websites

1397

00:56:14,840 --> 00:56:13,080

were you visiting I mean if you were

1398

00:56:18,500 --> 00:56:14,850

doing research about you know home

1399

00:56:21,050 --> 00:56:18,510

values you know how to set up your home

1400

00:56:24,710 --> 00:56:21,060

for the best you know open house that

1401
00:56:26,930 --> 00:56:24,720
sort of thing you know how to you know

1402
00:56:28,520 --> 00:56:26,940
ten projects you should do before you

1403
00:56:31,960 --> 00:56:28,530
put your home on the market that sort of

1404
00:56:35,120 --> 00:56:31,970
thing then you were being tracked either

1405
00:56:37,100 --> 00:56:35,130
either by your internet provider who

1406
00:56:39,440 --> 00:56:37,110
then you know said that we can target

1407
00:56:41,540 --> 00:56:39,450
ads to you

1408
00:56:43,430 --> 00:56:41,550
they told some company that you know is

1409
00:56:45,830 --> 00:56:43,440
doing something with home values and

1410
00:56:49,040 --> 00:56:45,840
said we can show ads to Martin apart

1411
00:56:51,320 --> 00:56:49,050
about home values or you were trapped

1412
00:56:55,040 --> 00:56:51,330
just by embedded essentially what we

1413
00:56:56,750 --> 00:56:55,050

call third party trackers online so this

1414

00:56:58,040 --> 00:56:56,760

would have been you know content

1415

00:57:01,070 --> 00:56:58,050

embedded in the websites you were

1416

00:57:03,620 --> 00:57:01,080

visiting and to be honest this is almost

1417

00:57:05,510 --> 00:57:03,630

a topic for another entire show when I

1418

00:57:07,070 --> 00:57:05,520

could talk about third party trackers

1419

00:57:08,990 --> 00:57:07,080

for probably a whole another hour

1420

00:57:12,740 --> 00:57:09,000

there's plenty of material on the EMF

1421

00:57:14,300 --> 00:57:12,750

web site or you just you know pick your

1422

00:57:17,540 --> 00:57:14,310

favorite search engine that you trust

1423

00:57:19,010 --> 00:57:17,550

and and look up third-party trackers and

1424

00:57:21,530 --> 00:57:19,020

I'm sure you'll find articles on yet

1425

00:57:23,330 --> 00:57:21,540

that website yeah well I'm sure and you

1426

00:57:25,970 --> 00:57:23,340

know you could probably do a show almost

1427

00:57:27,170 --> 00:57:25,980

about Facebook couldn't you yeah I mean

1428

00:57:30,470 --> 00:57:27,180

Facebook is a big one if you were

1429

00:57:32,720 --> 00:57:30,480

talking about this on Facebook if you

1430

00:57:35,600 --> 00:57:32,730

are clicking links from Facebook to

1431

00:57:37,460 --> 00:57:35,610

other sites or even if these sites you

1432

00:57:39,620 --> 00:57:37,470

went to had the facebook like button on

1433

00:57:41,260 --> 00:57:39,630

them that's one way Facebook tracks what

1434

00:57:44,900 --> 00:57:41,270

people do when they're not on Facebook

1435

00:57:45,980 --> 00:57:44,910

and so yeah Facebook would could also be

1436

00:57:50,330 --> 00:57:45,990

a whole nother show

1437

00:57:53,050 --> 00:57:50,340

Wow yeah and it's all gearing in a way

1438

00:57:55,880 --> 00:57:53,060

it's like our goes back to our privacy

1439

00:57:59,390 --> 00:57:55,890

because all these things are gearing up

1440

00:58:01,550 --> 00:57:59,400

to send us to places that will spend

1441

00:58:07,609 --> 00:58:01,560

money you know yeah

1442

00:58:09,589 --> 00:58:07,619

so anyway back to net neutrality I guess

1443

00:58:12,500 --> 00:58:09,599

I'm gonna ask you this question is all

1444

00:58:16,690 --> 00:58:12,510

right what it's the other side what is

1445

00:58:19,520 --> 00:58:16,700

their best argument for the free-for-all

1446

00:58:21,230 --> 00:58:19,530

so I can tell you what I think their

1447

00:58:24,589 --> 00:58:21,240

best argument is I'm obviously a little

1448

00:58:25,940 --> 00:58:24,599

biased and so apologies if people are

1449

00:58:27,920 --> 00:58:25,950

listening this and think I butchered

1450

00:58:29,990 --> 00:58:27,930

this I'm gonna try and I'm honestly

1451

00:58:33,589 --> 00:58:30,000

gonna try and do it justice and part of

1452

00:58:35,300 --> 00:58:33,599

this is biased because to be perfectly

1453

00:58:37,790 --> 00:58:35,310

blunt EF F tends to be a fairly

1454

00:58:39,770 --> 00:58:37,800

libertarian leaning organisation we tend

1455

00:58:42,050 --> 00:58:39,780

because the whole idea of regulating the

1456

00:58:45,260 --> 00:58:42,060

internet doesn't make sense because it's

1457

00:58:48,109 --> 00:58:45,270

a worldwide thing and so to me it's the

1458

00:58:50,750 --> 00:58:48,119

libertarian argument that by regulating

1459

00:58:52,849 --> 00:58:50,760

internet providers you're cutting down

1460

