

BNETD AND BLIZZARD

It's hard to believe sometimes that we went from Pong, a simple table tennis game developed by a single tinkering engineer, to games like *Everquest* or *Grand Theft Auto 3*, games developed for years by 50 people at established companies. The game industry has come a long way, and in that journey legitimate business models have been developed. This is no longer some two-bit operation – billions of dollars in revenue are made each year. There are fewer and fewer “independent” game companies; most have been swallowed by a large multi-national parent corporation.

It's no surprise, then, that these corporations would want to do everything they can to protect the legitimacy of their product, much like any other business. The main issue in this industry is piracy. Over the years, as games and computer infrastructures have developed, this problem has become less of an issue in some ways. Now that people need licensed copies of the games to play online, the need to have a real copy of the game has increased. For example, in order to play *Starcraft* online, you needed the real thing to connect to the Blizzard service battle.net. However, soon after *Starcraft* was released, a program called bnetd was released. Bnetd was an imitation of the battle.net service, allowing players to choose an alternative service when playing the games online. The ensuing legal battle and uproar in the community caused by bnetd crystallized the industry's stance on program interoperability and set a precedent for future open source emulation projects.

Before we look into the bnetd fiasco, it's important that we understand the development of Blizzard and its online service, battle.net. Blizzard, a current division of Vivendi Universal Games, had its first big success with *Warcraft: Orcs and Humans*. Released in 1994,⁵ it was arguably the most influential game in a then-upcoming genre known as real time strategy (RTS). *Warcraft II*⁶ was released a year later, and allowed up to eight people to play simultaneously on a LAN or using a protocol known as IPX. Internet play was not yet available, because the Internet uses a different protocol (TCP/IP).

However, a freelance service known as Kali was soon available that basically fooled the game into thinking it was on a LAN when it was actually on the Internet. Kali became so popular that Blizzard released a patch to help Kali play, although no formal agreements between the two companies were ever made. The Kali shareware client was eventually bundled with the *Warcraft II: Battle Chest* edition, even though Blizzard never asked Kali if such an inclusion was acceptable. This was legally safe since shareware by nature can be freely distributed.

With the surprise success of the Kali network, Blizzard decided to introduce battle.net with its next product, *Diablo*. Like Kali, battle.net was a place that players of the game could meet, talk, and play together. Battle.net was a free service which any player who had bought the game could use. This release was such a success that battle.net has become an integral part of every subsequent Blizzard title.

How does battle.net actually work? The protocol is actually much simpler than one might think. Battle.net doesn't actually host games itself – it simply provides a forum for players to meet and set up their own games.⁸ The actual game is hosted on one

of the players' own computers. It is therefore not creating games itself, but rather facilitating the opportunity for players to create their own games.

In February of 1998, Starcraft was released.⁴ Starcraft is considered by many to be the best real time strategy game ever released, and is even responsible for revitalizing the Korean economy. A few months after it was released, a student at UC San Diego, Mark Baysinger, began reverse engineering the protocol which Starcraft clients use when connecting to battle.net. He was extremely dissatisfied with his experience of playing the game on Battle.net, and wanted to design his own system. He released the first ever version of a battle.net emulator, which he dubbed Starhack. It was so rudimentary, however, that while players could chat with each other, they could not actually play the game.

One day after he posted his emulator, Mark Baysinger was slapped with a cease and desist letter from Blizzard. Confused, he asked for clarification on what exactly he was doing wrong, and what copyright he was infringing. His questions were never answered, and when he refused to shut down his project, the issue was apparently dropped.

Mark soon abandoned the project for his own reasons, but released the source code so others could continue to work on it. It became the bnetd project, and soon supported most battle.net functionality, meaning most importantly that bnetd users could actually play the game. It effectively became an open-source alternative to Blizzard's battle.net service.¹ Two of the lead developers, Ross Combs and Rob Crittenden, say that all they wanted to do was "create a place to play best-selling Blizzard games like

Starcraft and Diablo in a friendly online atmosphere free of the technical bugs that plague Battle.net.”⁷

Such an assertion is not unfounded. As an avid player of Blizzard games myself, I can attest to what many complain about all over the Internet – that battle.net is often laggy, overloaded, and crash-prone. Its very popularity is, in many ways, its own downfall – the servers simply can’t effectively handle the load of players. In addition to these technical failings, some aspects of the battle.net community quickly became home to hackers, “trolls,” and other people who destroyed the fun of the game for everyone else.

