Open Source MongoDB Monitoring

Diagnostics and Capacity Planning

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June 30, 2016
Many Sides of Monitoring

Alerting (When things get bad)

Investigations and Diagnostics (Finding Root Cause)

Capacity Planning (Preventing resource exhaustion)
## Focus on Service vs Component

**Service**
- Web Site Overall
- General Availability and Performance
- Redundancy Loss
- Other “global” issues i.e. correctness
- Immediate Action required 24/7
- Automated Actions for Healing and Scaling

**Component**
- Single Web Server
- Remove from the service if poor availability or Performance
- Self Healing (especially cloud)
- 24/7 optional
Proactive and Reactive

**Proactive**
- Needs attention to prevent future problem
- Working Hours
- Need Shard Rebalancing
- Will run out of space in a week
- Backup is taking longer than desired

**Reactive**
- When things are bad or problem eminent
- 24/7/365
- Server Crashed
- Servicing Commands Slowly
- Backup Failed
Service Impacting and Operational

Service Impacting
- Directly Impacting Application
- Service Down
- Service Slow

Operational
- Are backup being taken?
- Is configuration valid/secure?
- Is Desired level of redundancy maintained
Signal Versus Noise

High Noise Alerting systems fail due to Human Psychology

Learn More on Alerting

Fantastic Alerting Philosophy by Rob Ewaschuk

What do we use at Percona?

Percona Monitoring Plugins (NAGIOS)

Working on next generation Alerting for Percona Monitoring and Management
What does MongoDB do?

Responds Application Requests
Criteria

Response (Available)  Right (Correctness)  Quickly (Performance)
Two Ways to Look

Commands Focused

System Focus
With this in mind we built PMP


Metrics – Looking at the Operating System and MongoDB Side

Understanding of MongoDB Sharding and Replica Sets

Built by using Best in class Open Source Components

100% Open Source

Currently is BETA – work in progress
Inside Percona Monitoring and Management
PMM Future

MongoDB Queries Monitoring and Profiling

Alerting

Support for MongoRocks

Alternative Packaging

Deployment

Management
For the User?

Get Docker Container for “Server Part”

Install the “Agent” on MongoDB Servers

Point the agent to the right server location
Check it Out

Live Demo is running at
http://pmmdeploy.percona.com
Let's Explore it Together!

(Demo)
Thank You!