



Introduction to Appeon Mobile

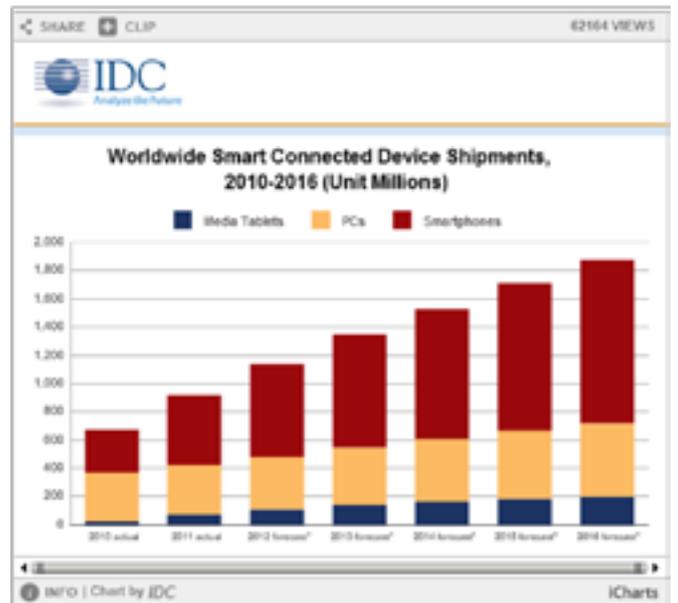
First-ever Mobility Solution for PowerBuilder Professionals

Appeon Corporation

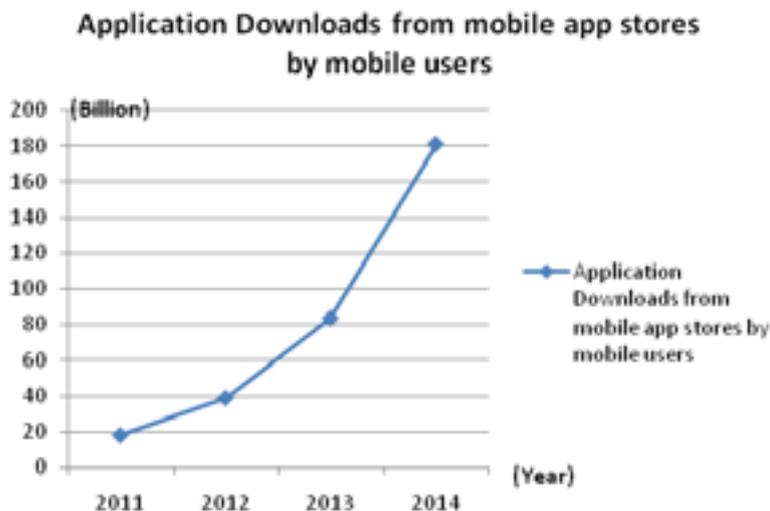
Mobile Market Trends

In the last couple decades the Internet has profoundly changed the way we work and do business. Now the mobile computing platform stands to make the same if not greater changes to how we work and do business. Let's first take a look at recent statistics on mobile device sales and mobile app downloads. These numbers speak for themselves how big the mobile opportunity is and the need to mobilize your business.

IDC Chart



Gartner Chart



According to IDC's recently-published statistics, smartphone sales has for the first time exceeded PC sales, and this trend will continue to eclipse PC sales by 2016. Gartner, another notable research source, forecasts 185 billion mobile apps will be downloaded from app stores by 2014.

The First-Ever PowerBuilder Mobility Solution



What is Appeon Mobile?

Appeon Mobile is the first and revolutionary solution that enables PowerBuilder developers to rapidly and easily build native mobile apps from the PowerBuilder IDE. Native mobile apps, unlike HTML apps, offer powerful native mobile functionality, fast performance, and offline application access. Appeon Mobile Apps, although native, can be run on virtually all mobile device OS, including iOS, Android, and Windows Phone.

By leveraging the superior RAD productivity of PowerBuilder along with DataWindow technology, PowerBuilder developers can rapidly and easily build native mobile apps. Mobile app development is performed exclusively within the familiar PowerBuilder IDE and requires only PowerBuilder programming skills. From PowerBuilder, Appeon Mobile will then generate multiple native mobile applications, one for each supported mobile OS.