00:58:55,730 --> 00:58:52,859

on the innovation that they could have

1461

00:58:58,880 --> 00:58:55,740

your force you're forcing them not to

1462

00:59:02,570 --> 00:58:58,890

charge people that want to pay extra for

1463

00:59:06,109 --> 00:59:02,580

the Facebook package or the online video

1464

00:59:08,480 --> 00:59:06,119

@hd package or the you know BitTorrent

1465

00:59:10,280 --> 00:59:08,490

package you're keeping them from

1466

00:59:11,900 --> 00:59:10,290

differentiating the market in that way

1467

00:59:15,859 --> 00:59:11,910

coming up with new ways to charge people

1468

00:59:17,930 --> 00:59:15,869

for these things and you know there's a

1469

00:59:20,030 --> 00:59:17,940

grain of truth to you know in a world

1470

00:59:20,810 --> 00:59:20,040

where internet providers could do

1471

00:59:23,180 --> 00:59:20,820

whatever they want

1472

00:59:24,470 --> 00:59:23,190

you know maybe they would start mining

1473

00:59:26,089 --> 00:59:24,480

all of our data you know maybe in the

1474

00:59:28,040 --> 00:59:26,099

internet provider would start mining all

1475

00:59:31,880 --> 00:59:28,050

of our data to provide you know super

1476

00:59:33,020 --> 00:59:31,890

fast free internet access but that's not

1477

00:59:34,670 --> 00:59:33,030

what we've seen I mean now I'm gonna

1478

00:59:37,660 --> 00:59:34,680

digress and go back to the other side

1479

00:59:40,280 --> 00:59:37,670

again it's not what we've seen so far

1480

00:59:42,560 --> 00:59:40,290

because you know with AT&T they actually

1481

00:59:44,420 --> 00:59:42,570

have a plan where they charge you more

1482

00:59:46,790 --> 00:59:44,430

if you want to keep your privacy but

1483

00:59:48,620 --> 00:59:46,800

they're still charging you you know 60

1484

00:59:51,260 --> 00:59:48,630

bucks a month even if you don't want

1485

00:59:54,050 --> 00:59:51,270

your privacy so we haven't seen them you

1486

00:59:56,000 --> 00:59:54,060

know really offer you know any sort of

1487

00:59:57,440 --> 00:59:56,010

free service or anything like that but I

1488

01:00:00,710 --> 00:59:57,450

think that's their argument is that it

1489

01:00:02,420 --> 01:00:00,720

cuts down on I mean their argument would

1490

01:00:04,130 --> 01:00:02,430

be twofold the other argument is that oh

1491

01:00:06,380 --> 01:00:04,140

we don't need it because we haven't seen

1492

01:00:09,950 --> 01:00:06,390

any actual you know bad things happen we

1493

01:00:11,089 --> 01:00:09,960

haven't seen any harm that argument I

1494

01:00:13,130 --> 01:00:11,099

don't think it's very good because I've

1495

01:00:14,670 --> 01:00:13,140

listed off a bunch and I've got plenty

1496

01:00:16,950 --> 01:00:14,680

more it's pretty decent

1497

01:00:18,510 --> 01:00:16,960

u.s. we've seen internet providers do

1498

01:00:20,490 --> 01:00:18,520

pretty creepy and pretty you know

1499

01:00:23,640 --> 01:00:20,500

terrible things when you given the

1500

01:00:25,830 --> 01:00:23,650

chance if they were trying to convince

1501
01:00:27,480 --> 01:00:25,840
me the libertarian the the argument that

1502
01:00:29,460 --> 01:00:27,490
you're you know restricting what

1503
01:00:31,230 --> 01:00:29,470
possible innovation internet providers

1504
01:00:32,430 --> 01:00:31,240
could do would be the one that would

1505
01:00:35,820 --> 01:00:32,440
have the greatest chance of convincing

1506
01:00:38,250 --> 01:00:35,830
me but even then for me it's you know

1507
01:00:40,620 --> 01:00:38,260
that may be true but I don't think you

1508
01:00:43,170 --> 01:00:40,630
should be charging more for different

1509
01:00:44,820 --> 01:00:43,180
protocols because then you may be

1510
01:00:46,680 --> 01:00:44,830
getting more innovation for internet

1511
01:00:48,660 --> 01:00:46,690
providers but you're gonna stifle

1512
01:00:50,370 --> 01:00:48,670
innovation on the you know the rest of

1513
01:00:52,050 --> 01:00:50,380

the Internet you're gonna stifle that

1514

01:00:54,780 --> 01:00:52,060

new startup that wants to use BitTorrent

1515

01:00:56,490 --> 01:00:54,790

in a really crazy but really awesome way

1516

01:00:58,440 --> 01:00:56,500

that creates some awesome new you know

1517

01:01:00,360 --> 01:00:58,450

next big app they're not gonna be able

1518

01:01:01,830 --> 01:01:00,370

to do it because now people have to pay

1519

01:01:04,980 --> 01:01:01,840

extra for the BitTorrent package or

1520

01:01:06,900 --> 01:01:04,990

something like that so it's it's that

1521

01:01:09,330 --> 01:01:06,910

sort of thing where you know it it's

1522

01:01:11,160 --> 01:01:09,340

true it the internet providers might get

1523

