



PERCONA
LIVE **ONLINE**
MAY 12 - 13th
2021

Percona Server for MongoDB Versus MongoDB Enterprise Advance

Hello!

I am Barrett Chambers

I am a Senior Solutions Engineer at Percona

You can find me at @BarrettUNC or on LinkedIn

Agenda

Percona, LLC and MongoDB, Inc.

Percona Server for MongoDB Build Process

MongoDB Enterprise Advance versus Percona Server for MongoDB features:

- Core Server
 - Authentication
 - Authorization
 - Encryption
 - Auditing
- Operational Considerations
 - Backups
 - Automation
 - Monitoring and Alerting

- Cost Considerations

Percona LLC and MongoDB, Inc.

The bottom of the slide features a decorative graphic consisting of several overlapping, wavy, semi-transparent shapes in various shades of orange and red, creating a modern, abstract background element.



Percona, LLC founded
Percona Server for MySQL

2006

2007

10gen software founded
10gen software develops MongoDB

Percona Xtrabackup (MySQL)

2009

10gen open sources MongoDB

Percona Toolkit

2011

2013

10gen becomes MongoDB, Inc.

Percona Acquires Tokutek
Percona Server for MongoDB

2015

Ops Manager*



* these products are subscription or license-based

Percona Monitoring and Management

2016

MongoDB Atlas*
MongoDB Compass

2017

MongoDB, Inc. public on NASDAQ

2018

MongoDB, Inc. acquires mLab
MongoDB, Inc. changes license to SSPL
MongoDB Enterprise Kubernetes Operator*

2019

Percona Backup for MongoDB
Percona Kubernetes Operator for PSMDB

MongoDB, Inc. acquires Realm*

2020

Percona Distribution for MongoDB

2021



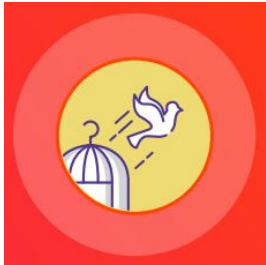
* these products are subscription or license-based



So Where Are We Now?

Percona, LLC

Keeping open source open for 15 years. Anyone, anywhere, should have free access to the software and tools necessary to turn their ideas into a viable business.



MongoDB, Inc.

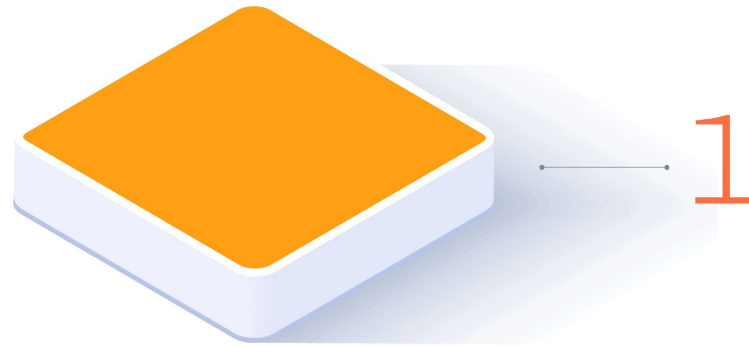
We believe that making data easy to work with gives people the opportunity to free their genius and create something world-changing.



Percona Server for MongoDB Build Process



Percona Server for MongoDB Build Process



1

MongoDB
Community Version

Start with the awesome
MongoDB Community version

Percona Server for MongoDB Build Process

Critical Bug Fixes
Fix the bugs and make it super perform.

2



1

MongoDB Community Version
Start with the awesome MongoDB Community version

Percona Server for MongoDB Build Process



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Percona Server for MongoDB Build Process



Enterprise Features

The background of the slide features abstract, flowing shapes in shades of orange and red. On the left side, there are several overlapping, wavy shapes in various tones of orange, ranging from light to dark. On the right side, there are similar wavy shapes in shades of red and pink, also overlapping. The overall effect is a modern, dynamic, and colorful background that complements the title.

