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THE COMPUTER FRAUD AND ABUSE ACT:  
ARE YOU STILL WATCHING?

Alex N. Samaei<sup>1</sup>

**I. Introduction**

New media-entertainment powerhouses, such as Netflix, are beginning to chip away at traditional cable's customer base.<sup>2</sup> In part, this is because up-and-coming technologies strategically offer cheap, convenient access to a large database of quality entertainment.<sup>3</sup> Consumers enjoy the ability to sit down and watch their favorite TV show or movie at their leisure.<sup>4</sup> As a result, more companies have invested in this industry and have created their own media-streaming services

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<sup>1</sup> J.D. Candidate, Suffolk University Law School, 2018; B.S. Industrial & Systems Engineering, University of Florida, 2013.

<sup>2</sup> See *United States Telecom Ass'n v. FCC*, 825 F.3d 674, 698 (D.C. Cir. 2016) (claiming today's typical users have broadband mainly to use apps such as Netflix and Facebook); see also Nicole Aliloupour, Thesis, *The Impact of Technology on the Entertainment Distribution Market: The Effects of Netflix and Hulu on Cable Revenue*, 746 SCRIPPS SENIOR THESIS 4, 25-26 (2016) (describing the effect that video streaming services have had on Time Warner Cable).

<sup>3</sup> See Aliloupour, *supra* note 2, at 25 (characterizing Netflix and Hulu Plus subscription prices as a key factor in the decline of Time Warner Cable's revenue); see also *In re Netflix, Inc.*, 923 F. Supp. 2d 1214, 1216 (N.D. Cal. 2013) (identifying Netflix as a leading internet-streaming service provider).

<sup>4</sup> See Lane Mann, Thesis, "*Come TV With Us*": *The Business Strategies, Discourses, and Imagined Audiences of Netflix and Hulu*, U. OF TEX. THESIS COMM.1, 109-10 (May 2016) (explaining the popularity of broad programming options to younger generations).

in order to capitalize on these potential profits.<sup>5</sup> This makes perfect sense, considering the fact that streaming is one of the “fastest-growing consumer sub-segments” and is projected to reach \$10.1 billion in 2018, up from \$3.3 billion in 2013.<sup>6</sup>

Albeit, the video streaming industry is burdened with ever increasing expenses such as: data congestion, program updates, software, licensing, security, and advertising costs.<sup>7</sup> While businesses in this industry have had some success, one must wonder if the benefit will always outweigh the annual \$500 million dollar cost that these businesses incur?<sup>8</sup> Yes, \$500 million dollars is estimated dollar

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<sup>5</sup> See *id.* at 54 (providing examples of television channels and networks that have created apps and services to compete with Hulu); see also Nathan McAlone, *Services Like Netflix and Hulu Are Growing Much Faster Than Cable*, BUSINESS INSIDER (Apr. 11, 2016), archived at <https://perma.cc/4QG7-TNL4> (comparing the 29% growth in video streaming service revenue to the 3% growth by the cable and satellite industry in 2015). As part of this growth, McAlone mentions an “explosion of new players in the industry, from NBC’s all-comedy Seeso to Sony’s Playstation Vue.” *Id.* However, Netflix and Hulu accounted for 98% of the non-cable streaming service revenue in 2015. *Id.*

<sup>6</sup> See Ray Yeung, *Advertising to Outpace Consumer Spending in the Migration to Digital for Entertainment & Media Industry, Says PwC US*, PwC (June 3, 2014), archived at <https://perma.cc/F3R5-AVXH> (predicting future revenue for the video streaming industry); see also John Koblin, *Crowded TV Marketplace Gets Ready for Three Tech Giants*, N.Y. TIMES (Aug. 20, 2017), archived at <https://perma.cc/7WAM-6WQQ> (mentioning that Apple, Google and Facebook are looking into launching their own video streaming services to compete with Netflix).

<sup>7</sup> See Shalini Ramachandran, *Netflix to Pay Comcast for Smoother Streaming*, WALL ST. J. (Feb. 23, 2014), archived at <https://perma.cc/TM4E-6MSH> (announcing a deal between Netflix and Comcast that will provide customers with faster viewing and higher quality video streaming); see also Michael Yuan, *The Effects of Barriers to Entry on Monopolistic Intermediary Online Services: The Case of a Digital Library*, 42 SOCIO-ECON. PLAN. SCI. 56, 56-57 (Sept. 29, 2006) (providing examples of expenses incurred when companies enter the streaming service business).

<sup>8</sup> See Eric Reed, *Sharing Your Netflix Password Could Land You in Jail*, THE STREET (July 24, 2016), archived at <https://perma.cc/2V76-H7B2> (questioning the lengths password sharing should be tolerated given the large capital loss companies incur each year). See John Koblin, *Netflix Says It Will Spend Up to \$8 Billion on Content Next Year*, N.Y. TIMES (Oct. 17, 2017), archived at <https://perma.cc/TM6S-2Z92> (announcing that Netflix plans on spending \$8 Billion on new content in 2018).

amount that video streaming services are losing each year due to unauthorized use of subscriber account log-in information.<sup>9</sup> Sharing passwords with unauthorized users is “forbidden” by many online company’s user agreements, such as Facebook.<sup>10</sup> According to Consumer Reports in January 2015,<sup>11</sup> this did not stop “46% of video streaming users [from sharing] passwords with people outside of their households.”<sup>12</sup> This phenomenon however, has not gone unnoticed as jurisdictions have voiced their concerns on the matter and have adopted criminal statutes for unauthorized distribution of more sensitive log-in information.<sup>13</sup> It is clear that companies are suffering from unauthorized users accessing their services for free, but the question

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<sup>9</sup> See Reed, *supra* note 8 (stressing the large amounts of money lost to password sharing); Kathleen Burke, *Why Sharing Your Netflix Password Is Considered Piracy Lite*, MARKETWATCH (Oct. 15, 2015), archived at <https://perma.cc/XUY2-5KJD> (reiterating that in 2015 video streaming was expected to lose \$500 million due to password sharing); Brad Tuttle, *The Real Rules for Sharing Passwords at HBO Now, Netflix, Amazon Prime, and Hulu*, TIME: MONEY (Sept. 21, 2015), archived at <https://perma.cc/MVT3-DW3A> (citing an estimate that video streaming services would lose approximately \$500 million in 2015); Lisa Richwine & Jessica Toonkel, *Streaming TV apps grapple with password sharing*, REUTERS (July 11, 2017) archived at <https://perma.cc/4VRP-XK7K> (estimating up to \$550 million dollars lost in 2019 at the current trend); Ashley Rodriguez, *If it Cracked Down on Password Sharing, Netflix Could Probably Make \$400 Million More a Year*, QUARTZ (July 12, 2017), archived at <https://perma.cc/6NF2-FQLH> (claiming that Netflix could save approximately \$400 million per year if they began to crack down on password sharing).

<sup>10</sup> See *Company Info*, FACEBOOK NEWSROOM (Feb. 22, 2017), archived at <https://perma.cc/686Y-P3MU> (providing statistics such as “1.32 billion daily active users” on the social networking platform).

<sup>11</sup> See *Is It Okay to Share Log-ins for Amazon Prime, HBO Go, Hulu Plus, and Netflix?*, CONSUMER REPORTS (Jan. 28, 2015), archived at <https://perma.cc/BZ5C-EY2J> (highlighting a recent study that showed 46% of users with streaming accounts share their login-in information with someone outside their household).

<sup>12</sup> See *id.* (predicting password sharing rates); see also *Streaming TV apps grapple with password sharing*, *supra* note 9 (showing a higher trend of password sharing among adults ages 18 to 24 as compared to their older peers).

<sup>13</sup> See *United States v. Nosal*, 844 F.3d 1024, 1028 (9th Cir. 2016) [hereinafter *Nosal II*] (considering the criminality of password sharing under the Computer Fraud and Abuse Act); *NCMIC Fin. Corp. v. Artino*, 638 F. Supp. 2d 1042, 1062-63 (S. D. Iowa 2009) (convicting a defendant under § 1030(a)(4) and (a)(2) of the Computer Fraud and Abuse Act); *Int’l Airport Ctrs., L.L.C. v. Citrin*, 440 F.3d 418, 420-21 (7th Cir. 2006) (remanding a case with directions for reinstatement where employee deleted all files off an employer’s computer after being terminated).

is, whether imposing criminal consequences typically reserved for severe computer crimes are a reasonable means to ending this industry's multi-million dollar issue?<sup>14</sup>

This Note will explore the various rationales for applying criminal statutes to the unauthorized use of Netflix account log-in sharing and will determine which solution is the most appropriate given the effect it might have on the market as well as individual users. Part II will discuss the evolution of video streaming services and log-in information technology. Part III will introduce the current perception of password sharing under the law and the business practices in the industry. Next, Part IV will provide support for the conclusion that given the organic development of video streaming services, along with the technology surrounding them, there must be a natural progression in the law that does not include criminal charges for this very common form of password sharing.