01:01:13,740 --> 01:01:11,170

to innovate a little bit more in pricing

1524

01:01:15,900 --> 01:01:13,750

schemes but you know in terms of overall

1525

01:01:18,990 --> 01:01:15,910

value of the Internet as a whole in our

1526

01:01:21,390 --> 01:01:19,000

lives I don't think it I don't think it

1527

01:01:25,260 --> 01:01:21,400

you know tilts the scales for me right

1528

01:01:27,450 --> 01:01:25,270

you know we have absolutely I'm sure you

1529

01:01:29,640 --> 01:01:27,460

will agree well most likely will we have

1530

01:01:31,020 --> 01:01:29,650

absolutely no what's have no idea what's

1531

01:01:33,090 --> 01:01:31,030

gonna happen in the future as far as

1532

01:01:34,710 --> 01:01:33,100

technology and any of this now is

1533

01:01:36,390 --> 01:01:34,720

heading I mean it may morph into

1534

01:01:41,940 --> 01:01:36,400

something that's totally different than

1535

01:01:46,470 --> 01:01:41,950

what we're using right now and all this

1536

01:01:49,560 --> 01:01:46,480

may mean nothing but what do you have to

1537

01:01:51,870 --> 01:01:49,570

do see the future I mean do clouds make

1538

01:01:53,730 --> 01:01:51,880

any difference or is there any type of

1539

01:01:57,030 --> 01:01:53,740

future that you're seeing we're heading

1540

01:02:00,480 --> 01:01:57,040

toward right now where net neutrality is

1541

01:02:02,990 --> 01:02:00,490

important I mean I think that I think

1542

01:02:06,390 --> 01:02:03,000

the big one is towards a future where

1543

01:02:09,150 --> 01:02:06,400

excuse me where people are I mean it's

1544

01:02:10,920 --> 01:02:09,160

it's really it's kind of the the stupid

1545

01:02:12,840 --> 01:02:10,930

extrapolation people just spend more and

1546

01:02:16,230 --> 01:02:12,850

more and more of their life online right

1547

01:02:20,220 --> 01:02:16,240

um and you know it you know eventually

1548

01:02:21,390 --> 01:02:20,230

as silly as it may sound to some people

1549

01:02:23,880 --> 01:02:21,400

you know we're not gonna have broadcast

1550

01:02:25,620 --> 01:02:23,890

TV digital or otherwise anymore it'll

1551

01:02:28,020 --> 01:02:25,630

all be on the internet everything will

1552

01:02:28,460 --> 01:02:28,030

be on the internet I'm an early candle

1553

01:02:32,570 --> 01:02:28,470

cutter my

1554

01:02:35,000 --> 01:02:32,580

so yeah I mean my five or six Packers

1555

01:02:37,160 --> 01:02:35,010

know the vast majority of millenials are

1556

01:02:38,870 --> 01:02:37,170

and it's just gonna go from there and

1557

01:02:40,700 --> 01:02:38,880

it's not because they're replacing it by

1558

01:02:44,270 --> 01:02:40,710

watching lots of broadcast over the air

1559

01:02:46,670 --> 01:02:44,280

TV either right they're just it's all on

1560

01:02:48,710 --> 01:02:46,680

the internet and so I you know I that's

1561

01:02:50,690 --> 01:02:48,720

where you know the the thing I like to

1562

01:02:52,250 --> 01:02:50,700

and I didn't come up with this so

1563

01:02:54,589 --> 01:02:52,260

whoever came up with this if you if you

1564

01:02:56,630 --> 01:02:54,599

are listening let me know but the the

1565

01:02:59,750 --> 01:02:56,640

saying I've heard is you know whatever

1566

01:03:01,160 --> 01:02:59,760

your most important issue is net

1567

01:03:03,260 --> 01:03:01,170

neutrality should be your second one

1568

01:03:04,940 --> 01:03:03,270

because it affects how people can

1569

01:03:07,550 --> 01:03:04,950

communicate online whether or not

1570

01:03:09,859 --> 01:03:07,560

internet providers can can get in

1571

01:03:15,349 --> 01:03:09,869

between and censor or choose winners and

1572

01:03:16,849 --> 01:03:15,359

losers or play favorites and so because

1573

01:03:20,060 --> 01:03:16,859

the internet is just a bigger part of

1574

01:03:22,450 --> 01:03:20,070

our lives you know if your whatever you

1575

01:03:25,250 --> 01:03:22,460

know political or you know you know

1576

01:03:27,500 --> 01:03:25,260

nonprofit cause or your favorite hobby

1577

01:03:28,820 --> 01:03:27,510

whatever it doesn't matter because in

1578

01:03:31,700 --> 01:03:28,830

the end you don't want your internet

1579

01:03:33,859 --> 01:03:31,710

provider deciding well this is you know

1580

01:03:35,420 --> 01:03:33,869

some collateral damage from some other

1581

01:03:38,060 --> 01:03:35,430

business decision we've made that

1582

01:03:39,980 --> 01:03:38,070

decides what doesn't doesn't count

1583

01:03:42,320 --> 01:03:39,990

against your data cap what services do

1584

01:03:46,460 --> 01:03:42,330

and don't you can or cannot use on our

1585

01:03:48,530 --> 01:03:46,470