In February of 2002, Blizzard began testing its next incarnation in the *Warcraft* series by shipping out 5,000 copies of the *Warcraft III* beta to qualified testers. Blizzard wanted player input on the balance and style of the game before the actual game was released. However, wanting a closed sample of the population, only those who were expressly contacted by Blizzard were given access to battle.net – meaning that nobody else was allowed to test for them.

This sentiment was met with strong opposition from many in the *Warcraft* community, who felt that anybody should be entitled to test the game. It wasn’t long, then, before the communications between the *Warcraft III* beta client and battle.net were analyzed, and bnetd was quickly altered to make the beta playable for anybody. However, not all of the main developers agreed that this was an ethically correct thing to do, and refused to work on the project. Thus, Warforge, a forked version of bnetd developed by those who supported its proliferation, was born.

A few days after the Warforge version of bnetd had been released, the ISP hosting the project was sent a cease and desist e-mail by Vivendi. This e-mail, which has been hotly debated, accused Warforge of infringing on any number of Blizzard's copyrights, including allegations that it modifies its software.⁷ Interestingly enough, however, specifics were never mentioned. No infringing files were ever identified, or even referenced to in more than vague terms. This has led many in the community to question whether or not there was any infringement at all, or if Blizzard was just trying to shut down a competitor.

In general, copyright infringement means copying or distributing someone else's work without express authorization. In this case, the bnetd software is the original work of its various developers. Since they have never actually had access to the code for Blizzard software, it would have been impossible for them to copy it. Bnetd was an emulation, which is software designed to imitate other software, not an actual copy of battle.net.

The argument goes that the technological measure developed by Blizzard does not protect access to multiplayer functionality. Blizzard can only protect access to the *software code* that allows multiplayer functionality. There's a big difference here – multiplayer functionality itself cannot be copyrighted or even patented because it isn't specific to the company. It would be like trying to copyright all of software instead of just your program. Since Warforge doesn't actually copy Blizzard's code and only offers an alternative method of achieving multiplayer functionality, it isn't actually infringing on the copyright.

On the other hand, one can see how Blizzard would be concerned that a service like bnetd existed. Unlike battle.net, bnetd had no CD-key check – meaning that anybody, even those with pirated copies of the game, could play online. Michael Morhaime, Blizzard’s president and co-founder, was skeptical that only players with legitimate copies were using bnetd:

We always have been and will continue to be diligent in protecting our trademarks and copyrighted materials. We are convinced that certain members of the bnetd project illegally copied parts of our code and bypassed the game's CD-Key authentication process. We further believe that emulators damage our efforts to prevent piracy, and they create safe havens for players using illegal copies of our products. ⁷

After they were made aware of Blizzard’s piracy concerns, the developers of bnetd tried to work with them instead of against them. They offered to incorporate the CD-Key system into their software, thereby removing the threat of piracy but still offering an alternative to battle.net. Blizzard refused this offer, saying that the risk of piracy was still too great. Being just a group of programmers and having no real means of contesting the expensive lawsuit, the offending files were removed and bnetd was all but finished.

Before it was destroyed completely, bnetd garnered significant notice in the open source community. The legal battle turned into more than just players wanting to play in a friendlier environment, or wanting a bug-free experience. It became a symbol of the fight for open source rights, and more freedom in regards to intellectual property. Representatives of the EFF, the Electronic Frontier Foundation, were sure that it had broad ramifications for the future of free software and open source communities.² They felt so strongly about it that they decided to lend their support to bnetd and fight for its rights.

Unfortunately, such efforts proved futile. EFF was never able to get a court ruling in its favor, and bnetd was forced to shut down. The lead developers admit that had they sought legal advice sooner, things might have turned out differently, but it just never occurred to them that they would need to. They never condoned piracy; they were just fans of open source. Unfortunately, Blizzard didn't see it that way, and decided to set a strong example by cutting bnetd off while they still could.

