

Ghostbusters: The Video Game Remastered Gets a Proton Boost with Intel

Ghostbusters: The Video Game Remastered takes players on a rollercoaster ride, much like the celebrated films on which it's based. Saber Interactive* produced and published the HD remaster which launched on PC, PlayStation 4*, Xbox One*, and Nintendo Switch* on October 4th, 2019, almost 10 years after the original version hit the shelves. The team at Saber showed no fear during their dangerous mission to bring the epochal title to a new generation of gamers. Intel was on hand every creepy step of the way to ensure the PC version ran sweeter than Ecto-1 and to get it in front of the world's PC-playing Ghostbusters* aficionados through the Intel® Game Dev Boost program.



Figure 1. *Ghostbusters: The Video Game Remastered* was developed by Saber Interactive* and published by Mad Dog Games* in October 2019. (Image courtesy of Saber Interactive)

The original *Ghostbusters: The Video Game* was developed by now-defunct studio Terminal Reality and published by Sony* in 2009, having previously passed through the hands of Vivendi Games*. Many consider the title to be the finest video game realization of the Ghostbusters universe. It boasts voiceover work from many of the original cast members in an all-new 3D adventure that follows on neatly from the second movie.

Saber Interactive was acutely aware of both the game's evergreen cultural cachet and its potential to charm a whole new audience. "When we first started working on Ghostbusters, we got very excited about bringing the project to new consoles and making this ghostbusting

experience enjoyable and fun for a new generation of players,” said Anton Krupkin, chief technology officer and co-founder at Saber Interactive. Eyeing 2019 as the 35th anniversary of the original film, the team set about pulling together the pieces to produce and publish *Ghostbusters: The Video Game Remastered*.

Remaking a Legend

The team at Saber Interactive is no stranger to working on massive franchises. *Halo: The Master Chief Collection*, *World War Z*, and *The Witcher 3: Wild Hunt* for Nintendo Switch are just three of the major titles they’ve delivered since the studio’s first steps developing 2003’s *Will Rock* for Ubisoft*.



Figure 2. Set in the same universe as the 2013 movie, the game version of *World War Z* was developed by Saber Interactive and published by Mad Dog Games in April 2019. (Image courtesy of Saber Interactive)

Remastering *Ghostbusters: The Video Game* came with its own unique challenges, however. Saber found themselves chasing down a mothballed hard drive in an animator’s garage to reassemble the cut scenes. Not everything went their way: to date, the remaster is without its original multiplayer mode, as a result of unearthing six different versions of the source code and not having any way to identify the right one.

Unbowed, Saber pushed on with the remake, with Intel stepping in to offer substantially more than just moral support on the PC version.

Intel Tools and Testing

Saber has an established, tried-and-tested relationship with Intel, slotting numerous resources neatly into their PC-production pipeline to get the best out of each game on Intel® hardware, including *Ghostbusters: The Video Game Remastered*. “Our relationship with Intel started way back around 2005,” said Anton. “Intel has been a very good partner for us through the years. Essentially, whatever we need from them, they help us.”



Figure 3. Players will confront some familiar foes in *Ghostbusters: The Video Game Remastered*, including unmistakable green ectoplasmic blob Slimer. (Image courtesy of Saber Interactive)

Intel supported Saber in two main ways: providing hardware samples for in-house testing at Saber, and testing the game at the Intel hardware lab. While in-house testing is ideal in terms of controlling the hardware environment and monitoring results, it would be impossible for Saber to accommodate every permutation of Intel hardware, which is where the Intel lab stepped in. “There are a lot of different Intel chipsets, video cards, and processors on the market,” said Anton. “To cover all that, you’d need a huge hardware lab, and they have it in-house.”

“For the partnership on *Ghostbusters: The Video Game Remastered*, we started with running our build of the game through the Intel hardware lab, and it ran very well,” said Anton. “It was essentially built for the onboard graphics.” The team at Intel took note and realized the project was a great opportunity to promote the hardware, so they fired up their proton packs and got involved. “We sent them builds, and they provided us with feedback, suggestions for optimizations, and timely driver bug fixes,” said Anton.