serve on our internet platform so I mean

1586

01:03:50,930 --> 01:03:48,540

I feel like it's every future wherein

1587

01:03:53,300 --> 01:03:50,940

that neutrality matters well that's I

1588

01:03:55,730 --> 01:03:53,310

think that's a really good message sat

1589

01:03:59,780 --> 01:03:55,740

Saxton in our chat room is using your

1590

01:04:02,900 --> 01:03:59,790

the e FF s-- privacy badger browser

1591

01:04:04,970 --> 01:04:02,910

extension and he's up he's given it out

1592

01:04:06,740 --> 01:04:04,980

to other people in the chatroom yep

1593

01:04:09,560 --> 01:04:06,750

that's that is a good one for protecting

1594

01:04:13,400 --> 01:04:09,570

it wants as much protected from your

1595

01:04:14,720 --> 01:04:13,410

internet provider but it will protect it

1596

01:04:16,130 --> 01:04:14,730

from the I was talking about the

1597

01:04:17,870 --> 01:04:16,140

third-party tracking online and that's

1598

01:04:21,859 --> 01:04:17,880

exactly what privacy badger takes care

1599

01:04:24,109 --> 01:04:21,869

of I will say that if anyone is

1600

01:04:25,910 --> 01:04:24,119

downloading privacy badger if it doesn't

1601
01:04:28,609 --> 01:04:25,920
work for you let us know we all were

1602
01:04:30,589 --> 01:04:28,619
constantly trying to improve it and so

1603
01:04:31,940 --> 01:04:30,599
instead of just giving up on it give us

1604
01:04:33,859 --> 01:04:31,950
feedback because we want to make it

1605
01:04:37,130 --> 01:04:33,869
better we really do and it's free it's

1606
01:04:39,260 --> 01:04:37,140
open source if you you know like playing

1607
01:04:41,089 --> 01:04:39,270
with JavaScript you can contribute to

1608
01:04:42,410 --> 01:04:41,099
the code you know because it's open

1609
01:04:45,140 --> 01:04:42,420
source but um

1610
01:04:47,630 --> 01:04:45,150
yeah so that's great to hear so if the

1611
01:04:51,529 --> 01:04:47,640
average Joe out there is thinks net

1612
01:04:54,620 --> 01:04:51,539
neutrality is important what what can

1613
01:04:56,509 --> 01:04:54,630

they do to help so for now I would say

1614

01:04:57,950 --> 01:04:56,519

the the biggest thing is just keep an

1615

01:05:00,380 --> 01:04:57,960

eye on things stay abreast in the

1616

01:05:04,009 --> 01:05:00,390

situation you know read the news you

1617

01:05:07,160 --> 01:05:04,019

know the comment period is over one

1618

01:05:08,990 --> 01:05:07,170

thing you could do again is write your

1619

01:05:11,450 --> 01:05:09,000

member of Congress write your Senators

1620

01:05:15,319 --> 01:05:11,460

and let them know that this is important

1621

01:05:17,660 --> 01:05:15,329

to you because if it does end up in

1622

01:05:18,829 --> 01:05:17,670

Congress and you know there's a it could

1623

01:05:20,059 --> 01:05:18,839

end up there whether or not we'll

1624

01:05:21,890 --> 01:05:20,069

actually get anything out of it is

1625

01:05:23,660 --> 01:05:21,900

unclear but if it does you know Congress

1626

01:05:27,109 --> 01:05:23,670

decides to take something up we want

1627

01:05:29,180 --> 01:05:27,119

them to do the right thing and so you

1628

01:05:31,009 --> 01:05:29,190

know there's no bill right now in

1629

01:05:33,529 --> 01:05:31,019

Congress at least certainly none that

1630

01:05:37,009 --> 01:05:33,539

seems viable and realistic that would

1631

01:05:39,589 --> 01:05:37,019

enshrine net neutrality into law but it

1632

01:05:42,650 --> 01:05:39,599

could happen and so basically right now

1633

01:05:44,509 --> 01:05:42,660

just the best advice I can give is be

1634

01:05:47,450 --> 01:05:44,519

ready to act when it matters

1635

01:05:51,440 --> 01:05:47,460

and otherwise just sort of we just try

1636

01:05:53,089 --> 01:05:51,450

to keep the drum beat up on sort of the

1637

01:05:54,609 --> 01:05:53,099

background to make sure that members of

1638

01:05:56,630 --> 01:05:54,619

Congress you know the administration

1639

01:05:59,059 --> 01:05:56,640

understand that this is an important

1640

01:06:01,400 --> 01:05:59,069

issue and people see through sort of the

1641

01:06:03,620 --> 01:06:01,410

the BS that a lot of the internet

1642

01:06:06,859 --> 01:06:03,630

providers are putting out you know

1643

01:06:09,019 --> 01:06:06,869

there's a there's propaganda out there

1644

01:06:10,309 --> 01:06:09,029

too oh yeah yes sir

1645

01:06:12,109 --> 01:06:10,319

I know we're at the end of the show or

1646

01:06:16,240 --> 01:06:12,119

near the end if you want to talk about

1647

01:06:19,190 --> 01:06:16,250

the propaganda what where it's being

1648

01:06:21,829 --> 01:06:19,200

who's being pushed at and and what are

1649

01:06:23,779 --> 01:06:21,839

