

# Milestone

Milestone now compiles its builds as fast as its racing games



The very mention of Milestone's name is enough to send gamers into an adrenaline fueled rush. The AAA game developer has made its brand synonymous with high-octane racing games such as the Superbike, Ride, MotoGP and World Rally Championship franchises for over a decade.

Based in Milan, Milestone is currently made up of 180 people working on multiple projects, some using proprietary technology and some using Unreal Engine 4.

## The Challenge

As a studio dedicated to conveying the art of extreme speed via the digital medium, it was only fitting for Milestone to break the developer speed limit as well and not settle for slow development times.

“The top challenge to overcome was the long compile times of the Unreal Engine 4 Editor and the game. We were taking almost three hours for a single build. With Incredibuild that time went down to just over twenty minutes,” says Milestone's Ivan Del Duca, technical director at Milestone.

Milestone's developers are currently actively working on two projects. They compile the Unreal Engine 4 Editor daily on four development branches, which means the Unreal cooking process can become time consuming as well.

Industry

| **Game Development**

Process

| **C++**

Results

| **Compile Game time reduced from 107 mins to 14 mins**

## How Incredibuild Crunched It

Milestone utilizes Incredibuild on several channels, according to Del Duca. “We use Incredibuild to accelerate compilation times both for developers and for the build machines. We use a CI system based on Jenkins while Unreal Engine takes care of handling the shaders and source code compilation via Incredibuild.”

But Incredibuild benefits are not limited to Milestone developers. “All of our technical artists use Incredibuild to accelerate shaders compilation. Additionally some key people among the artists that use Unreal for level composition and lighting have Incredibuild installed on their machine mainly to speed up Unreal startup time when syncing their work from source control (and hence the need to rebuild all the shaders).”

Milestone’s games are multiplatform, so Incredibuild is used to reduce compilation time for PC, XBOX and PlayStation consoles simultaneously.

“Working on large and complex projects without Incredibuild is not an option.”

**Ivan Del Duca**  
Technical Director

As for the future, De Duca sees other potential channels within Milestone which can be boosted with Incredibuild. “We are working on a neural network AI system whose training could certainly benefit from being distributed with Incredibuild.”

