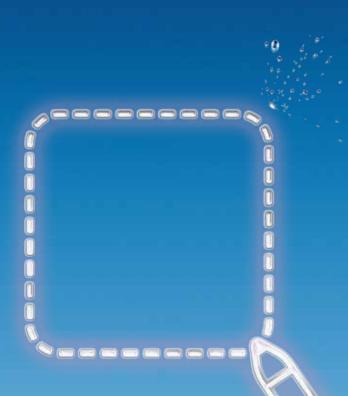
Mobile Application Platform



Next generation cloud-based solution that simplifies the development, deployment and management of mobile apps for enterprise.

- Develop native, hybrid and HTML5 apps
- Connect securely to multiple backend systems
- Supports deployment of server-side code to private, public or hybrid cloud environments
- Ideal for use on Telefónica's mobile-optimised Instant Servers cloud service

A single platform to create, control, measure, adapt and future proof your mobility strategy.

• Higher productivity

- Better connectivity
- Closer engagement

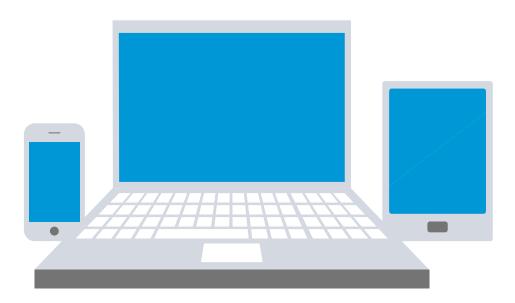


O₂'s next-generation Mobile Application Platform, from FeedHenry, rewrites the rule book on enterprise app development. It keeps things simple and allows businesses to be agile, innovative and experimental.

Consumer culture is changing how we work

Now we're so well connected in our personal lives, we want the same kind of freedom at work. We expect quick, intuitive interfaces. Apps that do clever things with a touch of style. And we want a constant supply of new stuff, so we expect corporate technology to evolve as fast as the dynamic consumer apps and devices we use every day.

It can all be done, but you need more processing power, bigger storage and better energy efficiency. Which is where the cloud and mobile come in.



Enterprise app development

Mobile apps aren't simply lightweight, portable versions of traditional enterprise systems. Mobile brings fresh features, capabilities and challenges

- Device capabilities features such as cameras and location awareness lend themselves to a wide variety of uses, from diagnostics to asset tracking and lone worker safety
- Anytime, anywhere people are working flexibly, connecting to the corporate network from remote locations, working online and offline with a variety of devices, which creates new security and management challenges
- **Blended information** corporate data can be combined with content from other sources and services to create rich new sources of management information
- Mix of devices and operating systems IT teams are having to extend traditional management, security and compliance policies to many new devices and platforms, as people adopt consumer technologies for work
- **Ease of use** apps are popular because they're easier to use, which also means there's less need for technology training

Mobile app developers are all about creative frontend development. Yet they spend a lot of time on backend design, implementation and integration. O_2 's next-generation Mobile Application Platform allows developers to focus on creating compelling user experiences, without having to get bogged down in server maintenance and backend code.

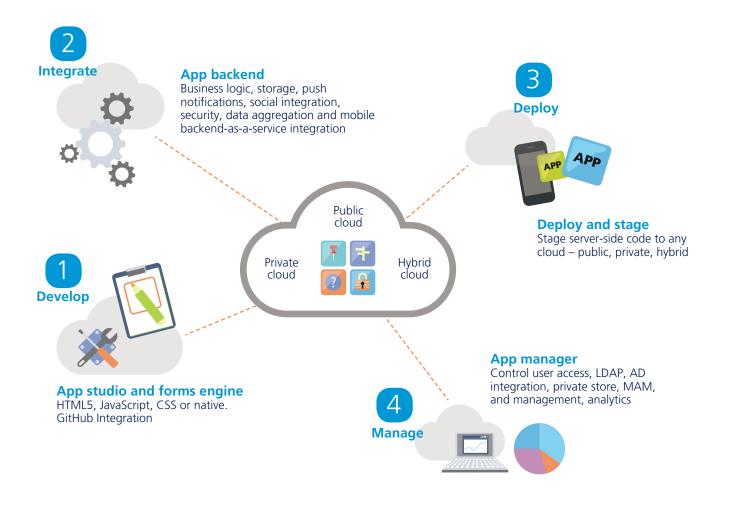


Diagram: Mobile Application Platform

1 Develop

App Studio and Forms Engine: an open platform for faster, more agile development

O₂'s platform supports the development of HTML5, hybrid or web apps, as well as native apps. Developers can use common HTML and JavaScript toolkits such as PhoneGap, Sencha Touch and jQuery Mobile to create stunning apps without having to learn a new development language.