## II. History

### A. The Technology

Today's most popular video streaming services, Netflix, Hulu<sup>15</sup>, and HBOGO,<sup>16</sup> have continued the transformation of the entertainment industry which began with cable television in 1948.<sup>17</sup> In the two decades following the creation of cable television, investments by large corporations such as Cox,<sup>18</sup> allowed for the development of

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<sup>14</sup> See *Streaming TV apps grapple with password sharing*, *supra* note 9 (questioning if password sharing is a problem now); *LVRC Holdings LLC v. Brekka*, 581 F.3d 1127, 1137 (9th Cir. 2009) (holding a defendant did not use an employer's computer "without authorization" when he emailed documents from his from his work computer to his personal computer because he had permission to use the work computer).

<sup>15</sup> *About Hulu*, HULU (Aug. 31, 2017), *archived at* <https://perma.cc/4BM2-EXVQ> (introducing Hulu as a "premium streaming TV destination").

<sup>16</sup> *What is HBO NOW, and How Is It Different From HBO GO?*, HBO GO (Aug. 31, 2017), *archived at* <https://perma.cc/QL6X-GZ9U> (describing HBO GO as a free service to HBO subscribers which allows instant streaming to computers, phones, tablets, and TV).

<sup>17</sup> See *History of Cable*, CAL. CABLE & TELECOMM. ASS'N. (Aug. 31, 2017), *archived at* <https://perma.cc/DL26-54T9> (noting that cable television began in Arkansas, Oregon and Pennsylvania in 1948 with antenna towers).

<sup>18</sup> See *History*, COX ENTERPRISES (Oct. 29, 2016), *archived at* <https://perma.cc/2U7Y-SYBA> (providing a brief history of Cox Enterprises).

new technology to import distance signals which provided users with more programming options in the form of new television stations and shows.<sup>19</sup> The growth in subscribers stalled for several years when the Federal Communications Commission (“FCC”) placed restrictions on “importing distant television signals”<sup>20</sup> in metropolitan areas.<sup>21</sup> By the 1970s, this restriction was lifted, and after massive efforts on multiple political stages, industry growth was revived.<sup>22</sup>

In 1972, the Home Box Office<sup>23</sup> (“HBO”) became the first pay-tv<sup>24</sup> network and used this success to begin utilizing satellite transmissions in order to increase the reach of cable.<sup>25</sup> “Satellite delivery, combined with the federal government’s relaxation of cable’s restrictive regulatory structure, allowed the cable industry to become a major force in providing high quality video entertainment and information to consumers.”<sup>26</sup>

During the 1990s, cable companies invested an additional \$65 billion to upgrade their systems to broadband networks<sup>27</sup> in order to

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<sup>19</sup> See *History of Cable*, *supra* note 17 (describing the original spike in cable subscriber’s growth).

<sup>20</sup> See Amy Tikkanen, *Cable Television*, ENCYC. BRITANNICA (Dec. 1, 2006), archived at <https://perma.cc/7D35-LZ3X> (defining broadcast signals as community antenna television which receive broadcast signals in metropolitan areas where the signal would normally be faded and retransmit them by cable).

<sup>21</sup> See *History of Cable*, *supra* note 17 (explaining the first “freeze” in entertainment growth occurred when FCC began to regulate technological growth).

<sup>22</sup> See *History of Cable*, *supra* note 17 (suggesting federal, state, and local efforts helped lower the restrictions that the FCC had previously placed). “These changes, coupled with cable’s pioneering of satellite communications technology, led to a pronounced growth of services to consumers and a substantial increase in cable subscribers.” *Id.*

<sup>23</sup> See Erik Gregersen, *HBO*, ENCYC. BRITANNICA (Mar. 4, 2016), archived at <https://perma.cc/5K8R-26UN> (recognizing HBO as one of the original American cable television companies providing movies and original programming).

<sup>24</sup> See Dermot Nolan, *Bottlenecks in Pay Television: Impact on Market Development in Europe*, 21 TELECOMM. POL’Y 597, 598 (Jan. 10, 1997) (defining “pay television” as an add-on to existing “free-to-air” television services which the user can chose to pay for).

<sup>25</sup> See *History of Cable*, *supra* note 17 (stating that by 1980 there were multiple services using satellites to broadcast channels to an estimated 16 million households).

<sup>26</sup> See *History of Cable*, *supra* note 17 (pointing to the relaxation of federal regulations as a key factor in the renewed growth of the industry).

<sup>27</sup> See *History of Cable*, *supra* note 17 (defining broadband networks as the upgraded hybrid network of fiber optic and coaxial cables).

accommodate their ever increasing client base.<sup>28</sup> Introducing broadband allowed cable companies to sell high-speed internet,<sup>29</sup> bringing the World Wide Web into the majority of American households.<sup>30</sup> In April 1995, these technological advancements allowed ESPN SportsZone<sup>31</sup> to show the world's first live-streaming event to thousands of online subscribers.<sup>32</sup> By this point, smaller companies like Progressive Networks<sup>33</sup> had caused Microsoft to work on their own video streaming platform.<sup>34</sup> During this time, competition increased as companies attempted to enter the market with new innovations believing that video steaming had the potential to become its own profitable business.<sup>35</sup> By 1997, most companies had resorted to Flash<sup>36</sup> for

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<sup>28</sup> See *History of Cable*, *supra* note 17 (explaining how the growth in subscribers required an update to the network that also allowed telephone and internet access).

<sup>29</sup> See *Household Broadband Guide*, FCC (Oct. 30, 2014), *archived at* <https://perma.cc/P738-Q86M> (listing 1 Mbps as the minimum download speed needed to be considered a broadband connection for a bare minimum use of one user); *but see* Amanda Holpuch, *FCC Raises Threshold for High-Speed Internet as Service Providers Cry Foul*, THE GUARDIAN (Jan. 29, 2015), *archived at* <https://perma.cc/7VXG-4L9J> (reporting on the jump from 4 to 25 megabits per second as the new minimum download speed required to be considered broadband).

<sup>30</sup> See *History of Cable*, *supra* note 17 (noting that the creation of a modern network allowed users in all areas to have more options for information and entertainment services).

<sup>31</sup> See *ESPN, Inc. Fact Sheet*, ESPN MEDIAZONE (Oct. 29, 2016), *archived at* <https://perma.cc/ay8f-c9kw> (outlining the history of ESPN as a leading sports entertainment company).

<sup>32</sup> See Alex Zambelli, *A history of media streaming and the future of connected TV*, THE GUARDIAN (Mar. 1, 2013), *archived at* <https://perma.cc/Q4CU-UTKA> (stating it is generally believed that baseball was the first sport to be streamed live over the internet).

<sup>33</sup> See *Progressive Networks Changes Name to RealNetworks*, PR NEWSWIRE (Sept. 26, 1997), *archived at* <https://perma.cc/E2EZ-84JA> (recognizing Progressive Networks as a leading company in the streaming media market).

<sup>34</sup> See Zambelli, *supra* note 32 (pointing to Microsoft competing with multiple companies and buying out some of the startups with useful technology).

<sup>35</sup> See DAN RAYBURN, *STREAMING AND DIGITAL MEDIA: UNDERSTANDING THE BUSINESS AND TECHNOLOGY* 140 (2007) (acknowledging the growth in technology in companies like RealNetworks supporting simultaneous streams). This growth came from investments by companies like Sun and Cisco when video streaming became a profitable business. *Id.*

<sup>36</sup> See *Adobe Flash Player Overview*, ADOBE (Oct. 29, 2016), *archived at* <https://perma.cc/V5A9-7SUI> (portraying Adobe Flash Player as a premier way to stream videos online).

watching and streaming videos online, but Microsoft and Apple tried to innovate around this technology.<sup>37</sup>

Eight years later, YouTube<sup>38</sup> was created, enabling users to upload, share, and view videos.<sup>39</sup> The following year, Google<sup>40</sup> purchased the relatively new YouTube platform for \$1.65 billion.<sup>41</sup> As a result, there was a flood of interest in video streaming which was evident by Netflix's transition of their main business model from its DVD<sup>42</sup> delivery-service to online streaming in 2007.<sup>43</sup> By March 2008, Disney<sup>44</sup>, NBCUniversal<sup>45</sup>, and News Corp.<sup>46</sup> tried to "hop on the bandwagon" by creating Hulu.<sup>47</sup> Rapid growth in the industry became prevalent as increased projected profits and consumer internet access became standard.<sup>48</sup> Netflix went from making \$277 million

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<sup>37</sup> See Sam Thielman, *A Very Brief History of Web Videos From Lonelygirl15 to Billions of Viewers*, ADWEEK (Apr. 29, 2013), archived at <https://perma.cc/96LK-HUEP> (stating that "FutureSplash" would ultimately change its name to "Flash" and become the industry standard for video viewing).

<sup>38</sup> See *About YouTube*, YOUTUBE (Oct. 29, 2016), archived at <https://perma.cc/XE5Y-Z95K> (outlining the history of the video distribution platform owned by Google).

<sup>39</sup> See Thielman, *supra* note 37 (describing the functions of the YouTube platform).

