

Results

Best (bar chart)		Data table	Latency	Framework overhead										
Best fortunes responses per second, Dell R720xd dual-Xeon E5 v2 + 10 GbE (164 tests)														
Framework	Best performance (higher is better)			Cls	Lng	Plt	FE	Aos	DB	Dos	Orm	IA	Errors	
ulib-postgres	321,727	<div><div></div></div>	100.0%	Plt	C++	ULi	use	Lin	Pg	Lin	Mcr	Rea	0	
urweb-postgres	300,633	<div><div></div></div>	93.4%	Ful	Ur	Ur/	Non	Lin	Pg	Lin	Mcr	Rea	0	
ulib-mysql	181,935	<div><div></div></div>	56.5%	Plt	C++	ULi	use	Lin	My	Lin	Mcr	Rea	0	
gemini-postgres	164,678	<div><div></div></div>	51.2%	Ful	Jav	Svt	Res	Lin	Pg	Lin	Mcr	Rea	0	
compojure	161,469	<div><div></div></div>	50.2%	Mcr	Clj	Svt	Res	Lin	My	Lin	Mcr	Rea	0	
cpoll_cppsp-raw	152,974	<div><div></div></div>	47.5%	Plt	C++	Cpl	Non	Lin	My	Lin	Raw	Rea	0	
gemini-mysql	123,103	<div><div></div></div>	38.3%	Ful	Jav	Svt	Res	Lin	My	Lin	Mcr	Rea	0	
urweb-mysql	120,122	<div><div></div></div>	37.3%	Ful	Ur	Ur/	Non	Lin	My	Lin	Mcr	Rea	0	
servlet-raw	118,278	<div><div></div></div>	36.8%	Plt	Jav	Svt	Res	Lin	My	Lin	Raw	Rea	0	
silicon-tpc-mysql	110,004	<div><div></div></div>	34.2%	Mcr	C++	Sil	Non	Lin	My	Lin	Ful	Rea	0	
undertow edge	105,388	<div><div></div></div>	32.8%	Plt	Jav	Und	Non	Lin	Mo	Lin	Raw	Rea	0	
go-raw	101,816	<div><div></div></div>	31.6%	Plt	Go	Go	Non	Lin	My	Lin	Raw	Rea	0	
go	99,800	<div><div></div></div>	31.0%	Plt	Go	Go	Non	Lin	My	Lin	Raw	Rea	0	
undertow	99,196	<div><div></div></div>	30.8%	Plt	Jav	Utw	Non	Lin	My	Lin	Raw	Rea	0	
http-kit	99,013	<div><div></div></div>	30.8%	Plt	Clj	htk	Non	Lin	My	Lin	Raw	Rea	0	
undertow edge	98,816	<div><div></div></div>	30.7%	Plt	Jav	Und	Non	Lin	My	Lin	Raw	Rea	0	
wt-postgres	95,489	<div><div></div></div>	29.7%	Ful	C++	Wt	Non	Lin	Pg	Lin	Ful	Rea	0	
wt	95,241	<div><div></div></div>	29.6%	Ful	C++	Wt	Non	Lin	My	Lin	Ful	Rea	0	
silicon-epoll-mysql	93,066	<div><div></div></div>	28.9%	Mcr	C++	Sil	Non	Lin	My	Lin	Ful	Rea	0	
plain	92,538	<div><div></div></div>	28.8%	Ful	Sca	Pla	Non	Lin	My	Lin	Mcr	Rea	0	
openresty	92,379	<div><div></div></div>	28.7%	Plt	Lua	OpR	ngx	Lin	My	Lin	Raw	Rea	0	
undertow	91,863	<div><div></div></div>	28.6%	Plt	Jav	Utw	Non	Lin	Pg	Lin	Raw	Rea	0	
php-raw	90,469	<div><div></div></div>	28.1%	Plt	PHP	FPM	ngx	Lin	My	Lin	Raw	Rea	0	
undertow edge	89,063	<div><div></div></div>	27.7%	Plt	Jav	Und	Non	Lin	Pg	Lin	Raw	Rea	0	
undertow	81,258	<div><div></div></div>	25.3%	Plt	Jav	Utw	Non	Lin	Mo	Lin	Raw	Rea	0	
gin	66,527	<div><div></div></div>	20.7%	Plt	Go	Go	Non	Lin	My	Lin	Raw	Rea	0	