The platform's 'write once, run anywhere' capability allows apps to be deployed easily to multiple devices from a single build. You avoid the time and cost of developing and managing dedicated versions of apps for specific platforms.

At the same time, the platform allows developers to access device features such as the camera, storage or the geo-location function, to create clever new functionality. For example, a maintenance engineer equipped with a mobile device can not only transmit the exact location of an infrastructure problem in the field, but also send photo or video images of the site to get assistance from other engineers, and provide tracking information to the back office.

The App Forms solution within App Studio enables even more rapid application development. Form-based apps are quick and easy to build. The drag and drop GUI can generate native Android or iOS apps without the need to write a line of code.



Mobile Backend-as-a-Service

Our mobile Backend-as-Service (MBaaS) unlocks full access to cloud services such as storage, security, caching and business logic. You can flatten the traditional technology stack and make it manageably modular by shifting a lot of the backend server-side complexity to the cloud.

With a full Node.js back-end, your developers can easily generate REST APIs, taking all of complexity of multiple enterprise data sources away from the handset. Node.js is a portable cloud code and, together with our caching and cloud database features, it ensures that your apps are more lightweight, bandwidth-friendly and responsive.

Simple, secure backend integration

The MBaaS acts as a hub between mobile clients and enterprise systems. It makes it easy to integrate legacy systems with the mobile estate. A single REST API layer enables consistent REST requests, regardless of data source or intent.

With information security a key priority, our MBaaS provides an intelligent proxy layer that ensures that internal systems are never directly exposed to mobile devices. You can set your own appropriate levels of security, data encryption and log every access to the MBaaS itself. This proxy layer is the first point of defence in our platform and can live wherever you need it, whether it's a in public, hybrid, private or on-premise cloud.



Scalability and flexibility in the cloud

Enterprise apps are getting hungrier. Mobile devices are getting smarter. Organisations are generating huge volumes of data and network traffic that has to be managed and stored. The cloud has the scale and flexible capacity to cope. Keeping things working means putting the cloud at the heart of your planning.

4 Manage

App Manager: stay in control

The App Manager helps to make sure you get maximum value from your investment in your app portfolio. It uses push notifications to bring users to the app at the most appropriate time, so they make proper use of the apps you have created. Push notifications can be created and delivered through the cloud.

The platform's reporting and analytics tools show you how users are working with their apps. You can use the feedback to improve the apps and continually boost the value they deliver.

Manage users and their preferences in the cloud

With so much going on in the cloud, users are not locked in to a particular device. The preferences they set apply no matter what they use to access an app – corporate or personal smartphone, or tablet.

Administrators can also add or remove users, or modify their access rights, without having to repeat the process for each device. One change applies to all. And they can use standard, light-touch mobile authentication, rather than having put complicated and intrusive processes in place.

Simplify your own mobile initiatives

O₂'s Mobile Application Platform gives you the flexible capacity and capabilities you need to kick start a full-scale app strategy. It takes away vast amounts of development hassle, and lifts the pressure on IT teams to provide an infrastructure specially adapted for apps.

It gives you a one-stop shop for extending your service to mobile channels, with the API and middleware you need. Even if you have a suitable API platform, our platform can provide the scalable cloud fundamentals and mobile add-ons that will help you get the most from your existing investment.

The Business Case

A lot of organisations are tinkering with apps, but they're cautious. It feels like a heavy commitment, with complex development, management and control.

But apps can unlock huge productive power, automating so many laborious processes and connecting users with brilliantly useful new capabilities. They can save time and money. And they're great for collaboration and personal productivity.

So we've taken away the cumbersome, complicated bit. Our Mobile Application Platform moves the serverside logic of the app to the cloud. It makes common functions like security, authentication, messaging and auditing / compliance available to all apps and frees up developers to create more and more sophisticated apps, with engaging, user-friendly interfaces.

And the easier and more engaging the apps are, the more people will use them, which means faster return on investment and a sharper competitive edge. To learn more about our Mobile Application Platform, contact your account manager or call **Lee Hargadon** on **07801 977 333**

۲



ublished in October 2013. All information is correct at time of going to print elefónica UK Limited Registered in England no. 1743099 legistered Office 260 Bath Road Slough SL1 4DX

Telefonica