



David Pilato
Developer | Evangelist
@dadoonet

make sense of your (BIG) data!



Feb 7, 2010 – Sep 5, 2016

Contributions to master, excluding merge commits

Contributions: Commits ▾



kimchy

4,737 commits / 1,401,534 ++ / 1,064,899 --

#1



s1monw

2,216 commits / 1,219,296 ++ / 1,217,559 --

#2



dadoonet

1,171 commits / 128,081 ++ / 84,741 --

#3



javanna

1,101 commits / 142,713 ++ / 119,744 --

#4



martijnvg

1,093 commits / 212,940 ++ / 142,674 --

#5



clintongormley

854 commits / 232,442 ++ / 30,976 --

#6



rmuir

833 commits / 161,166 ++ / 147,023 --

#7



jasontedor

772 commits / 62,452 ++ / 37,875 --

#8



jpountz

737 commits / 173,140 ++ / 204,220 --

#9









elastic
@elastic

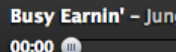
Move over
#ElasticS
details, al

Voir la traduction

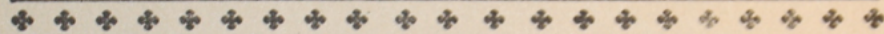


RETWEETS 77
J'AIM 43

```
{
  "created_at": "Thu Sep 22 16:48:41 +0000 2016",
  "id": 778999470402842624,
  "text": "Move over alphas, It\u2019s BETA time! Welcome to #ElasticStack 5.0.0 Beta 1! New feat",
  "entities": {
    "hashtags": [{
      "text": "ElasticStack"
    }],
    "source": "\u003ca href=\"https://about.twitter.com/products/tweetdeck\" rel=\"nofollow\" \"",
    "user": {
      "screen_name": "elastic",
      "description": "As the company behind #Elasticsearch, #Logstash, and #Kibana, Elastic believe",
      "followers_count": 24482,
      "friends_count": 76,
      "created_at": "Fri Oct 23 05:25:26 +0000 2009",
      "favourites_count": 548,
      "verified": true,
      "statuses_count": 3998,
      "lang": "en"
    },
    "retweet_count": 77,
    "favorite_count": 43,
    "lang": "en"
  }
}
```



[illegible]



THE GREAT TRIANGULAR DUEL

By CAPTAIN FREDERICK MARRYAT

JACK walked up to the boatswain, and, taking off his hat, with the utmost politeness, said to him:
“If I mistake not, Mr. Biggs, your conversation refers to me.”

“Very likely it does,” replied the boatswain. “Listeners hear no good of themselves.”

“It happens that gentlemen can’t converse without being watched,” continued Mr. Easthupp, pulling up his shirt-collar.”

“It is not the first time you have thought proper to make very offensive remarks, Mr. Biggs; and as you appear to consider yourself ill-treated in the affair of the trousers, for I tell you at once that it was I who brought them on board, I can only say,” continued our hero, with a very polite bow, “that I shall be most happy to give you satisfaction.”

Big data?



2005



2014



The production of data is expanding at an astonishing pace. Experts now point to a 4300% increase in annual data generation by 2020. Drivers include the switch from analog to digital technologies and the rapid increase in data generation by individuals and corporations alike.

Size of Total Data
Enterprise Managed Data

Enterprise Created Data

2020: MORE THAN 1/3 OF THE DATA PRODUCED WILL LIVE IN OR PASS THROUGH THE CLOUD.

2012: CUSTOMERS WILL START STORING 1 EB OF INFORMATION.



WHAT IS A ZETTABYTE?

