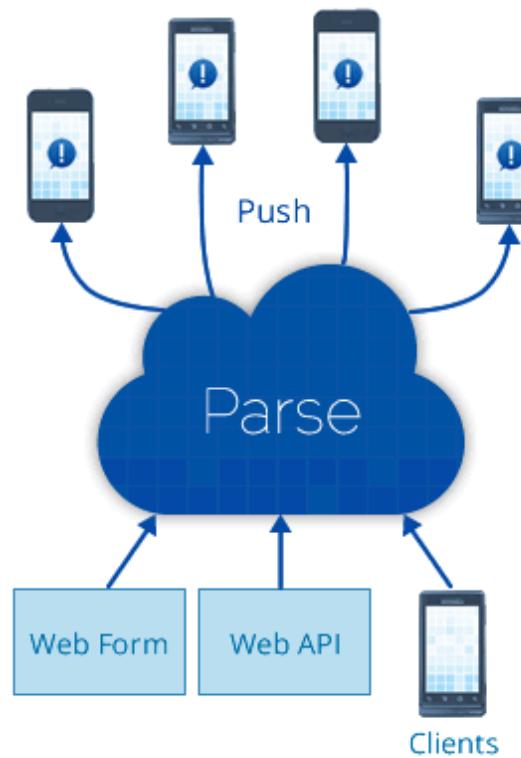


Backend as a Service (BaaS / mBaaS)

BY: KYLE HYNES - 11/01/18 -

[HTTPS://SPARK.ADOBE.COM/PAGE/BACL CWEWMTHLU/](https://spark.adobe.com/page/baclcwewmthlu/)



Wilkin, Garret. parse2. 31 Oct. 2011,
www.programmableweb.com/news/backend-service-companies-differentiate-funding-documentation/2011/10/31. Accessed 1 Nov. 2018.

What is BaaS?

The technological and communicative capabilities that came with the development of mobile devices is continuously growing, and with that growth, came a demand for efficiency in accessing data through these mobile mediums. BaaS, or Backend as a

Service, is a cloud computing service that acts as a “middle-man” and provides developers ways to connect web and mobile applications to cloud services by using API’s (application programming interfaces) and SDK’s (software developer’s kits).

