

Intel® INDE

Integrated Native Developer Experience



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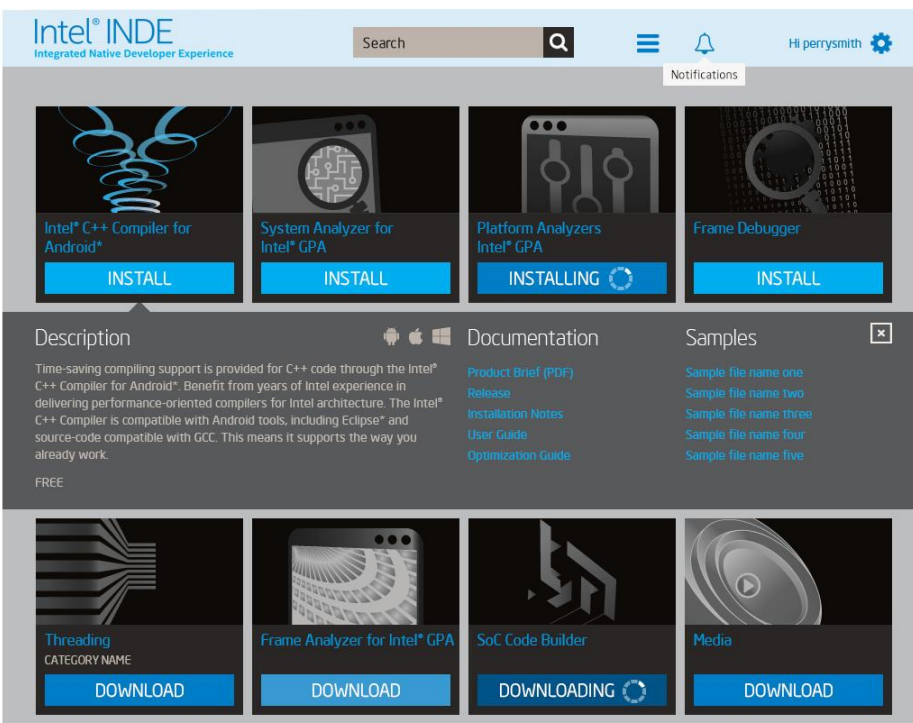
Beta pre-release: coming soon

A cross-platform productivity suite built with today's developer in mind.

The Intel® Integrated Native Developer Experience (Intel® INDE) is a cross-platform productivity suite enabling developers to create and deliver native apps for Android* and Microsoft Windows* targets. Intel® INDE enables efficient reuse of performance-sensitive code across operating systems and platforms with consistent C++/Java* tools, libraries & samples for environment setup, code creation, compilation, debugging and analysis. Additional tools, host and target support will be added this year. Developers can code quickly with integration of tools into popular IDEs, while being future proof with automatic updates to the latest tools and technology.

C++ and Java tools allow developers to code native applications that expose underlying architecture, enabling delivery of higher performance, more responsive apps. Experienced C++ and Java developers can take advantage of Intel's performance-oriented tools now available for Android in addition to Microsoft Windows. Documentation, samples and support forums are provided for developers who enjoy detailed learning guides. Intel INDE provides support for media, threading, code building, compiling, system, platform & frame analysis, frame debugging, and environment setup.

BELOW Example screenshot of the Intel® INDE Experience UI.



Intel® INDE Provides:

IDE support

Eclipse*, vs-android plugin for Microsoft Visual Studio*

Host support

Microsoft Windows* 7-8.1

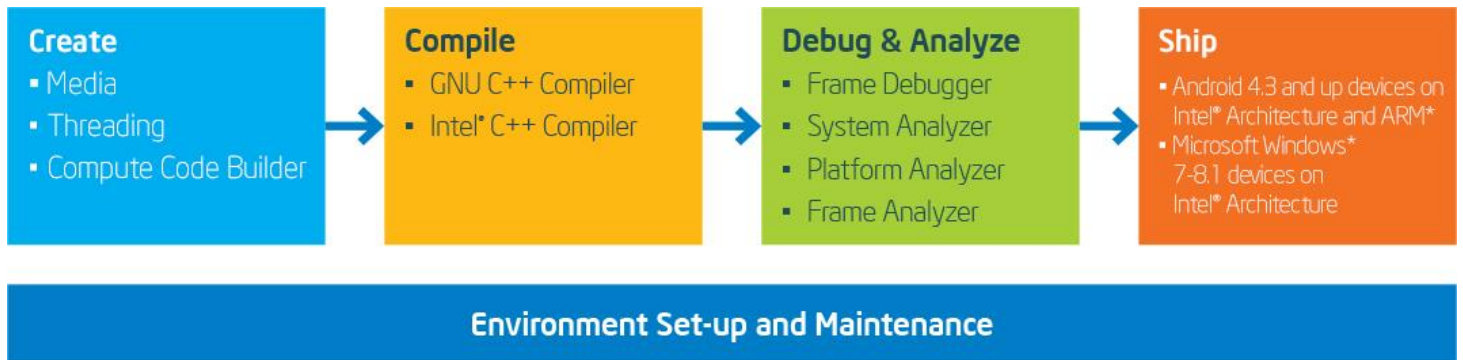
Target support

Android 4.3 & up devices on ARM* & Intel® Architecture and Microsoft Windows* 7-8.1 devices on Intel® Architecture

Learn More:

intel.com/software/INDE

Increasing productivity at every step along the development chain



Environment Setup

Previously known under codename Beacon Mountain as a beta tool, the environment setup component of Intel INDE quick-starts development by setting up and installing an IDE and integrating popular tools. Developers can selectively choose tools to install, allowing for a customized environment. The environment setup menu gives developers the option to install Eclipse* (through the Android* SDK), and vs-android plug-in for Microsoft Visual Studio* IDE support. Apache Ant* is provided for command-line development. For tools, the setup menu includes the Android SDK for Java development, Android* NDK for C++ development, Android* Design for style library integration and the Intel® Hardware Accelerated Execution Manager (Intel® HAXM) for host environment Android emulation.

Media Pack for Android

Developers can create and add visually compelling native video and audio extensions for mobile applications with ease by using the media component, available through Intel INDE. The Media Pack for Android* enables visually powerful and easily integrated top video and audio use cases, delivering professional quality solutions including camera and screen capturing, video editing, video streaming, and audio fingerprinting. Source code and examples are given to help advanced programmers further customize their video transcode pipeline. All libraries are optimized for x86 and ARM*-based Android* devices running Jelly Bean 4.3 & up.

Learn more:

Documentation and a support forum are available to help quick-start development at intel.com/software/INDE.

Threading

Explore a rich set of components to efficiently implement higher-level, task-based parallelism using Intel® Threading Building Blocks. Intel® TBB provides a widely-used, award-winning C and C++ library for the development of higher-performance, scalable applications. INDE. The threading capability supports development of apps for both Android and Microsoft Windows targets.

Compute Code Builder

Develop code that executes on computing devices beyond the CPU and maximize performance with programmable graphics using the compute code builder. This tool assists with creating, compiling, debugging and analyzing compute APIs like Renderscript* and OpenCL™. The compute builder integrates with both Microsoft Visual Studio and Eclipse. The compute code builder supports development of apps for both Android and Microsoft Windows targets.

Compiling

Time-saving compiling support is provided for C++ code through the Intel® C++ Compiler for Android*. Developers benefit from years of Intel experience in delivering performance-oriented compilers for Intel® Architecture. The Intel® C++ Compiler is compatible with Android tools, including Eclipse and source-code compatible with GCC. This means it supports the way developers already work. The GNU C++ Compiler is also provided through the Android NDK, which is a customization option in the Environment Setup component of Intel INDE. The compilers support development of apps for Android targets.

Analysis & Debugging

The Platform Analyzer is a powerful component enabling trace analysis of CPU/GPU performance metrics, API call tracing, code execution, and CPU/GPU usage, and task data.

The System Analyzer allows for platform and application-specific GPU* analysis & performance overrides for OpenGL and DirectX*.

Use Frame Analyzer to perform deep-dive frame capture analysis of workloads, asset exploration, live state, uniform & shader editing, override performance experiments and more.

Real-time, in-depth exploration of OpenGL-ES 1.1/2.0 workloads is made easy with the Intel® Frame Debugger, available through Intel® INDE. This component allows for the debugging of OpenGL-ES API errors, exploration of textures, shaders, vertex layouts and related shader objects.

Analysis and debugging tools support development of apps for Android and Microsoft Windows devices running on Intel Architecture.

How to Get Started

Intel® INDE offers easy-to-use solutions to speed development for existing and new-to-Android developers using C++ or Java. From quick, professional-grade implementations of media video conferencing, to real-time analysis and debugging of graphics, Intel® INDE offers performance-oriented solutions. To get started today, download a beta pre-release copy at intel.com/software/INDE.

[Documentation and a support forum are available to help quick-start development at \[intel.com/software/INDE\]\(http://intel.com/software/INDE\).](#)

For more complete information about compiler optimizations, see our Optimization Notice at: software.intel.com/en-us/articles/optimization-notice#opt-en.

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