Although EFF continues to make half-hearted efforts in the bnetd case, it is essentially over. Bnetd has been soundly defeated, as is evidenced by the fact that their official website, bnetd.org, was taken down. When asked about the bnetd issue, xG3, the proprietor of sclegacy.com, one of the largest *Starcraft* communities on the Internet, commented that "it was old news." He went on to say that the effects of bnetd was felt by all:

Bnetd affected Warcraft more directly than Starcraft, but its effects rippled through our communities as well. Although many claimed the open source defense was just covering up the fact that it totally helped piracy, some of us believed in its ideals and what it stood for in terms of what we could and couldn't do. Taking away our right to reverse engineer and our right to open source is taking away our freedom, I don't care what anybody else says.⁹

It seems that the death of bnetd is almost as crucial to the game industry as its inception. Creating it was a big step forward for the open source community, and shutting it down was an important step for the major game companies.

What this all meant for the gaming community was that "there is now more suspicion toward Blizzard and other large game producers."⁹ Whether or not gamers agreed that bnetd/warforge was illegal, one thing everyone did agree on was that Blizzard was being unreasonable in some way. Much of the furor arose over how Blizzard let

bnetd slip under its radar for such a long time, and then suddenly cracked down hard. If they had a problem with it, many felt that they should have taken care of it earlier, instead of allowing it to progress to the point that it got to.

Of course, not all gamers even care about this issue. For a general-appeal company like Blizzard, most purchasers of their games are either 1) too technically unsophisticated to take advantage of programs like bnetd, 2) perfectly happy with the service provided by battle.net, or 3) honestly convinced, beyond a doubt, that using programs such as bnetd is illegal. The casual gamer doesn't care about these issues and just wants to play good games. It's the savvy gamers that have issues; their ability to manipulate the game has been limited. In an e-mail interview with Michael Garza, an outside observer who wrote several well-articulated essays on the subject, they are "victims of a growing lockdown on software code and efforts to promote interoperability between programs."³

The bnetd case was important to the industry because the issue was brought up just as online services were becoming popular. Its case and its resolution were important factors in setting the precedent for what was acceptable usage in the gaming community. Even though open source advocates have argued passionately that no rules were broken and quashing bnetd was an attack on the freedom of programmers, the project was ultimately shelved because of legal pressure. This means that in the future, similar projects will be shut down with the same ferocity, as companies will cite the bnetd case as reason enough to stifle programming exploration. For better or for worse, the bnetd case has guided the industry to be very protective of their intellectual property, and have very low tolerance for such open source projects.

Notes

1. "Bnetd – Wikipedia." <<http://en.wikipedia.org/wiki/Bnetd>> (10 March 2004)
2. "EFF: Blizzard vs. Bnetd Archive." <http://www.eff.org/IP/Emulation/Blizzard_v_bnetd/> (10 March 2004)
3. Michael Garza. <neoplatonic@hotmail.com> "The Bnetd issue," 15 March 2004, Personal e-mail (15 March 2004).
4. "Starcraft for PC at Gamespot." <<http://www.gamespot.com/pc/strategy/starcraft/index.html>> (10 March 2004)
5. "Warcraft: Orcs and Humans for PC at Gamespot." <<http://www.gamespot.com/pc/strategy/warcraftorcsandhumans/index.html>> (10 March 2004)
6. "Warcraft II for PC at Gamespot." <<http://www.gamespot.com/pc/strategy/warcraft2tidesofdarkness/index.html>> (10 March 2004)
7. Wen, Howard. "Battle.net Goes to War." <<http://salon.com/tech/feature/2002/04/18/bnetd/index.html>> (10 March 2004)
8. Wen, Howard. "Developing the Battle.net Emulator Bnetd." <<http://www.onlamp.com/pub/a/onlamp/2002/05/09/bnetd.html>> (10 March 2004)
9. xG3 (nickname). <xg3@sclegacy.com> "Starcraft/Blizzard info," 10 March 2004, Personal e-mail (10 March 2004)

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