<sup>40</sup> See *Our Products and Services*, GOOGLE CO. (Oct. 29, 2016), archived at <https://perma.cc/GHG3-WR6H> (stating that Google is a company that provides many searching and advertisement services to billions of users).

<sup>41</sup> See Thielman, *supra* note 37 (suggesting Google became a "major player" in video streaming by purchasing YouTube).

<sup>42</sup> See *DVD*, TECHTERMS (Oct. 14, 2014), archived at <https://perma.cc/A2Q8-EECM> (defining "DVD" as a digital versatile disk).

<sup>43</sup> See Thielman, *supra* note 37 (explaining the expanding business model of Netflix and its success as they reached 10 million subscribers by 2009); see also Seth Macy, *Youtube Announces New Live TV Service*, IGN (Feb. 28, 2017), archived at <https://perma.cc/JQ9U-NGY3> (announcing Youtube's live video streaming service in order to serve the growing demand for video streaming).

<sup>44</sup> See *About The Walt Disney Company*, THE WALT DISNEY CO. (Oct. 29, 2016), archived at <https://perma.cc/FX5B-MX2Y> (stating the company's mission to be a leading provider in entertainment).

<sup>45</sup> See *About NBCUniversal*, NBCUNIVERSAL (Oct. 29, 2016), archived at <https://perma.cc/2NHC-Z254> (maintaining that NBC Universal is one of the world leading companies in entertainment and media services).

<sup>46</sup> See *About Us*, NEWS CORP (Oct. 29, 2016), archived at <https://perma.cc/9F5L-NUQX> (describing News Corp a world leading company in "media, news, education, and information services").

<sup>47</sup> See Thielman, *supra* note 37 (expounding on how three entertainment industry titans came together to found the Original Hulu website).

<sup>48</sup> See *Netflix Revenue Quarterly*, YCHARTS (Oct. 22, 2016), archived at <https://perma.cc/PP5X-LGWA> (showing the quarterly revenue for Netflix from

during their best quarter in 2006 to \$444 million in 2009 – a staggering 160% increase in profits over a three year span.<sup>49</sup>

What made Netflix so appealing to consumers was the low subscription price for access to TV shows and movies when compared to what would normally be paid for standard cable subscriptions.<sup>50</sup> As a result of this increased popularity, profits rose and cable services experienced a steady decline in subscribers.<sup>51</sup> Today, more users are deciding to take “internet only” packages which theoretically allows them to use video streaming in place of traditional cable.<sup>52</sup> This has created a bottleneck between cable, Netflix, and YouTube because during peak usage hours, Netflix and YouTube make up 50% of total internet bandwidth in North America.<sup>53</sup> In order to provide high quality video with little buffering, Netflix agreed to pay fees to cable companies in order to connect directly to broadcasting “backbone networks.”<sup>54</sup> Netflix also incurred additional costs as it has expanded to 130 new countries in 2016 and is attempting to customize its licensed

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2007 to Sep. 30, 2016 as an exponential increase over time); *see also* Seung-Hyun Hong, *The Recent Growth of the Internet and Changes in Household-level Demand for Entertainment*, 19 INFO. ECON. AND POL’Y 304, 317 (2007) (addressing the increase in video rentals even when music record sales decline due to Netflix, among other “online video rental stores”).

<sup>49</sup> *See Netflix Revenue Quarterly*, *supra* note 48 (characterizing the repaid revenue growth Netflix experienced in a short amount of time).

<sup>50</sup> *See* Aliloupour, *supra* note 2, at 5 (discussing low cost subscription for Netflix and Hulu as opposed to traditional cable television providers); Karl Bode, *80% Of Cord Cutters Leave Because Of High Cable TV Prices, But The Industry Still Refuses To Compete On Price*, TECHDIRT (June 19, 2017), *archived at* <https://perma.cc/Y6LH-GYCS> (stating 80% of cable customers who leave for streaming services do so because of the high costs).

<sup>51</sup> *See* Eugene Kim, *The Number of Americans Paying for Traditional TV Peaked in 2012*, BUS. INSIDER (Apr. 17, 2015), *archived at* <https://perma.cc/HG69-BL5V> (highlighting a steady decrease in the number of U.S. cable subscribers).

<sup>52</sup> *See id.* (describing “cord-cutters” as users who switch from TV subscriptions to online video services).

<sup>53</sup> *See* United States Telecom Ass’n v. FCC, 825 F.3d 674, 698 (D.C. Cir. 2016) (claiming that Netflix and YouTube are two of the largest strains of current internet).

<sup>54</sup> *See id.* at 711 (citing the agreement between these companies to showcase the importance of video quality to customers while also explaining the heavy constraint that video streaming takes on internet providers); *see also* James Billington, *A “Netflix Tax” is About to Make Online Streaming More Expensive* (Aug. 18, 2017), *archived at* <https://perma.cc/XC8N-V9Q7> (commenting on how Netflix’s growth has reached a level where multiple states have either considered, or begun taxing the service).

and original programming to each of those client bases.<sup>55</sup> Due to these high costs, it is only a matter of time before video streaming service companies decide that the additional cost of unauthorized users is not sustainable for their successful business model.<sup>56</sup>

### B. *The Law*

In the 1980s there was an increasing demand for statutes specifically addressing computer-related crimes.<sup>57</sup> “Although the wire and mail fraud provisions of the federal criminal code were capable of addressing some types of computer related criminal activity, neither of these statutes provided the full range of tools necessary to combat new-age crimes.”<sup>58</sup> In response, Congress created the Comprehensive Crime Control Act of 1984<sup>59</sup> as a means of protecting federal and financial institution computers from unauthorized access by adding more inclusive sentencing guidelines.<sup>60</sup>

Over the next two years, Congress continued to examine this emerging area of the law and amended 18 U.S.C. § 1030 to encompass

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<sup>55</sup> See Ezequiel Minaya and Amol Sharma, *Netflix Expands to 190 Countries*, WALL ST. J. (Jan. 6, 2016), archived at <https://perma.cc/DJ8A-5G6U> (stating Netflix planned expand to an additional 130 countries in 2016); see also Brian Barrett, *Amazon and Netflix Look to Their Own Shows as the Key to World Domination* (Dec. 17, 2016), archived at <https://perma.cc/E6NQ-JCKN> (noting Netflix’s existence in over 200 countries and citing their plans to continue this success by adding original content).

<sup>56</sup> See Reed, *supra* note 8 (asserting streaming companies are losing an estimated \$500 million each year).

<sup>57</sup> See Deborah F. Buckman, *Validity, Construction, and Application of Computer Fraud and Abuse Act (18 U.S.C.A § 1030)*, 174 A.L.R. Fed. 101, \*2 (explaining that older statutes could not address non-interstate commerce issues); see also Michael W. Bailie et al., *Prosecuting Computer Crimes*, in OLE LITIGATION SERIES, at 1 (Off. of Legal Educ., 2015) (expressing the demand for new criminal laws during the 1980s).

<sup>58</sup> See Bailie, *supra* note 57, at 1 (summarizing the failures of previous attempts at criminalizing computer crimes via the “wire and mail fraud provisions of the federal criminal code”).

<sup>59</sup> See 18 U.S.C. § 3551 (1984) (updating the criminal code).

<sup>60</sup> See Buckman, *supra* note 57, at 2 (“Congress enacted this statute, which was directed at protecting classified information, financial records, and credit information on governmental and financial institution computers.”). This also caused issues because it only prevented unauthorized access, but did not stop authorized access which caused harm. *Id.* See also 132 CONG. REC. H 11291 (1986) (presenting minor changes to the Comprehensive Crime Control Act of 1984 to further the protection of federal computers).

modern Computer Fraud and Abuse Act (CFAA).<sup>61</sup> This updated bill was designed to limit federal jurisdiction “to those cases involving a compelling federal interest.”<sup>62</sup> Over time, the CFAA was amended eight more times, each time broadening the scope of the Act’s reach, with the most recent and drastic changes occurring in 2008.<sup>63</sup>

Some of the most expansive changes included eliminating: the requirement in 18 U.S.C. § 1030(a)(2)(C) that information must have been stolen through an interstate or foreign communication, ...the requirement in 18 U.S.C. § 1030(a)(5) that the defendant’s action must result in a loss exceeding \$5,000, ...[and] broaden[ing] the definition of ‘protected computer’ in 18 U.S.C. § 1030(e)(2) to the full extent of Congress’s commerce power by including those computers used in or affecting interstate or foreign commerce or communication.<sup>64</sup>

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<sup>61</sup> See The Computer Fraud and Abuse Act, 18 U.S.C.S. § 1030 (2008) (considering whether further revisions of section 1030 were required); see also Bailie, *supra* note 57 at 1 (describing House and Senate meetings where discussions took place regarding computer crimes and possible legislation to overcome these problems).

<sup>62</sup> See Buckman, *supra* note 57, at 2; see also Bailie, *supra* note 57, at 1-2 (noting Congress’s choice to make this this shift because of pressure to avoid a federalist type area of law from developing).

