PHP Startup Prototypes

By @emgiezet



Who am I?



- In PHP since 2003
- In Symfony since 1.2.14
- Master @ wmid.amu.edu.pl
- Tech Lead @ RedExperts
- self-employed
- Blogger & Geek

new Agenda();

```
$presentation[0] = 'Who am I?';
$presentation[1] = 'I got an idea but have no money!';
$presentation[2] = 'PAAS';
$presentation[3] = 'PAAS - Providers';
$presentation[4] = 'Costs?';
$presentation[5] = 'Application';
$presentation[6] = 'Silex';
$presentation[7] = 'Laravel4';
$presentation[8] = 'Our cloud is under siege!';
$presentation[9] = 'Charts and other crap';
$presentation[10] = 'Q&A';
$presentation[11] = 'Tank You!';
```

PaaS == Platform As A Service

- Focused on application
- No additional infrastructure required
- Deploy and Forget
- Load Balancer? Who needs the load balancer?
- No admin support needed anymore! Sorry guys.

PHP friendly PaaS - Providers











appfog



- Evolves from PHPFog
- After Deployment Scripts
- Easy to deploy
- Additional Services Config available via get_env();
- Gem application to deploy your app
- 2GB of RAM for your apps for free!
- Up to 10 Services for your apps free!
- Time to time throws 500 on appfog panel.
- Cannot write to disk of instance for ex. file uploads or file cache.
- No auto scaling

Engine Yard - Orchestra



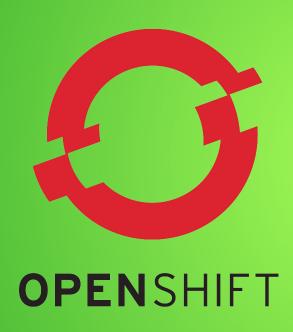
- Deploys straight from repository(Git and SVN)
- Production database need to be hosted on AWS - \$\$\$
- Only orchestra sub-domain
- Only free add ons at free plan
- 1 concurrent connection our siege tests are ruined!
- No auto scaling

heroku



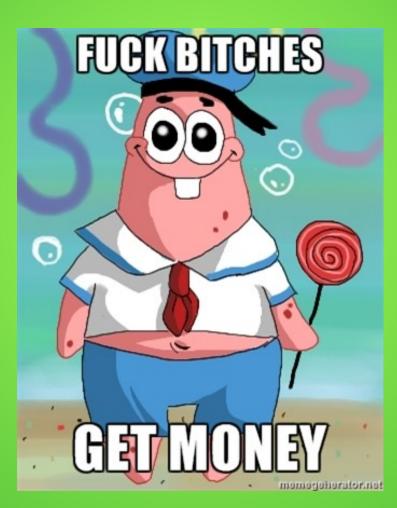
- Cloud level: "Asians"
- Based on ngnix
- Dev DB up to 10k rows is free
- Production DB starts from \$9 / mo.
- Only 1 instance is free
- Needs special a "buildpack"

OPENSHIFT



- RedHat based must be awesome!
- Build on Zend Server
- 3 small "gears" 512 MB RAM for free!
- Each "gear" can have MySQL, MongoDB, PostgreSQL, phpMyAdmin etc.
- Free application can have auto-scale feature and fill all the 3 gears available on the traffic peak.

Costs?!



PAAS - Providers Free Plans

Feature	af applog	Orchestra	Heroku	OpenShift	
RAM	2GB	?	?	512MB / inst.	
Storage	1 GB / inst.	2\$ / mo.	Dev s3	1GB / inst.	
MySQL		Shared DB	10k rows	1 / instance	
MongoDB	Up to 10	?\$ / mo.	496 MB	1 / instance	
Redis		X	100 MB	X	
Memcached	X	X	1x 25 MB	X	
Location	US, Europe, Asia	US West	Cannot select	Cannot select	
Instances	Up to 16	2	1	Salable up to 3	
Deploy	by gem af	from git	by toolbelt	by gem rhc or by jenkins	
My Grade:	4+	2	3	4	

Application

- Routing and ORM based.
- Cloud friendly easy to scale horizontally,
- Database filled with 10k of random records
- One controller displays the data from the DB
- Composer based installation (I wish be there)
- Big frameworks aren't supported (mostly);(
- So let's go with micro-frameworks!

Cloud friendly Application? WAT?

