



BACKENDLESS

DIVYA SAMBASIVAN

SNEAK PEEK

- Demo
- Mobile Backend As A Service
- Backendless
- Setting up your App Backend
- Q & A



MBAAS – MOBILE BACKEND AS A SERVICE



User
Management

Storage

File
Management

Geolocation

Push
Notifications

Social
Integration



WHY USE BAAS

- Efficiency Gains
- Faster Times to Market
- App Delivery With Fewer Resources
- Reduce fragmentation problems across multiple platforms and devices
- Secure and Scalable Infrastructure Stack of Common API resources

Let developers do what they do best

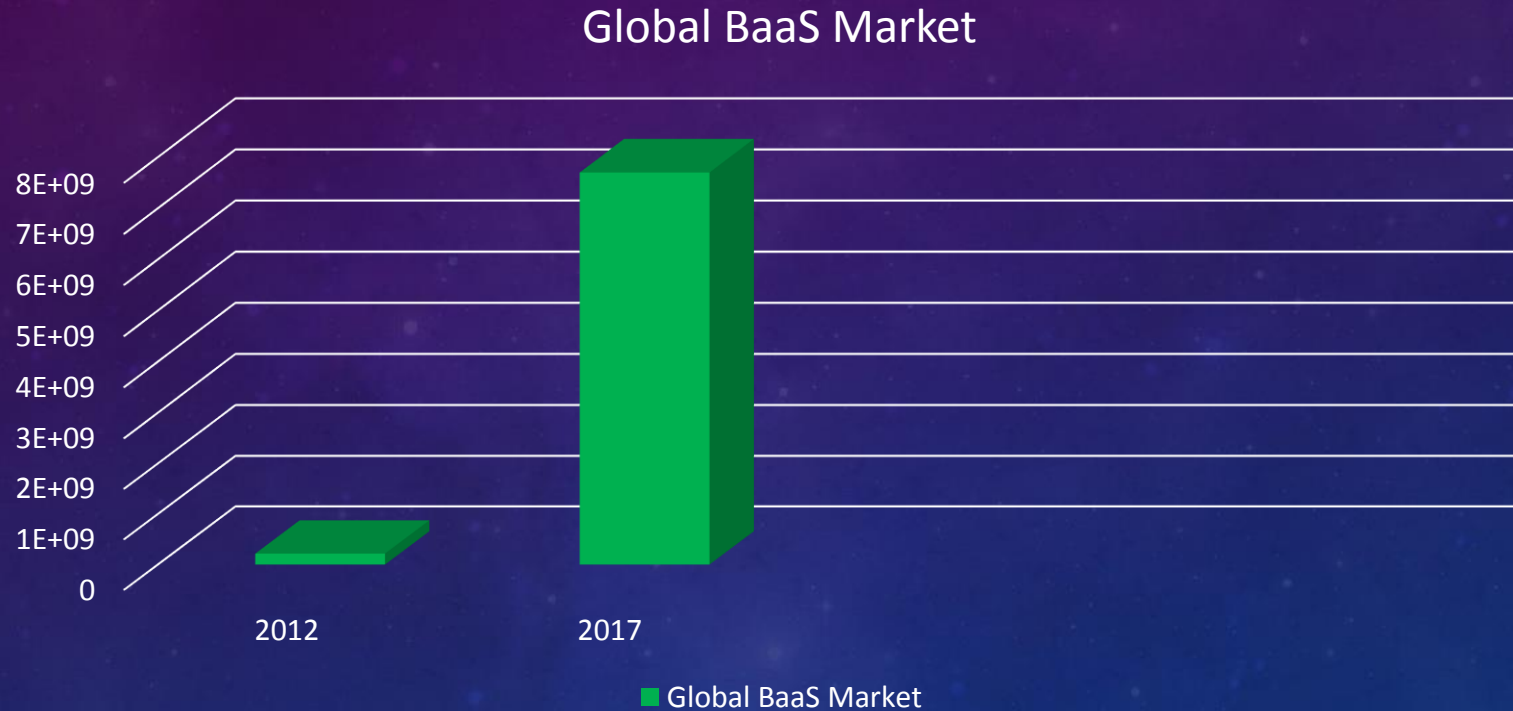


BAAS – HOW IS IT DIFFERENT FROM PAAS

- BaaS and PaaS have the same intent – to make application development easy
- However BaaS is :
 - Purely Backend Service
 - Optimized for Mobile Services



MARKET FORECAST



The global BaaS market is estimated to grow from \$216.5 million in 2012 to \$7.7 billion in 2017 - *Global Advancements, Business Models, Technology Roadmap, Forecasts & Analysis (2012 – 2017)* published by MarketsandMarkets



File Management
uploads, sharing &
downloads



Versioning
run multiple versions



Geolocation
put it on the map



Push Notifications
push to iOS, Android and
Windows Phone



Analytics
usage data & dashboards



Media Streaming
on-demand & live



User Management
user registration, login,
logout

USER MANAGEMENT

The screenshot shows the Backendless user management interface for an application named "CaptainCook" (version v1). The left sidebar contains navigation links for Manage, Users, Data, Media, Files, and Messaging. The "Users" section is expanded, showing options for User Properties, Registration, Login, Email Templates, and Security & Restrictions. The main content area is titled "User Properties" and includes a toggle for "Enable Dynamic User Definition" (which is turned ON) and a section for "User properties" with a note that they can also be managed from the Data view. Below this is a table of user properties.

Backendless Create App

CaptainCook v1

User Properties
Configure user entity

Registration
Set up registration properties

Login
Setup login properties

Email Templates
Communicate with users

Security & Restrictions
Set up roles and restrict access

Enable Dynamic User Definition
☒ ON
When enabled users will be able to save custom properties.