1,000,000,000,000 gigabytes
1,000,000,000,000,000 bytes
1,000,000,000,000,000,000 bits
1,000,000,000,000,000,000,000 octets
1,000,000,000,000,000,000,000,000 dodecets



1 terabyte holds the

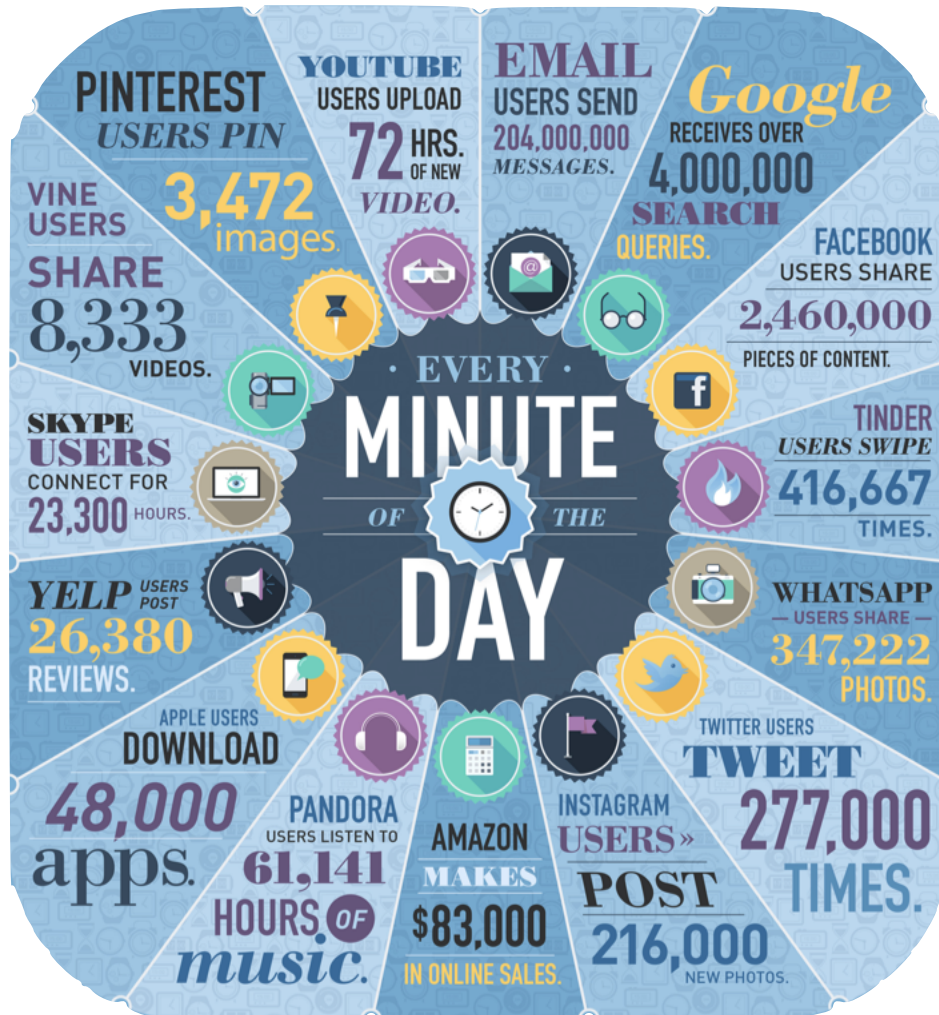
It took roughly 1 petabyte of local storage to render the



In 2007, the estimated

DATA PRODUCTION WILL BE 44 TIMES GREATER IN 2020 THAN IT WAS IN 2009

35.000.000.000.000.000 mb





Some data

```
CREATE TABLE user
(
  name VARCHAR(100),
  comments VARCHAR(1000)
);
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at french customs service');
INSERT INTO user VALUES ('David Gageot', 'Engineer at Docker');
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

Search on term

```
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');  
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at  
french customs service');  
INSERT INTO user VALUES ('David Gageot', 'Engineer at Docker');  
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

```
SELECT * FROM user WHERE name="David";  
Empty set (0,00 sec)
```

Search like

```
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at french customs service');
INSERT INTO user VALUES ('David Gageot', 'Engineer at Docker');
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

