



Genero[®]
mobile

Put the profit back
into mobile app development ...

... and simultaneously create beautiful, native, enterprise apps for iOS and Android



Prototype, develop, test, package and deploy apps for the world's leading mobile platforms in a single cycle. Develop for one, and you've developed for both. Need to evolve your systems with the times? You'll never find a simpler and more cost effective way than with Genero[®] Mobile. Shorten your time-to-market, deploy new business models and streamline field operations. You'll halve development costs and simplify support.

The best of both worlds

You've learnt that apps are either native or cross-platform. Native apps look and perform better, whereas cross-platform apps run 'everywhere'. With Genero Mobile, this trade-off is no longer necessary. Focus your development on Genero Mobile and you avoid dissipating energy between incompatible development frameworks. You'll improve productivity, reduce support costs and turn a profit quicker – that's the Genero Mobile promise. Develop apps that span the entire architecture; from the server to the mobile device with a single programming language.

No need to choose

You've wasted precious cycles reinventing the wheel, first with one version for iOS[®] and then another for Android[®]. This consumes expense budgets better spent marketing your solution. Cross-platform HTML5 based solutions go some way to solving this problem, but fail to deliver in terms of performance. More often than not, you end up returning to native frameworks to create user interfaces. That forces a choice; do you focus on iOS or Android as your primary platform?

With Genero Mobile, there's no need to choose. You build iOS .IPA and Android .APK packages within Genero Studio – an intuitive IDE comprising Business Development Language (BDL) – an abstract, generic programming language that hides operating system complexities and dependencies. Harness this innovation and spare yourself the steep learning curve of iOS and Android.

A new breed of enterprise apps

Get yourself started with Business Application Modeler (BAM). BAM lets you design workflow diagrams and use customizable code templates. Templates enable you to reuse patterns, quickly integrate on-board peripherals such as cameras, phones, GPS sensors, and interface with embedded apps such as email, contacts and calendars.

Templates reduce human error, shorten QA cycles and reinforce reliability through consistent corporate standards. Generate 80% of your app from diagrams that tightly couple with your source code. Write bespoke business logic with Code Editor (CE) to create the custom features that will take user productivity to new heights and let your apps really shine.

Read barcodes, QR digicodes. Scan signatures. Localize staff, assets. Reschedule visits on-the-fly. Send rich media messages to customers and patients. Delete records with the flick of a finger. Thumb through orders and product catalogs on the showroom floor. Create proposals, close agreements, search account payables on site. Update job sheets. Upload accident photos from the scene, in real-time.

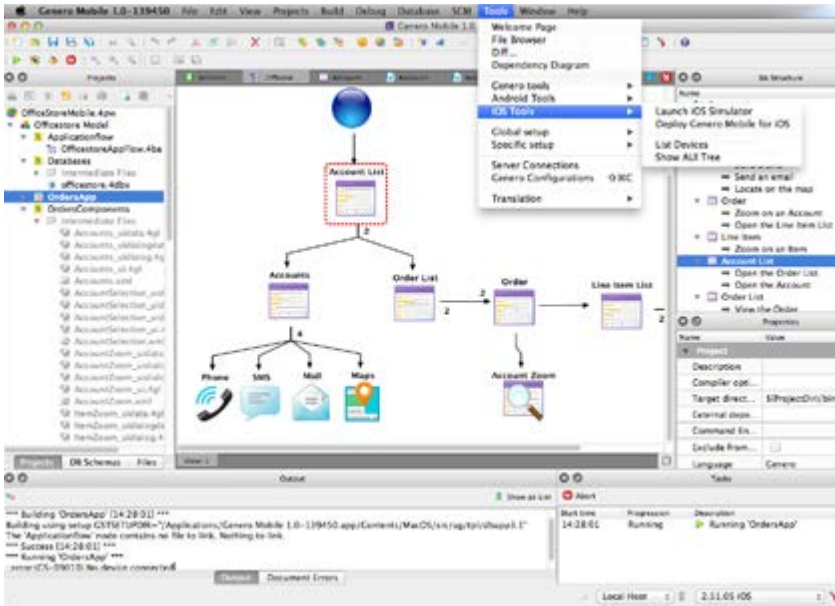
Never before has there been so much potential to differentiate your solution, so quickly, and so cost effectively.

Smartphones and tablets

Smartphones outsell tablets by an order of magnitude, yet they rival each other for developer attention. What if the app you develop for a tablet, were also to run on a Smartphone – unchanged? With Genero Mobile it can - apps adapt to device orientation as well as different form factors to fill the available 'real-estate'.

Online and offline

Network coverage is not always guaranteed in buildings, city centers, and rural zones. So apps need to be able to run offline, store data to the device, and synchronize when the network signal returns. This synchronization can be done via RESTful or SOAP Web services. Genero Mobile RESTful Web services use JSON over http(s), whereas SOAP Web services use the XML based protocol. Wizards take developers through the creation of SOAP Web services to save the developer from having to learn the protocol's complexities.



Business Application Modeler - application workflow with maps, mail, SMS and phone modules

Code Editor and Graphical Debugger

Learn-as-you-type

Learn-as-you-type with Code Editor. Its embedded BDL compiler enables structured editing, in-line syntax-checking, and automatic code completion.

Code Analyzer and Profiler

Eliminate bottlenecks and dead code

Profiler identifies hot-spots for performance tuning, whereas Code Analyzer promotes structured code. It does this by illustrating an app's architecture in order to simplify the identification of loops and dead code. Code Analyzer relies on two diagrams for this purpose – dependency and sequence diagrams. Dependency diagrams simplify the optimization, navigation and documentation of the code. Sequence diagrams highlight the function calling sequence that lets you navigate through functions to the relevant code. Right-clicking on a statement within Code Editor opens up the appropriate sequence diagram.