User properties
Note: user properties can also be managed from the, [Data](#) view.

Properties	Type	Default Value	Identity	Required	Delete
password	string		<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="button" value="x"/>
user_id	string		<input checked="" type="radio"/>	<input checked="" type="checkbox"/>	<input type="button" value="x"/>



CaptainCook

v1



Manage



Users



Data



Media



Files



Messaging



User Properties

Configure user entity



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Set up registration properties



Login

Setup login properties



Email Templates

Communicate with users



Security & Restrictions

Set up roles and restrict access



Registration

When registration is disabled, no new users can be created, the API results in error. This is useful for closely controlled systems where users are either pre-created or user registration information resides elsewhere.



Require Email Confirmation

When email confirmation is required, users can not login until email is confirmed



Execute Registration Callback

If enabled Backendless.com will execute a POST URL request with the user registration information.

Callback URL

CaptainCook v1



Manage



Users



Data



Media



Files



Messaging



Geolocation



User Properties

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External Authentication

When enabled, users will be authenticated against an external URL via Basic Authentication.

Authentication URL:



Enable Multiple Logins

Maximum number of simultaneous logins for an account:

When a secondary login occurs, logout and notify:

☐ First user ☒ Second user



Enable Session Timeout

Inactivity timeout: sec

Redirect to page when session expires (optional):



Lock User Account

☒ Unlimited unsuccessful logins



Unlock User Account

Waiting time required to unlock user account

10
1 min 60 min

CaptainCook v1



Manage



Users



Data



Media



Files



Messaging



Geolocation



User Properties

Configure user entity



Registration

Set up registration properties



Login

Setup login properties



Email Templates

Communicate with users



Security & Restrictions

Set up roles and restrict access



Email Templates

An email template can be associated with an event occurring in the system. Select an event from the drop down list and enter the subject line and the text of the message. When the event occurs, Backendless delivers the email message to the corresponding user.

☒ User made registration

☐ Do not send email for the event

☒ [User request password recovery](#)

☒ [User logs in for the first time](#)

☒ [Confirmation template](#)

Hello,

Thank you for creating an account with the "{app_name}" application. In this version of the application we added the following features:

- Feature 1
- Feature 2
- Feature 3

We welcome you to our community and would love to hear your comments about the application.

Sincerely,

The following subscription variables are available:

{identity_value} - User%27s%20identity%20parameter%20value

{identity_name} - User%27s%20identity%20parameter%20name

{app_name} - Application%20name

Save

Preview

CaptainCook v1



User Properties
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Geographical Restrictions

Restrict application access to users from:

☐ Antarctica
 ☐ Antigua and barbuda
 ☐ Netherlands antilles



<input type="checkbox"/>	Delete Selected	Add Role
<input type="checkbox"/>	AuthenticatedUser	
<input type="checkbox"/>	FacebookUser	
<input type="checkbox"/>	NotAuthenticatedUser	
<input type="checkbox"/>	SocialUser	
<input type="checkbox"/>	TwitterUser	

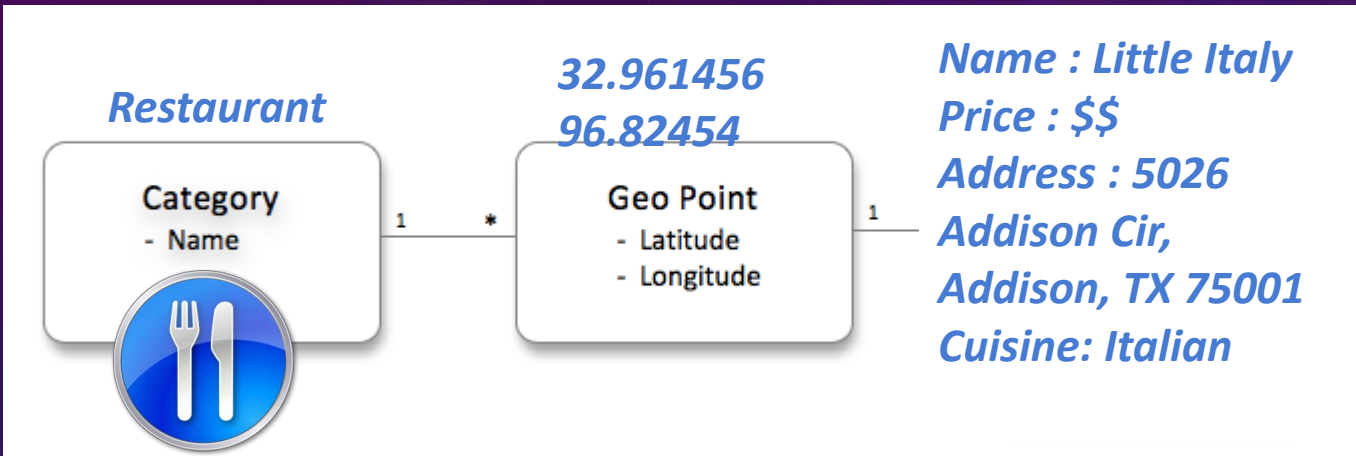
GEO LOCATION



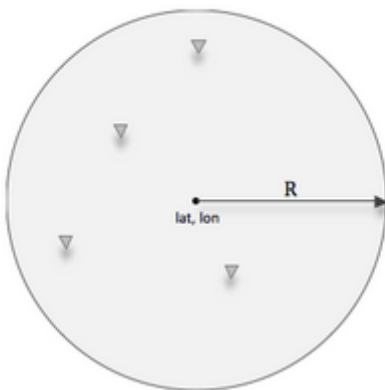
Partial Matches

Data Paging

Restaurants : Price = '\$\$' and
Cuisine = 'Italian'