Developing Mobile Apps with Appeon Mobile

RAPID Mobile Development

High-Productivity Development Environment

Development is performed within the PowerBuilder IDE, using DataWindows and painters – the hallmark of PowerBuilder. PowerBuilder offers several time-saving benefits over typical mobile development tools. First, the complexity of data access, manipulation and presentation is abstracted and made simple. Second, many robust objects and functions are provided to you out-of-the-box. Third, you need not worry about OS or mobile architecture specifics. As such, you will find that very little code is required to do a lot, which will significantly accelerate application development and allow you to focus on your business instead of get tangled in technology nonsense. In fact, comparing to traditional native mobile app development tools, such as Xcode or Eclipse, Appeon Mobile proves to be at least 10X faster!

Appeon Mobile UI Framework

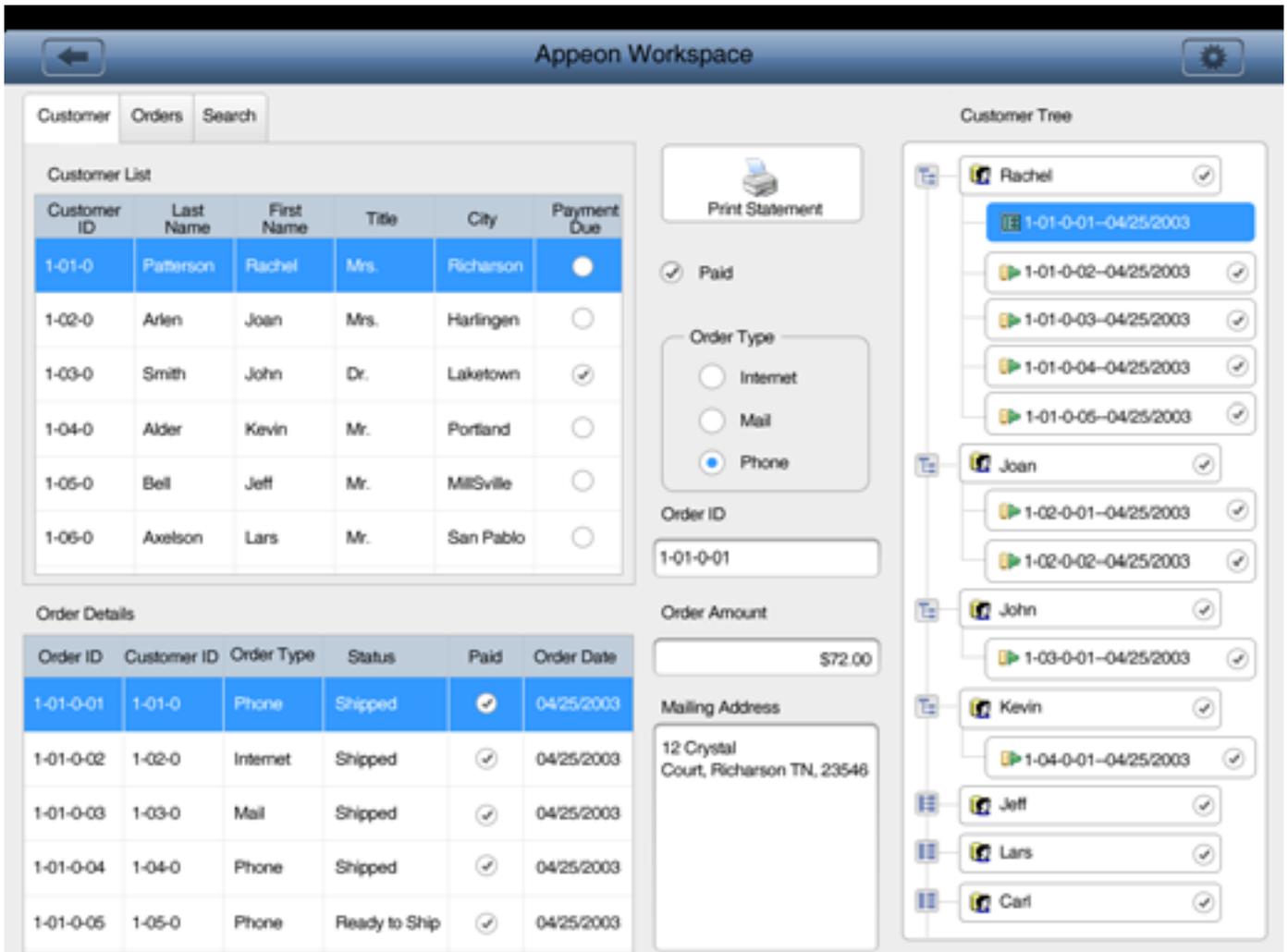
Appeon provides a standardized mobile UI framework to further simplify mobile app development and ensure your success. The mobile UI framework is a combination of PowerBuilder controls/objects and UI libraries/interfaces, which extend PowerBuilder with new mobile UI controls and functionalities. It also provides a template mobile user interface layout, which can be customized to match your company's presentation standards.