In addition to clarifying several provisions in the original section 1030, the CFAA also criminalized additional computer-related acts. For example, Congress added a provision to penalize the theft of property via computer that occurs as a part of a scheme to defraud. Congress also added a provision to penalize those who intentionally alter, damage, or destroy data belonging to others. This latter provision was designed to cover such activities as the distribution of malicious code and denial of service attacks. Finally, Congress also included in the CFAA a provision criminalizing trafficking in passwords and similar items.

*Id.* at 2.

<sup>63</sup> See PROSECUTING COMPUTER CRIMES BAILIE, *supra* note 57, at 2 (providing further information the development of the CFAA). “[T]he CFAA required further amending, which Congress did in 1988, 1989, 1990, 1994, 1996, 2001, 2002, and 2008”).

<sup>64</sup> See PROSECUTING COMPUTER CRIMES BAILIE, *supra* note 57, at 2-3 (describing the most influential updates to the statute).

With the legal expansions of the statute, along with technological advancements, there is a plethora of discussion in trying to decide how this relates to different criminal actions.<sup>65</sup>

Many video streaming providers have publicly stated that they are “fine with password sharing for the time being.”<sup>66</sup> To no surprise, studies continue to attribute the rise in subscription prices as partially part of an attempt to compensate for the additional overhead cost of millions of users who do not pay for the services.<sup>67</sup> One of the main reasons companies in this industry continue to have such a “relaxed policy” when it comes to password sharing, is because they do not want to risk losing potential future growth.<sup>68</sup> While this is fair point, without technological and business solutions being further explored, it makes little sense for the current law to be drawn so broadly.<sup>69</sup>

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<sup>65</sup> See *Epic Sys. Corp. v. Tata Consultancy Servs.*, No. 14-cv-748-wmc, 2015 U.S. Dist. LEXIS 176561, at \*73 (W.D. Wis. Mar. 2, 2015) (expanding the term ‘protected computer’ to encompass “a computer affecting interstate commerce”).

<sup>66</sup> See Sarah Perez, *Netflix CEO Says Account Sharing is OK*, TECHCRUNCH (Jan. 11, 2016), archived at <https://perma.cc/NNE2-NBNB> (explaining that Netflix and HBOGO CEOs have both stated they are fine with household password sharing because it encourages future subscribers).

<sup>67</sup> See Nathan McAlone, *Netflix raised its prices because you were sharing your password too much*, BUS. INSIDER (Oct. 9, 2015), archived at <https://perma.cc/BH52-EX58> (suggesting the \$1 increase in subscription for Netflix was in order to cover the cost of millions of free-riding users).

<sup>68</sup> See Jacob Roscoe, *Password Sharing: Implications for Streaming Video Providers*, CARTESIAN (Dec. 21, 2015), archived at <https://perma.cc/Z25H-XZLB> (proposing firms prefer the losses from password sharing to the potential lost market shares).

<sup>69</sup> See *id.* (explaining that companies, like HBO and Netflix, currently have relatively relaxed current policies regarding password sharing).

### III. Premise

Netflix subscribers must accept the companies “Terms of Use”<sup>70</sup> before receiving access to the service.<sup>71</sup> This contract incorporates the “End User License Agreement”<sup>72</sup> and “Privacy Statement”<sup>73</sup> into its terms which further outline subscriber’s data usage.<sup>74</sup> These documents contain varying levels of descriptiveness as to who is given access.<sup>75</sup> In short, the subscribing user is granted “a limited, non-exclusive, non-transferable, license to access the Netflix service”<sup>76</sup> (emphasis added) which extends to their immediate household and owners of devices by which the subscriber accesses Netflix.<sup>77</sup> If the agreement is violated, the user agrees to arbitration or small claims court.<sup>78</sup> There is ongoing discussion on the broad language used in this licensing agreement and the implications it may have on password sharing.<sup>79</sup>

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<sup>70</sup> See *Netflix Terms of Use*, NETFLIX (May 5, 2016), archived at

<https://perma.cc/VQA3-C2KN> (setting for that acceptance of the governing rules are required to create a Netflix subscription).

<sup>71</sup> See *id.* (explaining the Terms of Use outline the subscribers use with the service).

<sup>72</sup> See *Netflix End User License Agreement*, NETFLIX (July 12, 2011), archived at <https://perma.cc/V44R-27ZB> (stating that acceptance of the limited license agreement includes rights for your immediate household members, the devices used to access the service, and people using the Netflix device, who you will be responsible for).

<sup>73</sup> See *Privacy Statement*, NETFLIX (Jan. 6, 2016), archived at

<https://perma.cc/4MCV-JMS9> (explaining how the user information can be used and the risks of other people having access to your account information).

<sup>74</sup> See *Netflix Terms of Use*, *supra* note 70 (incorporating all hyperlinked forms and contracts into the Terms of Use).

<sup>75</sup> See *Netflix Terms of Use*, *supra* note 70 (describing users as non-exclusive entities); see also *Netflix End User License Agreement*, *supra* note 72 (describing users as the contractee, household members, and others whom they can be liable for).

<sup>76</sup> See *Netflix Terms of Use*, *supra* note 70.

<sup>77</sup> See *Netflix End User License Agreement*, *supra* note 72 (listing parties subscribing user can liable for when they enter an agreement with Netflix, including members of the household).

<sup>78</sup> See *Netflix Terms of Use*, *supra* note 70 (binding users to arbitration or small claims court if any disputes should arise against Netflix.) “You and Netflix agree that any dispute, claim or controversy arising out of or relating in any way to the Netflix service, these Terms of Use and this Arbitration Agreement, shall be determined by binding arbitration or in small claims court.” *Id.*

<sup>79</sup> See *Berkson v. Gogo, LLC*, 97 F. Supp. 3d 359, 388 (E.D. N.Y. 2015) (discussing the importance of contract language and reasonable terms for online contracts of adhesion); Aaron Brown, *If You Share A Netflix Account With Someone, You NEED To Read This*, EXPRESS (Jan. 11, 2016), archived at <https://perma.cc/E2LD->

As of 2016, monthly subscriptions to Netflix cost \$7.99, \$9.99, or \$11.99, respectively, based on the package you select for one, two, or four devices to simultaneously watch from one account, regardless of the number of profiles.<sup>80</sup> If the number of devices streaming is already at capacity, any additional attempts to login will receive a message that “too many people are logged onto your account right now,” and will not be able to access the content until other devices logoff.<sup>81</sup> This solution prevents excessive simultaneous streaming, but does not prevent a handful of users from having access to a single account, if used at different times, even if they are not paying for their own subscription.<sup>82</sup>

In 2016, Netflix rolled out a slight increase in their pricing which is attributed to a loss of around eight-hundred-thousand new customers by the end of the year.<sup>83</sup> This rollout was done on a gradual scale to avoid more serious customer losses.<sup>84</sup> This was an attempt to

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U4HJ (analyzing the gray area between sharing an account between a family and a child who still lives at home versus when they move into their own household); David Moye, *It's Probably Ok to Share Your Netflix Password (For Now)*, THE HUFFINGTON POST (July 7, 2016), archived at <https://perma.cc/QLB5-8DWH> (suggesting account sharing with a friend who the user does not live with would most likely violate the Terms of Use).

<sup>80</sup> See Rahul, *How Much Does Netflix Cost For a Month in My Country?*, DREAM TRICKS (Oct. 18, 2016), archived at <https://perma.cc/4E5F-ZB9P> (listing the pricing options for different levels of Netflix subscriptions). See *How do profiles work on my Netflix account?*, NETFLIX (Nov. 22, 2016), archived at <https://perma.cc/2TNW-AC25> (stating that each account can create up to five profiles for members of the household).

<sup>81</sup> See *Netflix Says My Account Is Already In Use When I Try To Watch*, NETFLIX (Nov. 22, 2016), archived at <https://perma.cc/GXT7-8EVU> (showing possible messages that will appear if more devices attempt to simultaneously stream than are allowed based on the user account).

<sup>82</sup> See *id.* (stating a limited number of devices can stream simultaneously).

<sup>83</sup> See Brandon Katz, *Netflix Price Increase Leading To 500,000 Cancellations?*, FORBES (July 13, 2016), archived at <https://perma.cc/FUX8-GUDB> (justifying the potential of lost customers for Netflix due to the price jump and explaining how the increased revenue should cover this difference and only slow their growth internationally); see also Jeremy Owens, *Netflix price increase does damage, but media and subscribers blamed*, MARKETWATCH (July 19, 2016), archived at <https://perma.cc/BB8P-TCSM> (commenting on Netflix gaining nearly 800 thousand fewer subscribers than predicted). Much of the blame for slower growth was attributed to the media coverage of the upcoming price increase. *Id.*

<sup>84</sup> See Owens, *supra* note 83 (describing the risks of loss if more users unsubscribe than their models predict).

avoid a repeat of 2011 when the company lost over one million subscribers after having to raise their prices.<sup>85</sup> The price increase is due to rising costs of developing original content and their overall global expansion.<sup>86</sup>

Publically, Netflix takes the stance that they are fine with password sharing as long as users are not trying to “sell access” to their account.<sup>87</sup> They take this position with hopes that “free-riding”<sup>88</sup> users will eventually subscribe for their own account.<sup>89</sup> HBOGO has taken a slightly less accepting approach by stating that “[s]hould it become a big number, [they] will deal with it.”<sup>90</sup> HBO acknowledges that there

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<sup>85</sup> See David Goldman, *Netflix Prices Are Going Up. Here's When You'll Have to Pay More*, CNN TECH (Apr. 19, 2016), *achieved at* <https://perma.cc/5RN2-DG6E> (explaining the 2011 Netflix attempt at dividing the DVD and streaming services with Quikster which raised prices and costed the company 1 million subscribers).