Search in radius:



Search in a rectangular area:



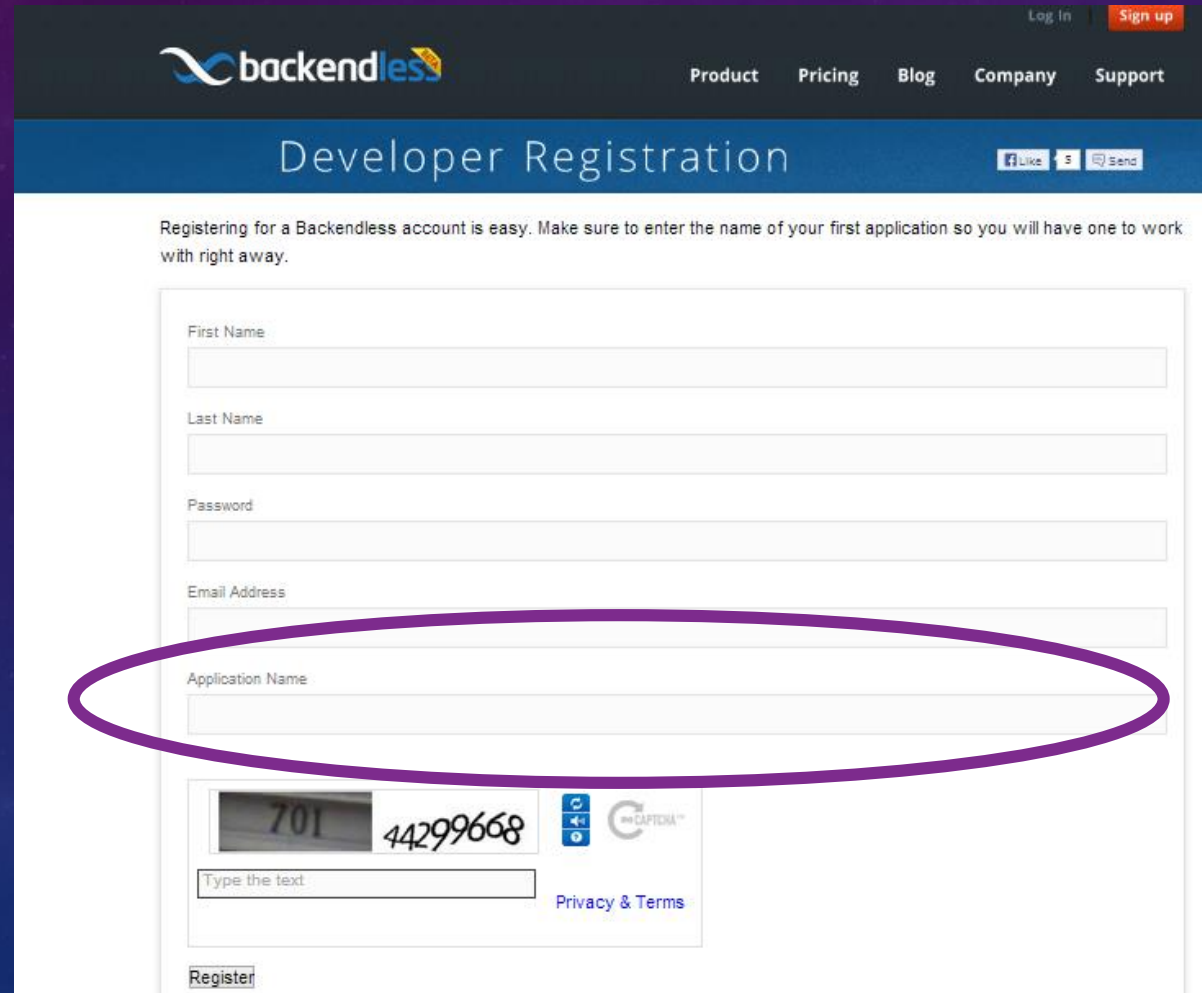
MEDIA SERVICE API



- Live video/audio broadcast
- Recording video/audio content on the server
- Video/audio chat
- Video/audio playback for live and on-demand content

