New Hire Technical Training

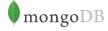## July 25-29, 2016

MongoDB – The Company

Contents

- Training (goal, logistics and history)

- History of the company
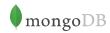
- Business Model

- MongoDB Releases

Logistics

- ~8:00 Breakfast
- 9:00-17:00 Sessions
- 17:00-18:00 Guest speaker

- ~12:00 Break for lunch (45 minutes)

- 2 x 3 hour sessions per day
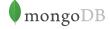
- Wifi: xgen or xgen_public

Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
9:00-17:00	• Introduction • Schema Design • Drivers and Applications	• Indexing • Storage Engines • Security	• Replication • Sharding	• Cloud Manager • Tools	• Ops Manager

Let's get to know each other

- Name

- Location

- Position (CE, SA, TSE, Devel, Docs, …)

- Relevant experience before MongoDB

- Something funny or anecdote about you

Goal of the Training

- Try to get people up to speed as quickly as possible about
  - How MongoDB is supposed to work
  - How MongoDB does not work

- Get to
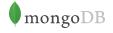 - ask questions
  - meet people

Words of wisdom

"There is no fact about MongoDB that you absolutely need to know in order to do your job effectively and there is probably no fact that if you don't know it that will be the end of the world"

"Don't make guesses, there is a lot in MongoDB that may not behave the way you expect."
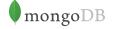
"Don't get caught saying MongoDB works like that, while it works differently. Once you lose their confidence and trust as a consultant or TSE, it is very difficult to gain back. They will stop listening to you about everything, even when you are right."

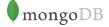It is OK to say: "I don't know how it works, but let me find it out for you."

Training History

- At the beginning of MongoDB, every technical person was involved in support

- Training started around 2012, running for 4 years

- Now, we are more specialized, support mainly done by Technical Support Engineers, consultation by Consulting Engineers, …

Company History

- 2007 – 10gen founded
- 2008 – Business model changed from full stack SAAS to focus on the storage layer
- 2009 – MongoDB v1.0 is released (9 people)
- 2013 – 10gen renamed to MongoDB (250 people)
- 2014 – Acquired WiredTiger (425 people)
- 2016 – Atlas/DBaaS (545 people)

MongoDB Company overview

520+ employees

2,700+ customers

13 offices around the world

Over **$300 million** in funding

Database popularity index

299 systems in ranking, March 2016

	Rank		DBMS	Database Model	Score		
Mar 2016	Feb 2016	Mar 2015			Mar 2016	Feb 2016	Mar 2015
1.	1.	1.	Oracle	Relational DBMS	1472.01	-4.13	+2.93
2.	2.	2.	MySQL ➕	Relational DBMS	1347.71	+26.59	+86.62
3.	3.	3.	Microsoft SQL Server	Relational DBMS	1136.49	-13.73	-28.31
4.	4.	4.	MongoDB ➕	Document store	305.33	-0.27	+30.32
5.	5.	5.	PostgreSQL	Relational DBMS	299.62	+10.97	+35.19
6.	6.	6.	DB2	Relational DBMS	187.94	-6.55	-10.91
7.	7.	7.	Microsoft Access	Relational DBMS	135.03	+1.95	-6.66
8.	8.	8.	Cassandra ➕	Wide column store	130.33	-1.43	+23.02
9.	⬆ 10.	⬆ 10.	Redis ➕	Key-value store	106.22	+4.14	+9.17
10.	⬇ 9.	⬇ 9.	SQLite	Relational DBMS	105.77	-1.01	+4.06
11.	⬆ 12.	⬆ 15.	Elasticsearch ➕	Search engine	80.17	+2.33	+21.24
12.	⬇ 11.	⬇ 11.	SAP Adaptive Server	Relational DBMS	76.64	-3.39	-8.72
13.	13.	13.	Teradata	Relational DBMS	74.07	+0.69	+1.29
14.	14.	⬇ 12.	Solr	Search engine	69.37	-2.91	-12.52
15.	⬆ 16.	⬇ 14.	HBase	Wide column store	52.41	+0.39	-8.32
16.	⬇ 15.	⬆ 17.	Hive	Relational DBMS	50.51	-2.26	+11.18
17.	17.	⬇ 16.	FileMaker	Relational DBMS	47.93	+0.90	-4.41
18.	18.	⬆ 19.	Splunk	Search engine	43.73	+0.90	+8.01
19.	19.	⬆ 21.	SAP HANA ➕	Relational DBMS	39.99	+1.91	+7.82
20.	⬆ 21.	⬆ 23.	Neo4j ➕	Graph DBMS	32.36	+0.07	+4.73
21.	⬇ 20.	⬇ 18.	Informix	Relational DBMS	31.87	-1.15	-5.95
22.	⬆ 23.	⬆ 25.	MariaDB ➕	Relational DBMS	29.88	+1.11	+7.79
23.	⬇ 22.	⬇ 20.	Memcached	Key-value store	29.24	+0.31	-6.27
24.	24.	24.	Couchbase ➕	Document store	25.80	+0.41	+2.62
25.	25.	⬇ 22.	CouchDB	Document store	23.38	-0.16	-4.53

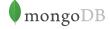## REF: http://db-engines.com/en/ranking

Business Model

- Subscriptions
  - support
  - OpsManager, Compass, BI connector
  - on-line training
  - enterprise builds (packages, advanced security, auditing, …)
  - commercial licenses
- Consulting
- Training (@MongoDB or @Customer)
- CloudManager (monitoring/automation, backup)
- Indemnification (negative income, we pay our customers if something bad happens)
- Atlas – MongoDB as a service

investors like something that you can sell and costs nothing to produce
- high margin
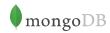- revenues that are **not** proportional to number of employees