While Appeon's mobile UI framework serves as a best-practice starting point and can further accelerate your project it is not required. Standard PowerBuilder UI controls and functionalities are adapted to work on the mobile device, including Menus, TreeViews, Tabs, DataWindows, etc. As a PowerBuilder developer you can build native mobile app using existing PowerBuilder features with any framework of your choice, including but not limited to PFC, STD foundation classes, homegrown frameworks, etc.

Rich Mobile User Interface

With Appeon not only do you get all the benefits of native mobile UI but you also get the powerful controls of PowerBuilder. For example, DataWindow, EditMask, TreeView, Menu, etc. are available for you to use in your native mobile app. Of course, Appeon takes care of automatically remapping these controls to the mobile counterparts that look modern and are easy-to-use on the mobile form-factor.

Below is an example of a native iPad application with PowerBuilder Menu, Toolbar, Tabs, master-detail DataWindows, EditMask, TreeView, RadioButtons, and CommandButtons. You can see that it has been automatically remapped by Appeon to mobile counterparts on an New iPad.



Smart Configuration Wizard

Appeon provides a Configuration Wizard for your mobile project. It guides developers through the configuration process, to ensure no critical settings are overlooked and that your mobile project can be successfully deployed. While an Appeon Mobile project will require more configurations than a typical PowerBuilder client/server project, the configuration of Appeon Mobile apps are not any more complicated than other database-driven mobile apps. In fact, Appeon has taken great effort to ensure all low-level technology issues are abstracted from the developer to the extent possible so you can benefit from the unbeatable productivity of PowerBuilder.