they saying so I don't know who they're

1650

01:06:26,029 --> 01:06:23,789

targeting so much I mean I think part of

1651

01:06:28,730 --> 01:06:26,039

it is the propaganda is get put out the

1652

01:06:32,089 --> 01:06:28,740

propaganda gets put out there to target

1653

01:06:38,690 --> 01:06:32,099

you know people in power Congress FCC

1654

01:06:39,890 --> 01:06:38,700

their staff or to some extent you know

1655

01:06:41,180 --> 01:06:39,900

people who don't pay very close

1656

01:06:42,980 --> 01:06:41,190

attention to the issue because this is

1657

01:06:45,620 --> 01:06:42,990

an issue where I feel like you know on

1658

01:06:48,559 --> 01:06:45,630

the surface it's very easy to to listen

1659

01:06:49,970 --> 01:06:48,569

to the ISP propaganda and think oh yeah

1660

01:06:51,380 --> 01:06:49,980

that makes sense why would we want the

1661

01:06:52,579 --> 01:06:51,390

government regulating the internet

1662

01:06:54,079 --> 01:06:52,589

because that's what they say it is all

1663

01:06:55,730 --> 01:06:54,089

the time they're like keep the

1664

01:06:58,460 --> 01:06:55,740

government out of the Internet right

1665

01:07:00,830 --> 01:06:58,470

oppressive obama regulations but if you

1666

01:07:02,690 --> 01:07:00,840

dig down for like five minutes you

1667

01:07:04,370 --> 01:07:02,700

realize wait we're not regulating the

1668

01:07:05,750 --> 01:07:04,380

internet we're talking about internet

1669

01:07:07,910 --> 01:07:05,760

providers which is a whole different

1670

01:07:09,830 --> 01:07:07,920

thing you know a comcast is an entirely

1671

01:07:13,310 --> 01:07:09,840

different beast than a netflix or a

1672

01:07:14,960 --> 01:07:13,320

Google or your or by website you know

1673

01:07:16,310 --> 01:07:14,970

it's totally different we're not talking

1674

01:07:18,550 --> 01:07:16,320

about regulating those sorts of things

1675

01:07:22,780 --> 01:07:18,560

we're talking about internet provided

1676

01:07:25,609 --> 01:07:22,790

and so that I think is you know the the

1677

01:07:28,640 --> 01:07:25,619

propaganda really sort of preys on the

1678

01:07:30,710 --> 01:07:28,650

idea that that you're not gonna dig very

1679

01:07:33,470 --> 01:07:30,720

deep and you're just gonna you know go

1680

01:07:34,640 --> 01:07:33,480

with what they say and so I mean and you

1681

01:07:36,770 --> 01:07:34,650

know I would say the other thing you

1682

01:07:37,790 --> 01:07:36,780

know in in sort of full disclosure if

1683

01:07:40,670 --> 01:07:37,800

you think what I've been saying is

1684

01:07:42,080 --> 01:07:40,680

propaganda go research yourself go take

1685

01:07:44,990 --> 01:07:42,090

a look and make your own informed

1686

01:07:47,180 --> 01:07:45,000

decision because that's the best way you

1687

01:07:50,240 --> 01:07:47,190

know that you can act in this world and

1688

01:07:52,460 --> 01:07:50,250

so that's what I would say is you know

1689

01:07:55,220 --> 01:07:52,470

you do a little research take five or

1690

01:07:56,060 --> 01:07:55,230

ten minutes and make a decision about

1691

01:07:58,850 --> 01:07:56,070

this important issue

1692

01:08:02,180 --> 01:07:58,860

now when you say vigilant you have to

1693

01:08:05,180 --> 01:08:02,190

really be vigilant and watch there's no

1694

01:08:07,400 --> 01:08:05,190

chance that this could be snuck into a

1695

01:08:09,849 --> 01:08:07,410

bill somehow you know how they do that

1696

01:08:13,190 --> 01:08:09,859

Congress can do that sometimes it's

1697

01:08:15,290 --> 01:08:13,200

possible I think it's unlikely certainly

1698

01:08:16,940 --> 01:08:15,300

I think if they've tried you know it's

1699

01:08:18,980 --> 01:08:16,950

it's not this sort of scenario where

1700

01:08:21,130 --> 01:08:18,990

they could sneak it in and it would

1701

01:08:24,380 --> 01:08:21,140

completely pass without any sort of

1702

01:08:26,210 --> 01:08:24,390

uproar or alarm um it might be the sort

1703

01:08:28,490 --> 01:08:26,220

of thing where one you know chamber of

1704

01:08:30,590 --> 01:08:28,500

Congress sneaks it in but then for the

1705

01:08:31,700 --> 01:08:30,600

other chamber to agree to it you know by

1706

01:08:33,769 --> 01:08:31,710

the time it gets to the other chamber

1707

01:08:35,900 --> 01:08:33,779

we'll know about it and be able to raise

1708

01:08:40,010 --> 01:08:35,910

the alarm I mean one thing you can do

1709

01:08:42,440 --> 01:08:40,020

and that you know again this is sort of

1710

01:08:45,559 --> 01:08:42,450

shameless self-promotion but you can

1711

01:08:47,960 --> 01:08:45,569

sign up for EFS manling list and that