<sup>86</sup> See Trey Williams, *Netflix could lose hundreds of thousands of subscribers with price hike*, MARKETWATCH (June 22, 2016), *archived at* <https://perma.cc/R83R-C82D> (attributing Netflix price changes to the increasing costs associated with expanding their customer bases and business).

<sup>87</sup> See Nathan McAlone, *NETFLIX: You can share your password, as long as you don't sell it*, BUS. INSIDER (July 15, 2016), *archived at* <https://perma.cc/VG4Y-YKCT> [hereinafter *NETFLIX: you can share your password*] (citing Netflix CEO stating that members can use their passwords however they want as long as they do not sell them); *see also* Madeline Farber, *Netflix Is Not Going to Bust You for Sharing Your Password*, FORTUNE (Oct. 18, 2016), *archived at* <https://perma.cc/WW9B-WHH3> (quoting Netflix CEO Reed Hasting stating that there are no current plans to change the companies acceptance of password sharing). Mr. Hasting stated a change in password sharing would be difficult since there is no “bright line” rule because some password sharing is legitimate, like within an immediate household. *Id.*

<sup>88</sup> See *Free Rider Problem*, INVESTOPEDIA (Sept. 14, 2017), *archived at* <https://perma.cc/5NQF-7NV5> (defining free rider as “a market failure that occurs when people take advantage of being able to use a common resource, or collective good, without paying for it”).

<sup>89</sup> See Angie Han, *HBO or Netflix Password Sharing Might be a Federal Crime*, SLASH FILM (July 12, 2016), *archived at* <https://perma.cc/A92M-6GB6> (describing a potential benefit of “free-rider” users as becoming subscribers for convenience).

<sup>90</sup> *See id.* (quoting the HBO CEO, who stated that that the platform could change the number of concurrent streams, should it become an issue, but at the time it is not concerned about the number of password sharing accounts as long as the numbers remain trivial in the grand business context).

is potential for increased revenue if these services were to restrict password sharing in an attempt to push these users to create accounts.<sup>91</sup>

Recently in *United States v. Nosal*,<sup>92</sup> a controversial 2:1 decision held that password sharing may be a federal crime under 18 U.S.C. § 1030(a)(4) given the correct context.<sup>93</sup> Under this statutory section, criminal sanctions are imposed on anyone who “knowingly and with intent to defraud, accesses a protected computer without authorization, or exceeds authorized access, and by means of such conduct furthers the intended fraud and obtains anything of value . . . .”<sup>94</sup>

Judge Reinhardt began his dissenting opinion by stating “this case is about password sharing”<sup>95</sup> and that he did not believe the CFAA should be used to criminalize password sharing.<sup>96</sup> Media outlets began reporting on the potential criminality of Netflix password sharing, which led to the subsequent public discussion on the matter.<sup>97</sup> Since then, other courts have had to reference this case in their analysis of the CFAA.<sup>98</sup> They have followed the groundwork set by *Nosal* by explaining that violation of a website’s terms of service by itself should

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<sup>91</sup> See Seth Archer, *Ending Password Sharing is a ‘Growth Opportunity’ for Netflix*, BUS. INSIDER (July 15, 2016), archived at <http://perma.cc/QMP9-W2WP> (analyzing the potential for increased revenue if Netflix began to restrict streaming services after their international growth begins to slow).

<sup>92</sup> See *Nosal II*, 844 F.3d 1024, 1029-30 (9th Cir. 2016) (affirming defendant’s conviction in violation of CFAA).

<sup>93</sup> See *id.* at 1038 (implementing the CFAA as a means to criminalize the actions of millions engaging in password sharing); see also Alan Yu, *How a ‘Nightmare’ Law Could Make Sharing Passwords Illegal*, NPR: ALL TECH CONSIDERED (July 14, 2016), archived at <https://perma.cc/2JDX-5AJX> (discussing the majority’s decision and articulating the potential effects of criminalizing password sharing).

<sup>94</sup> See 18 U.S.C. § 1030(a)(4) (1986) (expanding the type of criminal actions which the statute allows recovery under).

<sup>95</sup> See *Nosal II*, 844 F.3d at 1048 (Reinhardt, J., dissenting) (explaining the nature of the case).

<sup>96</sup> See *id.* (characterizing password sharing by millions of public members as outside the scope of the CFAA).

<sup>97</sup> See *NETFLIX: You can share your password*, *supra* note 87 (explaining public concern over the ruling in the *Nosal* case); see Farber, *supra* note 87 (describing why Netflix users do not need to be scared of criminal charges at this moment if they are sharing passwords); see Han, *supra* note 89 (suggesting HBO GO and Netflix will likely develop technological solutions in response to password sharing rather than resorting to litigation).

<sup>98</sup> See *Facebook, Inc. v. Power Ventures, Inc.*, 844 F.3d 1058, 1065-67 (9th Cir. 2016) (addressing Facebook account access under the CFAA); see also *Phillips Med. Sys. P.R., Inc. v. GIS Partners Corp.*, 203 F. Supp. 3d 221, 231 (D.P.R. 2016)

not be enough to justify a CFAA penalty.<sup>99</sup> Still, the majority of media coverage reported that Netflix password sharing is unlikely to be charged under the CFAA; there is enough uncertainty that the discussion continues.<sup>100</sup>

Activist scholars agree with the dissent's position, calling for a reform of the CFAA's jurisdiction and sentencing guidelines.<sup>101</sup> Critics argue the expanded jurisdiction of the CFAA has caused courts to sentence several cases as if the crime was computer fraud, which causes potential economic harm, instead of the actual crime of trespass.<sup>102</sup> Others have recommended the creation of a new administrative agency to help stay up-to-date with technology and which will avoid expanding the statute when current laws are unable to justifiably

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(noting the statute does not apply to the punishment of users who accidentally stumble into another's account).

<sup>99</sup> See *Facebook Inc.*, 844 F.3d at 1067 (stating the CFAA requires more than just a Terms of Service violation to establish liability); see also *Satmodo, LLC v. Whenever Communs., LLC*, No. 17-cv-0192-AJB NLS, 2017 U.S. Dist. LEXIS 57719, at \*12 (S.D. Cal. Apr. 14, 2017) (supporting the narrowing of CFAA violations by requiring more than a contract violation to be able to implement the federal protection).

<sup>100</sup> See *NETFLIX: You can Share Your Password*, *supra* note 87 (commenting on the unlikelihood of a criminal charge through the *Nosal II* case for Netflix password sharing).

<sup>101</sup> See Orin Kerr, *Trespass, Not Fraud: The Need for New Sentencing Guidelines in CFAA Cases*, 84 GEO. WASH. L. REV. 1544, 1557-58 (2016) (urging reform of the CFAA guidelines for sentencing and jurisdictional reach); see also Johnathan Mayor, *The "Narrowing" Interpretation of the Computer Fraud and Abuse Act: A User Guide for Applying United States v. Nosal*, 84 GEO. WASH. L. REV. 1644, 1646 (recognizing that the current CFAA has been interpreted in different ways by courts).

<sup>102</sup> See Kerr, *supra* note 101, at 1555-56. (expressing the need to update sentencing guidelines to reflect the damages CFAA cases currently use to address trespass issues); see also Josh Goldfoot and Aditya Bamzai, *A Trespass Framework for the Crime of Hacking*, 84 GEO. WASH. L. REV. 1477, 1483 (2016) (proposing that "authorization" within the CFAA is often analyzed by looking at the entry, knowledge, and prohibition of the action). The analysis of the meaning of "authorization" is vital because of the lack of clarity in the current CFAA language. *Id.* at 1497.

solve the issues.<sup>103</sup> The United States Supreme Court declined certiorari, making the Appeals Court decision final.<sup>104</sup>

Since the death internet activist Aaron Swartz<sup>105</sup> these proposals have been emphasized in legislation.<sup>106</sup> Swartz's suicide was largely attributed to the pressure from being charged with computer fraud under CFAA after stealing 4.8 million academic files by hacking into JSTOR<sup>107</sup>, a subscription-only service that houses millions of academic files.<sup>108</sup> Thus far, proposed legislation has been unsuccessful in attempting to remove the CFAA's criminalization of violating a company's terms of services.<sup>109</sup>

#### IV. Analysis

Video streaming services have transformed the entertainment industry with the development of a new form of cheap, fast, service for

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<sup>103</sup> See Ric Simmons, *The Failure of the Computer Fraud and Abuse Act: Time to Take a New Approach to Regulating Computer Crime*, 84 GEO. WASH. L. REV. 1703, 1704-05 (2016) (discussing the legislature's need to examine the potential benefits of an administrative agency handling computer crimes and their legislature).

