Jetbrains IntelliJ IDEA 2018

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Agenda

- Intellij IDEA History
- Comparison of versions
- Create project/import project
- Present each part of the IDE screen
- Project Settings
- Maven
- Refactoring
- Debugging
- Live templates
- Plugins

History

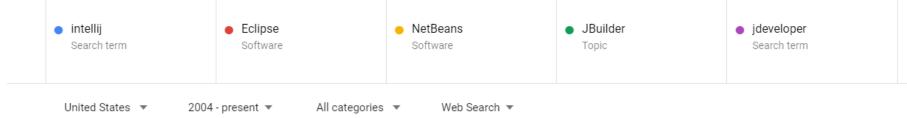
The first version of IntelliJ IDEA was released in January 2001, and was one of the first available Java IDEs with advanced code navigation and code refactoring capabilities integrated.

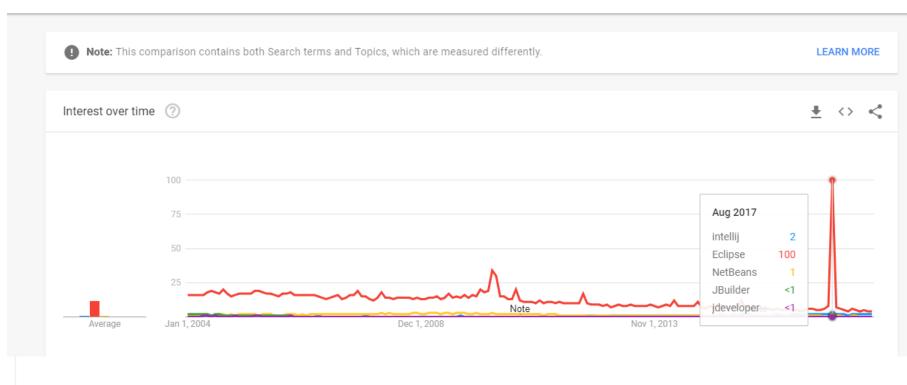
History

"For a while IntelliJ have been building an IDE for Java that was liked for its [...] searching capabilities. They added various renaming capabilities to the tool which made it a minor favorite on the sixth floor here where we were unable to use Visual Age. Then in January I got a surprise email - their IDEA tool now supports Extract Method." [1]

Martin Fowler February 2001

Popularity History





Community Edition Announcement

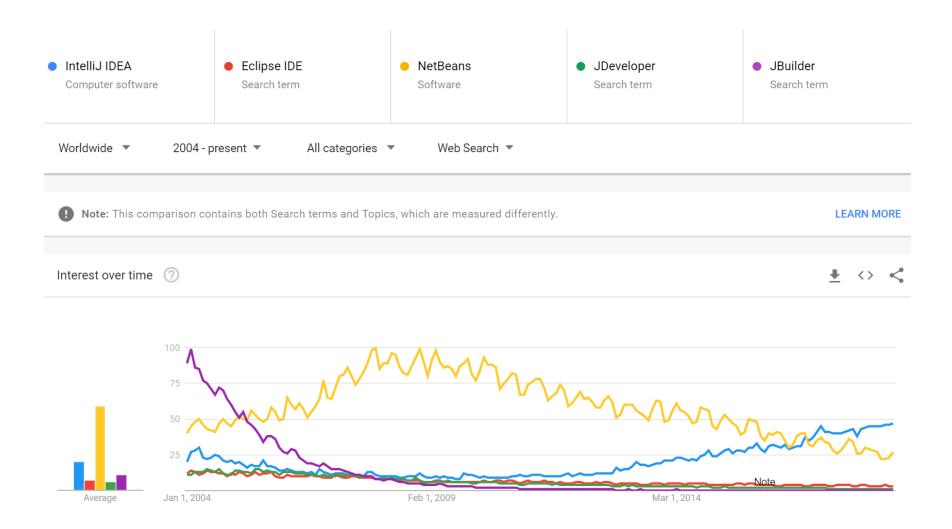
On October 2009 they announced in their blog post that:

Starting with the upcoming version 9.0, IntelliJ IDEA will be offered in two editions: **Community Edition** and **Ultimate Edition**. The Community Edition focuses on Java SE technologies, Groovy and Scala development. **It's free of charge and opensourced under the Apache 2.0 license** [2]

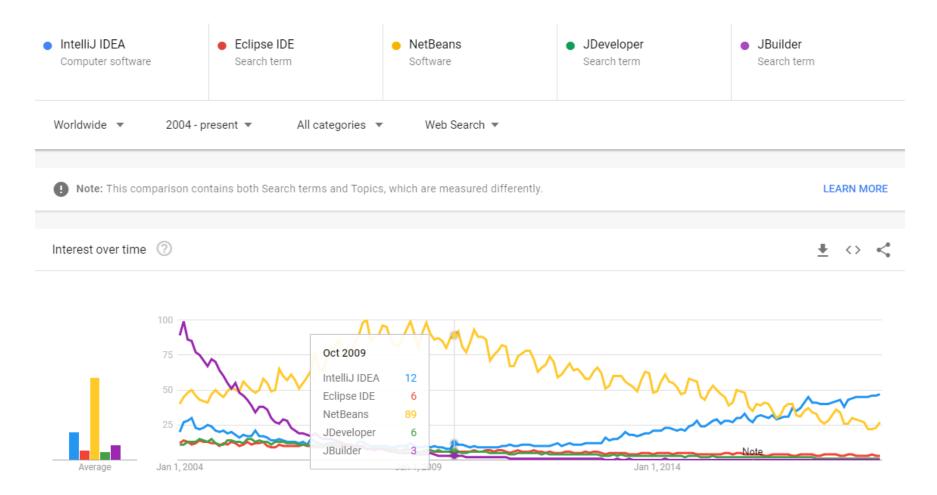
Google Releases Android Studio 1.0

In December 2014, Google announced version 1.0 of Android Studio, an open source IDE for Android apps, based on the open source community edition of IntelliJ IDEA. [3]

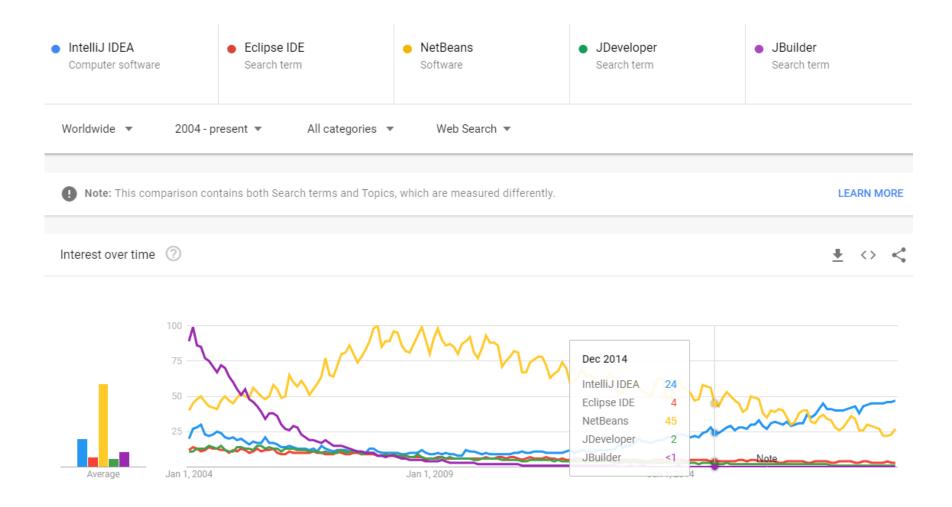
Google Trends from 2004 - present



Community Edition Announcement



Google Releases Android Studio 1.0



ZeroTurnaround Survey 2012 [4]

28% of devs use IntelliJIDEA

IDES

The number of Eclipse users has been around the two thirds mark (68%) for a while. It's by far the most popular IDE among Java developers, and receives lots of small improvements each year - the devil is in the details. Intellij IDEA has a number of users who swear by it and would never switch to Eclipse, and it seems to have gained more ground as well (28%) compared to our last survey where we saw 22% of Java developers using IDEA. The free Community Edition might have something to do with increased adoption.

