

Secret 6 shatters its productivity ceiling with the AMD Ryzen™ Threadripper™

High speed rendering resulting in the shortest wait times and increased work performance as Project Xandata heads toward completion.



CUSTOMER



INDUSTRY

Media & Entertainment / Game Development

CHALLENGES

Find areas of improvement in their workflow to be able to build multiple projects, such as Project Xandata, faster while maintaining their high quality standard

SOLUTION

Deploy AMD Ryzen™ Threadripper™ 3990X processor to our workstations.

RESULTS

Secret 6 increased productivity created by the AMD Ryzen™ Threadripper™ in almost all aspects of the process, specifically in compiling shaders and baking lights.

AMD TECHNOLOGY AT A GLANCE

AMD Ryzen™ Threadripper™ 3990X CPU

With Project Xandata gaining deserved ovation locally and overseas, the Manila-based office of Secret 6 is busy identifying improvement areas for their processes to prepare for the game's anticipated release. Now, after testing the AMD Ryzen™ Threadripper™ processor against their usual workstations, they know where to begin.

When the studio was founded in 2005, the only service provided revolved around 3D art. A stark difference from now, with 3 offices located in San Francisco, Madrid, and the Philippines, with the Manila branch providing end to end game development, art outsourcing, and quality assurance testing services. Secret 6's monumental growth opened opportunities for them to collaborate with industry heavy hitters such as Naughty Dog for the Uncharted series, CD Projekt Red for Cyberpunk 2077, Other Ocean Interactive, and Sony for MediEvil. The experience gained from working alongside companies they aspire to be has given them the confidence and motivation to discover what they can uniquely offer to the world.

The vision of Secret 6's Manila studio extends beyond their organization. For

them, the dream of becoming the most renowned game development studio in Southeast Asia is coupled with positioning the Philippines to be known as a source of exceptional gaming-related content and services. This is the weight of the legacy they plan to build with Project Xandata, Secret 6's very own original 3v3 first-person shooter title. Anticipation for the game's public arrival is high within the industry and within the Secret 6 team themselves. The dedication to their craft is unquestionable; they are able to juggle in-house and client projects while maintaining the quality of their outputs, during a global pandemic. While the workflow developed with their current workstations gets things done, there is still much to be desired in terms of machine efficiency and productivity.

"It significantly sped up the time I took to compile shaders and materials: from 3-4 hours with a AMD Ryzen™ 5 3600 Processor, to just about 6 minutes with the AMD Ryzen™ Threadripper™ 3990X. This gives me more confidence in iterating and improving our final output."

Jem Bernaldez, Creative Head for Project Xandata

The Impact of Processing Time

For companies like Secret 6, rendering stands at the heart of the process. The time it takes to complete rendering can single handedly influence the timeframe of the entire project. "One of the challenges we encounter during work is when our machine slows down. I've experienced my work PC freezing for an hour waiting for a procedure to complete whereas the same procedure can be completed in just a few minutes on the AMD Ryzen™ Threadripper™ processor-powered workstation.

This typically happens when inspecting high polygon 3D assets. This issue wastes valuable time and hinders productivity on our side,” says Brian Cruz, one of Secret 6’s QA Analysts. Depending on its complexity, these assets usually have more than 2 million Tris that needs to be inspected. Other essential areas of game development, such as compiling shaders and baking lights take an average of 2 - 4 hours to render on studio workstations. As these inspections and renders complete, the team is forced to wait idly as other aspects of their production line are processor-heavy as well.

When they tested out the same rendering on a workstation built with the AMD Ryzen™ Threadripper™ 3990X, it only took them 5 minutes and 42 seconds. Having the AMD Ryzen™ Threadripper™ processor as part of their machine arsenal would eliminate one of their constant work bottlenecks by significantly cutting down the total production and turnaround time of their projects. Less production time means faster progressing and more focused game building for all of Secret 6’s endeavors, especially Project Xandata.