lapis	64,705	<div><div></div></div>	20.1%	Ful	Lua	OpR	ngx	Lin	Pg	Lin	Ful	Rea	0	
revel	64,322	<div><div></div></div>	20.0%	Ful	Go	Go	Non	Lin	My	Lin	Raw	Rea	0	
dart	62,407	<div><div></div></div>	19.4%	Plt	Dar	Dar	Non	Lin	Pg	Lin	Raw	Rea	0	
revel-qbs	59,099	<div><div></div></div>	18.4%	Ful	Go	Go	Non	Lin	My	Lin	Raw	Rea	0	
revel-jet	56,088	<div><div></div></div>	17.4%	Ful	Go	Go	Non	Lin	My	Lin	Raw	Rea	0	
nodejs-mongodb-raw	54,163	<div><div></div></div>	16.8%	Plt	JS	njs	Non	Lin	Mo	Lin	Raw	Rea	0	
nodejs-mysql-raw	51,729	<div><div></div></div>	16.1%	Plt	JS	njs	Non	Lin	My	Lin	Raw	Rea	0	
grizzly-jersey	46,344	<div><div></div></div>	14.4%	Mcr	Jav	Svt	Grz	Lin	My	Lin	Ful	Rea	0	
jawn	46,058	<div><div></div></div>	14.3%	Ful	Jav	Svt	Utw	Lin	My	Lin	Raw	Rea	0	
start	45,115	<div><div></div></div>	14.0%	Mcr	Dar	Dar	ngx	Lin	Pg	Lin	Raw	Rea	0	
treefrog	41,522	<div><div></div></div>	12.9%	Ful	C++	Tre	Non	Lin	My	Lin	Mcr	Rea	0	
dropwizard	41,406	<div><div></div></div>	12.9%	Ful	Jav	Jty	Jty	Lin	Pg	Lin	Ful	Rea	0	
falcore	41,380	<div><div></div></div>	12.9%	Mcr	Go	Go	Non	Lin	My	Lin	Raw	Rea	0	
php-phalcon-micro	39,494	<div><div></div></div>	12.3%	Mcr	PHP	FPM	ngx	Lin	My	Lin	Ful	Rea	0	
dropwizard	38,754	<div><div></div></div>	12.0%	Ful	Jav	Jty	Jty	Lin	My	Lin	Ful	Rea	0	
stream	37,832	<div><div></div></div>	11.8%	Mcr	Dar	Dar	ngx	Lin	Pg	Lin	Raw	Rea	0	
bottle-mysql-raw	37,181	<div><div></div></div>	11.6%	Mcr	Py	Mei	Non	Lin	My	Lin	Raw	Rea	0	
plain-servlet-linux	32,952	<div><div></div></div>	10.2%	Ful	Sca	Pla	Non	Lin	My	Lin	Ful	Rea	0	
redstone-postgresql	32,346	<div><div></div></div>	10.1%	Mcr	Dar	Dar	Non	Lin	Pg	Lin	Mcr	Rea	0	
start	31,806	<div><div></div></div>	9.9%	Mcr	Dar	Dar	ngx	Lin	Mo	Lin	Raw	Rea	0	
mangoo i/o	29,372	<div><div></div></div>	9.1%	Ful	Jav	Utw	Utw	Lin	Mo	Lin	Ful	Rea	0	
stream	28,201	<div><div></div></div>	8.8%	Mcr	Dar	Dar	ngx	Lin	Mo	Lin	Raw	Rea	0	
flask	26,682	<div><div></div></div>	8.3%	Mcr	Py	Mei	Non	Lin	My	Lin	Raw	Rea	0	
redstone-mongodb	25,932	<div><div></div></div>	8.1%	Mcr	Dar	Dar	Non	Lin	Mo	Lin	Mcr	Rea	0	
yesod	25,284	<div><div></div></div>	7.9%	Ful	Hkl	Wai	Wrp	Lin	My	Lin	Raw	Rea	0	
phalcon	25,190	<div><div></div></div>	7.8%	Ful	PHP	FPM	ngx	Lin	Mo	Lin	Ful	Rea	0	
api-hour+aihttp.web	24,147	<div><div></div></div>	7.5%	Mcr	Py	API	Gun	Lin	Pg	Lin	Raw	Rea	0	
sabina jetty mysql	23,498	<div><div></div></div>	7.3%	Mcr	Jav	Svt	Non	Lin	My	Lin	Raw	Rea	0	
sabina	23,375	<div><div></div></div>	7.3%	Mcr	Jav	Svt	Non	Lin	Mo	Lin	Raw	Rea	0	
lwlan	23,168	<div><div></div></div>	7.2%	Plt	C	Lwa	Lwa	Lin	Lite	Lin	Raw	Rea	0	