```
SELECT * FROM user WHERE name LIKE "%David%";
```

name	comments
David Pilato	Developer at elastic
David Gageot	Engineer at Docker
David David	Who is that guy?

Search like

```
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at french customs service');
INSERT INTO user VALUES ('David Gageot', 'Engineer at Docker');
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

```
SELECT * FROM user WHERE name LIKE "%David%Pilato%";
```

name	comments
David Pilato	Developer at elastic

Search like with inverted terms

```
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');  
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at  
french customs service');  
INSERT INTO user VALUES ('David Gageot', 'Engineer at Docker');  
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

```
SELECT * FROM user WHERE name LIKE "%Pilato%David%";  
Empty set (0,00 sec)
```

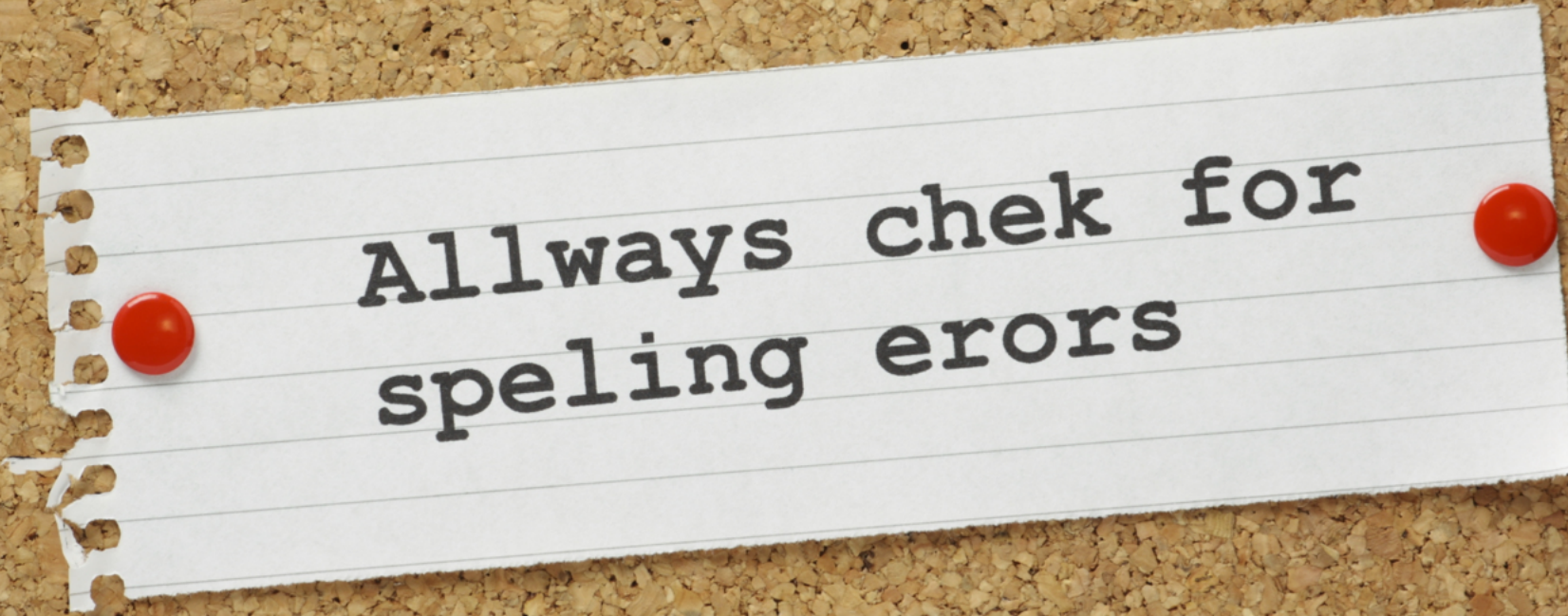
Search in two fields

```
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at french customs service');
INSERT INTO user VALUES ('David Gageot', 'Engineer at Docker');
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

```
SELECT * FROM user WHERE name LIKE "%David%" OR
                        comments LIKE "%David%";
```

name	comments
David Pilato	Developer at elastic
Malloum Laya	Worked with David at french customs service
David Gageot	Engineer at Docker
David David	Who is that guy?