Form Designer

Design abstract forms for Smartphone and tablets

Form Designer lets you create native user interfaces using native widgets for both iOS and Android supporting full gesture controls that work on Smartphones and tablets in landscape and portrait orientations. Browse through the database schema and select tables, columns and patterns via wizards that let you quickly design abstract screen layouts you can test in real-time, on-device.

Subversion

Simplify team development

Simplify team development through Genero Studio's graphic implementation of Apache Subversion supporting local and remote coding.

Genero Studio

Develop faster, smarter with macOS, Linux and Windows

Genero Studio is the only framework you'll ever need to learn. No need to learn proprietary APIs for gesture or peripheral control – they come as part and parcel of the package. Everything you need to create amazing apps is here: an application modeler and generator, a code editor and graphical debugger, a forms designer, a source code control system for team development, a code analyzer and profiler for performance tuning, a database schema designer and project manager for rapid builds.

Business Application Modeller (BAM)

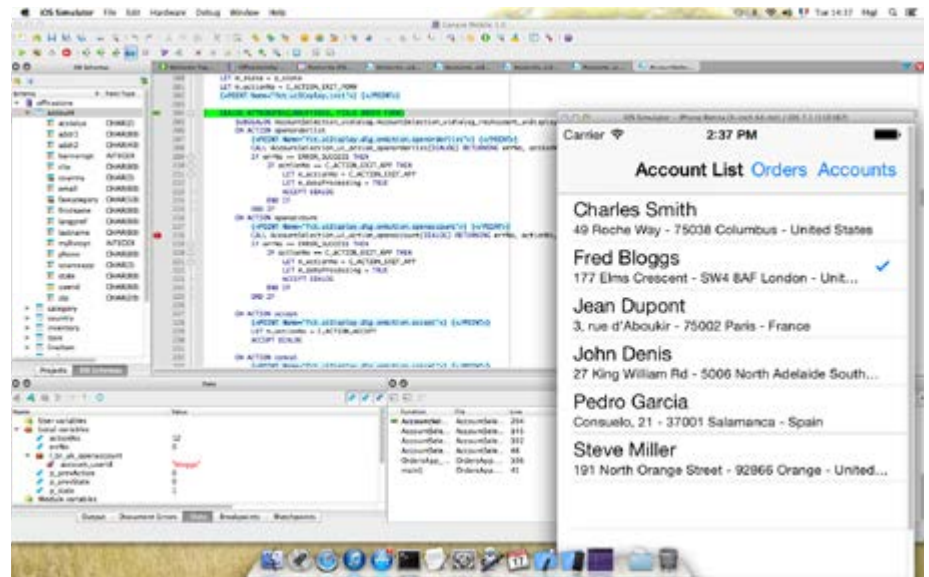
Design workflows that generate the backbone of your app

Applications developed using BAM impose software engineering standards through code templates for ergonomic coherence and consistency. BAM's object editor creates symbolic workflow diagrams that synchronize with source code. Customize templates to fit your own corporate standards.

Business Development Language (BDL)

A generic, abstract language, purpose-built for enterprise apps

Business logic is modeled with BAM and coded using Business Development Language (BDL) – a powerful, abstract, easy-to-learn, easy-to-maintain business oriented programming language. BDL's compiler embeds SQLite access and finds bugs at compile rather than run time. Its device independent pseudo code executes irrespectively on iOS and Android and is also supported on desktop and server based Windows®, Linux®, Unix® and Mac® macOS® systems.



Code Editor and Graphical Debugger - real-time prototyping and testing

Database Designer

Create, modify and enrich database schemas

Database Designer is a graphic tool that enables the creation, modification, synchronization and analysis of database schemas. Associated meta schemas, stored as column or table properties, enrich the database schema and provide centralized information about widgets, labels, validation, primary key/foreign key that simplify coding and enforce consistency.

Packaging, deploying

Genero Studio eases the packaging and deployment of your app by enabling you to build it from within your project. A package includes the files needed to run the program, and specifies where to put those files when the package is deployed on the device.



Operating system support

Genero Studio	Target Platform			
	ANDROID 5.0 > 10.0		iOS 12.x > 14.x	
	Development	APK Build	Development	IPA Build
Apple MacOSX 10.15	✓	✓ (1)	✓ (2)	✓ (2)
Linux Debian stable (x86_64), Gnome 3 (4)	✓	✓ (1)	✓ (3)	∅
Microsoft Windows Windows 7 / 8.1 / 10	✓	✓ (1)	✓ (3)	∅

(1) For JDK supported version please refer to page 5 (Four Js Genero 3.20xx Supported java List) of this document.

(2) Development of native iOS extensions requires Xcode 12 running on macOS Catalina 10.15.4 or later.

(3) Requires an iOS Device (iOS 12.x to 14.x) with the Genero Mobile Development Client (available from Apple App Store) installed.

(4) Tested on Debian stable 64bit with Gnome 3.x. Know to work on Linux distributions with GNU C Library (glibc) 2.15 or later, and 64-bit capable of running 32-bit applications.

Features

- iOS and Android,
- Smartphones and tablets,
- One development cycle,
- Web user experience,
- Native user experience,
- Native UI widgets,
- Embedded SQLite access,
- Host data synchronization,
- Online and offline execution,
- Real-time, on-device prototyping,
- Unicode UTF-8 character sets,
- RESTful Web services via JSON,
- Genero Studio IDE for macOS,

Benefits

- Halve development costs,
- 'Best-of-breed' user experience,
- Shorten time-to-market,
- Faster return-on-investment,
- Reach global markets.





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 <http://www.linkedin.com/groups/Genero-Community-4105129>

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