spring	22,755	7.1%	Ful	Jav	Svt	Tom	Lin	My	Lin	Ful	Rea	0
onion-raw	22,645	7.0%	Plt	C	Oni	Non	Lin	My	Lin	Raw	Rea	0
wildfly-ee7	22,602	7.0%	Plt	Jav	Svt	Wil	Lin	My	Lin	Ful	Rea	0
sabina undertow mysql	22,206	6.9%	Mcr	Jav	Svt	Non	Lin	My	Lin	Raw	Rea	0
sabina jetty mongodb	21,660	6.7%	Mcr	Jav	Svt	Non	Lin	Mo	Lin	Raw	Rea	0
pyramid-py3	19,170	6.0%	Ful	Py	Mei	Non	Lin	Pg	Lin	Ful	Rea	0
go-raw-mongodb	18,961	5.9%	Plt	Go	Go	Non	Lin	Mo	Lin	Raw	Rea	0
nodejs-mysql	18,453	5.7%	Plt	JS	njs	Non	Lin	My	Lin	Ful	Rea	0
pyramid-py2	16,991	5.3%	Ful	Py	Mei	Non	Lin	Pg	Lin	Ful	Rea	0
grails	16,835	5.2%	Ful	Grv	Svt	Res	Lin	My	Lin	Ful	Rea	0
ninja-standalone	15,995	5.0%	Ful	Jav	Jty	Jty	Lin	My	Lin	Ful	Rea	0
pedestal	15,630	4.9%	Mcr	Clj	Svt	Jty	Lin	My	Lin	Mcr	Rea	0
bottle	13,754	4.3%	Mcr	Py	Mei	Non	Lin	My	Lin	Ful	Rea	0
turbogears	13,661	4.2%	Mcr	Py	Mei	Non	Lin	My	Lin	Ful	Rea	0
bottle-py3	13,464	4.2%	Mcr	Py	Mei	Non	Lin	My	Lin	Ful	Rea	0
php-phalcon	13,118	4.1%	Ful	PHP	FPM	ngx	Lin	My	Lin	Ful	Rea	0
codeigniter-raw	12,914	4.0%	Ful	PHP	FPM	ngx	Lin	My	Lin	Raw	Rea	0
phpixie	12,613	3.9%	Ful	PHP	FPM	ngx	Lin	My	Lin	Ful	Rea	0
sinatra-torqbox-jrub	12,454	3.9%	Mcr	Rby	JRb	Tor	Lin	My	Lin	Ful	Rea	138
bottle-nginx-uwsgi	12,273	3.8%	Mcr	Py	uWS	ngx	Lin	My	Lin	Ful	Rea	0
flask-nginx-uwsgi	12,226	3.8%	Mcr	Py	uWS	ngx	Lin	My	Lin	Ful	Rea	0
koa	12,189	3.8%	Mcr	JS	njs	Non	Lin	Mo	Lin	Raw	Rea	0
flask	12,011	3.7%	Mcr	Py	Mei	Non	Lin	My	Lin	Ful	Rea	0
mojolicious	11,963	3.7%	Ful	Pri	Moj	Hyp	Lin	Pg	Lin	Raw	Rea	0
ringojs-conv	11,715	3.6%	Mcr	JS	Rin	Jty	Lin	My	Lin	Mcr	Rea	0
goji	11,705	3.6%	Plt	Go	Go	Non	Lin	My	Lin	Raw	Rea	0
bottle-pypy	11,479	3.6%	Mcr	Py	Tor	Non	Lin	My	Lin	Ful	Rea	0
flask-py3	11,400	3.5%	Mcr	Py	Mei	Non	Lin	My	Lin	Ful	Rea	0
sinatra-trinidad	10,642	3.3%	Mcr	Rby	JRb	Tri	Lin	My	Lin	Ful	Rea	0
ringojs	9,543	3.0%	Plt	JS	Rin	Jty	Lin	My	Lin	Raw	Rea	0
akka-http	9,123	2.8%	Mcr	Sca	Akk	Non	Lin	My	Lin	Raw	Rea	0
flask-pypy	9,117	2.8%	Mcr	Py	Tor	Non	Lin	My	Lin	Raw	Rea	0