Allways chek for
speling erors



search engine?

B	Back-Up Lights.....	9
	Battery.....	70, 97
	Body Construction.....	82A
	Body Insulation.....	87
	Body Sealing.....	87
	Body Styles.....	26-49
	Brake Drums.....	76, 77, 102
	Brake Lining.....	77, 102
	Brakes.....	76, 77, 102
	Brakes, Parking.....	76, 77, 102
	Brakes, Power.....	76, 77, 102
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	Bumpers.....	9

1964

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B	Back-Up Lights.....	9
	Battery.....	70, 97
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plug & play

scalable



elasticsearch

Apache 2 license

REST/JSON

Lucene



start...

```
$ wget https://artifacts.elastic.co/downloads/elasticsearch/
elasticsearch-5.0.0-beta1.tar.gz
$ tar -xf elasticsearch-5.0.0-beta1.tar.gz
$ ./elasticsearch-5.0.0-beta1/bin/elasticsearch
[INFO ][node          ][Ghost Maker] version[5.0.0-beta1], pid[72965], ...
[INFO ][transport][Ghost Maker] publish_address {[/127.0.0.1:9300]}
[INFO ][http        ][Ghost Maker] publish_address {[/127.0.0.1:9200]}
[INFO ][node          ][Ghost Maker] started
```

... and play!

```
$ curl -XPUT localhost:9200/sessions/session/1 -d '{
  "title"      : "Elasticsearch",
  "subtitle"   : "Make sense of your (BIG) data !",
  "date"       : "2016-10-07T16:30:00",
  "tags"       : [ "realtime", "bigdata" ],
  "speakers"   : [{
    "first_name" : "David",
    "last_name"  : "Pilato"
  }]
}'
```

search!

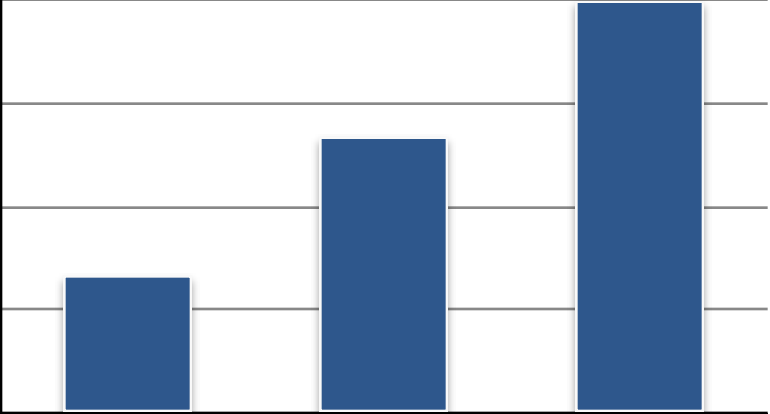
```
$ curl http://localhost:9200/sessions/session/_search -d'
{
  "query": {
    "multi_match": {
      "query": "elasticsearch bigdata david",
      "fields": [ "title^3", "tags^2", "speakers.first_name" ]
    }
  },
  "post_filter": {
    "range": {
      "date": {
        "from": "2016-10-01",
        "to": "2016-11-01"
      }
    }
  }
}'
```

compute?

<i>B</i>	Back-Up Lights.....	9
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	Bucket Seats.....	35-39, 45
	Bumpers.....	9

compute!

```
$ curl http://localhost:9200/sessions/session/_search -d'
{
  "query": { ... },
  "aggs": {
    "by_date": {
      "date_histogram": {
        "field": "date",
        "interval": "day",
        "format": "dd/MM/yyyy"
      }
    }
  }
}'
```



```
    "by_date": [
      { "key_as_string": "03/10/2016", "doc_count": 1 },
      { "key_as_string": "07/10/2016", "doc_count": 2 },
      { "key_as_string": "10/10/2016", "doc_count": 3 }
    ]
  }
```



Let's make sense of ...

