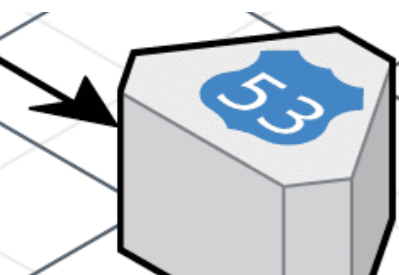


JENKINS ON SPOT

Mykola Marzhan





Mykola Marzhan
Release Engineer, Percona

AWS Certified Solutions
Architect - Professional

I have been working as Release
Engineer for 10 years.



JENKINS MASTER ON **SPOT** INSTANCE

MURDERED DUE TO

PRICE, CAPACITY,

CONSTRAINTS



JENKINS MASTER

FREQUENCY OF INTERRUPTION

(spot advisor)

JENKINS MASTER

AMAZON

ELASTIC FILE SYSTEM

EFS PERFORMANCE

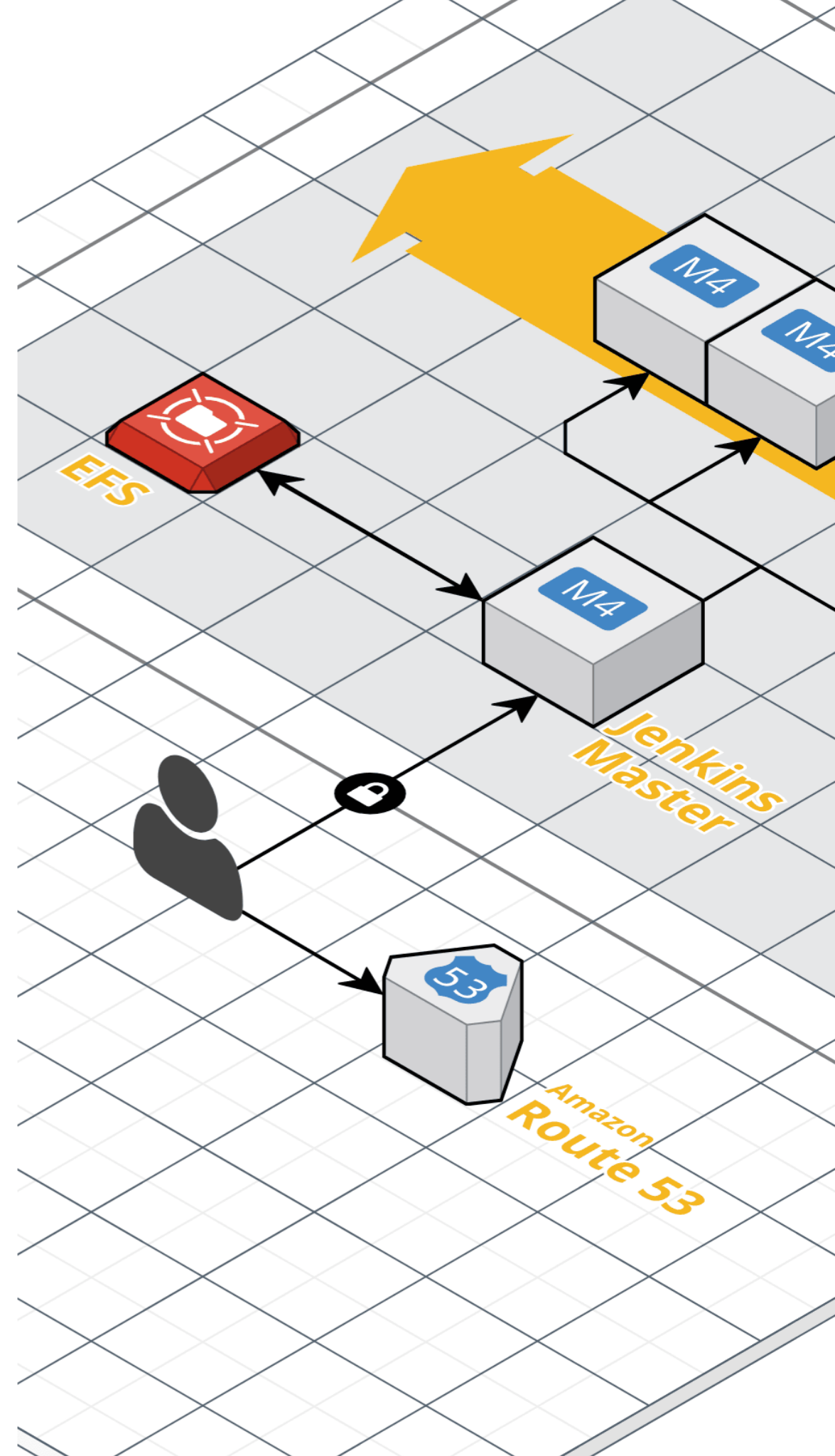
	MiB/s	Operations/s	AVG latency (ms)
Sequential read	122,96	7869,10	0,126
Random read	21,13	1352,28	0,737
Sequential write	1,95	124,72	8,026
Sequential rewrite	1,99	127,33	7,869
Random write	1,47	94,14	10,616
Random rewrite	1,55	98,90	4,044