django-postgresql	8,855	2.8%	Ful	Py	Mei	Non	Lin	Pg	Lin	Ful	Rea	0
luminus	8,813	2.7%	Plt	Clj	htk	Non	Lin	My	Lin	Raw	Rea	0
django-py3	8,502	2.6%	Ful	Py	Mei	Non	Lin	My	Lin	Ful	Rea	0
express-mysql	8,389	2.6%	Mcr	JS	njs	Non	Lin	My	Lin	Ful	Rea	0
django	8,242	2.6%	Ful	Py	Mei	Non	Lin	My	Lin	Ful	Rea	0
activeweb	8,177	2.5%	Ful	Jav	Svt	Res	Lin	My	Lin	Mcr	Rea	0
php-kohana-raw	7,401	2.3%	Ful	PHP	FPM	ngx	Lin	My	Lin	Raw	Rea	0
silex	6,422	2.0%	Mcr	PHP	FPM	ngx	Lin	My	Lin	Raw	Rea	0
nodejs-mongodb	6,409	2.0%	Plt	JS	njs	Non	Lin	Mo	Lin	Ful	Rea	0
treefrog-thread	6,003	1.9%	Ful	C++	Tre	Non	Lin	My	Lin	Mcr	Rea	0
dropwizard-mongodb	5,997	1.9%	Ful	Jav	Jty	Jty	Lin	Mo	Lin	Ful	Rea	0
flask-pypy	5,894	1.8%	Mcr	Py	Tor	Non	Lin	My	Lin	Ful	Rea	0
hapi	5,530	1.7%	Mcr	JS	njs	Non	Lin	Pg	Lin	Ful	Rea	0
hapi-mysql	5,401	1.7%	Mcr	JS	njs	Non	Lin	My	Lin	Ful	Rea	0
sinatra-unicorn	4,289	1.3%	Mcr	Rby	Rac	Uni	Lin	My	Lin	Ful	Rea	0
hapi	4,195	1.3%	Mcr	JS	njs	Non	Lin	Mo	Lin	Ful	Rea	0
fuel	4,183	1.3%	Mcr	PHP	FPM	ngx	Lin	My	Lin	Raw	Rea	0
sinatra-puma	4,159	1.3%	Mcr	Rby	Rac	Pum	Lin	My	Lin	Ful	Rea	0
trinidad-padrino	3,848	1.2%	Mcr	Rby	JRb	Tri	Lin	My	Lin	Ful	Rea	0
torqbox-padrino	3,602	1.1%	Mcr	Rby	JRb	Tor	Lin	My	Lin	Ful	Rea	0
phreeze	3,569	1.1%	Mcr	PHP	FPM	ngx	Lin	My	Lin	Mcr	Rea	0
puma-mri-rails	3,411	1.1%	Ful	Rby	Rac	Pum	Lin	My	Lin	Ful	Rea	0
rails-unicorn	3,261	1.0%	Ful	Rby	Rac	Uni	Lin	My	Lin	Ful	Rea	0
trinidad-rails	2,685	0.8%	Ful	Rby	JRb	Tri	Lin	My	Lin	Ful	Rea	0
aspnet-mvc-mono	2,554	0.8%	Ful	C#	Mon	ngx	Lin	Mo	Lin	Raw	Rea	0
kelp	2,548	0.8%	Ful	Pri	Plk	Sta	Lin	My	Lin	Raw	Rea	27
rails-torqbox-jruby	2,525	0.8%	Ful	Rby	JRb	Tor	Lin	My	Lin	Ful	Rea	0
aspnet-mvc-mono	2,326	0.7%	Ful	C#	Mon	ngx	Lin	My	Lin	Raw	Rea	0
servicestack	2,300	0.7%	Plt	C#	Mon	ngx	Lin	Mo	Lin	Raw	Rea	0
aspnet-mvc-mono	2,221	0.7%	Ful	C#	Mon	ngx	Lin	Pg	Lin	Raw	Rea	0
unicorn-padrino	2,152	0.7%	Mcr	Rby	Rac	Uni	Lin	My	Lin	Ful	Rea	0
puma-padrino	2,128	0.7%	Mcr	Rby	Rac	Pum	Lin	My	Lin	Ful	Rea	0
aspnet-mvc-mono	2,106	0.7%	Ful	C#	Mon	ngx	Lin	My	Lin	Ful	Rea	0