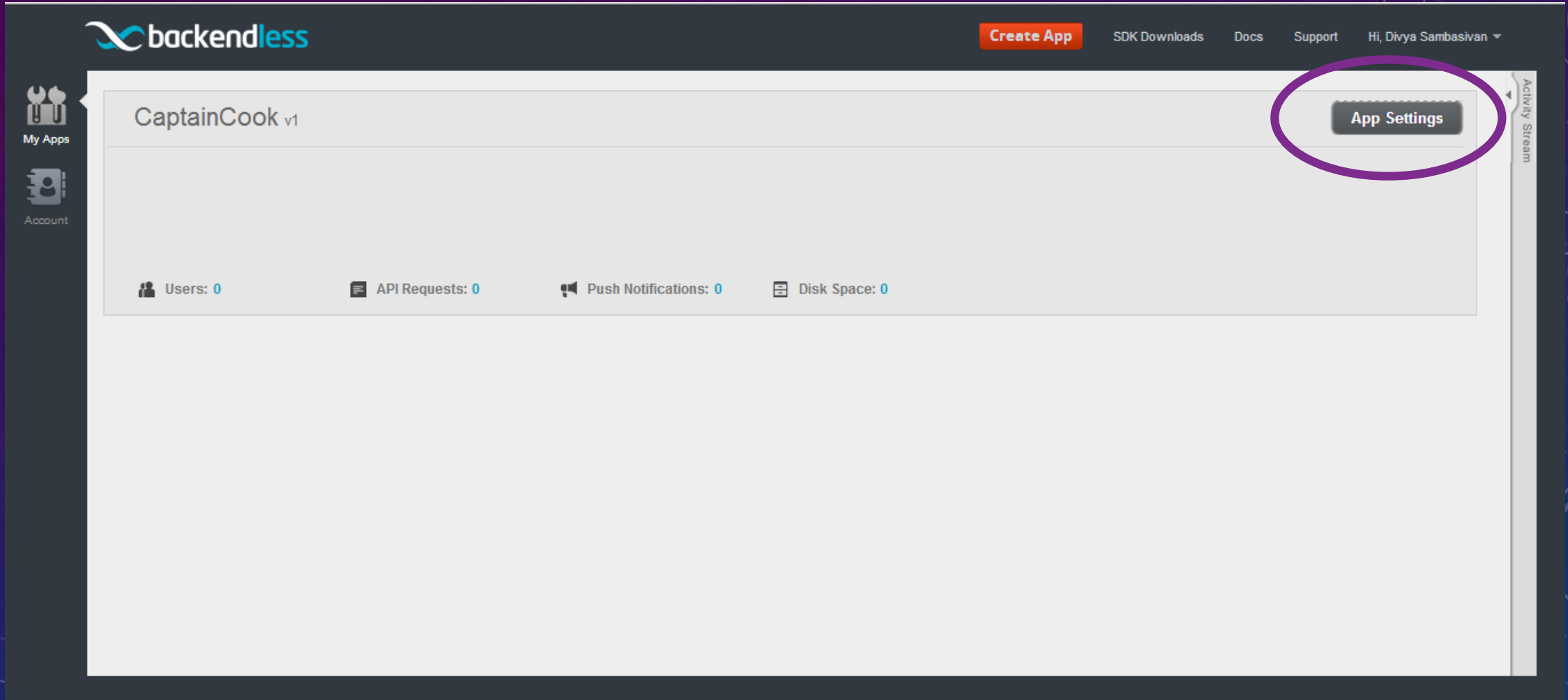
CREATING YOUR APP BACKEND (less) IN 5 STEPS

1) Register yourself



The screenshot shows the Backendless Developer Registration page. The header includes the Backendless logo, navigation links (Product, Pricing, Blog, Company, Support), and 'Log In' and 'Sign up' buttons. The main heading is 'Developer Registration'. Below it, a message states: 'Registering for a Backendless account is easy. Make sure to enter the name of your first application so you will have one to work with right away.' The registration form contains the following fields: First Name, Last Name, Password, Email Address, and Application Name. The 'Application Name' field is highlighted with a purple oval. At the bottom of the form, there is a CAPTCHA image showing the numbers '701' and '44299668', a text input field labeled 'Type the text', a 'Privacy & Terms' link, and a 'Register' button.

2) Create your application



The screenshot displays the Backendless dashboard interface. At the top, the Backendless logo is on the left, and navigation links for 'Create App', 'SDK Downloads', 'Docs', 'Support', and a user profile 'Hi, Divya Sambasivan' are on the right. A left sidebar contains 'My Apps' and 'Account' icons. The main content area shows the details for an application named 'CaptainCook v1'. In the top right corner of this application view, the 'App Settings' button is circled in purple. Below the application name, a row of statistics is displayed: 'Users: 0', 'API Requests: 0', 'Push Notifications: 0', and 'Disk Space: 0'. An 'Activity Stream' sidebar is visible on the far right edge.