Easy Testing & Debugging

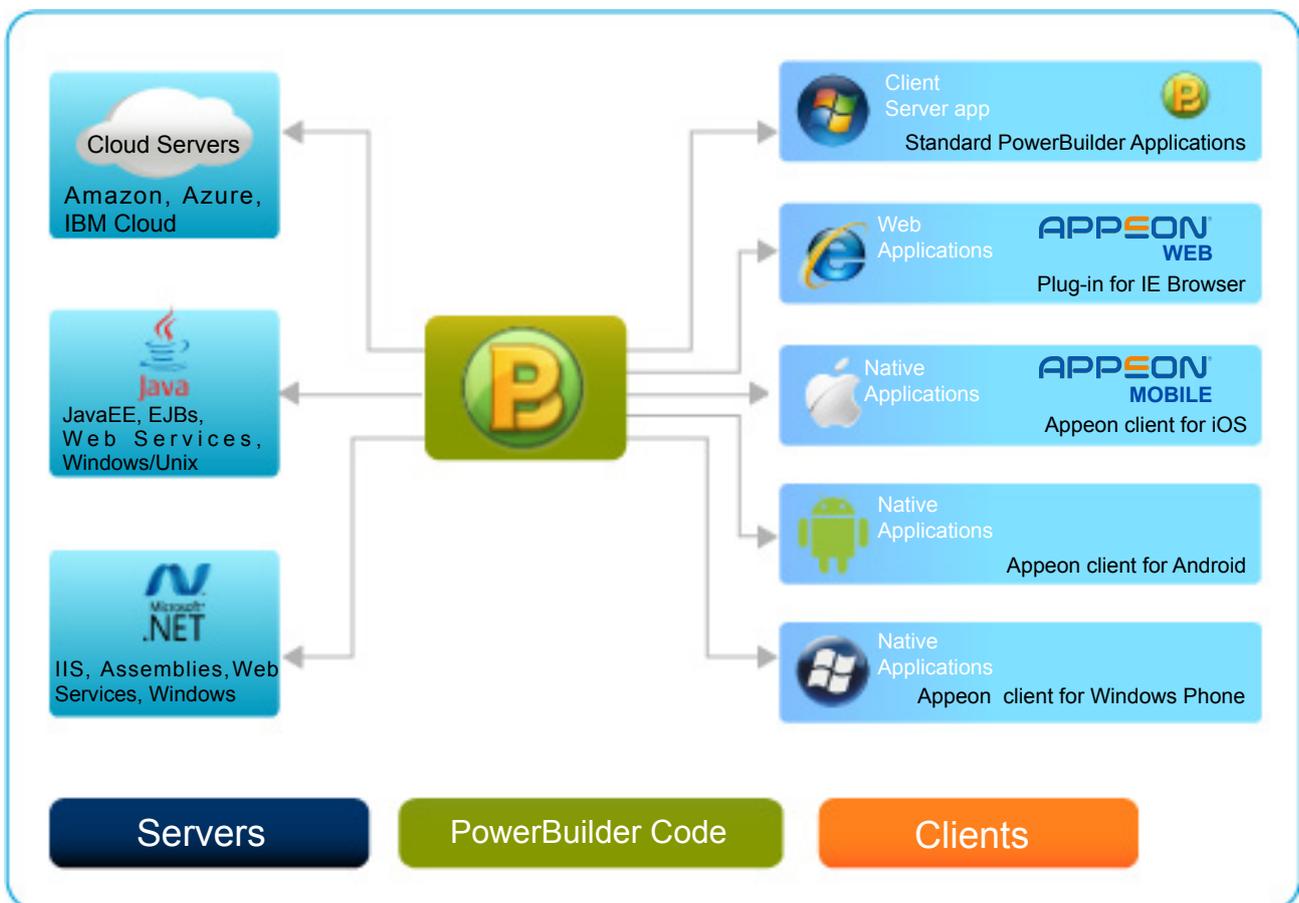


Appeon provides a Mobile Debugger, which enables developers to easily debug their mobile apps within the PowerBuilder IDE and on a Windows OS. It works similarly to the PowerBuilder Debugger, including setting breakpoints and watching variables, except all debugging is performed against the mobile application. The Mobile Debugger also includes an emulator that is capable of running the mobile app on Windows OS and without deploying to a physical device. This greatly saves time and money by avoiding the licensing, installation, and configuration of multiple OS environments and devices. Appeon's Mobile Debugger is the fastest and easiest way to test your mobile apps and see how they look on the target mobile OS.

Code Once, Deploy Everywhere

There is no other solution on the market that abstracts the development project from the technical implementation to the degree of PowerBuilder and Appeon. What is the benefit of such high-degree abstraction? A single PowerBuilder project can be deployed as native mobile apps running on leading mobile OS, as a Web application running in Internet Explorer (cross-browser in Appeon 7.0), and a Windows desktop application. You can use a .NET or Java middle tier and switch at whim without any changes to your PowerBuilder code.

The cost and headaches associated with maintaining and testing multiple projects for the myriad of different OS, platforms and devices is a thing of the past. You will never worry about what technology Microsoft will make obsolete again, what mobile OS will dominate in the future, or what middle tier is best for your company in the long run? Appeon shields you from all the risk and cost of the ever-changing high-tech world. All you need to do is redeploy your existing apps with a newer version of Appeon!