Subscriptions

	MongoDB Cloud Manager	MongoDB Professional	MongoDB Enterprise Advanced
Version	Community	Community	Enterprise Advanced
Management	Cloud Manager	Cloud Manager Premium	Cloud Manager Premium or Ops Manager
Backup	+$	+$	✓, +$
Integrations with Server Monitoring Products	✓	✓	✓
MongoDB Compass		✓	✓
Advanced Security			✓
In-Memory Storage Engine, BI Connector			✓
Advanced Full-text languages**			✓**
On-Demand Training, Platform Certifications			✓
Support	No SLA Cloud Manager Only	2 Hour SLA	1 Hour SLA
MongoDB License	N/A	AGPL	Commercial
Indemnity			✓

Notes:

MongoDB Enterprise Advanced is $12K/node/year

Node: one VM in the Cloud, or one machine you own with <512GB RAM

Subscriptions

- **MongoDB Enterprise Advanced, per server**
  - MongoDB Enterprise Server (advanced security)
  - Ops Manager (Monitoring, Backup, Automation) & legacy MMS On-Prem OR Cloud Manager Premium
  - Commercial Support, high SLA
  - On-Demand MongoDB University
  - MongoDB Compass
  - BI Connector
  - Note QA/Test nodes are 50% discounted and development nodes are free!
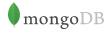- **MongoDB Development Subscription, unlimited servers**
  - MongoDB Enterprise Server (advanced security)
  - Ops Manager (Monitoring, Backup, Automation) & legacy MMS On-Prem
  - Commercial Support
  - MongoDB Compass
  - BI Connector
- **MongoDB Professional, per server**
  - Cloud Manager Premium (which includes Cloud Manager Standard + Visual Query Profiler + Index suggestions + Managed indexes + TBD)
  - Commercial Support, medium SLA
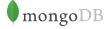 - MongoDB Compass (when released with 3.2)
- **MongoDB Cloud Manager ("Standard"), per server**
  - Includes management, monitoring; excludes the "Premium" features listed above, and Backup costs extra.
  - Support for Cloud Manager only (not MongoDB general usage), No SLA

Open Source Model

- Which code is open source?
  - Database is open source
  - Drivers are open source
  - OpsManager and Agents are not open source

- "Open Source" is more to protect us and our customers than to accept contributions
  - MongoDB is the sole copyright holder of the source code
- A third party can not distribute our binaries without the source code and they can't sell licenses of MongoDB

Company Mission and Values

- Our Mission:
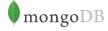 - MongoDB unleashes the power of software and data for innovators everywhere.

- Our Core Values:
  - Think Big, Go Far
  - Make It Matter
  - Build Together
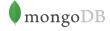 - Be Intellectually Honest
  - Own What You Do

How to work at MongoDB

- Getting started
    - https://wiki.mongodb.com/display/10GEN/How+To+Be+A+New+Hire+@+MongoDB
- System we are using
    - https://wiki.mongodb.com/display/10GEN/Systems+Checklist
- JIRA tips
    - Never go to JIRA in front of the customer, there are dev only notes, …
    - Projects:
        - CS (Commercial Support)
        - MMSSUPPORT (Some may be paying customers: backups, extra hosts)
        - SUPPORT (Community Private, customer to sign soon)
        - FREE (Community Support)
        - SERVER
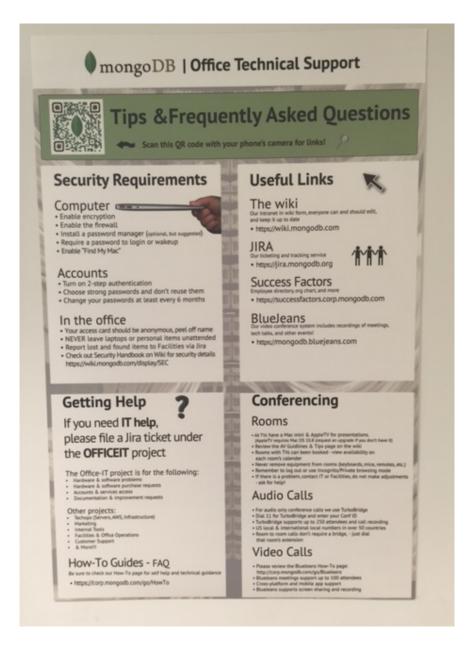   - HELP (internal questions to MongoDB)

How to work at MongoDB

- Public comments about MongoDB
    - Do not post anything on the internet, do not get in arguments/defend MongoDB
    - Report to the communication department instead
        - Send mail to "publicmentions@mongodb.com"
- Confidentiality
    - If you share your screen, ensure nothing about another customer is visible
        - Use a different browser where you *NEVER* log as <user>@mongodb.com
    - Never go to JIRA in front of the customer, there are dev only notes, …
    - If a customer has presented, you can point to the presentation, but do not cite the contents of the presentation.
    - You should read and agree on the data security policy, which includes deleting customer data on your machine.

IT Cheat Sheet

References

- Links
  - https://engineering.mongodb.com/ (Engineering Blog)
  - http://firstround.com/review/radical-candor-the-surprising-secret-to-being-a-good-boss/ (Radical Candor by Kim Scott)
  - http://www.informationweek.com/strategic-cio/penn-medicine-using-data-to-save-patient-lives/d/d-id/1325364
- Books
  - Good to Great: Why Some Companies Make the Leap...And Others, by Jim Collins, 2001
  - Outliers: The Story of Success, by Malcolm Gladwell, 2011
  - Crossing the Chasm, 3rd Edition: Marketing and Selling Disruptive Products to Mainstream Customers, by Geoffrey A. Moore, 2014