Oracle Mobile Hub

Mobile is everywhere and has changed nearly every facet of our lives. The way we work, play, socialize and interact with one another have all been revolutionized by mobile devices. More than 50% of the world’s population now carries a smartphone. Expectations of how we as consumers engage through mobile has influenced how your customers, your workforce and your business partners expect to engage with you. Mobile apps that delight and engage end users are now a fundamental component of any successful organization’s digital strategy. Oracle Mobile Hub will help you build BETTER apps FASTER.

**Complete Mobile Platform**

Oracle Mobile Hub is a complete omni-channel platform to help you build, deploy and manage mobile apps that drive engagement with your customers, business partners and employees. Front-end developers can collaborate with back-end developers with an API First approach, to build compelling web and mobile apps that securely connect to all your enterprise systems. Rich analytics help you understand and optimize the engagement with your users across all your channels, giving you the actionable insights you need to maximize the benefits from your mobile strategy.
BENEFITS

• Connect any mobile client to any backend system using industry standards such as REST and SOAP

• Built in mobile services such as push notifications, location based services, storage, offline & sync and user management

• API First: Browse and publish to API Catalog with built in lifecycle management. Collaborate faster with mock APIs

• Use Node.js to create highly scalable APIs and extend using popular open-source node.js modules

• Sophisticated usage and performance analytics with customizable dashboards providing Actionable Insights

KEY FEATURES

• Commonly shared API Catalog for mobile app and backend developers

• Pre-built mobile services including Push Notifications, Offline Data Sync, Storage, User Management and Location

• Client SDKs for Apple iOS, Android, and JavaScript mobile apps

• Command line testing and debugging tools to support DevOps

• Configurable and reusable Connectors that define policies around APIs securely connect to external systems

• Express API wizard to rapidly design a set of APIs

• Support for OAUTH2, SSO with external identity providers and social logins

• Behavioral analytics to maximize digital traction by tracking usage, conversion and engagement metrics

• Service level analytics to detect execution anomalies, locate failed calls, and identify opportunities for performance enhancements

Mobile Services, APIs and Custom APIs

At the core of Oracle Mobile Hub is highly-scalable, enterprise-grade Mobile Backend as a Service (MBaaS) that provides a rich set of mobile services to allow front-end mobile App Developers to focus on design and creativity while back-end service developers create the secure and robust connections to your enterprise back-end systems. By utilizing these built-in services, developers can rapidly build apps that are location aware, can work offline and receive push notifications when users are away from their mobile device.

The platform services are exposed as APIs that mobile app developers can call directly from their client apps, using REST calls or via one of the many downloadable client SDKs.

• Offline / Data Synchronization: Provides two-way data synchronization with conflict detection and customizable resolution rules.

• Location Services: Provides the ability to deliver contextual information based on user’s location using a combination GPS and Beacons.

• Push Notifications: Adds immediacy to your mobile apps by communicating with your users when a significant event occurs.

• Storage: Stores data in a collection that can be accessed by any mobile app. Gets the data off the client and onto the server where it belongs.

• User Management: Simplifies self-registration and login procedures for the mobile app developer.

• SMS – Integration with Syniverse

You not only get the out-of-the-box services that every mobile app requires, but also the ability to define and implement new enterprise-ready APIs quickly and cleanly. Using an API First approach, front-end and back-end developers can collaborate faster with mock APIs which can then be implemented in parallel and published to the commonly shared API Catalog.

These “Custom APIs” can make connections to your backend systems over existing REST, SOAP web services or through Oracle Integration Cloud Service. The developer can then use JavaScript code to shape the data and optimize the API according to the specific needs of each mobile app. Custom APIs are executed inside Node.js containers, which allows you to extend your API with hundreds of thousands of open-source Node.js modules. What’s more, all API calls from your mobile client applications to built-in or custom APIs are made via uniform REST calls, thus creating a cohesive development environment that’s easy to control and maintain.
Analytics

Use Oracle Mobile Hub Analytics to gain insight into how (and how often) customers use applications at any given time. The data that is gathered and presented by Oracle Mobile Hub Analytics enables you to see an application’s adoption rate, and find out which functions are utilized the most — or the least.