1712

01:08:49,760 --> 01:08:47,970

way you'll get alerts if you know we

1713

01:08:51,380 --> 01:08:49,770

it's an emergency and we need people to

1714

01:08:55,160 --> 01:08:51,390

contact their members of Congress you

1715

01:08:56,630 --> 01:08:55,170

know right away that sort of thing but

1716

01:08:58,970 --> 01:08:56,640

if you don't want to do that

1717

01:09:02,630 --> 01:08:58,980

just stay on top of the news you could

1718

01:09:04,190 --> 01:09:02,640

go to EFS website but it this isn't an

1719

01:09:06,890 --> 01:09:04,200

issue that it that seems likely to get

1720

01:09:09,020 --> 01:09:06,900

snuck through fortunately at least you

1721

01:09:11,290 --> 01:09:09,030

know fingers crossed I hope right

1722

01:09:14,810 --> 01:09:11,300

one comment in the chat room just to

1723

01:09:17,990 --> 01:09:14,820

throw by you if now I don't know how to

1724

01:09:18,500 --> 01:09:18,000

pronounce his name PI pee alright yeah

1725

01:09:20,750 --> 01:09:18,510

yeah

1726

01:09:24,830 --> 01:09:20,760

if he stays never neutrality goes be

1727

01:09:27,830 --> 01:09:24,840

honest uh so I don't know about

1728

01:09:31,010 --> 01:09:27,840

permanently I certainly think so

1729

01:09:33,470 --> 01:09:31,020

Congress actually just voted along or

1730

01:09:36,920 --> 01:09:33,480

the Senate just today voted along near

1731

01:09:40,640 --> 01:09:36,930

party lines I think there were like four

1732

01:09:45,530 --> 01:09:40,650

Democrats who voted to confirm reconfirm

1733

01:09:47,350 --> 01:09:45,540

him as chairman of the FCC and he's the

1734

01:09:51,410 --> 01:09:47,360

one who's been the driving force I mean

1735

01:09:52,490 --> 01:09:51,420

him and the two other Republican well I

1736

01:09:55,130 --> 01:09:52,500

guess right now I don't know if they've

1737

01:09:57,560 --> 01:09:55,140

even filled the seats yet but certainly

1738

01:09:59,150 --> 01:09:57,570

he's been the driving force here and so

1739

01:10:02,480 --> 01:09:59,160

it's entirely likely that he will push

1740

01:10:04,400 --> 01:10:02,490

forward with this rollback of net

1741

01:10:09,200 --> 01:10:04,410

neutrality but then it could go to the

1742

01:10:11,060 --> 01:10:09,210

courts because you know when an agency

1743

01:10:14,480 --> 01:10:11,070

changes its mind or does a new rule

1744

01:10:15,950 --> 01:10:14,490

making it's it's susceptible to judicial

1745

01:10:19,100 --> 01:10:15,960

review to make sure that the decision

1746

01:10:22,910 --> 01:10:19,110

making process was correct and so we

1747

01:10:25,730 --> 01:10:22,920

could still win in the courts and even

1748

01:10:27,050 --> 01:10:25,740

if we you know lose in the courts again

1749

01:10:29,780 --> 01:10:27,060

it gets back to a situation where

1750

01:10:32,180 --> 01:10:29,790

neither party certainly the companies

1751

01:10:34,520 --> 01:10:32,190

and people like you and me we don't want

1752

01:10:36,170 --> 01:10:34,530

this sort of ping-pong game of whoever

1753

01:10:37,670 --> 01:10:36,180

else happens to be in the White House

1754

01:10:41,840 --> 01:10:37,680

deciding what happens with net

1755

01:10:43,640 --> 01:10:41,850

neutrality and so even if we lose now it

1756

01:10:46,310 --> 01:10:43,650

could mean that we get to a point where

1757

01:10:47,810 --> 01:10:46,320

Congress has to write a law and then we

1758

01:10:52,010 --> 01:10:47,820

have to make sure that Congress rates a

1759

01:10:54,280 --> 01:10:52,020

good law about net neutrality so I'm I'm

1760

01:10:57,920 --> 01:10:54,290

it certainly I think in their short term

1761

01:11:00,110 --> 01:10:57,930

it's the fight is complicated and and

1762

01:11:03,530 --> 01:11:00,120

you know definitely gonna be there

1763

01:11:04,940 --> 01:11:03,540

given that pie got reconfirm but I don't

1764

01:11:07,130 --> 01:11:04,950

think it's over by any stretch of the

1765

01:11:10,190 --> 01:11:07,140

imagination we've got a lot a lot of

1766

01:11:11,810 --> 01:11:10,200

ground to cover yet before the all the

1767

01:11:14,420 --> 01:11:11,820

nails are in the coffin for net

1768

01:11:19,580 --> 01:11:14,430

neutrality can you tell me the type of

1769

01:11:21,860 --> 01:11:19,590

person that is a funder for the e FF so

1770

01:11:22,850 --> 01:11:21,870

the vast majority of our yeah I should

1771

01:11:26,450 --> 01:11:22,860

have said this at

1772

01:11:29,390 --> 01:11:26,460

outset so the majority of our donations

1773

01:11:31,100 --> 01:11:29,400

so FF is a non-profit come from

1774

01:11:34,040 --> 01:11:31,110

individual members individual

1775