- Can use Master/Slave DB Connection.
- Gives ability to store session in DB/Memcache/Redis because sticky session sux hard by keeping user only at single instance/node while session is valid.
- Can use external storage for uploads (ex. Amazon S3 bucket)

Micro-frameworks

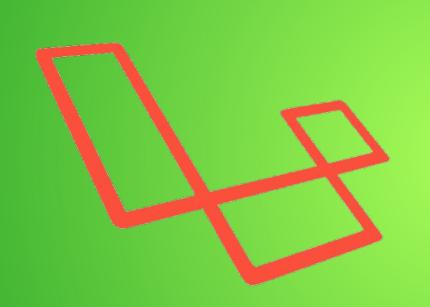


Silex



- Build on symfony2 components!
- Uses TWIG
- Has lot's of extensions
- Easy to use for symfony2 developers
- Cloud friendly!

Laravel 4



- Also uses symfony2 components,
- Well documented,
- Light weight,
- Popular
- DBAL not so great

Let's build the APPs!



- One controller with one action
- Display the data
- Add a memcached if available
- Create a fixtures or dump to fill the database!
- Deploy the apps in to the cloud!

But before we deploy them...



- We need to create our apps in the PAAS Cloud!
- Configure the build,
- Add a resources(RAM, additional services),
- Load Balancing? Forget.
 PAAS has LB build in!

Our Cloud is under siege!



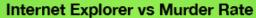
Siege Config

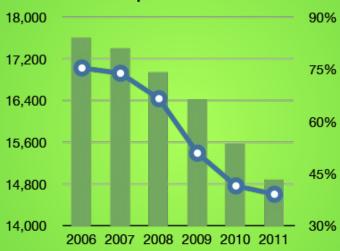
- 15 concurrent users
- 1 minute of siege

Siege Results

Results	appfog		Engine Yard		heroku		openshift	
Framework	Silex	Laravel4	Silex	Laravel4	Silex	Laravel4	Silex	Laravel4
Transactions	1050	863	N	S	?	?		
Availability	97.31	96.42	Α	E	?	?		
Data transferred	7.44 MB	8.48 MB	Т	L	?	?		
Response time	0.31 s	0.51 s	U	Е	?	?		
Transaction rate	17.77	14.59	R	С	?	?		
Concurrency	5.44	7.5	Α	Т	?	?		
Successful transactions	58	67	L	I	?	?		
Failed transactions:	29	32	-	0	?	?		
Longest transaction:	4.95	8.23	-	N	?	?		

Charts!

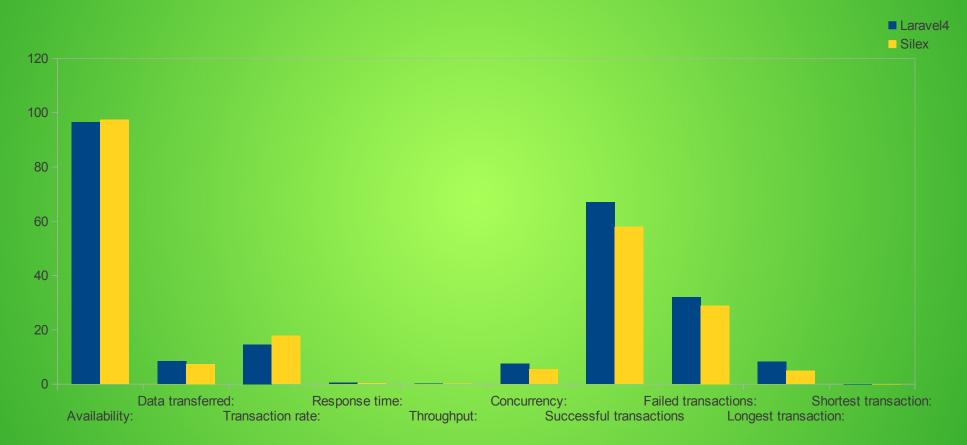




Murders in US

Internet Explorer Market Share

AppFog



Conclusion

- Orchestra free plan is not enough even for startup-fest. It will lag on final pitches.
- AppFog -
- Heroku -
- Openshift
- Silex Fastest! For Symfony2 developers the best choice!
- Laravel4 Weirdo DBAL. Fast but silex kicks his ass.

Conclusion

- Orchestra free plan is not enough even for startup-fest. It will lag on final pitches.
- AppFog Easiest!
- Silex Fastest! For Symfony2 developers the best choice!
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Engine Yard - Orchestra

Plus:

Well documented



Minus:

 Free plan is not enough even for startup-fest. It will lag on final pitches.

Heroku



Plus:

- Super rich add-ons market!
- Most of the add-ons have free plan!
- Easy to configure

- Only one node for free
- Deployment Massacre

Q&A

Dare to ask!