Oracle Mobile Hub supports these analytics:

**API Calls**: See the number of calls to your app and the response times over various time periods. The volume of received calls indicates how much an app utilizes the Mobile Hub platform (and consequently, how widely used the app may be). These reports enables developers to see an application's adoption rate and identify which APIs/functions are used the most (or the least). Response time monitoring allows you to detect execution anomalies, locate failed calls, and identify opportunities for performance enhancements.

**Events**: The Events report lets you focus on how to improve the mobile app user experience and how to explore business opportunities. For example, the Events report can show you not only how frequently users use an app's search function, but also how frequently users perform searches on specific devices and operating systems. By filtering an event with the device and operating system properties, you can see when usage of the app on a specific platform or device has outpaced usage on another. Declining usage across an entire platform may indicate that the application requires optimization for that platform.

**Funnels**: Conversion funnels let you compare how many users start a workflow (say, a checkout process, a user registration process, or a lead generation) against how many actually complete it. Typically, users drop off at each step of a workflow; many may begin a checkout process, for example, but comparatively few complete it. Funnel analytics show you the conversion rate for a workflow by showing the number of users who drop off at various points.

**Users and Sessions**: The user and session reports not only show you how many customers use a mobile app, but also where they are located and how long they use it. Use this to identify if applications are gaining users and if the app usage time reflects its purpose.
Mobile App Development

With Oracle Mobile Hub, developers are free to choose the front-end development tools and frameworks most suited to their skills and requirements. Any client side tooling that can make REST API calls can be used with Oracle Mobile Hub. Client SDKs are provided for native app and hybrid developers to make it easier to use APIs and services published from the mobile core.

- **Native SDKs**: Apple iOS, Android, and Xamarin
- **Hybrid & Web SDKs**: JavaScript, Apache Cordova

Whilst Oracle Mobile Hub is completely open to any client side development tools and frameworks, Oracle Mobile Hub supports Oracle development tools to suit the skills and requirements of different developers.
- **Oracle Visual Builder** (VB) is a cloud-based software development Platform as a Service (PaaS) and a hosted environment for your application development infrastructure. It provides an open-source standards-based solution to develop, collaborate on, and deploy applications within Oracle Cloud that provides an easy way to create and host web and mobile applications in a secure cloud environment. An intuitive visual development experience on top of a complete development and hosting platform accelerates application creation and provisioning, leveraging an open, standard-based architecture. Learn more at cloud.oracle.com/visual-builder

- **Oracle JavaScript Extension Toolkit (JET)** empowers developers by providing a modular open source toolkit based on modern JavaScript, CSS3 and HTML5 design and development principles. It is targeted at JavaScript developers working on client-side applications. Oracle JET is a collection of open source JavaScript libraries along with a set of Oracle contributed JavaScript libraries that make it as simple and efficient as possible to build applications that consume and interact with Oracle products and services, especially Oracle Cloud services. JET applications can be deployed as responsive web apps or deployed as an Apache Cordova hybrid mobile app through an App Store. Using the Oracle Mobile Hub JavaScript and Cordova SDKs, JET applications have full access to all of the rich mobile services and APIs to connect to your enterprise systems. For developers who are looking for a more visual way to create their JET applications, Oracle Visual Builder provides a cloud based visual development environment that simplifies the creation of web and mobile apps based on Oracle JET. Learn more at www.oraclejet.org

Whether your developers already have a favorite set of mobile application development tools or you are looking to adopt a new set of tools, Oracle Mobile Hub has you covered.

**Build BETTER Apps FASTER**

Oracle Mobile Hub enables you to connect any mobile client to any backend system. Whether it’s text and speech capable chatbots, device-resident mobile apps for smartphones, tablets and “wearables” or mobile web, you’ll have a platform that enables you to develop, deploy, manage and analyze mobile apps for all your end users. Built on open source technology, Oracle Mobile Hub is designed to be future-proof, agile and flexible for whatever lies ahead.
Integrated Cloud Applications & Platform Services

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