backendless

Create App SDK Downloads Docs Support Hi, Divya Sambasivan

My Apps Account

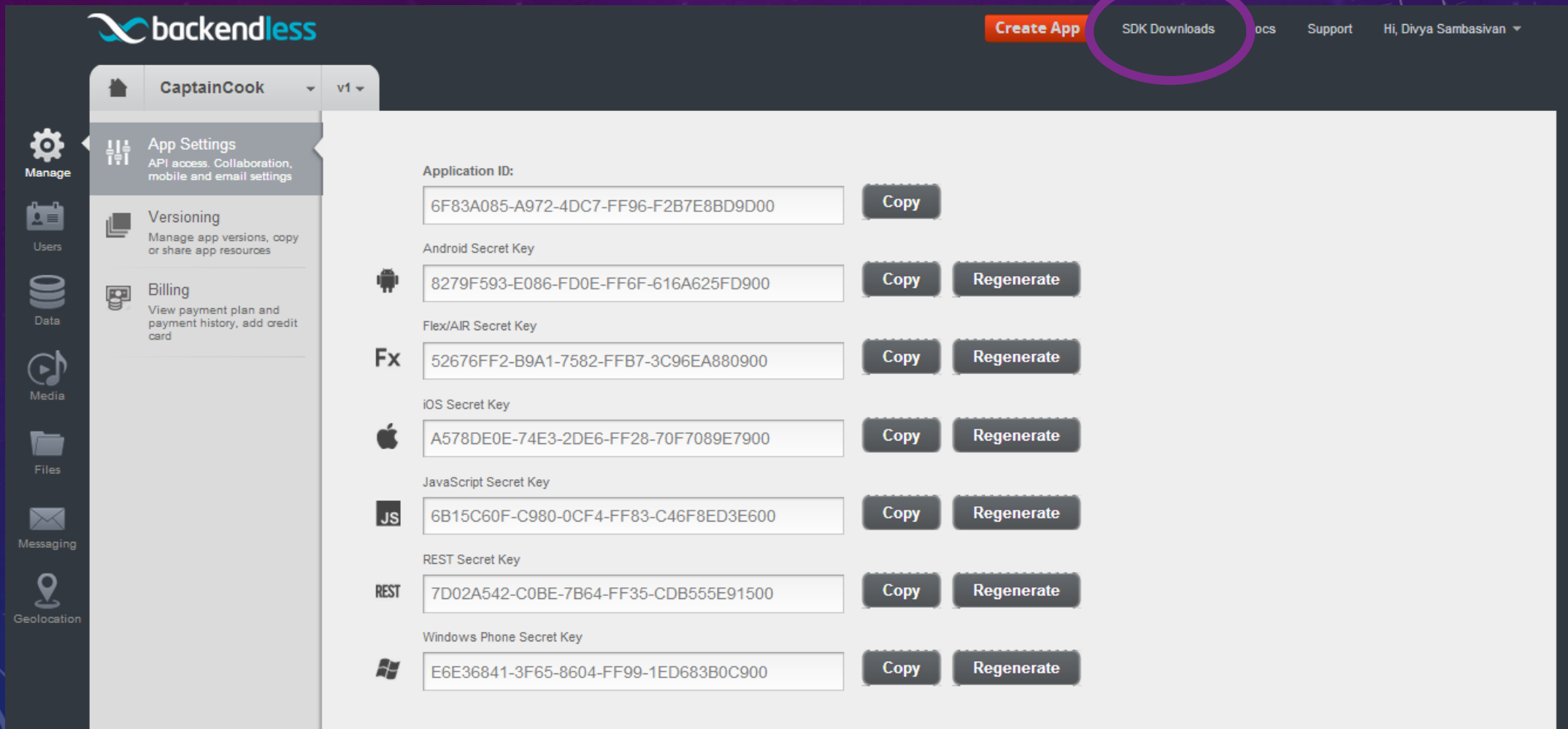
CaptainCook v1

App Settings

Activity Stream

Users: 0 API Requests: 0 Push Notifications: 0 Disk Space: 0

3) Copy the secret key to use from your application



The screenshot shows the Backendless dashboard interface. The top navigation bar includes a 'Create App' button and a 'SDK Downloads' link, which is circled in purple. The left sidebar contains a 'Manage' section with icons for App Settings, Versioning, Billing, Data, Media, Files, Messaging, and Geolocation. The main content area displays the 'App Settings' for an application named 'CaptainCook' (version v1). The settings are organized into sections for different platforms, each with a secret key and a 'Copy' button.

Platform	Secret Key	Action
Application ID	6F83A085-A972-4DC7-FF96-F2B7E8BD9D00	Copy
Android Secret Key	8279F593-E086-FD0E-FF6F-616A625FD900	Copy, Regenerate
Flex/AIR Secret Key	52676FF2-B9A1-7582-FFB7-3C96EA880900	Copy, Regenerate
iOS Secret Key	A578DE0E-74E3-2DE6-FF28-70F7089E7900	Copy, Regenerate
JavaScript Secret Key	6B15C60F-C980-0CF4-FF83-C46F8ED3E600	Copy, Regenerate
REST Secret Key	7D02A542-C0BE-7B64-FF35-CDB555E91500	Copy, Regenerate
Windows Phone Secret Key	E6E36841-3F65-8604-FF99-1ED683B0C900	Copy, Regenerate

4) Download SDK

The screenshot shows the Backendless website's SDK Downloads page. The header includes the Backendless logo, navigation links (Product, Pricing, Blog, Company, Support), and a 'Log in' button. Below the header is a blue banner with the text 'Backendless SDK Downloads' and social media links (Facebook Like, 2, Send). The main content area contains a paragraph about Backendless SDKs and a list of SDKs. The first item, 'Backendless SDK v1.3 for JavaScript', is circled in purple. Three green arrows point to the 'Quick Start Guide' links for the JavaScript, iOS, and Android SDKs. A green star is placed next to the 'Backendless SDK v1.0 for ActionScript (Flex/AIR)' entry. The right sidebar contains a 'Product' section with links to 'Features Tour', 'Media Service', 'Push Notifications', and 'Geo Service', followed by 'Documentation', 'Quick Start Guides', 'SDK Downloads', 'Discussion Forum', 'Webinars', and 'Register or Login'. At the bottom of the sidebar is a 'Find Us on Facebook' section with the 'Backendless Corp' profile name.








Log in | up

Product Pricing Blog Company Support

Backendless SDK Downloads

f Like 2 Send

Backendless SDKs is an essential component for starting development with Backendless. Each SDK includes a library native to the corresponding environment with the APIs and application examples. Once you download an SDK, make sure to [create a developer account](#). Using the account, you can login into the Backendless Console to manage your applications. The examples included into the SDKs demonstrate various functionality of the service. You will need to make a minor modification to the examples sources so they run in the context of your Backendless application. See the 'getting-started' guide [included into the SDKs](#) for additional details.