Seamless App Distribution

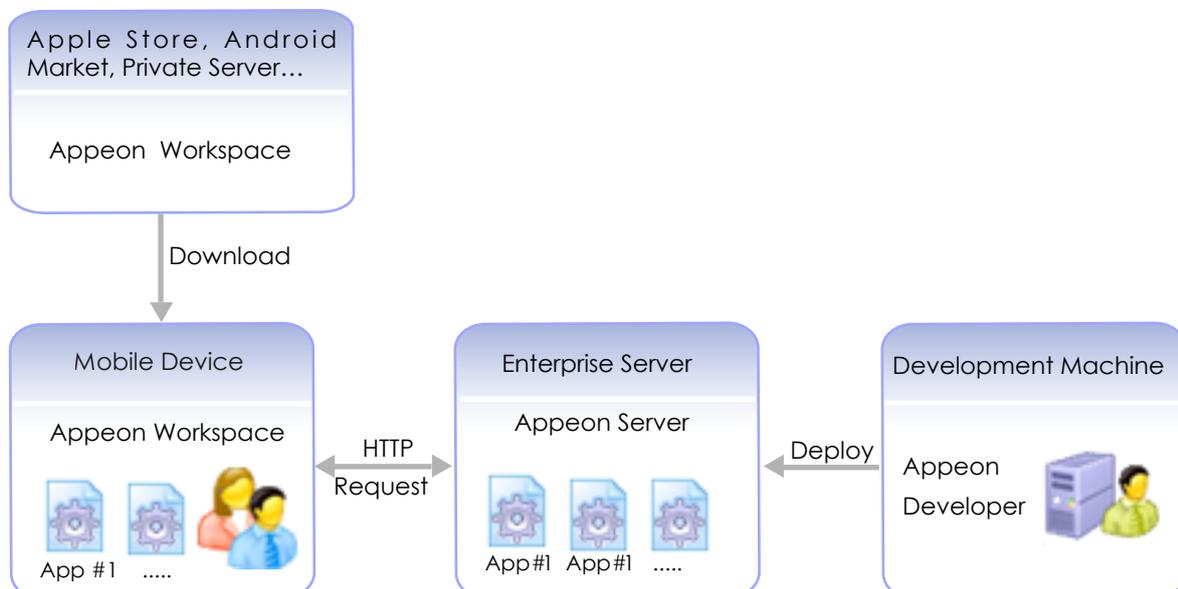
Standard Mobile Distribution

Appeon Mobile supports generating standard .IPA files (iOS) or .APK files (Android), which allows for various distribution strategies:

- **End-users** can perform the installation wirelessly by either using a direct URL or the included Appeon Workspace. With the help of third party MDM solutions, such as SAP Afaria, Good, AirWatch, MobileIron, BoxTone, Zenprise, etc. IT administrators can instruct managed devices to install the native mobile app automatically.
- **Developers** can upload and distribute publicly via the Apple App Store and Android Market (Google Play).

Appeon WorkSpace

Appeon Workspace, which itself is a native mobile app, simplifies deploying, accessing, and updating your Appeon Mobile apps. It is available in both .IPA (for iOS) and .APK (for Android) formats, and can be distributed via Apple Store, Android Market or your own server.



For Developers

Workspace simplifies the deployment process: there is no need to sign up for the Apple Developer Program or obtain an Apple Development Certificate, since Appeon Workspace has already been registered. Also, it will automatically keep all Appeon Mobile applications up to date without any user intervention (yes, even on iOS).

