Online Software Piracy of the Last Millennium

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Ever since there has been the ability to store data on a personal computer and commercial software for sale, there has been the existence of pirating. Pirating, cracking and even pirate scenes go all the way back to the late seventies, and maybe even earlier. By the early eighties some machines (such as the BBC Macro in Europe) where so riddled with pirates that the programming companies gave up. They discontinued producing and porting software for the affected computers because there was simply no money to be made. This article has been written with only the PC scene in mind.

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1.

The IBM PC Scene Beginnings

With the large amount of 8-bit computers around during the early eighties, otherwise known as the Golden Age. And then with the subsequence scenes that followed, most people will agree that the Commodore 64 scene was the greatest at the time. But the Commodore 64¹ wasn't the first computer system to have an organised international pirate scene. It was probably the Apple II users in the very late seventies² that can be credited with creating the first remnant of a pirate scene that would be familiar in todays internet warez world.

While the IBM PC computer system was released during the middle of 1981, it would be the Commodore and Apple pirate scenes which would introduce many of the standards that today we take as granted. During these times the PC scene was small and fragmented. There were the occasional small groups and often not individuals releasing and cracking. But these cracked programs usually only ever remained in the community local to person cracking them. The national and then eventually international PC scene did not take off until 1987. This was when people started to trade software with cracks over longer distances, and overseas. This act eventually lead to the formation of the now old school PC Bulletin Board System scene.

¹ The Commodore 64 released by Commodore Business Machines in 1982 is the best selling computer model of all time. Further information at <u>http://en.wikipedia.org/wiki/Commodore_64</u>

² The Apple Mafia Story by Red Ghost, available at <u>http://www.defacto2.net/text.files/AppleII/applemaf.hum.txt</u>

2. Bulletin Board Systems And Couriers

The first BBS program CBBS (Community Bulletin Board System) was created for the Altair 8080 computer in 1978³. The program was slow, buggy, and message based only (hence the name). Eventually the program evolved and gained popularity but the major breakthrough was when this program and others allowed the transfer of files using the specifically designed X-Modem protocol. The protocol was created by Ward Christenson and Randy Suess (the creators of CBBS) and allowed for error-free file and data exchange between users of most common computer systems. No sooner then when this protocol was implemented there was exchanging of commercial 'illegal' software and eventually BBS's dedicated to piracy.

As BBSs started appearing in different cities, states, and countries. Users who were getting bored of their local area boards started trying these different long distance boards. Unfortunately boards located outside your phone area code usually attracted large phone bills from telecommunication companies. But resourceful people often found ways of tricking the phone networks into giving them free long distance calls. These tricks involved people using electronic devices, known as boxes⁴ that are designed to defeat long distance charges.

These early phone network hackers were given the title of phreakers. Most phreakers where usually involved primarily in the HPAV (Hacking, Phreaking, Anarchy, Virus) type scenes leaving pirating as a second priority. This made the IBM PC scene very fragmented and slow as it would take weeks for releases to be spread continentally in North America⁵

The problem was that not many pirates knew how to phreak and paying for long distance phone calls was out of the question. But in around 1988 a new type of phreaking group was created. North American Pirate Phreak Alliance (NAP/PA) was the group and it's goal was to spread the How To's of Phreaking to the pirates. Many of the top pirate bulletin boards of the time quickly became affiliated with NAP/PA, which made this new information available to the right people. This information helped set the wheels in motion for the PC scene become more organized and a little more united.

Eventually as the pirate scene grew the roll of the phreaker evolved into that of the courier. The courier's sole job was to transfer releases between the different bulletin board systems. What specifically was transferred and to where was dependent on the couriers pirate group affiliations.

By the early nineties many people had less respect for couriers compared to that of other jobs in the scene. This opinion was usually formed because being a courier was not the most challenging of tasks, almost anyone could do it. It was more of a matter of how much you where willing to risk or spend rather then a person's computing skill or resourcefulness. At one point The Humble Guys even named their couriers, slaves⁶. Couriers would have to log onto The Humble Guys BBS as slave 1, slave 2 etc. This caused a minor uproar in the scene but at the time The Humble Guys were a big group and could generally do what they wanted.

³ CBBS from Wikipedia, available at <u>http://en.wikipedia.org/wiki/CBBS</u>

⁴ Phreaking from Wikipedia, available at <u>http://en.wikipedia.org/wiki/Phreaking</u>

⁵ IBM PC's (and clones) and Commodore 64's were the primarily computer systems in North American homes during the 80's. In Europe at this time the PC was the least popular home computer, with Amstrad, Spectrum, Commodore and Atari dominating instead.