kelp	2,067	0.6%	Ful	Pri	Plk	Sta	Lin	Mo	Lin	Raw	Rea	21
aspnet-mvc-mono	2,012	0.6%	Ful	C#	Mon	ngx	Lin	Pg	Lin	Ful	Rea	0
servicestack	1,979	0.6%	Plt	C#	Mon	ngx	Lin	Pg	Lin	Raw	Rea	0
servicestack	1,974	0.6%	Plt	C#	Mon	ngx	Lin	My	Lin	Raw	Rea	0
laravel-raw	1,069	0.3%	Ful	PHP	FPM	ngx	Lin	My	Lin	Raw	Rea	14,220
sinatra-jruby-puma	798	0.2%	Mcr	Rby	JRb	Pum	Lin	My	Lin	Ful	Rea	0
symfony2	722	0.2%	Ful	PHP	FPM	ngx	Lin	My	Lin	Raw	Str	10,433
jruby-padrino	721	0.2%	Mcr	Rby	JRb	Pum	Lin	My	Lin	Ful	Rea	0
sinatra-thin	611	0.2%	Mcr	Rby	Rac	Thi	Lin	My	Lin	Ful	Rea	0
symfony2	596	0.2%	Ful	PHP	FPM	ngx	Lin	My	Lin	Ful	Str	8,632
symfony2-raw	554	0.2%	Ful	PHP	FPM	ngx	Lin	My	Lin	Raw	Rea	8,180
symfony2	542	0.2%	Ful	PHP	FPM	ngx	Lin	My	Lin	Ful	Str	7,902
twisted klein	530	0.2%	Mcr	Py	Tw	Non	Lin	My	Lin	Ful	Rea	0
symfony2	499	0.2%	Ful	PHP	FPM	ngx	Lin	My	Lin	Ful	Rea	7,404
symfony2-php-templat	469	0.1%	Ful	PHP	FPM	ngx	Lin	My	Lin	Ful	Rea	6,963
limonade	413	0.1%	Mcr	PHP	FPM	ngx	Lin	My	Lin	Ful	Rea	0
puma-jruby-rails	395	0.1%	Ful	Rby	JRb	Pum	Lin	My	Lin	Ful	Rea	0
rbx-padrino	384	0.1%	Mcr	Rby	Rub	Pum	Lin	My	Lin	Ful	Rea	0
thin-padrino	294	0.1%	Mcr	Rby	Rac	Thi	Lin	My	Lin	Ful	Rea	0
puma-rbx-rails	210	0.1%	Ful	Rby	Rub	Pum	Lin	My	Lin	Ful	Rea	0
web2py	152	0.0%	Mcr	Py	web	Non	Lin	My	Lin	Ful	Rea	0
cherrypy-py3	48	0.0%	Mcr	Py	Che	Non	Lin	My	Lin	Ful	Rea	0
cherrypy	46	0.0%	Mcr	Py	Che	Non	Lin	My	Lin	Ful	Rea	0
lwan	0	0.0%	Plt	C	Lwa	Lwa	Lin	My	Lin	Raw	Rea	0
thin-rails	0	0.0%	Ful	Rby	Rac	Thi	Lin	My	Lin	Ful	Rea	7,012
sinatra-rbx-puma	0	0.0%	Mcr	Rby	Rub	Pum	Lin	My	Lin	Ful	Rea	0
webware	0	0.0%	Mcr	Py	Apc	Non	Lin	My	Lin	Ful	Rea	2,218
wheezy.web	0	0.0%	Mcr	Py	Mei	Non	Lin	My	Lin	Ful	Rea	10,226
wheezy.web-py3	0	0.0%	Mcr	Py	Mei	Non	Lin	My	Lin	Ful	Rea	11,378
api-hour+aiohttp.web	—	Did not complete	Mcr	Py	API	Gun	Lin	Red	Lin	Raw	Rea	—
cygnite	—	Did not complete	Ful	PHP	FPM	ngx	Lin	My	Lin	Raw	Rea	—
fat-free	—	Did not complete	Ful	PHP	FPM	ngx	Lin	My	Lin	Raw	Rea	—
hapi	—	Did not complete	Mcr	JS	njs	Non	Lin	Red	Lin	Ful	Rea	—
lumen	—	Did not complete	Mcr	PHP	FPM	ngx	Lin	My	Lin	Ful	Rea	—
nodejs	—	Did not complete	Plt	JS	njs	Non	Lin	Red	Lin	Ful	Rea	—
pimf	—	Did not complete	Plt	PHP	FPM	ngx	Lin	My	Lin	Mcr	Rea	—
servicestack	—	Did not complete	Plt	C#	Mon	XSP	Lin	Mo	Lin	Raw	Rea	—
servicestack	—	Did not complete	Plt	C#	Mon	XSP	Lin	My	Lin	Raw	Rea	—
servicestack	—	Did not complete	Plt	C#	Mon	XSP	Lin	Pg	Lin	Raw	Rea	—
ulib-sqlite	—	Did not complete	Plt	C++	ULi	use	Lin	Lite	Lin	Mcr	Rea	—
wicket	—	Did not complete	Ful	Jav	Svt	Res	Lin	My	Lin	Ful	Rea	—
yaf	—	Did not complete	Ful	PHP	FPM	ngx	Lin	My	Lin	Raw	Rea	—
yii2	—	Did not complete	Ful	PHP	FPM	ngx	Lin	My	Lin	Ful	Rea	—