Authentication and Authorization

Feature	Percona Server for MongoDB	MongoDB Enterprise Advanced
LDAP Authentication	✓	✓
LDAP Authorization	✓	✓
Kerberos	✓	✓
User Auditing	✓	✓
x509 Authentication	✓	✓
Log Redaction	✓	✓
SNMP	✗	✓

Additional Security Considerations











These features are available in MongoDB Community, Enterprise Advanced, and Percona Server for MongoDB

- Role-Based Access Control (RBAC)
 - Out-of-the box roles
 - User-defined roles
- TLS/SSL Connections
- Schema Validation

Storage Engines

Feature	Percona Server for MongoDB	MongoDB Enterprise Advanced
WiredTiger Engine	✓	✓
WiredTiger Hot Backup	✓	✓
WiredTiger Encryption	✓	✓
In-Memory Engine	✓	✓

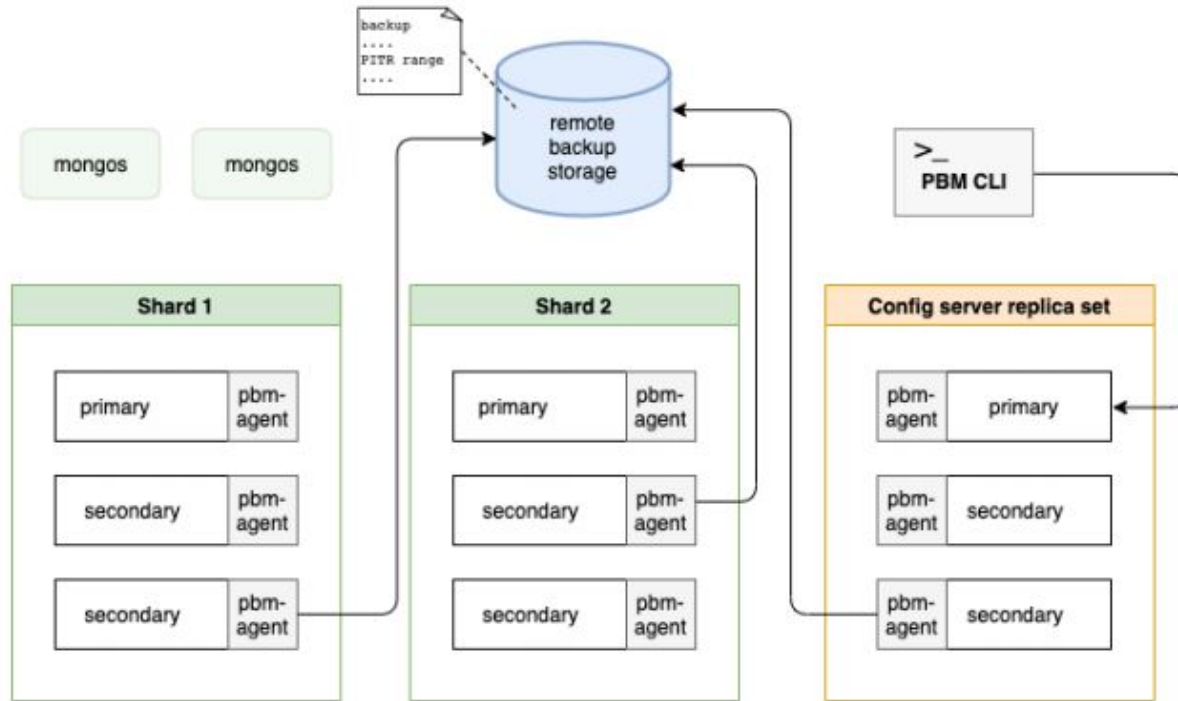
Encryption

Feature	Percona Server for MongoDB	MongoDB Enterprise Advanced
Local Key		
Hashicorp Vault Integration		
KMIP		
AWS KMS		
Client-side Field Level Encryption		

Backups

Feature	Percona Server for MongoDB & Percona Backup for MongoDB	MongoDB Enterprise Advanced & MongoDB Atlas
Automated	✓	✓
Sharded Cluster-Consistent PITR	✓	✓
Incremental	✓	✓
Cloud Backup	✓	✓
Snapshot	✓	✓
WiredTiger Hot Backup	✓	✓
Remote Backup Storage	✓	✓