⁶ The Humble Guy's Slave Application form, available at <u>http://www.defacto2.net/text.files/PC%</u> 20Classic/Applications/slaveapp.txt

Around this same time many bulletin board systems were having to pay monthly fees for their group affiliations. Group affiliations were important as they helped the creditability of the board and gave them first access to releases from the associated groups. The system operators usually did not like paying these fees from their own pockets. So they would create special user accounts on their boards known as 'leech accounts'. These user pay accounts gave people with very limited contacts complete access to all the illegal and often valuable software on the board.

The money obtained from affilates would be used by the groups to obtain software, to pay off people or to pay for hardware. A group with no money usually meant a dry run when it came to releasing. This monthly fee plus all the extra hardware and phone lines required a major investment by the system operator. But this financial investment gave the system operator a lot of respect from his fellow pirating peers.

Now running a BBS that contained illegal software was a risky business. Unlike internet sites of today, a pirate BBS was usually based at the system operator's home. So it was never that hard for the police to find the addresses of BBS operators. The phone numbers used by the BBS for dial-in access would often be registered in the operators name at the phone company. For this reason the scene of this time was often very secretive and underground. Phone numbers and names were only traded with people you knew. And obtaining access to a new board usually required a system password, a new user password and then either a recommendation or a vote from existing users.

But there was often good reason for this big paranoia. Some companies were desperate to stop the flow of the illegal copies of their programs. These corporations including Microsoft and Novell worked with local and federal police in attempt to take down this means distributing their software. This often involved narcs or undercover agents collecting information and evidence before a wide reaching operational raid by federal or state was executed.

Interestingly though before the introduction of the Net Act in the United States during the late nineties. It was not a criminal act under US law to pirate software. So the most common reason for people being arrested was because that the offender was making money from illegal software. So while the police couldn't arrest you for exchanging copied software for free. They could arrest you as soon as money was involved.

An alternative but often more harsh way of being charged was to get a civil case law suit filed against you. These where never pretty and usually involved the complete loss of ownership of anything that was computer related from one's house. Civil suits where bought on by software companies and are covered by a completely different set of rules to the criminal laws. While the measure of how effective these busts were is hard judge. One can say some companies were more successful then others. At one stage during the early 1990's a lot of boards blanket banned any pirate release that was stolen from then powerful networking company Novell. This was completely due to their successful worldwide anti-piracy campaign⁷ that took down a number of high profile boards during a period of many years.

The Fear & Loathing BBS was busted text file, available at <u>http://timeline.textfiles.com/1993/08/03/1/FILES/fearnloathing.txt</u> Phrack World News, Vol 3 Issue 33 File 11, The Bust For Red October, available at <u>http://www.phrack.org/phrack/33/P33-11</u>

3. The Death of the Bulletin Board System and the Rise of the Internet

The death of the BBS one could say happened after Park Central in New York city closed down in 1996. This was at the time the most respected and well known bulletin board system in the world and was a central communication link for the scene. It was often used to prove which group won a release race⁸, unofficially being the ring and the referee. But some groups got smart and started to avoid the BBS's all together and instead decided spread the release exclusively over the Internet. This left people a confusing situation of where there was one group winning the release on the BBS scene and the another winning on the internet. While the BBS scene had the prestige and the history, everyone knew it was a matter of time before everything would move over.

But the final nail in the coffin for the bulletin board system was the infamous Cyberstrike⁹ campaign of February 1997 where five major BBS's where busted in a single week. It caused many BBS and some sites to close shop permanently in the fear of themselves being the next victims.

The scene for various reasons has often used the internet but it never became a serious tool until the early nineties. Little did people know at the time how much this tool would change the scene, to basically evolve into a completely new generation of pirate scene. Bulletin board systems had always kept the scene semi-secret and a little bit underground. A newbie often found it extremely difficult to gain access to even a mediocre local board. Most of these people faced the daunting task of hunting down a system password just to get the login prompt and then new user password to even apply for membership.

But the Internet changed all this, the Internet made everything that was once so hard to obtain ever so easy. IRC, e-mail, FTP and web pages all completely opened up software piracy to Joe public. And in 1994 they flooded in, drove after drove causing great despair among the many older scene participants. A lot of these people didn't appreciate their turf being overrun by these so-called lamers¹⁰, so they closed their doors. While some of the old doors closed new doors opened, newsgroups, top 100 web pages, anonymous FTP and IRC offer channels where ready to fill the needs of the masses.

Most predominate of these new methods of pirating was the IRC offer channels. Originally these where started by pirate groups to offer releases to their friends but when FATE¹¹ opened their channel #fatefiles to the public, Joe Lamer couldn't resist. Many people copied #fatefile's format (+mnst)¹² causing an uproar within the groups who totally disapproved of IRC trading. Eventually though all these new methods lost their honeymoon popularity but most ended up carving a niche for themselves. Some methods where simply too frustrating and annoying to be useful while others such as a lot of Top100 websites where simply scams to make the owners

⁸ Groups always competed with each other to see who could get the release out into the scene first. When two groups were releasing the same program at the same time, it was often at race to see which group could spread the release. The group with the release on the most boards won, and this action was called racing.