Requirements summary

In this test, the framework's ORM is used to fetch all rows from a database table containing an unknown number of Unix fortune cookie messages (the table has 12 rows, but the code cannot have foreknowledge of the table's size). An additional fortune cookie message is inserted into the list at runtime and then the list is sorted by the message text. Finally, the list is delivered to the client using a server-side HTML template. The message text must be considered untrusted and properly escaped and the UTF-8 fortune messages must be rendered properly.

Whitespace is optional and may comply with the framework's best practices.

Example response:

```
HTTP/1.1 200 OK
Content-Length: 1196
Content-Type: text/html; charset=UTF-8
Server: Example
Date: Wed, 17 Apr 2013 12:00:00 GMT
```

```
<!DOCTYPE html><html><head><title>Fortunes</title></head><body><table><tr><th>id</th><th>message</th></tr><tr><td>11</td><td>&lt;&lt;script&gt;alert(&quot;This should not be displayed in a browser alert box.&quot;);&lt;/script&gt;</td></tr><tr><td>4</td><td>A bad
```

random number generator: 1, 1, 1, 1, 1, 4.33e+67, 1, 1, 1	
	5
A computer program does what you tell it to do, not what you want it to do.	
2	A computer scientist is someone who fixes things that aren't broken.
8	
A list is only as strong as its weakest link. – Donald Knuth	
0	Additional fortune added at request time.
3	After enough decimal places, nobody gives a damn.
7	Any program that runs right is obsolete.
10	Computers make very fast, very accurate mistakes.
6	Emacs is a nice operating system, but I prefer UNIX. – Tom Christaensen
9	Feature: A bug with seniority.
1	fortune: No such file or directory
12	フレームワークのベンチマーク

For a more detailed description of the requirements, see the [Source Code and Requirements](#) section.

Comments

If you have any comments about Round 11, please post at the [Framework Benchmarks Google Group](#).