01:11:36,500 --> 01:11:34,050

contributors so people who just you know

1776

01:11:39,320 --> 01:11:36,510

care about the sorts of issues FF works

1777

01:11:40,760 --> 01:11:39,330

on and donate some donate more some

1778

01:11:41,390 --> 01:11:40,770

donate less we have different membership

1779

01:11:42,560 --> 01:11:41,400

levels

1780

01:11:44,600 --> 01:11:42,570

we definitely have some bigger donors

1781

01:11:46,970 --> 01:11:44,610

and we've got you know college students

1782

01:11:48,500 --> 01:11:46,980

who you know donate you know forty bucks

1783

01:11:49,910 --> 01:11:48,510

a year because that's what they can

1784

01:11:53,270 --> 01:11:49,920

afford because they're you know just

1785

01:11:56,870 --> 01:11:53,280

trying to make it through college we get

1786

01:11:59,209 --> 01:11:56,880

a tiny bit of money uh yeah I mean I I

1787

01:12:00,740 --> 01:11:59,219

want to say I think it varies from year

1788

01:12:03,320 --> 01:12:00,750

to year some years it's like twenty

1789

01:12:04,609 --> 01:12:03,330

percent I don't think it's ever much

1790

01:12:08,470 --> 01:12:04,619

more than that usually it's actually

1791

01:12:10,760 --> 01:12:08,480

quite a bit less from companies

1792

01:12:13,070 --> 01:12:10,770

particularly because you know the

1793

01:12:15,800 --> 01:12:13,080

companies don't like to fund us much

1794

01:12:17,419 --> 01:12:15,810

because we call it how we see it and

1795

01:12:18,770 --> 01:12:17,429

sometimes we're praising Google and

1796

01:12:20,330 --> 01:12:18,780

Facebook because they did something

1797

01:12:23,450 --> 01:12:20,340

that's good for the security and

1798

01:12:25,609 --> 01:12:23,460

sometimes we're criticizing them because

1799

01:12:28,070 --> 01:12:25,619

we did some they did something that's

1800

01:12:31,250 --> 01:12:28,080

bad for privacy that's usually how the

1801
01:12:34,910 --> 01:12:31,260
dichotomy goes I don't think we've ever

1802
01:12:36,979 --> 01:12:34,920
had a ISP oh that's not true so there

1803
01:12:40,820 --> 01:12:36,989
are some some small ISPs I think which

1804
01:12:42,620 --> 01:12:40,830
have donated EF F in the past but we've

1805
01:12:45,800 --> 01:12:42,630
never had a big you know Comcast or

1806
01:12:49,399 --> 01:12:45,810
Verizon donate to us which if not to be

1807
01:12:52,370 --> 01:12:49,409
surprising yeah um but oh the majority

1808
01:12:55,160 --> 01:12:52,380
of it we also sometimes get money

1809
01:12:56,689 --> 01:12:55,170
through awards in court so if we do end

1810
01:12:58,750 --> 01:12:56,699
up taking someone to court we can get

1811
01:13:02,629 --> 01:12:58,760
the court we can get the attorney's fees

1812
01:13:03,979 --> 01:13:02,639
or if there's there's now it's this

1813
01:13:07,040 --> 01:13:03,989

complicated thing called sigh praise

1814

01:13:09,160 --> 01:13:07,050

which are a whole nother story but

1815

01:13:11,899 --> 01:13:09,170

sometimes if a company basically has

1816

01:13:13,490 --> 01:13:11,909

violated people's privacy or something

1817

01:13:16,820 --> 01:13:13,500

like that the court realizes that

1818

01:13:19,220 --> 01:13:16,830

sending \$2 to every person whose privacy

1819

01:13:21,470 --> 01:13:19,230

was violated isn't gonna do much to

1820

01:13:23,359 --> 01:13:21,480

better the world but giving it to an

1821

01:13:25,399 --> 01:13:23,369

organisation or splitting it between an

1822

01:13:27,979 --> 01:13:25,409

organization like the e FF and epic or

1823

01:13:30,290 --> 01:13:27,989

ACLU or consumer watchdog or other

1824

01:13:32,959 --> 01:13:30,300

organizations that advocate on behalf of

1825

01:13:35,689 --> 01:13:32,969

consumers would make more sense and they

1826

01:13:36,709 --> 01:13:35,699

you know a lump sum so sometimes we get

1827

01:13:38,270 --> 01:13:36,719

that but that's

1828

01:13:41,359 --> 01:13:38,280

it totally depends on what the court

1829

01:13:43,819 --> 01:13:41,369

wants to do and that's win I'll pardon

1830

01:13:45,080 --> 01:13:43,829

me is that like a class-action suit so

1831

01:13:46,729 --> 01:13:45,090

yeah usually there'll be a class-action

1832

01:13:50,390 --> 01:13:46,739

that EF F or these other organizations

1833

01:13:51,979 --> 01:13:50,400

aren't a part of but the as part of the

1834

01:13:53,569 --> 01:13:51,989

decision the you know the company will

1835

01:13:55,069 --> 01:13:53,579

say well instead of giving everyone you

1836

01:13:57,649 --> 01:13:55,079

know two dollars why don't we donate it

1837

01:13:58,969 --> 01:13:57,659

to EF F or the ACLU epic etc all these

1838

01:14:01,910 --> 01:13:58,979