⁹ Operation Cyber Strike was an eight-month undercover investigation of pirate BBS's, run out of the FBI's International Computer Crime Squad in San Francisco. Search warrants were executed on ten large pirate BBS's around the US.

¹⁰ A lamer is a slang term applied to name applied to individuals thought to be lacking in maturity, social skills, or intelligence. Further information at <u>http://en.wikipedia.org/wiki/Lamer</u>

¹¹ Fast Action Transfer Exchange the leading courier group of 1995, information file at http://www.defacto2.net/NFO/F/fate1995_1.txt

¹² IRC channels have restriction modes or rules that can be imposed on them. +mnst was basically a rule set that only allowed people offering software to talk and advertise in the channel. Everyone else who did not have this privilege could only view what was being offered. If they wanted something they would have to directly communicate to the person advertising.

money through pornography adverts. What did emerge as the ultimate form of mainstream piracy though was Peer-to-peer¹³ or P2P for short.

P2P was popularised in the mainstream media by the now defunct Napster. While most P2P piracy usually involves music and movies. The millions of users also make it an obvious tool for software pirates as well. Only one person needs to have a copy of a piece of software being shared by a P2P client for it to be available to anyone worldwide using the same P2P network. It seems to be the ultimate evolution of piracy due to its decentralisation and worldwide scope.

4. Software

Software Suppliers

The supplying methods for groups in early years where not too different to today's methods. Store pick-ups¹⁴ and ordering software directly from the company were the main means for many groups to obtain the titles they needed. The money would usually come from various payments such as official BBS affiliates, or more illicit means such as credit card fraud. Another more attractive way to supply was to use insiders. Insiders are kind of like corporate saboteurs for the pirate scene. They obtain the program directly from the source before it is publically released. It saves a lot of effort on the group's behalf as they don't have to keep tabs on the program and they avoid the rush to grab it when it goes to the stores. It also leaves the crackers more time to ticker around with the program while other groups are waiting for it's public release.

Some groups where more creative though, for example some group members used to pretend they worked for a magazine reviewing the latest software. The software companies at the time were usually more then happy to send out their software for free if given the correct information. But as the companies smartened up options like this became less viable.

5. Text Files

When crackers wanted to add last minute notes or information about their cracks they would include a small text file into the release. Eventually all groups started adding regular text files to their releases. Information in these files would usually state a note from the cracker, some information on how to play the game (keyboard keys etc) and maybe a member listing or some BBS numbers. It was the hacking groups of the eighties that first started to use acronyms to encrypt their names. This was often used to confuse unwanted people from differentiating the different hacking groups but it's main benefit was the abbreviated typing. Typing abbreviations is a lot easier then typing the complete group name. But the standard three letter acronym¹⁵ was not really considered standard until the PC's emergence in the early nineties. This was due to the operating system's¹⁶ limited file naming capability of only being able to handle eleven characters (eight . three) per file.

It was about this time that the groups started to implement a set-naming format to these text files. This format use an eight letter abbreviated form of the program title followed by .DOC (short for document). Other groups decided to replace the .DOC acronym with one based on their groups

^{13 &#}x27;Generally, a peer-to-peer (or P2P) computer network refers to any network that does not have fixed clients and servers, but a number of *peer* nodes that function as both clients and servers to the other nodes on the network.' Further information at <u>http://en.wikipedia.org/wiki/P2p</u>

¹⁴ A store pick-up is when a supplier goes to a retail outlet such as Electronic Boutique and picks up the software on its official day of release.

¹⁵ Groups on other computer systems never used any standards for acronyms.

¹⁶ The standard operating system on the PC back in the 1980's was Microsoft's DOS.

name for example SIMCITY.CIA, SIMCITY.INC or SIMCITY.PTL. Hence the standard group three letter acronym was formed.

To the best of knowledge The Humble Guys in 1990 introduced the now standard .NFO acronym. One assumes NFO was created to be a three-letter acronym for the word information or info. The initial format was the standard eight-letter game title abbreviation followed by .NFO before it eventually evolved to the now current standard of <group name>.NFO

6. Saan

Scene Art

There have been artists for the PC ever since there has been ASCII¹⁷ and ANSI¹⁸. But international art groups that we know of today only started in around late 1990. ACID (ANSI Creators In Demand) where the first of these international groups, trend setters who originally specialised in ANSI art and ANSIMation ads. They earned their reputation at being one of the best groups by creating art for the best pirate boards of the time. Just like our demo scene the PC art scene emerged from the pirate scene. But this link has long since been lost with the modern pirate art becoming second class works in comparision.

