

# Evolving our approach to game creation with a comprehensive development environment and our proprietary RE ENGINE

Aiming to simplify and streamline advanced technological development, Capcom is an industry pioneer in integrating the facilities and environment indispensable to game production. This includes technological research for the RE ENGINE, along with facilities for visuals and sound. This proprietary development environment has enabled us to create unique and iconic titles that truly resonate with international audiences. Capcom is bringing forth a new form of entertainment with the convergence of creativity and technology.

## RE ENGINE Creating more thrilling fights with *Fighter Tool*

I think the advantage of RE ENGINE is that it is a game development engine built in-house, so we can flexibly expand its functions as needed. Within the Engine Development Section, there are groups divided into fields such as AI and tools, and I am in charge of developing animation tools. My mission is to help bring character movement to life, which I do by utilizing controls after incorporating motion capture data (a digitized record of real human movements) into CG characters. In this sense, I support the title development team using technology.

*Street Fighter 6* is the first fighting game developed with RE ENGINE. Since we didn't yet have features optimized for fighting games, I built a new tool from scratch called *Fighter Tool* for adjusting the data of fighting game characters. The emphasis was on work efficiency. I designed *Fighter Tool* so conflicts won't arise in the character data even when different teams, such as planning, effects, and sound, are editing at the same time, while also making it so that two different characters' data can be implemented into the game while comparing them. I had to take a trial and error approach during development while adding functions and specification changes, but with the support of experienced colleagues, I was able to create a highly scalable tool that can stand up to the test of future updates. I hope players will enjoy all the interesting characters that were fine-tuned using this tool.



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*Monster Hunter Rise*  
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## New Creative Studio established to support the pinnacle of game graphics production

Motion capture is now indispensable for game production. With this technology, an actor performs the actions of a game character in the studio while infrared cameras detect their movement, which is then converted into digital information. Recording done together with RE ENGINE using this technology makes it possible to recreate the natural and bold movements of not only human characters, but also monsters. In *Street Fighter 6*, the actors' performances, such as ballet and street dance, were utilized in the dazzling moves of the game characters.

Action is the lifeblood of Capcom games. Because we are typically working to create gameplay actions for multiple

projects in tandem, the schedule for our existing studio could get quite full. As such, we built a new state-of-the-art facility called Creative Studio that houses two new motion capture studios, one of which features 150 cameras, including the latest ultra-high-resolution models, and has one of the largest filming areas in Japan. This increased filming capacity makes it possible to simultaneously record up to 10 people in full-performance motion capture. We will capitalize on this three-studio system to accelerate the development process.

### 3D scanning studio reduces workload while raising precision

Our 3D scanning studio is one of the world's largest and is equipped with approximately 310 cameras. Photographing people from 360° enables us to scan them as 3D objects. This significantly shortens the CG modeling process and allows us to pursue an even higher level of precision and quality.



### The Dynamic Mixing Stage: our 3D audio booth reproducing realistic sounds

We use a cutting-edge Dolby Atmos system, which can also be found in movie theaters, and which uses binaural technology capable of reproducing sounds with such reality you feel as if you are right there. This enhances the immersive feel of a game by influencing players' aural perception in addition to their visual perception.



### The Foley Stage: recording all types of sound effects and background sounds

The Foley Stage is where the various sound effects for games are recorded and produced. The diverse floor surfaces and myriad recording tools make it possible to recreate any number of scenes. Using the same techniques as recent Hollywood movies, we are able to produce high-quality game sound, offering an even more immersive experience.

