

# LOGIBALL

LOGIBALL uses Incredibuild to significantly reduce Android build time, cutting processing time from 15 to 2 minutes



Industry

| **Computer Software**

Process

| **C++**

Results

| **Android Builds reduced from 15 mins to 2 mins**

LOGIBALL specializes in the engineering of high quality navigation maps and the development of geo data based applications like the LOGIBALL Business Navigator, a navigation software solution optimized for the needs of business users. The company's product is developed using Visual Studio C++ and Eclipse and has its own cross-platform middleware. LOGIBALL builds its customized code per customer, so routine build and testing is required.

## The Challenge

When creating different solutions for multiple clients, it is imperative to streamline processes and maintain continuous delivery. Since each building process took several minutes, developers' work was routinely cut, while waiting for compilation to finish, hindering work continuity.

Customization – LOGIBALL has a large number of customers, each required a personalized solution for its needs. Consequently, the company needs to build and test cross-platform solution for each client. The company supplies client with software built in Windows, Mac OS X environments and using the Android NDK. The goal was to reduce building and testing time to streamline the building process and increase agility.

Windows Build – The company used both Visual Studio and Jenkins CI for its builds, with an average of 2:30 minutes per build. The challenge was to speed-up the building process, to enable continuous delivery.

Android NDK – LOGIBALL offers an Android product that is built using the Android NDK tool set. The average build time was 15 minutes on a developer's machine and 7 minutes on the company's server. The goal was to reduce build time as much as possible to allow significantly more builds per day. The developer working machines are supported by two Oracle servers with 16 cores each.

## Solution

By using Incredibuild, LOGIBALL's development process received a significant boost, saving time, money and tremendously increasing efficiency. The ease of implementation and instantaneous results presented an inclusive answer to the challenges the company faced.

LOGIBALL implemented Incredibuild in various places along its production line, including both within Jenkins and Visual Studio. Incredibuild was also implemented on the company's Android NDK environment (using a single line of code), on both developers' and server machines, and within its testing tool, which is used within Jenkins CI. The ease of integration enabled developers to try it and see results instantly. LOGIBALL's build process has changed drastically once implementing Incredibuild's solution. Build times were cut between 50 and 90 percent across various segments of production and, after Incredibuild became a part of LOGIBALL's build process, developers were able to execute Android builds 20 times a day.

## Benefits

Using Incredibuild's build-acceleration capabilities, LOGIBALL has sped-up its production line, achieving greater agility and continuous delivery. By reducing a developer's wait to a mere 48 seconds (instead of 7 minutes), the developer now

has a work continuum, radically changing the way they work. The developer can compile after every change instead of waiting for code changes to accumulate, allowing a faster and more focused workflow. Time saved can be used for additional processes, such as running additional builds and testing, increasing productivity and generating significant, measurable ROI.

Benefits include:

Dramatically reducing Android NDK builds within Jenkins from 15 minutes to less than 2 minutes on developers' machines and from 7 minutes to 48 seconds on server machines.

Accelerating Jenkins and Visual Studio build processes, cutting them in half, from 2:30 minutes to 1:15.

Integration with Jenkins using a single line of code. Allowing continuous integration and increased agility for developers: Developers can now execute Android builds 20 times per day, meaning less broken builds at the end of each day and increasing competitiveness by accelerating time to market.

Incredibuild was also found to be compatible with the company's testing tool, enable further acceleration of Logiball Build process.