-  [Backendless SDK v1.3 for JavaScript](#), released 06.06.2013. [Quick Start Guide](#).
-  [Backendless SDK v 1.3 for iOS](#), released 07.26.2013. [Quick Start Guide](#).
-  [Backendless SDK v1.1 for Android](#), released 06.10.2013. [Quick Start Guide](#).
-  [Backendless SDK v1.0 for .NET \(Windows Phone\)](#), released 02.28.2013
-  [Backendless SDK v1.0 for ActionScript \(Flex/AIR\)](#), release 09.10.2013  [Github](#) 

Product

- Features Tour
- Media Service
- Push Notifications
- Geo Service

Documentation

Quick Start Guides

SDK Downloads

Discussion Forum

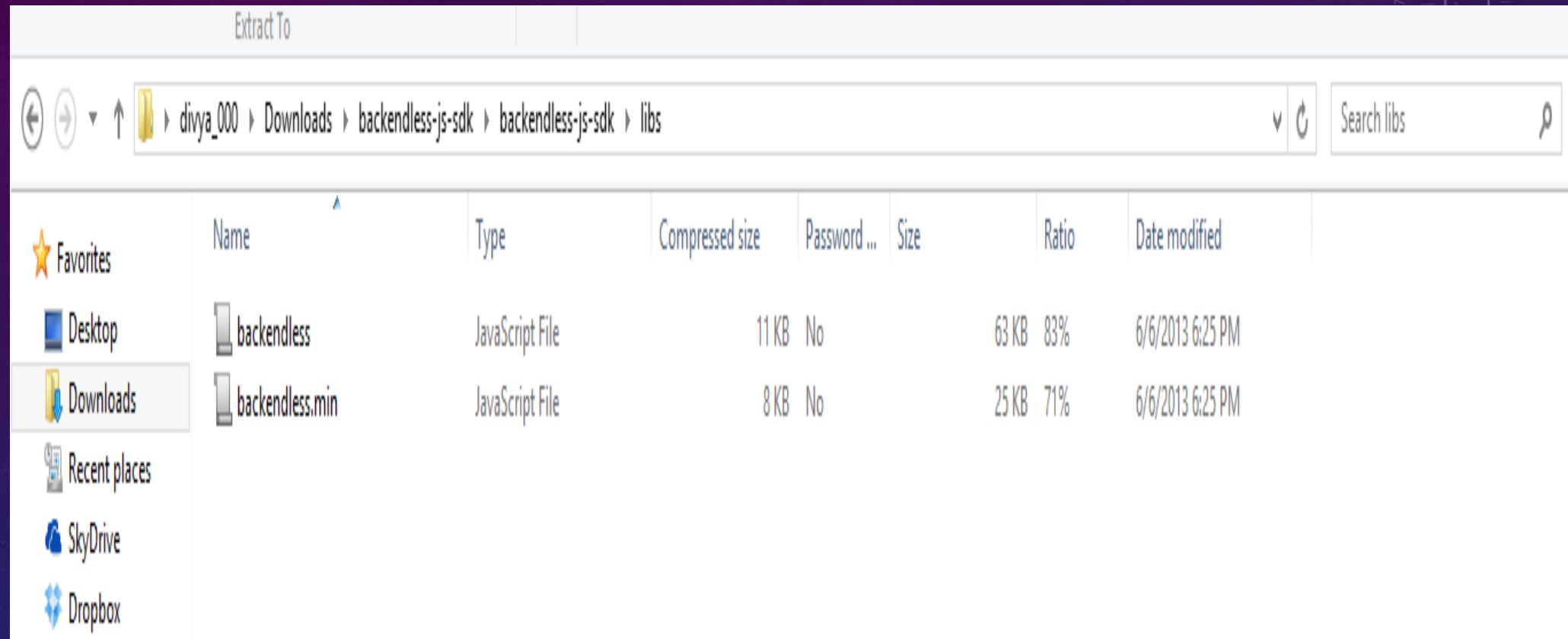
Webinars

Register or Login

Find Us on Facebook

Backendless Corp

5) Extract the backendless.js file



Application

🏠 CaptainCook

v1

Data Management

Delete Selected

Add Row

Delete All

Schema and Permissions

Search tables...

Search data...

Score 1
Tracker 2
Users 1
FoodStore 7
Comment 0

<input type="checkbox"/>	objectId	STRING_ID	created	DATETIME	password	STRING	updated	DATETIME	user_id	STRING max length: 500
<input type="checkbox"/>	0C2DD5BA-E683-50B3-FFF9-8F9849C		10/19/2013 23:59:04 GMT-0700				mm/dd/yyyy hh:mm:ss +zone		disambas	



CaptainCook ▾


[Back to Data Viewer](#)

Delete Selected

Add Column

Add Relationship

Edit Schema for:

Tracker ▾

Edit Schema

Users Permissions

Roles Permissions



Column Name

Data Type

Default Value

Shared with Versions



question_id

STRING ▾



updated

DATETIME ▾



user_id

STRING ▾



created

DATETIME ▾



Data Management

Delete Selected Add Row Delete All

Schema and Permissions

Search tables...

Search data...