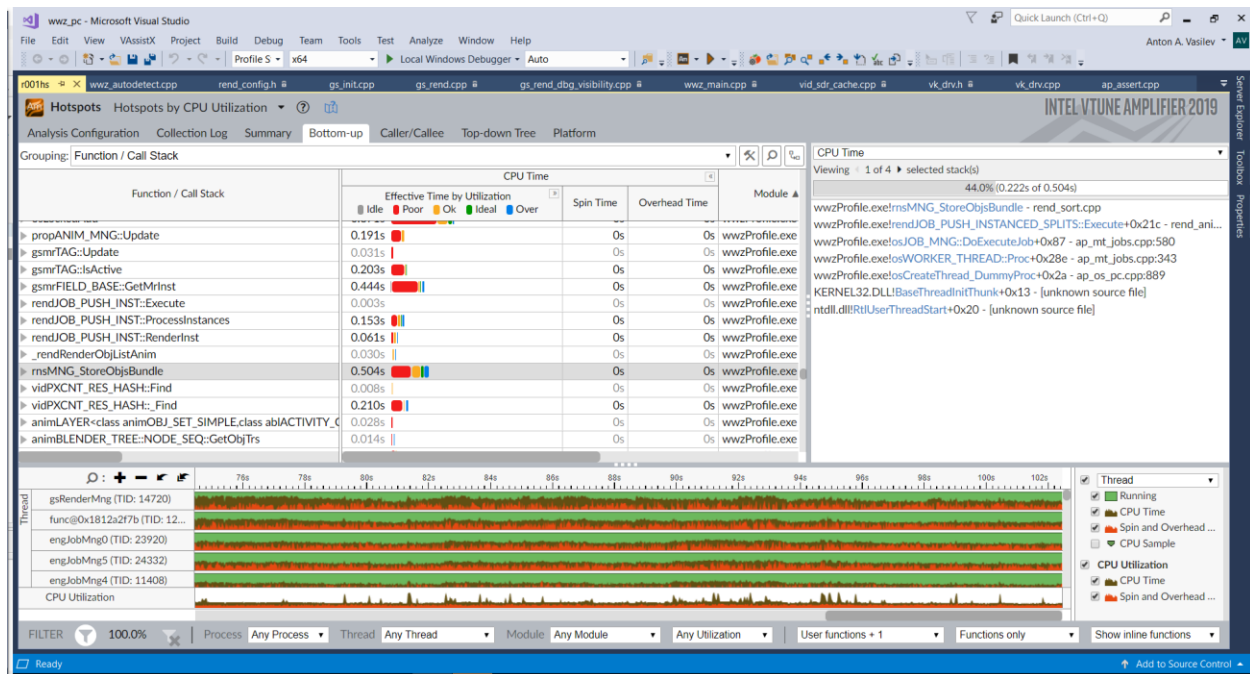


Figure 4. Saber Interactive uses Intel tools including the Intel® VTune™ Amplifier for its PC development work. (Image courtesy of Saber Interactive)

Saber used two additional Intel tools during development: the Intel® VTune™ Amplifier, which lets developers profile and optimize their games for Intel® CPUs, and the Intel® Graphics Performance Analyzers, a suite of tools to help improve game performance. “The Graphics Performance Analyzers are super-valuable tools that help us with PC development,” said Anton. “We use them all the time.”

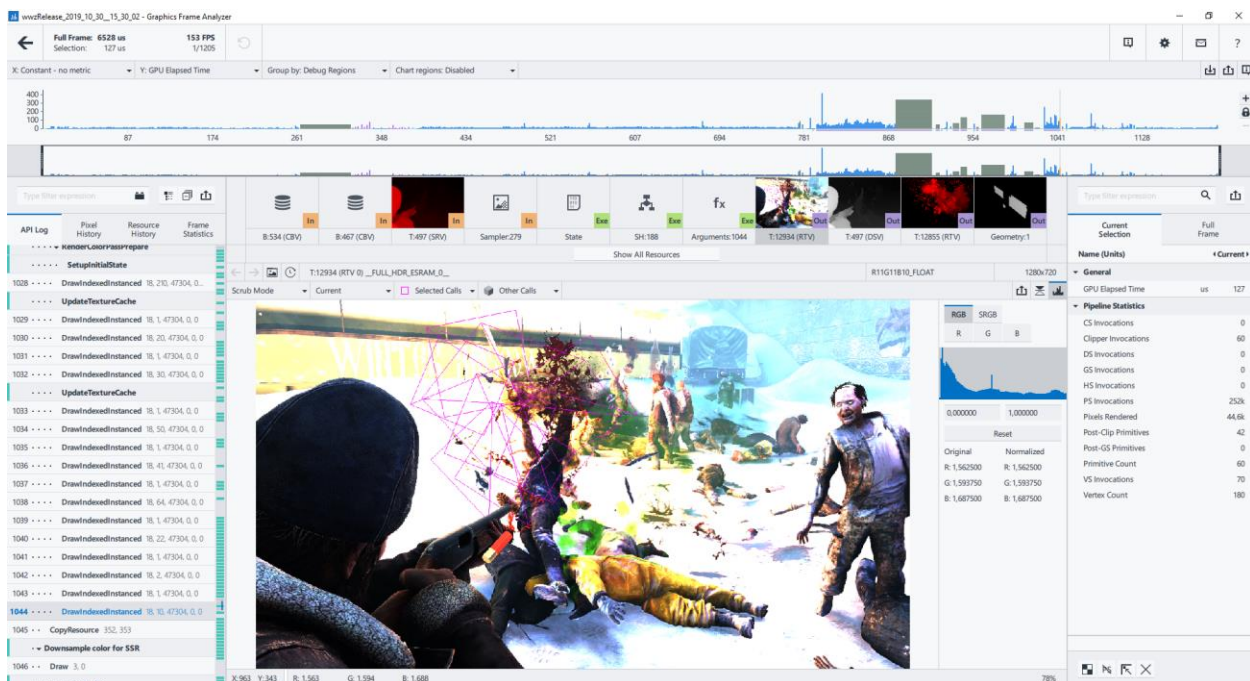


Figure 5. The team at Saber Interactive uses the Graphics Frame Analyzer, part of the Intel® Graphics Performance Analyzers suite of tools. (Image courtesy of Saber Interactive)