7.

The Emergance of Europe

The PC gained more acceptance in Europe during the early 1990's, in an area dominated by the competing Amiga and Atari systems. Some members of the bigger Amiga groups found themselves using or buying these strange PC machines and needed software for use on them. So a long line of Commodore cracking groups (and sometimes their members) made the trek across to the PC system, including famous groups such as Fairlight, Razor 1911 and the merged Tri Star and Red Sector.

8.

The Death of the Floppy Disk

While the internet changed the way the scene communicated and traded it was the gaming industry's move to the CD-ROM that also helped create the second scene revolution. While CD-ROM game titles for the PC have been around since 1989 the scene did not take to this new medium until the mid-nineties. Even at this time no one took it too seriously with many groups creating separate groups for the CD-ROM releases. These separate groups where usually created just to release 'crapware'¹⁹ under a different label. That is what CD titles where originally considered, crapware. These crapware groups where kind of like the IND²⁰ releases today, though less anonymous.

Originally these crapware/CD-ROM groups would release the whole CD, but it wasn't in ISO format, rather the files where just copied off the CD. But people where not used to these large releases and so the European group Hybrid invented the first CD-Rip. A CD-Rip is where the group would leave out unnecessary parts of the game such as music or speech. But the rippers still had the mentality of the floppy disk scene, the smaller the better was the goal. So many games were raped to

¹⁷ American Standard Code for Information Interchange is a character set and encoding based on the Roman alphabet as used in modern English and other Western languages. It is most commonly used by computers and other communication equipment to represent text.

¹⁸ American National Standards Institute in computing, is a standardised ASCII character set, which from an artists point of view supports colour.

¹⁹ Crapware being software groups would not want to release as it would damage their prestige but figure someone might want the program so it guess released under a different alias or anonymously

²⁰ IND is an acronym for independent

they're bare minimum making them pretty boring to play. Playing some of these raped games was like trying to watch a special effects Hollywood blockbuster on a black and white TV with no sound. To add to this problem many ripped games were also poorly cracked with great number requiring third party utilities such has CD emulators²¹.

When software publishers eventually started taking advantage of the space available on a CD-ROM most of the main game groups agreed on a standard disk limit. On July the 6th 1996 five of these groups formed a pact agreement under the name of Standards of Piracy Association²² (SPA). The SPA's goal was to see the enforcement of their "rules of engagement"²³. Any release that broke the SPA rules would be nuked on the affiliated sites. Eventually the SPA fell prey to internal fights created by group politics.

In 1998 the SPA was laid to rest because the groups involved where simply not following the rules. But soon enough the big three groups (Class, Razor 1911, and Paradigm) formed a new organization called The Faction. The faction created a detailed listing of it's rules and they released those rules to the public. The biggest change was the upping of the disk limit to 50*2.88 disks (it had been 75*1.44 disks). While other groups changed to the 2.88 disk format some did ignore the 50-disk limit²⁴ and to many people it just didn't matter any more.

9. Evolution to the ISO scene

In 1997 the prices of CD writing material became cheaper, this combined with easier access to high speed Internet created a new niche market. Full versions of games were wanted and so the ISO scene evolved. ISO's are CD images and because they contain the complete CD image they are extremely large in size, especial compared to a floppy disk. So just like the CD scene three years earlier some of the bigger groups created new sub-groups for this ISO scene.

By 1998 the ISO scene had grown and became more organised. Gone where the days groups would dupe each other's titles on different sites and not even realize it. Also gone where multi-standards in releases. The scene might have been called ISO because that was the original format people used to store the CD information with but by 1998 everyone had switched to the bin/cue format. Also strangely we discovered that in 1998 that some big name rip release groups couldn't hack it in the ISO scene. While other groups who where considered crap in the rip scene flourished in the ISO scene.

Probably the biggest controversy in the ISO scene for 1998 was weather groups should rip out useless extras (like Direct X, demos, etc.) to fit the image onto a standard 74min CD or weather to leave it as a full 80+minutes (which required special CDs to burn properly). Eventually it was agreed that keeping the releases as true to the original was the best option.

²¹ FakeCD was a CD-ROM emulator by Ingo Warnke, it enabled you to run programs from a CD on your computers hard disk.

²² The name is a parody of the anti-piracy organisation known as the Software Piracy Association

²³ The official rules can by found at the bottom of this document, available at http://www.defacto2.net/NFO/1996/08/Striker%20'96-HBD.txt

²⁴ In March of 2000 The Faction was reorganized with new rules, new member groups and a new limit.

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