Backups



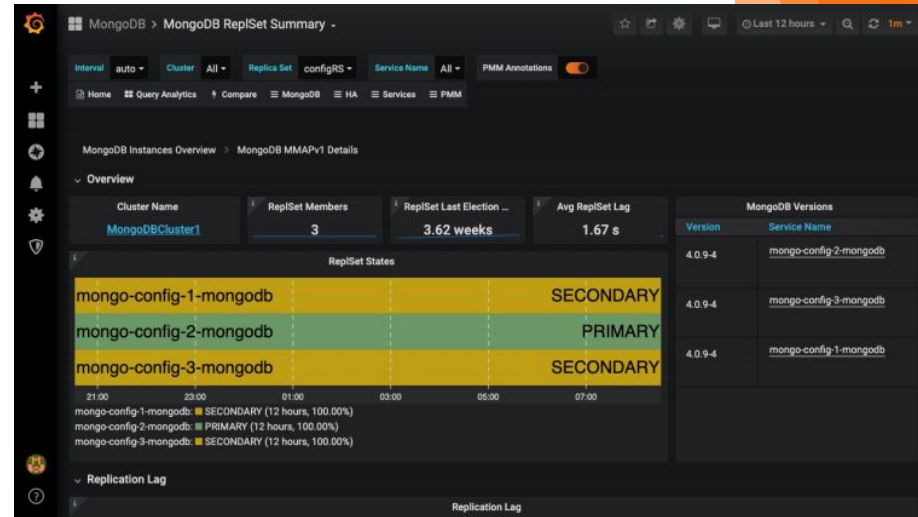
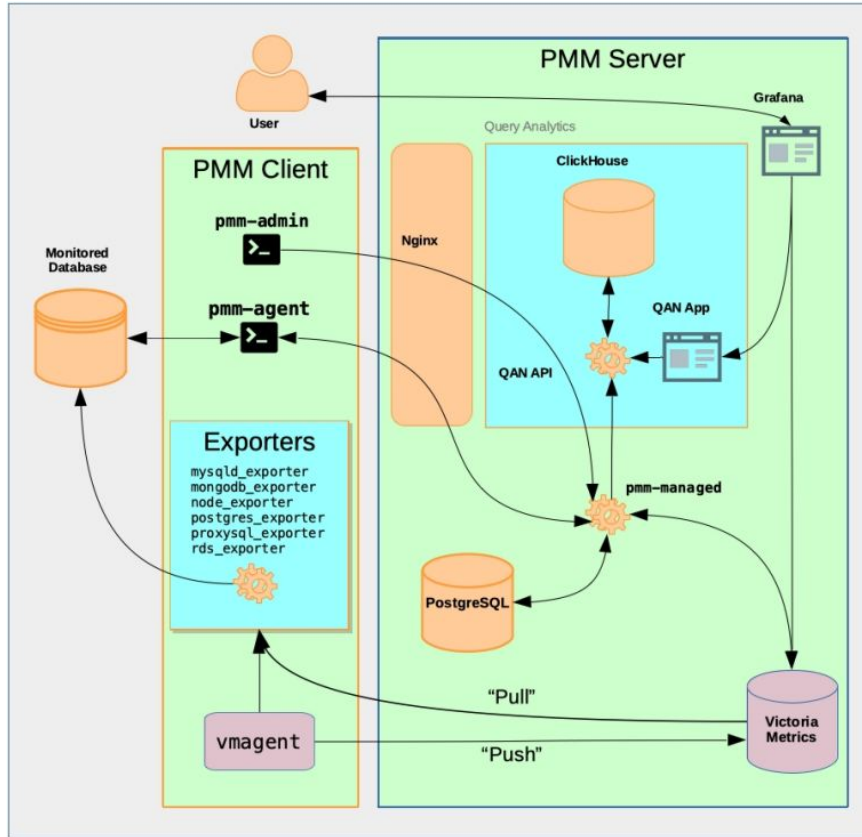
Monitoring

Feature	Percona Server for MongoDB & Percona Monitoring and Management	MongoDB Enterprise Advanced & MongoDB Atlas
Query Analytics	✓	✓
Performance Advisor	✗	✓
Replica Set Metrics	✓	✓
Cluster Metrics	✓	✓
Real-Time Metrics	✓	✓
CPU/Disk/OS Metrics	✓	✓













Monitoring

Feature	Percona Server for MongoDB & Percona Monitoring and Management	MongoDB Enterprise Advanced & MongoDB Atlas
Alerting (With 3rd party Integrations)		
Extendible		
Customizable		
Agentless Option		
Same Deployment On-Prem or Cloud		
Deploy on AWS, GCP, and Azure		
Deploy on Other Cloud Providers		