<sup>104</sup> See *Nosal v. United States Denied*, SCOTUSBLOG (Oct. 10, 2017), archived at <https://perma.cc/W6H4-3ZXA> (announcing the denial of a petition for review of the appellate decision).

<sup>105</sup> See Sarah Constant, Note, *The Computer Fraud and Abuse Act: A Prosecutor's Dream and a Hacker's Worst Nightmare - The Case Against Aaron Swartz and the Need To Reform the CFAA*, 16 TUL. J. TECH. & INTELL. PROP. 231, 231-32 (2013) (identifying Aaron Swartz as a famous hacker who committed suicide after being charged under the CFAA).

<sup>106</sup> See *id.* at 244 (attributing Swartz's suicide to the increase in motivation to reform the CFAA).

<sup>107</sup> See *About JSTOR*, JSTOR (Sept. 21, 2017), archived at <https://perma.cc/QZ9M-WZX9> (listing the features of the not-for-profit shared digital library).

<sup>108</sup> See Constant, *supra* note 105, at 240-41. (depicting Swartz using MIT's network to access a database of academic articles and how the subsequent criminal charges coincided with his suicide); see also Patrick Lambert, *The Case Against Aaron Swartz: Why We Should Be Concerned*, TECHREPUBLIC (Jan. 28, 2013), archived at <https://perma.cc/9LRD-VNWW> (describing Aaron Swartz as an internet activist and prodigy who took his own life in 2013 partly due to the criminal charges he faced).

<sup>109</sup> See Constant, *supra* note 105, at 237-38 (chronicling the failure of "Aaron's Law" from passing as legislature). One of the failed key provisions within Aaron's Law is the proposed decriminalization of terms of service violations. *Id.*

a wide variety of customers.<sup>110</sup> Accordingly, legislature attempted to expand the jurisdiction of existing statutes to compensate for these new technologies and platforms.<sup>111</sup> This raises questions as to whether the expansions are serving their purpose or if they are causing further harm by imposing harsher penalties than required.<sup>112</sup> In the case of Netflix, this reaction has been especially harsh because there are various contractual and technological solutions which would be more appropriate than expanding a criminal statute which theoretically could be used to criminally prosecute.<sup>113</sup>

### A. Criminal Law

Currently, the CFAA is used to bring civil and criminal charges against anyone who “accesses a protected computer without authorization or exceeding authorized access” in order to defraud or take information.<sup>114</sup> This language is vague as a result of the continuous expanding scope of the act, and is the reason it is essential to interpret each element thoroughly beyond just how the law applies to the facts at the case at hand.<sup>115</sup> The CFAA does not define all of its terms, some

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<sup>110</sup> See Thielman, *supra* note 37 (detailing Netflix’s business strategy which lead to their massive expansion); see also Aliloupour, *supra* note 2, at 5 (crediting the low cost of subscription to Netflix and Hulu as one of the key reasons they are surpassing traditional cable providers in terms of user subscription).

<sup>111</sup> See Bailie, *supra* note 57, at 2 (summarizing the eight years wherein Congress expanded the scope of the CFAA to compensate for new technologies and threats).

<sup>112</sup> See Kerr, *supra* note 101, at 1560 (suggesting that Congress reform the CFAA sentencing guidelines to reflect its current applicability); see also Constant, *supra* note 105, at 244 (attributing harsh sentencing to the suicide of Aaron Swartz).

<sup>113</sup> See *Netflix Terms of Use*, *supra* note 70 (contracting with new users before allowing them access to the Netflix database).

<sup>114</sup> See 18 U.S.C. § 1030 (codifying various requirements to be criminally charged under the CFAA). 18 U.S.C. § 1030(a)(4) imposes liability upon anyone who “knowingly and with intent to defraud, accesses a protected computer without authorization, or exceeds authorized access, and by means of such conduct furthers the intended fraud and obtains anything of value.” *Id.* Otherwise whoever “intentionally access a computer without authorization or exceeds authorized access, and thereby obtains . . . information from any protected computer.” 18 U.S.C. § 1030(a)(2)(C).

<sup>115</sup> See *NCMIC Fin. Corp. v. Artino*, 638 F. Supp. 2d 1042, 1055 (S. D. Iowa 2009) (explaining why they analyze the different statutes using certain specified interpretations).

of which are used in multiple sections each designed for different situations.<sup>116</sup>

For example, in *Nosal* the court found against the defendant under §1030(a)(4) for using a victim employer's login credentials to access computers without authorization in order to download customer information after he no longer worked at the company.<sup>117</sup> On the other hand, in *Artino* a former employee was charged for using his previous employer's computer to access information under both §1030(a)(4) and (a)(2)(C).<sup>118</sup> The latter of which is a broad rule which is generally easier for a plaintiff to satisfy, and correspondingly has lower penalties.<sup>119</sup>

These instances raised public concern about the legality of password sharing under the CFAA, and also show how different sections can be used to apply different standards.<sup>120</sup> In both of these federal cases, discussion focused on the meaning of "authorization" within the CFAA, because it is not defined within the statute and may have different applications within different sections.<sup>121</sup> Other elements that also arise in various sections of the statute are "knowingly," "intent," and "protected computer."<sup>122</sup>

The CFAA does not define "knowingly" because it is commonly used in criminal litigation.<sup>123</sup> Knowingly is a *mens rea* term which generally means to be aware of an act or the high probability that the act will occur.<sup>124</sup> In the context of the CFAA it is not limited

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<sup>116</sup> See *id.* at 1056 (pointing out how the CFAA does not define "authorization").

<sup>117</sup> See *Nosal II*, 844 F.3d 1024, 1029-30 (9th Cir. 2016) (concluding why the defendant is liable under the CFAA).

<sup>118</sup> See *Artino*, 638 F. Supp. 2d at 1066 (concluding the defendant is liable under 18 U.S.C. § 1030(a)(2)(c) and not under the stricter (a)(4)).

<sup>119</sup> See *id.* at 1060 (explaining that §1030(a)(2)(c) does not require intent to defraud, only intent to access).

<sup>120</sup> See *Nosal II*, 844 F.3d at 1028 (applying section 1030(a)(4)); see *Artino*, 638 F. Supp. 2d at 1055 (applying section 1030(a)(2)(C)).

<sup>121</sup> See *Nosal II*, 844 F.3d at 1028 (framing the liability of the defendant depends on the interpretation of the different elements of the CFAA language).

<sup>122</sup> See *id.* (categorizing the relevant text which need to be interpreted).

<sup>123</sup> See *id.* at 1032-33 (explaining the phrases "knowingly" and "intent to defraud" are so common in criminal litigation that it need not be defined within the statute).

<sup>124</sup> See *id.* at 1039 (restating the language used during trial to explain the jury how "knowingly" should be interpreted).

to only positive knowledge, but also includes states of mind where someone has consciously avoided knowing.<sup>125</sup>

Similarly, the CFAA does not explain the meaning of “intent to defraud” requirement of §1030(a)(4).<sup>126</sup> Courts have used the common meaning of the phrase which is “to act knowingly and with the intent to deceive someone for the purpose of causing some financial loss to another or bringing about some financial gain to oneself or another to the detriment of a third party.”<sup>127</sup> On the other hand, §1030(a)(2)(c) only requires the intentional accessing of a computer without authorization or exceeding authorization, a notably lower standard because no intentional deceit is necessary.<sup>128</sup>

These different standards became important in *Nosal* because the Court mentions that the “intent to defraud” element is why their decision will not affect regular conduct such as family password sharing.<sup>129</sup> However, as Judge Reinhardt points out in the dissent, this is flawed because other sections of the CFAA such as §1030(a)(2)(C), do not have the same narrow requirements.<sup>130</sup> This means that if a party did not have intent to defraud, but still had intent to use a protected computer with improper authorization, they could still be found culpable under broader sections of the act.<sup>131</sup> Applying the law as the majority suggests would once again broaden the CFAA, which was not

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<sup>125</sup> See *id.* (reinforcing the broad definition of “knowingly” to include states of mind where a party consciously avoided learning of an act).

<sup>126</sup> See *id.* at 1032-33 (noting that the term “intent to defraud” is not defined in the statute’s text).

<sup>127</sup> See *Artino*, 638 F. Supp. 2d at 1062 (quoting the Eighth Circuit’s model jury instruction of the definition for “intent to defraud”); *Phillips Med. Sys. P.R., Inc. v. GIS Partners Corp.*, 203 F. Supp. 3d 221, 231 (D.P.R. 2016) (explaining that the CFAA § 1030(a)(2)(C) is not used to punish users who unintentionally access another party’s account).

<sup>128</sup> See 18 U.S.C. § 1030 (criminalizing the intentional accessing of a computer without authorization or exceeding authorization to obtain information).

<sup>129</sup> See *Nosal II*, 844 F.3d 1024, 1028 (9th Cir. 2016) (justifying the argument that their decision in this case does not criminalize regular password sharing).