NetBeans remains in the third place among the free Java IDEs. It held a roughly 12% market share last year, and has seen some increased use since, potentially after the release of NetBeans 7. We saw NetBeans 7.1 came with many good improvements and 7.2 is coming very soon (presumably, in June 2012). NetBeans seems to be evolving quite actively, which is very positive.

The two commercial options, MyEclipse and IBM Rational Application Developer hold small but presumably dedicated market shares as well. With MyEclipse Blue positioned as a more lightweight alternative to RAD, it will be interesting to see if MyEclipse will be stealing away more RAD users over the next couple of years.

ECLIPSE 68%

NETBEANS 17%

INTELLIJ IDEA 28%

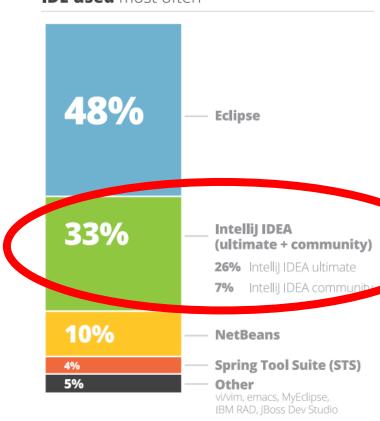
RAD 47%

MYECLIPSE 4%

ZeroTurnaround Survey 2014 [5]

33% of devs use IntelliJ IDEA





In last year's Developer Productivity Report 2013, 97% of respondents reported using IDEs (and 3% don't...really, WAT?), which makes the IDE market quite representative of development environments. This is a very mature market, with a strong commercial presence following the leading open source option, something that we could consider a reasonable indicator of market maturity.

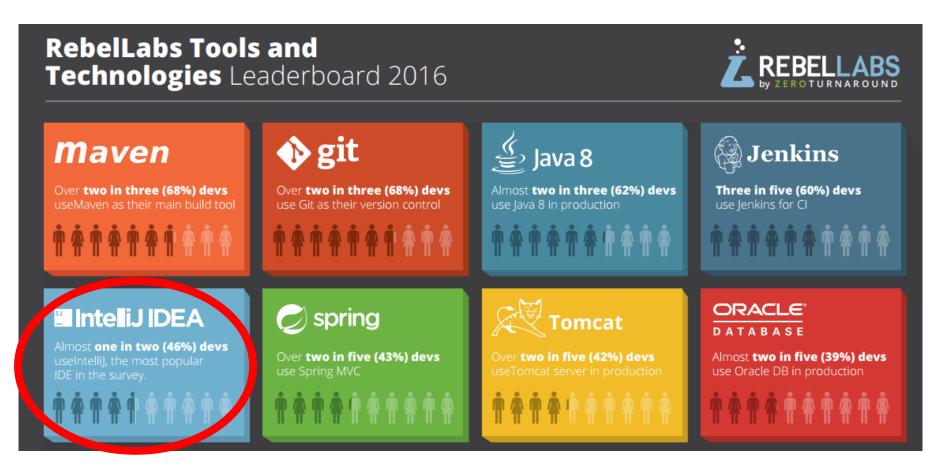
So we aren't surprised at **Eclipse (48%)** retaining the dominant market position, which has been incredibly stable over the years - last time we asked, over two-thirds of developers used Eclipse on at least some projects; however, in 2012 the survey choices were non-exclusive, indicating that at least some developers use multiple IDEs. Eclipse's market dominance increases if you combine the other tools out there that are based on the Eclipse platform as a different distribution - e.g. Spring Tool Suite (STS), WEClipse, IBM RAD and JBoss Developer Studio - then we can add another 7% the score, coming in with over half the IDE market (55%) for Eclipse.