5 BaaS Solutions/Providers

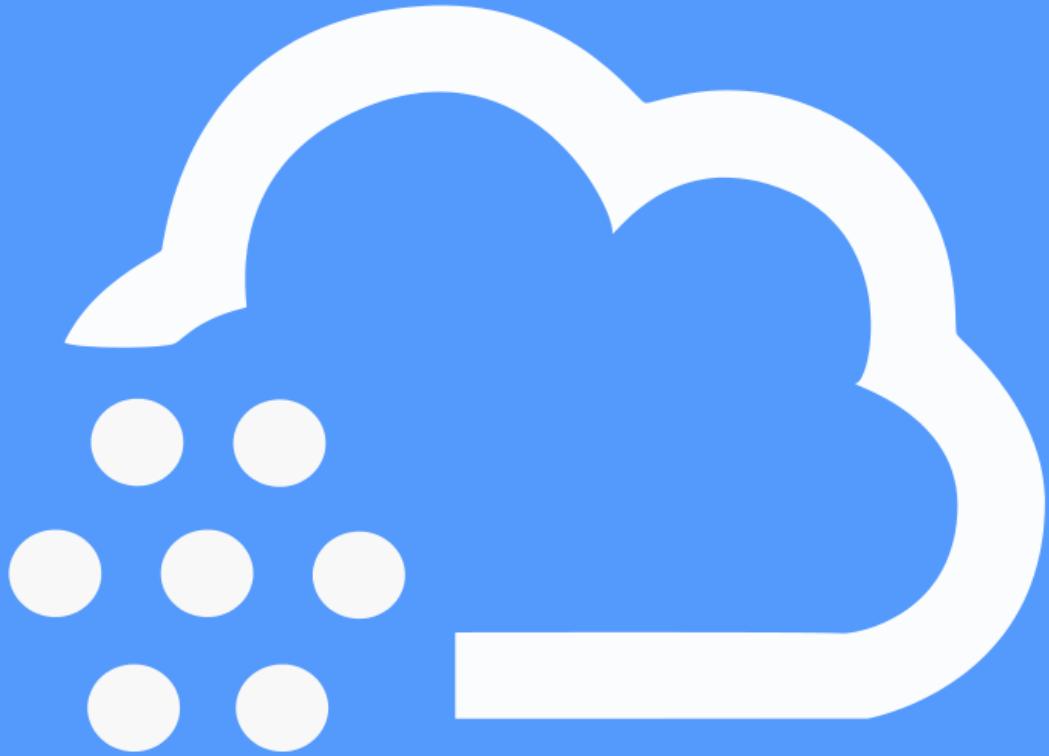


Oracle MCS (mobile cloud enterprise) is noted as being one of the more popular solutions for BaaS.

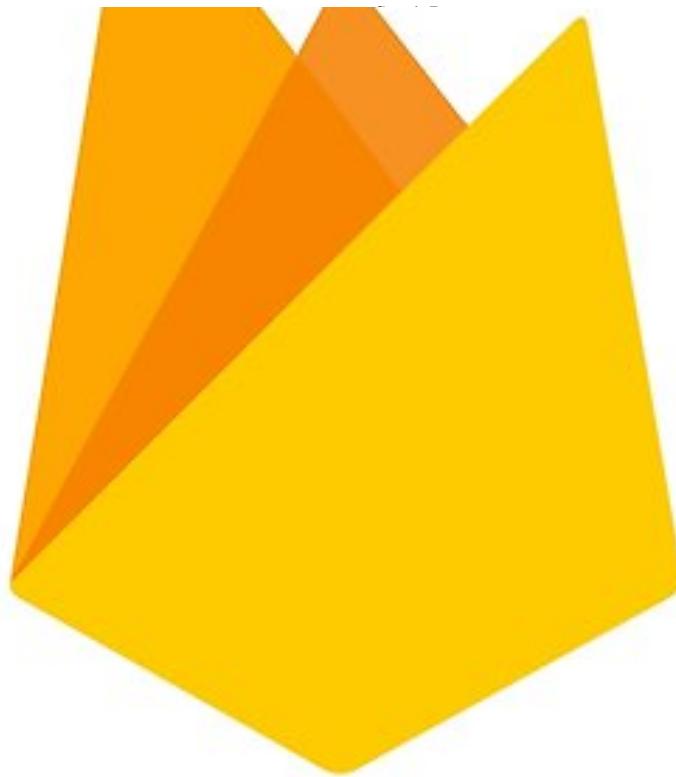
Oracle offers a wide range of features, including (but not limited to), notification management, offline data synchronization, location-based services, etc. Oracle also aids in introducing more security to applications by implementing authentication and authorization mechanisms.



BaaSbox is an open source solution for your BaaS needs. This solution caters to developers who are just getting into BaaS for the first time, by offering various packages that are customized to your application size and needs. BaaS also has services for larger and more demanding applications as well.



Like other BaaS solutions, Cloudbase offers storage, search, authentication, file, and offline sync cloud capabilities. An open source solution and primarily using JavaScript, Cloudbase is affiliated with over 5000 companies, including Sony, Bank of America, Adobe, Hershey, CocaCola, and many others.



