

51WORLD

Speeding up the earth's VR clone with half the effort



Established in February 2015, 51WORLD is a leading digital solution provider specializing in digital twin technologies. The global high-tech enterprise develops advanced applications with VR-based computer graphics and integrated artificial intelligence (AI). The company's vision is to enable individuals to experience the real world through 51WORLD's authentic, immersive, efficient, and safe products.

Among 51WORLD's products are platforms for:

- | Automated driving simulation
- | Smart city virtual operation
- | Real estate digital property management
- | Real-time cloud rendering

The Challenge

The 51World geo-cloning institute focuses on smart cities and smart realty. According to Shunji Wang, Head of SOP at EC (Earth Clone) Department, since 2018, the team has been doing the digital restoration of scenarios based on the Unreal Engine 4 development environment. The long compilation time of UE4 was a significant problem at that time, and the team consumed a lot of labor costs by pulling the code by hand.

After the development began to expand on a large scale, Shunji realized they must find a solution for the time-consuming development.

Industry

| **Computer Software**

Process

| **Graphics**

Results

| **Build times reduced from 60 min to 30 min**

How Incredibuild Crunched It

Before 51WORLD started working with Incredibuild, the team's stand-alone compile-time without SSD exceeded 1 hour. Thanks to Incredibuild, they managed to reduce the build to around 30 minutes.

The 51World team researched a few solutions before trying Incredibuild. Due to their need for higher performance for C++ compilations and Shader compilations, the decision to go with a powerful accelerator was finally made.

Today, more than 30 developers at the SOP (Standard Operating Procedures) team and the Transportation Department at 51World use Incredibuild to optimize quality and achieve better time-to-market windows.

“I was impressed by Incredibuild’s meticulous product design and the professional customer-care services of the China Team. In addition, in the last two updates, it is clear that version optimization has become even bigger and faster than before.”



Shunji Wang

EHead of SOP at Earth
Clone Department

The Bottom Line

Incredibuild significantly reduced the build time for UE4, doubling the build speed with just over 200 CPU cores on about 20 machines.

Build Time

Without Incredibuild

With Incredibuild

60min

30min



incredibuild.com

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