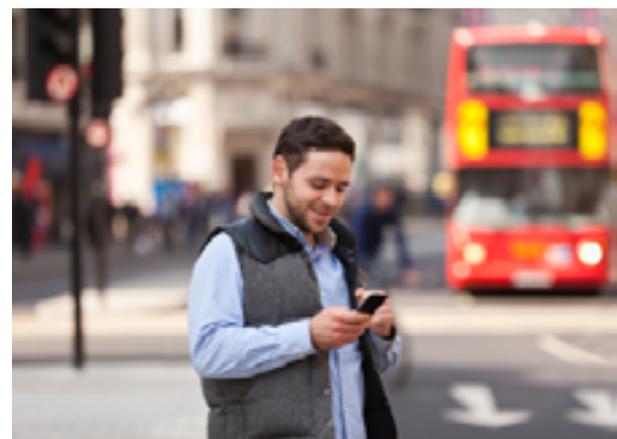
For End Users

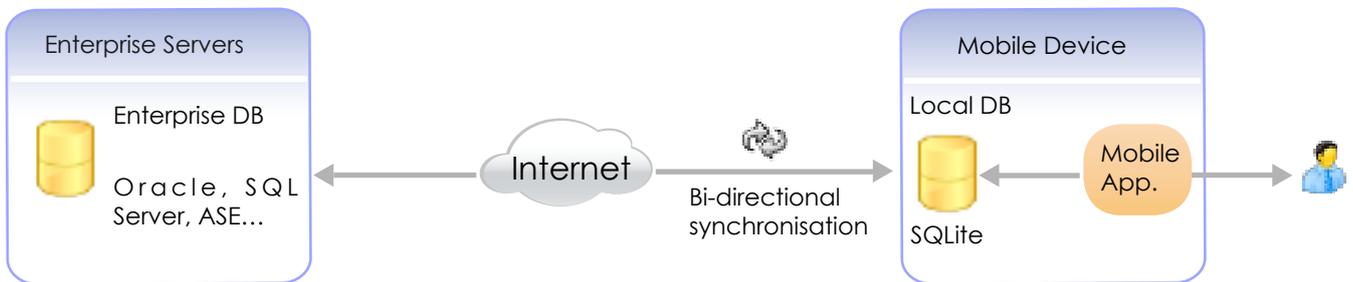
There is no need to go through the hassle of searching for and installing a native mobile application. Once Appeon Workspace is installed, it will present the user with all Appeon Mobile apps that the user has access to. Tapping the shortcut will automatically start the download and install process for the selected mobile app.

Work Anytime, Anywhere

Offline Data Synchronization

Appeon Mobile provides a built-in offline data access and synchronization solution and also supports the leading and most robust mobile data synchronization solution the market, SAP Mobilink. Offline data synchronization reduces the mobile app's dependency on Internet access or network connectivity. Appeon provides a local database (based on SQLite) that serves as the local data repository on the mobile device. It supports bi-directional data synchronization and conflict resolution. The data synchronization strategies are easily configurable according to your business needs.





Secure Data Transfer

The data transfer between the mobile device and the server side support strong SSL encryption so your employees can work securely even when outside of your private network:

- All data transmission can be secured by strong 256-bit encryption over the secure HTTPS protocol.
- All access to the server-side database is through your corporate firewall over HTTP port 80 via Java or .NET application servers.
- All user authentication coded in PowerBuilder will be replicated in your mobile application.
- Appeon Mobile applications can perform user authentication against leading LDAP solutions over the secure LDAPS protocol.

Appeon Mobile Technology

Powerful Native Technology

Appeon Mobile utilizes native mobile technology NOT HTML5. Native mobile applications inherently offer richer functionality, faster performance, and offline application access. While not every project will require complex functionality or offline application access, performance is something that cannot be overlooked.

HTML5's performance woes have afflicted numerous companies, with Facebook being the most highly publicized due to the mass adoption of their mobile app.

“Mark Zuckerberg, Facebook CEO, said at the TechCrunch Disrupt 2012 conference that Facebook's biggest strategic mistake was in adopting HTML5 for building its mobile app: "We [Facebook] burned through two years on that [HTML5]. It probably was the biggest strategic mistake we made.”

Al Hilwa, an IDC analyst also concurs that native apps are superior to HTML5 apps:

“Anyone who thought that HTML5 was a panacea for mobile development is probably reconsidering. Native apps will remain the best choice for the most optimal user experience or for use of specific hardware capabilities or for appealing to the user base of a particular platform.”

Key Components

The Appeon mobile product consists of two major components:

Appeon Developer (design-time)

Appeon Developer is a design-time add-on to PowerBuilder IDE. It provides various features to help you create & generate native Mobile Apps.

Main features: Simple Scripting, Code Analyzer, Appeon Debugger, Code Insight, Configuration Wizard, Packaging Tool, Appeon Emulator, and Context Help

Appeon Server (run-time)

Appeon Server is a run-time add-on to leading Java, .NET, and Cloud servers. It provides the server-side runtime services for database-driven Appeon Mobile applications.

Main features: Server-side Data Connectivity and Transaction Management, Mobile Data Security, Mobile App Provisioning, Offline Application Access, Session Load Balancing, SAP integration, Java and .NET integration, and Web Services

Runtime Architecture

Below is the architecture of the Appeon Mobile product and resulting native mobile applications.



Appeon Mobile vs. Typical Mobile Tools

Compared to native mobile app development with typical tools, Appeon Mobile offers unbeatable productivity and cost savings. Not only do you save time and money, but the overall performance, management and maintenance across multiple platforms and devices is superior.

	Appeon Mobile	Xcode
Development Productivity?	10X Faster	10X Slower
Cross-OS mobile deployment?	Yes	No
Development performed on Windows PC?	Yes	No
Native mobile UI?	Yes	Yes
Freedom to develop any business app without approval from Apple?	Yes	No
Includes offline bi-directional data sync solution?	Yes	No

Contact Us

Interested in Appeon Mobile?
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