- FoodStore 25
- Score 1
- Tracker 8
- Users 5

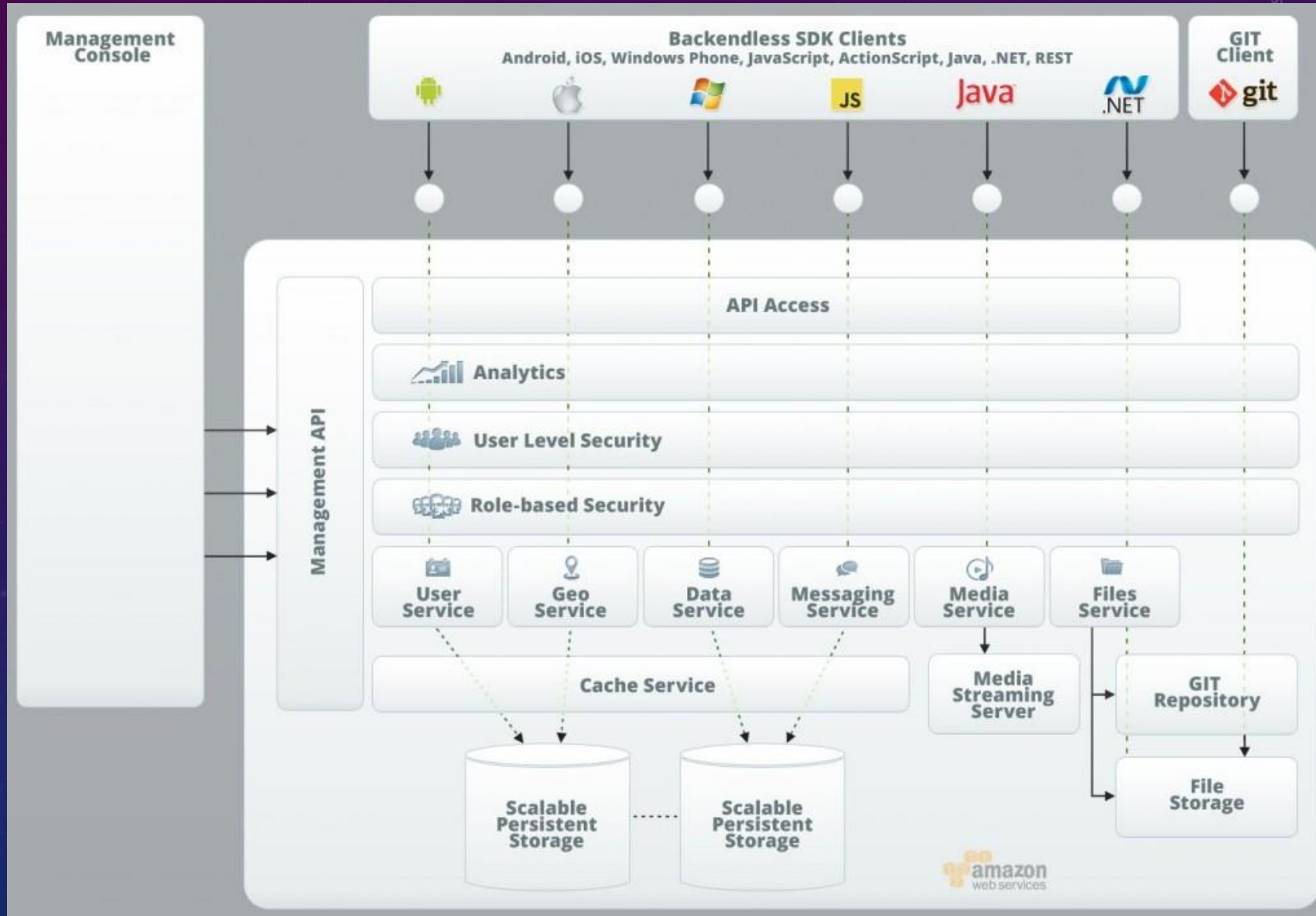
	objectId	question_id	updated	user_id	created	
<input type="checkbox"/>	A8908A1F-5678-769A-FF11-59F8C64	8	mm/dd/yyyy hh:mm:ss +zone	C9633CB9-D497-A896-FFCE-ED70D9!	11/6/2013 01:33:37 GMT-0800	
<input type="checkbox"/>	EB433B8F-FC53-5B08-FF69-5551852I	20	mm/dd/yyyy hh:mm:ss +zone	35668909-C7DE-E90D-FF93-B221417	11/1/2013 15:13:15 GMT-0700	
<input type="checkbox"/>	1DB2E94D-E881-606C-FFD4-1FAA12!	16	mm/dd/yyyy hh:mm:ss +zone	35668909-C7DE-E90D-FF93-B221417	11/1/2013 15:13:06 GMT-0700	
<input type="checkbox"/>	64CC2D48-E02A-C2A0-FF08-6DDA1E	7	mm/dd/yyyy hh:mm:ss +zone	35668909-C7DE-E90D-FF93-B221417	11/1/2013 15:12:54 GMT-0700	
<input type="checkbox"/>	B4F29863-CD71-DFB8-FFED-D8B41FE	5	mm/dd/yyyy hh:mm:ss +zone	35668909-C7DE-E90D-FF93-B221417	11/1/2013 15:12:38 GMT-0700	
<input type="checkbox"/>	E810D247-D4CE-2ED3-FF96-CFC1CFC	18	mm/dd/yyyy hh:mm:ss +zone	35668909-C7DE-E90D-FF93-B221417	11/1/2013 15:12:23 GMT-0700	
<input type="checkbox"/>	4FFCB4BE-BBC4-544F-FF73-B84C54F	4	mm/dd/yyyy hh:mm:ss +zone	35668909-C7DE-E90D-FF93-B221417	11/1/2013 15:11:50 GMT-0700	
<input type="checkbox"/>	F172C4F7-6F76-AB42-FF11-9D79830	6	mm/dd/yyyy hh:mm:ss +zone	35668909-C7DE-E90D-FF93-B221417	11/1/2013 15:11:24 GMT-0700	