Firehace

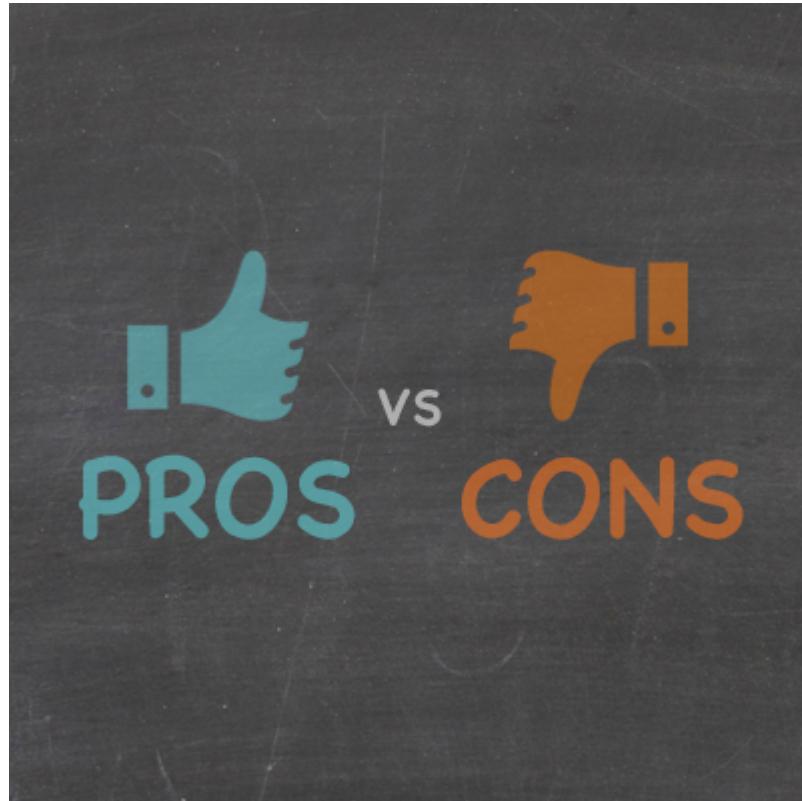
Acquired by Google in 2014, Firebase is a great place to start if you are new BaaS or working with BaaS providers in general. Another great perk of Firebase is that most of their services, outside of Realtime database, storage, and hosting services, are free! Firebase integrates some of Googles features like AdWords and AdMobs, and also has the usual BaaS features like Authentication, Notifications, and app indexing. Also included in those features are Crash reporting, Test Lab, and remote config.



Last but certainly not least is AWS (Amazon web and mobile services). The online shopping titan Amazon has extended its already plethora of services to also include BaaS. This solution is not for a developer that's just getting going. AWS caters to large scale companies who are already well versed in mobile development and are looking for a solution to further advance their applications. AWS offers features such as, user sign-in, cloud logic, app testing, content delivery, analytics, and more.

Three Reasons to Use BaaS

1. Access: The main reason developers look to BaaS is for its ability to bridge their app, the cloud, and the various API's required to operate the app together. All of the awesome features that we take for granted on applications (push notifications, email notifications, social networking) all require their own separate API's, and without a BaaS solution, the process to connect your app to all of these would be quite terrible.
2. Development Cost: Software development is costly, and clients looking to purchase software development services are going to shop for the best price, so implementing something like BaaS for your app would not only save time due to its automated features, but as a company you can also extend those savings to your future clients.
3. Speed: Referencing the above reason, BaaS development is quite speedy, which is also incredibly beneficial for large companies needing to make critical updates to their application(s) in a timely manner.



Pros-vs-cons [Digital image]. (n.d.). Retrieved November 1, 2018, from <http://www.mercadodasapostas.com/artigos/vantagens-e-desvantagens-do-trading/>

Three BaaS Solutions (Pros & Cons)

1. BaaSBox: Pros – Great for entry level developers looking to enter the world of BaaS. Good training resources and inexpensive plans to get you started. Cons: Since this is catered towards beginners you will eventually need to upgrade to a solution that is capable of handling larger applications.
2. AWS: Pros – Lots of resources available to you from features to the overall complexity and possibilities of the database itself. Cons: Not suited for beginners or small development teams. Also, not cheap compared to other solutions.
3. Oracle: Pros – Virtually all the features you can think of, great support, and decent pricing model for larger companies. Cons – Opensource BaaS's and databases provided by google offer similar services for a fraction of the cost if not free.

App Example, With One BaaS Solution, And

Three Reasons Why

App: Appointment managing app

BaaS Solution: Firebase

Reasons Why: Database options for all sizes of business, access to all needed API's such as calendar, contacts, accounts, finance etc. Use of AdWords to aid in marketing through the app.



Twitch-01 [Digital image]. (n.d.). Retrieved November 1, 2018, from
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One Company Using Baas And Why

The online streaming giant, Twitch.tv utilizes googles Firebase database to handle the majority of it's backend processing. Firebases advanced realtime database service is a perfect match for the streaming demands of Twitch.

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