Experiencing the AMD Ryzen™ Threadripper™ Processor Difference

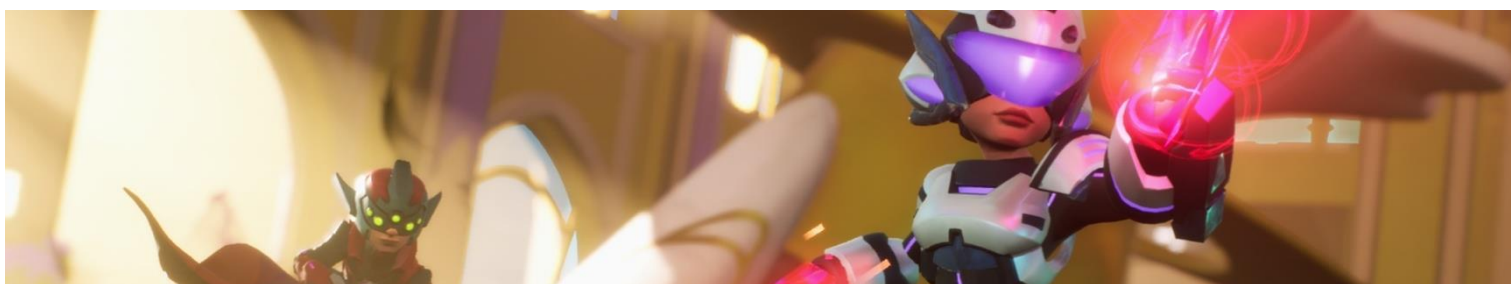
Suitably taglined “The one processor to render them all,” AMD takes pride in its Ryzen™ Threadripper™ 3990X processor. It is the first ever desktop processor to feature 64 cores and 128 threads of computing power, a base clock speed of 2.9 GHz, and a boost of up to 4.3 GHz¹, all working together to support the heaviest and most demanding of visual creators. In action, the numbers do not lie. Tests have been made to validate the AMD Ryzen™ Threadripper™ 3990X processor’s greatness. The Secret6’s results show it consistently performing up to two

times better in 3D rendering, movie mastering and encoding, and software compiling compared to its competitors and predecessors. This is why Secret 6 chose to add the AMD Ryzen™ Threadripper™ processors to their workstations.

What originally took Secret 6 developers 20 hours to build, only took them 40 minutes with the AMD Ryzen™ Threadripper™ processor. The 19 hours and 20 minutes of waiting turned into time well-spent working on more of their projects, especially on their very own Project Xandata. According to Jem Bernaldez, one of Project Xandata’s creative heads, the significant speed difference is a confidence booster as he can create more iterations and improve upon the final output as he sees fit without worrying about delaying the timeline.

The game-changing difference of the AMD Ryzen™ Threadripper™ 3990X is not in producing the shortest wait times, it is in empowering companies to create more. Experiencing this type of work support has encouraged Secret 6 to create an AMD environment within their studio, beginning with the processors. The team is looking forward to integrating AMD processors to their workstations as it undoubtedly helps them reach a higher productivity level. Specific to Project Xandata, the AMD Ryzen™ Threadripper™ increases the possibility of creating more levels for its users in the future. This combined with the talents of the team will help Secret 6 maintain its commitment to quality and achieve greater things as a studio.

Eyes are on them as the public patiently awaits the release of Project Xandata. The launch is Secret 6’s first step a future where they lead the way for the Philippines’ game development industry by creating more original titles, with the AMD Ryzen™ Threadripper™ 3990X as support.



About Secret 6

Secret 6 is a veteran game development studio based in San Francisco (USA), Manila (Philippines), and Madrid (Spain). They specialize in 3D art for AAA titles, 2D art, and full game production across all platforms. For over 15 years, the company has provided critical skills and support to some of the world’s biggest game studios, like Naughty Dog, Eidos Montreal, Pocket Gems, and Other Ocean. They’ve been credited on several Uncharted titles, The Last of Us 1 and 2, Shadow of the Tomb Raider, MediEvil, Cyberpunk 2077, Yu-Gi-Oh! Duel Generations, and multiple games for Cartoon Network Asia, among others. Secret 6 is also developing their original, competitive first-person shooter, Project Xandata. To learn more about Secret 6, visit www.secret6.com

About AMD

For more than 50 years, AMD has driven innovation in high-performance computing, graphics, and visualization technologies—the building blocks for gaming, immersive platforms, and the datacenter. Hundreds of millions of consumers, leading Fortune 500 businesses, and cutting-edge scientific research facilities around the world rely on AMD technology daily to improve how they live, work, and play. AMD employees around the world are focused on building great products that push the boundaries of what is possible. More information about how AMD is enabling today and inspiring tomorrow is available at these links: [AMD Ryzen™ Threadripper™ PRO](#) | [AMD Ryzen™ Threadripper™](#)

¹ Max boost for AMD Ryzen and Athlon processors is the maximum frequency achievable by a single core on the processor running a burst single-threaded workload. Max boost will vary based on several factors, including, but not limited to: thermal paste; system cooling; motherboard design and BIOS; the latest AMD chipset driver; and the latest OS updates. GD-150. All performance and cost savings claims are provided by Secret 6 and have not been independently verified by AMD. Performance and cost benefits are impacted by a variety of variables. Results herein are specific to Secret 6 and may not be typical. GD-181

©2021 Advanced Micro Devices, Inc. All rights reserved. AMD, the AMD Arrow logo, Epyc, Ryzen, Radeon, Threadripper, and combinations thereof are trademarks of Advanced Micro Devices, Inc. Other product names used in this publication are for identification purposes only and may be trademarks of their respective companies.