Intel IDEA (33%) continues to make gains, with their Ultimate (26%) and Community editions (7%) representing the flagship JetBrains product. After years of anecdotal evidence, we also took the opportunity to ask "which IDE would you rather use or test for development?", listing all the same IDEs as in the previous question.

Yep, some out there still

ZeroTurnaround Survey 2016 [6]

46% of devs use IntelliJ IDEA



Languages Support

Coding assistance comprises of smart code completion, deep static analysis, intelligent refactorings, quick navigation, debugger, test runner and more.

SUPPORTED ONLY IN ULTIMATE EDITION

JavaScript (all the functionality of WebStorm)

TypeScript

SQL (all the functionality of DataGrip)

CSS, LESS, Sass, Stylus

CoffeeScript

ActionScript

XSL, XPath

Ruby, JRuby (via a plugin)

PHP (via a plugin)

Go (via a plugin)

SUPPORTED IN ULTIMATE AND COMMUNITY EDITIONS

Java

Groovy

Kotlin

Scala (via a plugin)

Python, Jython (via a plugin)

Dart (via a plugin)

Erlang (via a plugin)

XML, JSON, YAML

AsciiDoc, Markdown (via plugins)

Frameworks Support

Out of the box IntelliJ IDEA supports a large variety of frameworks: both server-side and front-end.

SUPPORTED ONLY IN ULTIMATE EDITION

Spring (Spring MVC, Spring Boot, Spring Integration, Spring Security and others)

Java EE (JSF, JAX-RS, CDI, JPA, etc)

Grails, Griffon

GWT, Vaadin

Play (via a plugin)

Thymeleaf, Freemarker, Velocity, Tapestry

Struts, AspectJ, JBoss Seam, OSGI

React

AngularJS (via a plugin)

Node.js (via a plugin)

Apache Flex, Adobe AIR

Rails, Ruby Motion (via a plugin)

Django, Flask, Pyramid (via a plugin)

Drupal, Wordpress, Laravel (via a plugin)

SUPPORTED IN ULTIMATE AND COMMUNITY EDITIONS

Android (includes the Android Studio's functionality)

Swing (incl. UI Designer)

JavaFX

Version Control

IntelliJ IDEA allows to check out/in changes, browse history, work with branches and more.

SUPPORTED ONLY IN ULTIMATE EDITION

Team Foundation Server

Perforce

SUPPORTED IN ULTIMATE AND COMMUNITY EDITIONS

Git, GitHub

Subversion

Mercurial

CVS

Deployment

IntelliJ IDEA lets you deploy to major application servers and clouds: it helps you build artifacts, deploy it and debug.

SUPPORTED ONLY IN ULTIMATE EDITION

Tomcat

TomEE

Google App Engine and other clouds (via plugins)

GlassFish

JBoss, WildFly

WebLogic

WebSphere, Liberty

Geronimo

Resin

Jetty

Virgo

SUPPORTED IN ULTIMATE AND COMMUNITY EDITIONS

Docker, Docker Compose (via a plugin)

Build Tools

IntelliJ IDEA integrates major build automation tools for Java, Scala, JavaScript and other languages.