<sup>130</sup> See *id.* at 1050-51 (Reinhardt, J., dissenting) (detailing the different levels of culpability based on which elements have been satisfied and expressing that the majority’s decision effects all levels of the CFAA).

<sup>131</sup> See *id.* at 1051-52 (Reinhardt, J., dissenting) (explaining the effects of a narrow interpretation on other sections of the statute).

created to handle these issues.<sup>132</sup> A broad interpretation of the language is most appropriate because it does not continue the expansion of CFAA's scope.<sup>133</sup>

Next in the list of CFAA terms, "protected computers" is repeatedly used and defined as "a computer exclusively for the use of [or used by and affecting] a financial institution or the United States Government; or ... used in or affecting interstate or foreign commerce or communication."<sup>134</sup> However, in practice this has been interpreted to apply to any ordinary device with access to the internet, such as a cell phone.<sup>135</sup> This is justified because workplace computers can have an impact on interstate commerce.<sup>136</sup>

Devices used for video streaming would technically satisfy the requirement to be "protected computers" because they are used in interstate commerce and are a multi-billion-dollar industry.<sup>137</sup> Netflix can be accessed by various devices connected to the internet including cell phones, tablets, computers, and streaming devices (i.e. Apple TV).<sup>138</sup> Each of these would be considered "protected computers" under the CFAA.<sup>139</sup> Additionally, Netflix has expanded internationally

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<sup>132</sup> See Bailie, *supra* note 57, at 21-22 (listing the jurisdictional expansions to CFAA since its creation which have led to a very broad coverage).

<sup>133</sup> See *Artino*, 638 F. Supp. 2d at 1058 (suggesting a broad interpretation is most appropriate when analyzing CFAA cases); see also *Nosal II*, 844 F.3d at 1053 (Reinhardt, J., dissenting) (dissenting with respect to the broad interpretation because a narrow interpretation would be most appropriate when analyzing the entire CFAA).

<sup>134</sup> See 18 U.S.C. § 1030(e)(2)(a)-(b) (defining "protected computer" as interpreted by the CFAA).

<sup>135</sup> See *Nosal II*, 844 F.3d at 1050 (Reinhardt, J., dissenting) (explaining that almost all internet connected devices are under the category of "protected computer"); see also *Artino*, 638 F. Supp. 2d at 1060 (noting the extensive jurisdiction of Congress's commerce powers).

<sup>136</sup> See *Artino*, 638 F. Supp. 2d at 1060 (theorizing that any computer or device connected to the internet would have effect on interstate commerce when used in business).

<sup>137</sup> See *id.* (noting that most electronic devices with internet connection are protected computers); see also Yeung, *supra* note 6, at 2 (predicting video streaming services to be worth over \$10 billion by 2018).

<sup>138</sup> See Thielman, *supra* note 37, at 4 (chronicling the growth of Netflix from a DVD retailer to an online streaming service).

<sup>139</sup> See 18 U.S.C. § 1030(e)(2)(B) (explaining that devices which affect interstate commerce via the internet can be considered "protected computers").

with services in over 130 countries which would also bring it under CFAA jurisdiction because they now effect foreign commerce.<sup>140</sup>

The CFAA language most debated by courts is “without authorization or exceeding authorization.”<sup>141</sup> Unfortunately, the statute does not define “authorization” within its text.<sup>142</sup> Typically in situations where a word is not defined in the statute and there is no clear common law definition, courts will interpret the word to mean its “ordinary, contemporary, and common meaning.”<sup>143</sup> For “authorization” this should be interpreted to mean having permission or power granted by an authority.<sup>144</sup> Applying this interpretation to “without authorization,” the phrase should be understood to mean “accessing a computer without any permission at all, while a person who “exceeds authorized access” has permission to access the computer, but accesses information on the computer that the person is not entitled to access.”<sup>145</sup> Both of these are fairly broad meanings for “authorization.”<sup>146</sup>

Judge Reinhardt discusses the issues that arise when “authorization” is given such a broad interpretation within the context of the CFAA.<sup>147</sup> He urges that by using a broad definition, it would criminalize ordinary actions such as having a spouse log on to pay a utility

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<sup>140</sup> See Minaya, *supra* note 55, at 1 (detailing the international expansion Netflix has undergone in recent years); see also 18 U.S.C. § 1030 (defining “protected computers” to also encompass devices which effect foreign commerce and communications).

<sup>141</sup> See *Nosal II*, 844 F.3d 1024, 1028 (9th Cir. 2016) (discussing the ordinary definition of knowingly); *Artino*, 638 F. Supp. 2d at 1056-57 (contrasting “without authorization” and “exceeding authorization” based on precedent); *Int'l Airport Ctrs., L.L.C. v. Citrin*, 440 F.3d 418, 420 (7th Cir. 2006) (depicting the difference between “without authorization” and “exceeding authorization” as “paper thin”).

<sup>142</sup> See Goldfoot, *supra* note 102, at 1478 (highlighting that the pivotal term within the CFAA is authorization); see also *LVRC Holdings LLC v. Brekka*, 581 F.3d 1127, 1132-33 (9th Cir. 2009) (stating that the CFAA does not define authorization).

<sup>143</sup> See *id.* (insisting that it is a fundamental practice to interpret words in their common usage whenever a statute fails to provide a definition).

<sup>144</sup> See *id.* at 1133 (relying on dictionary definitions the court defines authorization within its common meaning).

<sup>145</sup> See *id.* at 1133 (deducing the intended meaning of “without authorization” and “exceeding authorization” based on their dictionary and common meanings).

<sup>146</sup> See *id.* at 1133 (showing the court’s decision to use a basic, are-they or are-they-not approach to authorization).

<sup>147</sup> See *Nosal II*, 844 F.3d 1024, 1050 (9th Cir. 2016) (Reinhardt, J., dissenting) (explaining how using a broad interpretation of authorization would impact not just

bill because they do not have authorization to log onto the user account.<sup>148</sup> This is why the real question when analyzing authority should be who can give authority?<sup>149</sup> The answer to this depends heavily on the facts of each case.<sup>150</sup>

The Ninth Circuit Court of Appeals addressed this issue in *Facebook, Inc. v. Power Ventures, Inc.*<sup>151</sup> where authorization to access a Facebook account was in question.<sup>152</sup> In this situation the Court decided that *both* the user and Facebook, Inc. needed to grant permission.<sup>153</sup> However, this method does not apply as neatly with who has authority to grant access for Netflix.<sup>154</sup>

Alternatively, the U.S. Supreme Court has often held that ambiguity in criminal statutes should be resolved in favor of the defendant.<sup>155</sup> This means that when authority is ambiguous, such as in certain password sharing situations, authorization should be interpreted to be granted by both the primary owner of the protected computer and the account holder.<sup>156</sup>

Applying a broad interpretation of who can grant “authority” would help narrow the scope of the CFAA by preventing the harsh

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the section of 18 U.S.C. § 1030 at hand but all sections which use the term under the CFAA).

<sup>148</sup> See *id.* at 1051 (Reinhardt, J., dissenting) (providing a hypothetical which would be made illegal if the proposed language is used).

<sup>149</sup> See *id.* at 1053 (Reinhardt, J., dissenting) (agreeing with the First Circuit that authorization is an elusive concept within the CFAA).

<sup>150</sup> See *id.* (Reinhardt, J., dissenting) (showing that authorization is decided on the facts of each case).

<sup>151</sup> See *Facebook, Inc. v. Power Ventures, Inc.*, 844 F.3d 1058, 1063 (9th Cir. 2016) (discussing authorization for third parties to access individual’s online Facebook accounts).

<sup>152</sup> See *id.* at 1068 (highlighting one of the issues before the court, which was who has authority to authorize Facebook account access).

<sup>153</sup> See *id.* (stating that third party needed permission from Facebook and account holder to have access).

<sup>154</sup> See Yu, *supra* note 93 (showcasing the public reaction to *United States v. Nosal* and the uncertainty on the general legality of Netflix password sharing).

<sup>155</sup> See *Nosal II*, 844 F.3d at 1053 (Reinhardt, J., dissenting) (citing Supreme Court cases where ambiguity is resolved in the defendant’s favor).

<sup>156</sup> See *id.* at 1052 (Reinhardt, J., dissenting) (concluding that the appropriate interpretation of “authority” is permission granted by “either a legitimate account holder or the system owner”).

criminal penalties from applying to such diverse situations.<sup>157</sup> This would help ease the increasing public pressure to reform the CFAA which has gained popularity ever since the death of Aaron Swartz.<sup>158</sup> Originally, the CFAA was only intended to handle hacking of computers which had some federal interest.<sup>159</sup> The statute was thereafter amended several times in order to address new technologies, however there comes a time when this is no longer practical.<sup>160</sup>

### B. Terms of Use

In determining which parties have authority to grant access to a Netflix account, it is necessary to examine the Terms of Use which all account holders agree to when beginning their subscription.<sup>161</sup> The Terms of Use grant a non-transferable license to access the service to the account holder.<sup>162</sup> The End User License Agreement then extends this license to members of the immediate household and owners of devices by which the account holder accesses the service.<sup>163</sup> This language implies that an account holder has the authority to grant access to the listed parties, but no authority for others.<sup>164</sup> Also in the Terms of

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<sup>157</sup> See Kerr, *supra* note 101, at 1552 (claiming that several cases have been inappropriately charged as computer fraud when they should have been more appropriately handled otherwise with less severe penalties). See also Mayor, *supra* note 101, at 1646 (noting the shift from expansion to narrowing interpretations and application of the CFAA in the *Nosal* case).