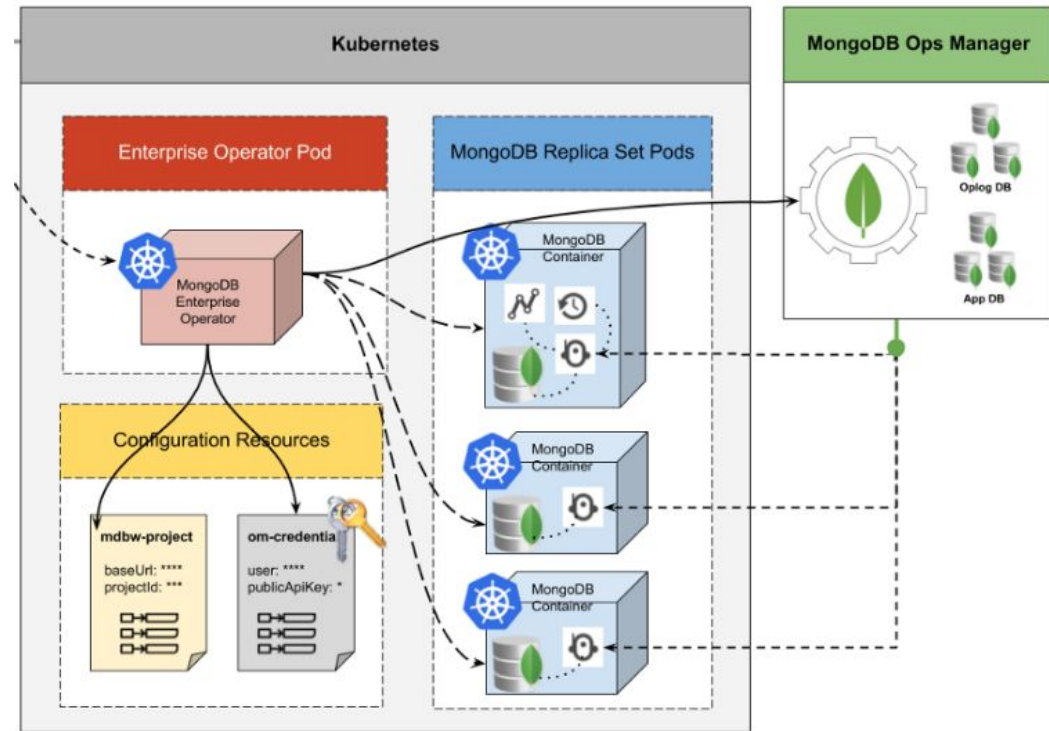
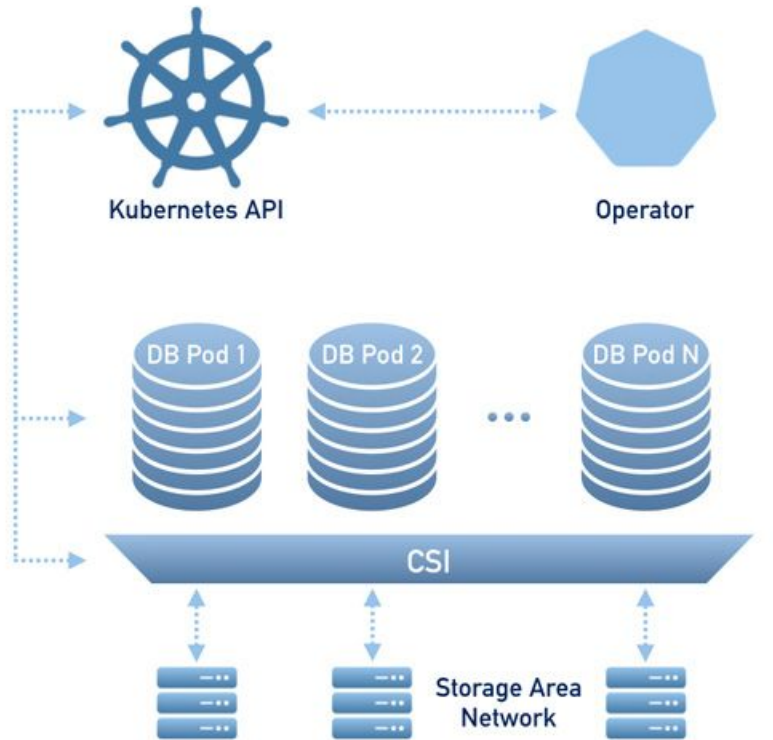
Percona Monitoring and Management



Automation

Feature	Percona Kubernetes Operator for Percona Server for MongoDB	MongoDB Enterprise Advanced & MongoDB Atlas
GUI-based Automation		
Automated Cloud Provisioning		
Automated Cluster Provisioning		
Automated Upgrades		
Automated Backups		
Automated Recovery		