SUPPORTED ONLY IN ULTIMATE EDITION

NPM (via a plugin)

Webpack

Gulp

Grunt

SUPPORTED IN ULTIMATE AND COMMUNITY EDITIONS

Maven

Gradle

SBT

Ant

Gant

Ivy (via a plugin)

New Project

- From scratch
- Spring.io
- github

Left Panels

- Project
- Autoscroll from/to source:
- Structure
 - Source marks the folder as a source root
 Test marks the sources as tests
 Excluded If you mark a folder as ignored it won't display in the project tree and its contents will not be indexed. Note that you might want to exclude a folder if there are a lot of big files, otherwise it can cause a bit of performance penalty for the indexer.
 Resources The new type of folders introduced in IDEA 13 the resources folder. The contents of the resource folder are automatically copied to the compiler's target folder.

Top Icons

- Compile (forget Ctrl+S)
- Edit Configurations (run/stop/debug)
- Version Control
- Settings/Project

Right Panel

- Database
- Maven Projects
- Inspector Analysis (find a big class)

Bottom Panels

- TODO -->ignore
- Terminal ->
- Version Control
- Event Log
- Inspector

Project Settings

- Project
- Jdk
- Modules
- path
- source/test
- Libraries
- Facets
- Artifacts -> come on...

Editing/Coding

- Double shift-> Uber
- Show Methods (Ctrl+F12)
- Fira Code
- Find Usages (ALT+F7)
- Find string (shows results immediately)
- Show Hierarchy
- Inspect Code
- Insert code/generate code
- Column mode
- Surround with
- Auto Import (static import)
- CodeFolding (anywhere)
- New Item Creation -->Getter/Setter
- Bookmarks F11/Shift-F11

Version Control

- Local History
- Version Control Tab
- Ignored files
 - files/folders to ignore
- GitIgnore
- Active Change List

Refactoring-Editor

- Renaming
- Method Extraction
- Pull method up
- Inline variable
- Extract variable
- Function refactoring
- Method Refactoring (remove/change param)
- Post Fix Completion (.notnull)

Debugging

- Tomcat debug
- Lambda debug
- Evaluate expression
- change variable
- watch method
- add debug condition

Live templates

- Sout
- psvm
- fori
- iter

Plugins

- IdeTalk
- Presentation Assistant
- FindBugs
- Docker
- GitIgnore
- Lombok
- Tab Shifter

Maven

- add project
- select profile
- reload dependences

Spring

- install spring project
- from pom
- from IDE
- show integration

Edit/Run Configurations

- Java application
- Tomcat server
- Spring boot application
- Run Class --> Ctrl+shift+F10

Test

- Alt enter on class
- Unit testing
- "Run all tests"
- Test coverage
- Spock

Shortcuts

- Shift x 2 --> Search Everywhere
- Alt+Enter --> Show Intentions Actions

Extended Shortcuts

- Alt+Tilda (alt+`) → VCS Operations popup
- Alt+shift+F10 → Run configuration
- Ctrl+Shift+Backspace → Last Edit Location
- Ctrl+E → Recent Files
- Ctrl+N → Open Class

Eclipse to Intellij Guide

- https://zeroturnaround.com/rebellabs/report
 s
- Find report called "Getting Started with IntelliJ IDEA as an Eclipse User)"

Prices...

•BUSINESSES AND ORGANIZATIONS

IntelliJ IDEA Ultimate

€499.00 /1st year €399.00 /2nd year €299.00 /3rd yr onwards

INDIVIDUAL CUSTOMERS

IntelliJ IDEA Ultimate

€149.00 /1st year €119.00 /2nd year €89.00 /3rd yr onwards

References

- 1. https://martinfowler.com/articles/refactoringRubicon.html
- 2. https://blog.jetbrains.com/idea/2009/10/intellij-idea-open-sourced/
- 3. https://android-developers.googleblog.com/2014/12/android-studio-10.html
- 4. https://zeroturnaround.com/rebellabs/developer-productivity-report-2012-java-tools-tech-devs-and-data/
- 5. https://zeroturnaround.com/rebellabs/java-tools-and-technologies-landscape-for-2014/6/
- 6. https://zeroturnaround.com/rebellabs/java-tools-and-technologies-landscape-2016/

Quesetions