+ -

Page 1 of 1

























View rows: 15 30 50

ARCHITECTURE



PRICING



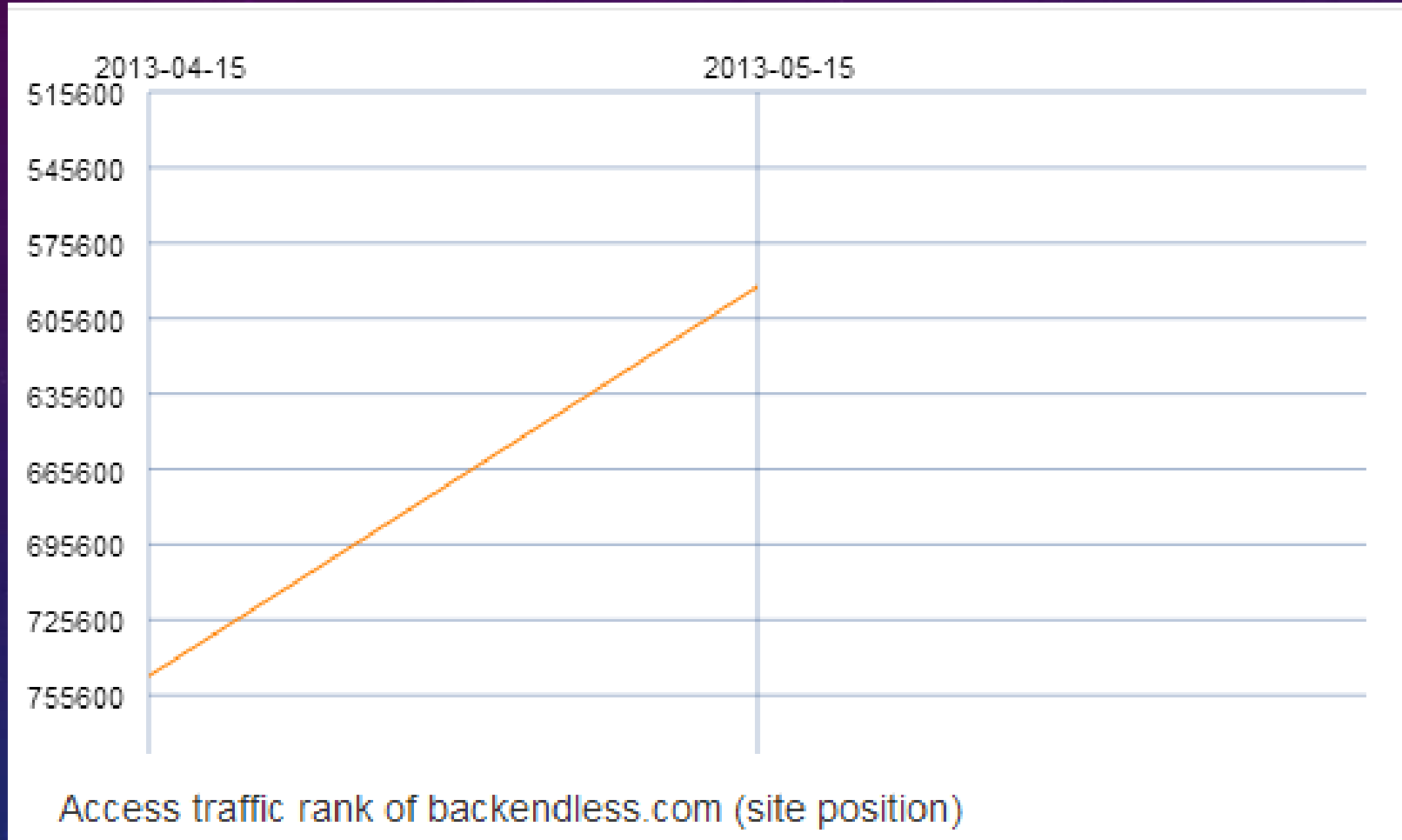
Plan Limits:		Free Plan Includes		Extended MONTHLY Limits		Total Monthly
 Users		100	+	 9,000	X \$1 per 1,000 users	= \$9.00
 Roles		2	+	 36	X \$5 per 1 role	= \$180.00
 App Versions		1	+	 0	X \$20 per 1 version	= \$0.00
 Files (GB)		2	+	 0	X \$1 per 10 GB	= \$0.00
 Pub/Sub Messages		200,000	+	 0	X \$0.10 per 1,000 messages	= \$0.00
 Media Streams		2	+	 0	X \$4 per 10 streams	= \$0.00
 Push Notifications		1,000,000	+	 0	X \$0.05 per 1,000 push messages	= \$0.00
 Developers		1	+	 0	X \$5 per developer	= \$0.00

Monthly Plan Price: \$189.00



StandAlone Mode

POPULARITY



2,180 visitors per day

BACKENDLESS - ELEVATOR PITCH

- Develop applications 5 to 10 times faster
- Remove the need for the server-side coding
- Available for iOS, Android, Windows Phone, JavaScript, ActionScript
- Subscription model starting with a free tier



MY OPINION

- Quick to setup and really easy to use
- Rich functionality within each feature
- “Quick Start Guides” and Webinars
- Simple and well documented API's (for those that are available)
- Good Support – Response in a day



DISADVANTAGES

- Incomplete documentation – for Files and Geolocation
- Media API's are only supported for iOS
 - “Our core differentiators are that we support ***audio/video broadcasting and recording***, client-side code generation, standalone deployment, and versioning capabilities.” – Mark Piller, CEO

REFERENCES

BAAS

<https://cloudsecurity.intel.com/analyst-reviews/overview-of-baas>

<http://www.marketsandmarkets.com/PressReleases/baas.asp>

[The global BaaS market is estimated to grow from \\$216.5 million in 2012 to \\$7.7 billion in 2017](#)

<http://launchdfw.com/startup-profiles/meet-backendless-cloud-based-backend-as-a-service-platform-for-your-apps/>

BACKENDLESS

<https://backendless.com/>

ORM

<http://www.orm.net/pdf/JoinConstraints.pdf>



Q & A





THANK YOU