- logs
- twitter
- github
- marketing data
- ...
- your data
- your big data

Let's make sense of ...

- logs
- twitter
- github
- marketing data
- ...
- your data
- your big data

```
{  
  "name": "Pilato David",  
  "dateOfBirth": "1971-12-26",  
  "gender": "male",  
  "children": 3,  
  "marketing": {  
    "fashion": 334,  
    "music": 3363,  
    "hifi": 2351  
  },  
  "address": {  
    "country": "France",  
    "city": "Paris",  
    "location": [2.332395, 48.861871]  
  }  
}
```


Demo

Let's inject **1 000 000**
marketing documents



Demo

Elastic Stack

User Interface



Kibana

Store, Index,
& Analyze



Elasticsearch



X-Pack

Security

Alerting

Monitoring

Reporting

Graph

Ingest



Logstash



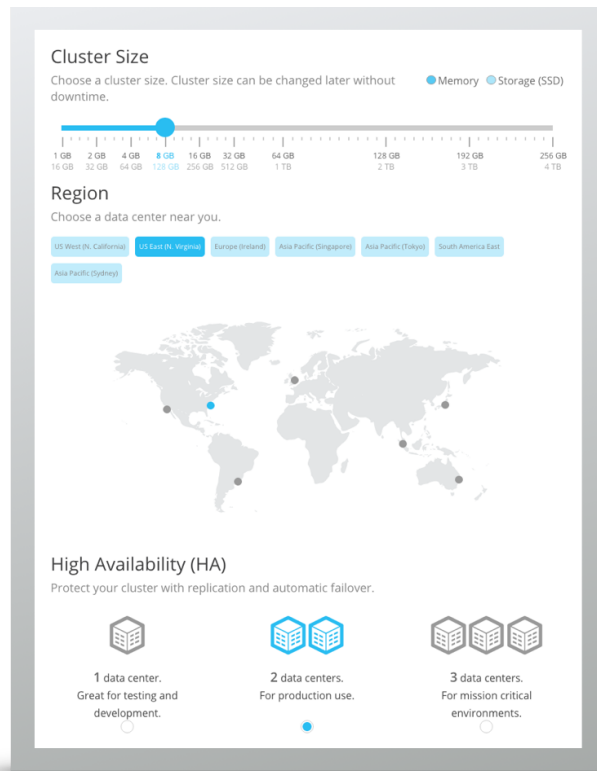
Beats



Elastic Cloud

The only Elasticsearch as a Service offering powered by the creators of the Elastic Stack

- Always runs on the latest software
- One-click to scale/upgrade with no downtime
- Free Kibana and backups every 30 minutes
- Dedicated, SLA-based support
- Easily add X-Pack features: security (Shield), alerting (Watcher), and monitoring (Marvel)
- Pricing starts at \$45 a month





Paris

9 novembre 2016

Événement complet. Nous travaillons actuellement pour ouvrir d'autres places.

[S'inscrire](#)[Changer de ville](#)

Ne manquez pas cet événement d'une journée qui se déroulera près de chez vous ! Vous y découvrirez toutes les nouveautés de la version 5.0 de notre produit, participerez à une formation technique de 2 h et pourrez poser vos questions directement à des ingénieurs d'Elastic.

PROGRAMME

08:30 - 09:30

Inscription, questions libres, démonstrations par nos sponsors

Émargez, demandez votre badge et préparez-vous à pour la journée avec une bonne tasse de café. Passez par notre stand "Ask Me Anything" pour poser vos questions à nos ingénieurs et



David Pilato
Developer | Evangelist
@dadoonet

Thank you!

<https://www.elastic.co/subscriptions>