Automation

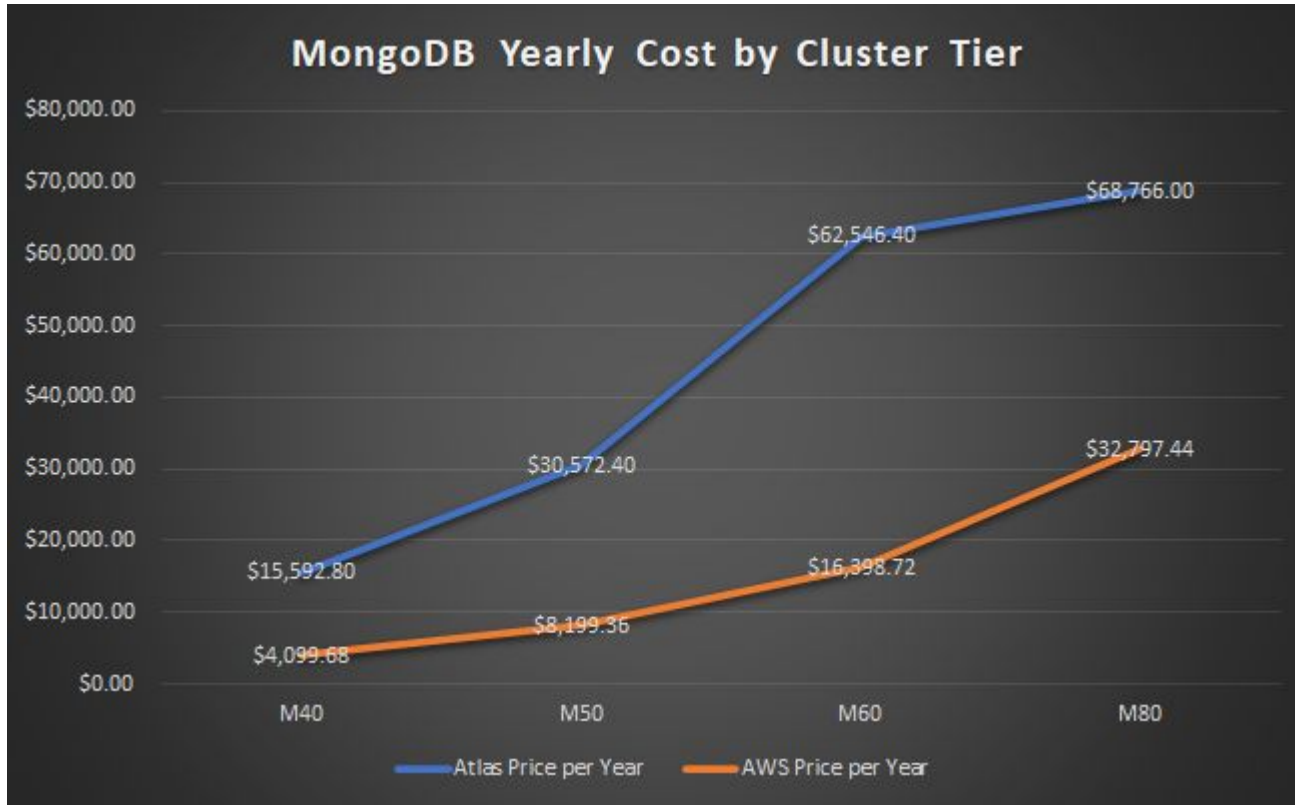


Cost Comparison

The background of the slide features abstract, wavy shapes in shades of orange and red. On the left side, there are overlapping orange shapes. On the right side, there are overlapping red and pink shapes that curve upwards towards the top right corner.

Assumptions for Cost Analysis

- MongoDB Atlas pricing retrieved from mongodb.com/pricing.
- AWS pricing retrieved from calculator.s3.amazonaws.com.
- Same vCPU, memory, storage used.
- No bundled or up-front cost-savings, only hourly used.
- 3-node cluster deployment.
- No other architectural components or I/O costs considered.



Most organizations will require commercial support which is not included in these costs

Summary

The background of the slide features a series of overlapping, wavy, semi-transparent shapes in shades of orange and red. These shapes create a sense of movement and depth, with the colors transitioning from a lighter orange on the left to a deeper red on the right. The overall effect is a modern, abstract design that complements the minimalist text.

Final Thoughts

- Choosing a database technology is a business decision as much as a technical one.
- Enterprise open source alternatives to MongoDB exist.
- Percona Server for MongoDB has many of the same features as MongoDB Enterprise without the license cost.
- Migration between MongoDB Enterprise and Percona Server for MongoDB is easy.

Thank You!



Barrett Chambers

<https://www.linkedin.com/in/barrettchambers/>

<https://www.percona.com/blog/author/barrett-chambers/>

THANK YOU !



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