<sup>158</sup> See Constant, *supra* note 105, at 231-32 (pointing to the suicide of young hacker Swartz as a calling cry for CFAA reform); see also Lambert, *supra* note 108 (recalling the various effects to reform the CFAA and noting that they have since been unsuccessful).

<sup>159</sup> See Bailie, *supra* note 57, at 1 (recognizing that Congress has reformed the provisions over time to allow for prosecution of new crimes).

<sup>160</sup> See Buckman, *supra* note 57, at 2 (referencing the change from the Comprehensive Crime Control Act of 1984 to the Computer Fraud and Abuse Act when the old act was no longer able to handle newer emerging computer crimes).

<sup>161</sup> See *Berkson v. Gogo, LLC*, 97 F. Supp. 3d 359, 381 (E.D. N.Y. 2015) (highlighting the importance of contractual language for online contracts which are not often read by the consumer).

<sup>162</sup> See *Netflix Terms of Use*, *supra* note 70 (explaining the license rights granted to each Netflix user whom subscribes to an account).

<sup>163</sup> See *Netflix End User License Agreement*, *supra* note 72 (stating that acceptance of the contract includes immediate household members, devices used to access the service, and people for which the account holder will be responsible).

<sup>164</sup> See *Netflix Terms of Use*, *supra* note 70 (according to the Terms of Use, users have a non-transferable right to their license to access Netflix).

Use, Netflix states that “to maintain exclusive control, the Account Owner should not reveal the password to anyone.”<sup>165</sup> Overall, when examined this contractual language gives an impression that password sharing is not acceptable when used outside of this specific scope.<sup>166</sup>

However, in analyzing these contract terms it also becomes important to look at the way Netflix conducts itself.<sup>167</sup> Recently Netflix has openly stated they are currently fine with casual password sharing because it eventually leads to more customers signing-up.<sup>168</sup> One could argue that Netflix encourages this by providing users with individual profiles customizable for different viewing habits.<sup>169</sup> The only place they have drawn a line is when a user wants to sell their own access to third-parties.<sup>170</sup> When balancing these actions against the somewhat vague contract terms which they themselves drafted, it would not be unreasonable for a user to believe they can share their password with a friend.<sup>171</sup> While this is fact sensitive based on information such as if the account holder often streams programming with the third-party, there is still enough uncertainty that the CFAA should be interpreted in favor of the defendant.<sup>172</sup>

Still, this creates a dangerous situation where a user could be prosecuted under the CFAA for sharing their Netflix password with a

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<sup>165</sup> See *Netflix Terms of Use*, *supra* note 70 (recommending that the account holder keep his or her password secure).

<sup>166</sup> See *Netflix Terms of Use*, *supra* note 70 (suggesting account holders can only share accounts with specific individuals).

<sup>167</sup> See *Berkson v. Gogo, LLC*, 97 F. Supp. 3d 359, 394 (E.D. N.Y. 2015) (noting that a party’s conduct can show acceptance or a belief about how a contract should be carried out).

<sup>168</sup> See *NETFLIX: You can share your password*, *supra* note 87 (asserting that the Netflix CEO does not have an issue with users sharing passwords); see also Han, *supra* note 89 (believing that “free-riding users will eventually sign up for their own accounts”).

<sup>169</sup> See *How do profiles work on my Netflix account?*, *supra* note 80 (explaining how Netflix profiles allow different users to customize their recommended and on-going programming).

<sup>170</sup> See *NETFLIX: You can share your password*, *supra* note 87 (stating as long as members do not sell their passwords to third parties, for example, on Craigslist, members can use their passwords however they please).

<sup>171</sup> See *Berkson*, 97 F. Supp. 3d at 388 (noting that in contracts of adhesion it is necessary to look at what a reasonable consumer would expect in the contract language which often mirrors the contractor’s behavior).

<sup>172</sup> See *Nosal II*, 844 F.3d 1024, 1049 (9th Cir. 2016) (Reinhardt, J., dissenting) (showing how the court needed to analyze all the relevant facts in determining Nosal’s culpability).

third-party who is not an immediate household member or the owner of a device which the account holder uses to access Netflix.<sup>173</sup> For example, sharing your password with a significant other in a different location, or with your old roommate.<sup>174</sup> A broad interpretation of “authority” could lead to liability in this situation, which is not what the CFAA was intended to protect against.<sup>175</sup> Using Judge Reinhardt’s proposed narrow interpretation could provide more adequate protection under the CFAA without overstepping the statute’s intended purpose.<sup>176</sup>

Alternatively, it would not be enough to only prove that an account holder violated the Terms of Use to bring charges under the CFAA.<sup>177</sup> These violations could be used to bring a breach of contract claim against an account holder.<sup>178</sup> All claims would need to be brought in small claims court as the Terms of Use specify.<sup>179</sup> This is a more appropriate outlet for any legal issues arising out of password sharing, because it does not add to the continuous expansion of the

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<sup>173</sup> See 18 U.S.C. § 1030 (codifying the criminal culpability of users who access a protected computer without authority under various statutory sections); see *Netflix End User License Agreement*, *supra* note 72 (forbidding account holders to transfer their license’s access to third-parties).

<sup>174</sup> See *Netflix End User License Agreement*, *supra* note 72 (listing the requirements to be tried under the CFAA); see also *People Sharing Passwords Are a Growing Problem for Netflix*, *supra* note 9 (asserting that 21% of adults ages 18-24 share passwords).

<sup>175</sup> See Bailie, *supra* note 57, at 1-2 (explaining that Congress created CFAA in order to handle modern computer crimes, mainly hacking, which other, more antiquated statutes could not adequately address).

<sup>176</sup> See *Nosal II*, 844 F. 3d at 1049-50 (Reinhardt, J., dissenting) (indicating that a more appropriate interpretation for “authority” would be to look at who granted the authority, the account holder or primary owner, which would prevent the CFAA from effecting all password sharing cases).

<sup>177</sup> See *Facebook, Inc. v. Power Ventures, Inc.*, 844 F.3d 1058, 1067 (9th Cir. 2016) (stating that more than a contract violation is required to establish liability under the CFAA); *Satmodo, LLC v. Whenever Communs., LLC*, No. 17-cv-0192-AJB NLS, 2017 U.S. Dist. LEXIS 57719, at \*12 (S.D. Cal. Apr. 14, 2017) (reiterating the narrowing of the CFAA by requiring additional infringements aside from a mere contract violation).

<sup>178</sup> See *Berkson v. Gogo, LLC*, 97 F. Supp. 3d 359, 402 (E.D. N.Y. 2015) (proposing the proper outlet for violating an electronic adhesion contract as a breach of contract lawsuit).

<sup>179</sup> See *Netflix Terms of Use*, *supra* note 70 (requiring all Netflix disputes to be brought to small claims court).

CFAA.<sup>180</sup> With the vague language of the Terms of Service it is unclear whether password sharing would be “more than” a contract violation as it currently stands.<sup>181</sup>

## V. Conclusion

Video streaming is quickly becoming an entertainment industry titan. At the moment, companies such as Netflix have proven themselves to be forward thinking and innovative in their service to clients. As they engulf more of the market and continue to have increasing expenses, it is only natural that these customer service concerns will shift their business model. Part of this shift should be the tightening of business practices to allow account sharing between non-household members. This can be effectively achieved through clearer contracts and restrictions to use of technology like account profiles and multiple devices.

Both options are more appropriate than to continue the expansion of the CFAA into this emerging industry. Corporation’s ability to rely on federal criminal penalties which have a wide-range of harsh fines and imprisonment standards should not continue to expand in scope. Specifically, for actions such as common password sharing, the CFAA should not be a viable option, but current application of the statute unfortunately does leave this door open under certain interpretations. Specifically, if the meaning of “authorized” within the statute is given a narrow meaning then it becomes more likely to a user does not have proper authority to grant access. This narrow interpretation would continue the expansion of the CFAA and possibly leads to unnecessary criminal implications. While this is not likely to occur in a Netflix account sharing context anytime soon, this computer law should reflect current technology, especially when it’s a well-established and quick growing industry. With the Supreme Court’s denial for certiorari in *Nosal*, the current CFAA interpretation will continue to rule password sharing cases in all contexts. Courts should use the tools already available before expanding application of the law into new areas which could have unforeseen consequences.

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<sup>180</sup> See Simmons, *supra* note 103, at 1705 (calling for alternative solutions to the use of CFAA for online behavior including administrative reform and technological solutions).

<sup>181</sup> See Simmons, *supra* note 103, at 1714 (requiring clearer standards would help continue the narrowing of the CFAA as the growing public opinion demands).