The Intel Boost Effect

The collaboration with Intel extended beyond the behind-the-scenes development on *Ghostbusters: The Video Game Remastered*. Saber signed up for the Intel Game Dev Boost program, which supports marketing efforts by putting games in front of a vast number of PC gamers. “Intel has a huge audience,” said Anton. “Engaging with the boost program helped us amplify our message to our gaming fans, to join the Ghostbusters for a unique ghost-hunting experience.”



Figure 6. In *Ghostbusters: The Video Game Remastered* players get to fire up their proton packs alongside the four original team members. (Image courtesy of Saber Interactive)

The Boost marketing support for *Ghostbusters: The Video Game Remastered* included a direct email newsletter to the Intel subscriber list of more than a million people, outreach through Intel social media channels, and sponsored articles, including one on major technology news outlet VentureBeat*. “All this effort is very impactful marketing to the PC gaming audience,” confirmed Anton. The email newsletter, in particular, had a noticeable effect in generating traffic and online buzz. “When the newsletter went out, we saw more people tweeting, posting on social media, and streaming on Twitch* and YouTube*,” said Anton. “The awareness was there.”

Overall, the Boost program was a clear positive for Saber in the promotion of the game. “We saw a definite impact from the program,” Anton said. “When you bring passionate gaming fans together, it’s always a good thing.”

More Games, More Boost

Saber has a full slate of games currently in production, including *SnowRunner: A MudRunner Game* and a host of unannounced projects, among which are original game properties for new consoles. And the team has every intention of continuing its long and fruitful relationship with Intel, both on the development side and through the Boost program. “We would definitely like to continue doing these co-marketing campaigns together with Intel,” said Anton. “It worked very well for us a couple of times, and it worked well on *Ghostbusters*.”



Figure 7. Saber Interactive is currently developing *Snowrunner: A MudRunner Game*, scheduled to be published by Focus Interactive* in 2020. (Image courtesy of Saber Interactive)

That's not to say there isn't more that can be done, and Anton has a few ideas. “We definitely would like to go deeper in co-marketing with Intel,” he said. “We could probably start earlier to create awareness for titles that haven't been released and promote them throughout the development process. That's one of the things I think we can do better with Intel in the future.”

From a purely developmental point of view, Anton is an advocate of the work Intel does with the gaming community. “I would like Intel to keep supporting video game developers with hardware, software, documentation, and through its research in graphics and general performance,” he said. “Keep doing it, because we need it.”

Ghostbusters: The Video Game Remastered is out now for PC, PlayStation 4, Xbox One, and Nintendo Switch.



Figure 8. The Stay Puft Marshmallow Man doesn't stay happy for long once he feels the sharp end of the Ghostbusters' particle beams. (Image courtesy of Saber Interactive)

About Saber Interactive*

Saber Interactive is a developer and publisher that produces original intellectual properties (IPs), work for hire, and ports, and is one of the world's few major independent game studios. The company began with a project for Ubisoft, *Will Rock*, that launched in 2003, and subsequently released *TimeShift* with Atari* in 2007. Over the years since, Saber has worked on numerous high-profile games including *Halo: The Master Chief Collection*, and *Quake Champions*. In spring 2019 Saber Interactive and publisher Mad Dog Games* released *World War Z*, a title based on the movie license, with sales of over 2.5 million copies to date. More recently, the company completed the port of *Witcher 3: Wild Hunt* for Nintendo Switch.



Figure 9. The Saber Interactive quality assurance (QA) team at work on *Ghostbusters: The Video Game Remastered* in the company's office in Saint Petersburg, Russia.

Today, the company has around 600 employees working on multiple game projects in different locations around the globe. The main office is in Saint Petersburg, Russia, with about 400 people, and there are small offices in New Jersey, Spain, and other locations around Europe. The company's goals include utilizing talent from multiple cities throughout Europe and Russia and partnering with other standout independent studios to produce high-quality games. Games in production include *SnowRunner* (the sequel to *MudRunner*), and many other unannounced projects, including original game IPs for new consoles.

Anton Krupkin is chief technology officer and co-founder at Saber Interactive, responsible for the company's internal technologies and other technical projects, including its porting work on *Ghostbusters: The Video Game Remastered*.

Learn more about *Ghostbusters: The Video Game Remastered* [here](#).

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