these people I just all these

1839

01:14:04,189 --> 01:14:01,920

organizations I just listed who are sort

1840

01:14:05,959 --> 01:14:04,199

of privacy watchdog and so we get that

1841

01:14:08,060 --> 01:14:05,969

sometimes but you know we never know

1842

01:14:09,500 --> 01:14:08,070

when that's gonna happen so we don't you

1843

01:14:11,419 --> 01:14:09,510

know count on that as part of our budget

1844

01:14:14,029 --> 01:14:11,429

what we really count on is getting

1845

01:14:17,299 --> 01:14:14,039

donations from individual members

1846

01:14:19,489 --> 01:14:17,309

individual contributors we don't take

1847

01:14:21,140 --> 01:14:19,499

any government money because you know I

1848

01:14:22,700 --> 01:14:21,150

almost all of the you know what I've

1849

01:14:24,709 --> 01:14:22,710

talked about today has been privacy and

1850

01:14:26,810 --> 01:14:24,719

security with respect to you companies

1851

01:14:29,359 --> 01:14:26,820

but we do you know a whole big chunk of

1852

01:14:30,739 --> 01:14:29,369

EFS work is suing the government for the

1853

01:14:31,939 --> 01:14:30,749

government doing things that are against

1854

01:14:33,529 --> 01:14:31,949

the Constitution which is you know a

1855

01:14:35,330 --> 01:14:33,539

whole nother you know our show or

1856

01:14:38,299 --> 01:14:35,340

several of them at least

1857

01:14:40,219 --> 01:14:38,309

so we we don't take money from directly

1858

01:14:46,100 --> 01:14:40,229

from the government not from the NSA no

1859

01:14:49,399 --> 01:14:46,110

not from the NSA yeah so it's it's

1860

01:14:52,489 --> 01:14:49,409

almost all individual contributors well

1861

01:14:54,049 --> 01:14:52,499

our Cyrus it the majority yeah and and

1862

01:14:55,879 --> 01:14:54,059

if you're curious our financials are on

1863

01:14:58,879 --> 01:14:55,889

our website you go look it up there in

1864

01:15:00,919 --> 01:14:58,889

our annual report usually on I apologize

1865

01:15:02,689 --> 01:15:00,929

they're delayed about a year because it

1866

01:15:04,729 --> 01:15:02,699

takes you know the way the fiscal year

1867

01:15:07,069 --> 01:15:04,739

works and getting stuff together and you

1868

01:15:09,229 --> 01:15:07,079

know we only have again we're mostly

1869

01:15:11,029 --> 01:15:09,239

focused on doing the good stuff and so

1870

01:15:13,700 --> 01:15:11,039

we only have like two people who work on

1871

01:15:15,379 --> 01:15:13,710

the finances on the backend and putting

1872

01:15:18,410 --> 01:15:15,389

those things together so apologies that

1873

01:15:20,450 --> 01:15:18,420

it's a little delayed but you can also

1874

01:15:24,080 --> 01:15:20,460

look up that for yourself on our website

1875

01:15:27,169 --> 01:15:24,090

and that's a EF F dot org right that's

1876

01:15:29,209 --> 01:15:27,179

it yeah yeah org example a great little

1877

01:15:31,669 --> 01:15:29,219

domain name well thank you so much it's

1878

01:15:32,719 --> 01:15:31,679

been a real pleasure and as someone

1879

01:15:35,390 --> 01:15:32,729

mentioned in the chatroom

1880

01:15:37,370 --> 01:15:35,400

they loved your enthusiasm I agree thank

1881

01:15:38,359 --> 01:15:37,380

you I appreciate that I try to make it

1882

01:15:41,959 --> 01:15:38,369

interesting because I know net

1883

01:15:44,930 --> 01:15:41,969

neutrality can be sort of a a a stodgy

1884

01:15:46,939 --> 01:15:44,940

dull subject but it's important and so

1885

01:15:48,680 --> 01:15:46,949

that's why I try to make it make it him

1886

01:15:50,029 --> 01:15:48,690

you know sound a little more interesting

1887

01:15:50,450 --> 01:15:50,039

so thank you so much for having me I

1888

01:15:51,800 --> 01:15:50,460

really

1889

01:15:55,010 --> 01:15:51,810

and thank you for trying to make a

1890

01:15:56,330 --> 01:15:55,020

difference absolutely it's I'm happy -

1891

01:15:58,729 --> 01:15:56,340

all right excellent

1892

01:16:01,310 --> 01:15:58,739

all right you take care you too thanks

1893

01:16:02,959 --> 01:16:01,320

so much all right all right everyone so

1894

01:16:05,870 --> 01:16:02,969

that's it for the show

1895

01:16:08,810 --> 01:16:05,880

and we are gonna be back next week with

1896

01:16:11,870 --> 01:16:08,820

dr. Jeffrey Bennett and he's going to be

1897

01:16:14,900 --> 01:16:11,880

talking about Einstein's a hundred years

1898

01:16:17,240 --> 01:16:14,910

of relativity dr. Jeffrey Bennett

1899

01:16:21,080 --> 01:16:17,250

astrophysicists great guy very very

1900

01:16:23,390 --> 01:16:21,090

interesting alright everyone so this is

1901

01:16:26,050 --> 01:16:23,400

Martin Willis and thanks so much for