JENKINS MASTER

ENHANCED NETWORKING FOR **EC2** INSTANCES

EFS LIMITATIONS

- EFS not suitable for many small files and one-thread applications
- All artifacts to S3
- Tens of jobs/pipelines
- Few of builds to keep
- Don't "stash" files (extremely slow)



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AMAZON

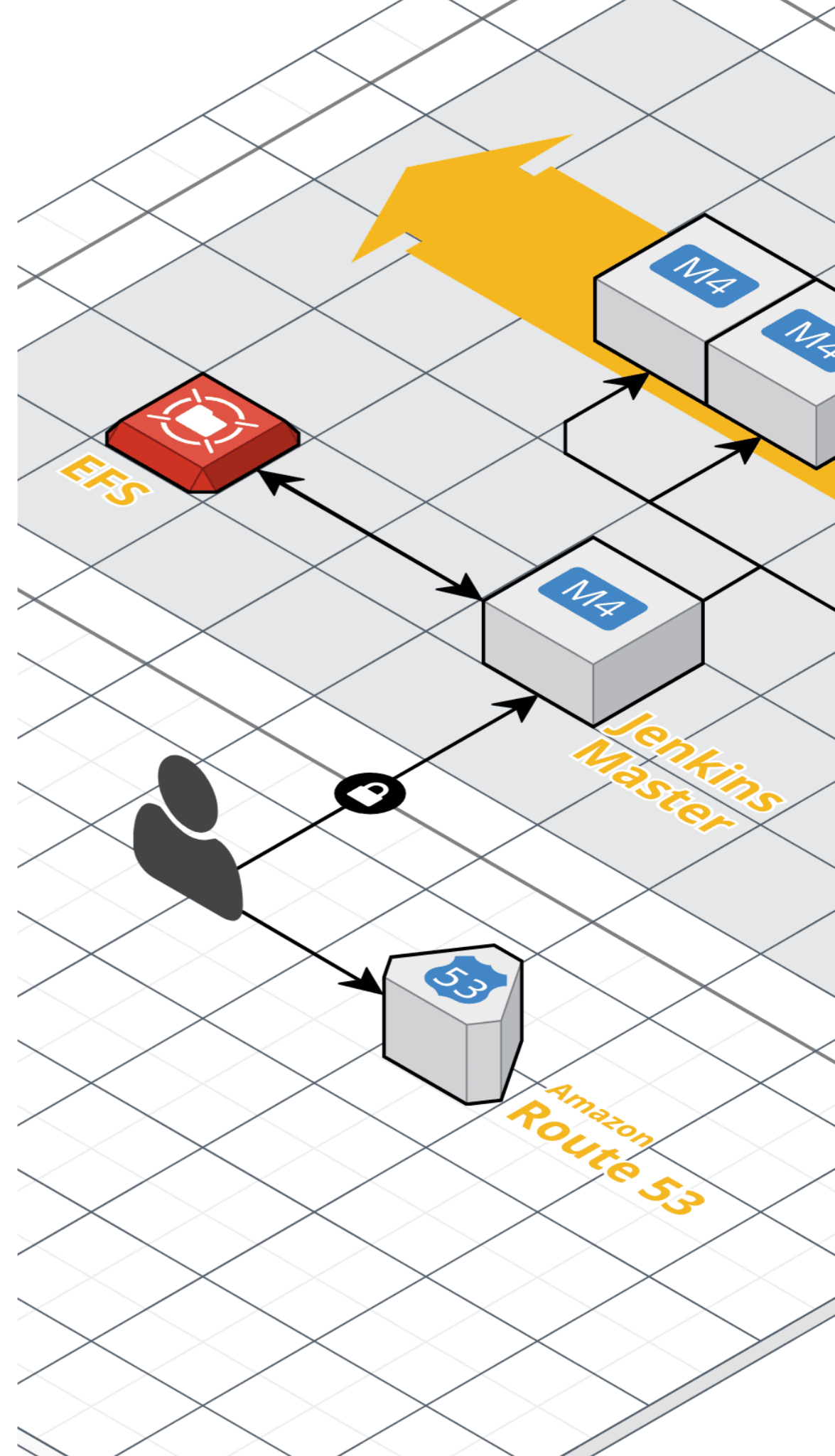
ELASTIC BLOCK STORE

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2-MINUTE INSTANCE TERMINATION NOTICE

EBS LIMITATIONS

- EBS limits to use one AZ



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**PIPELINES IN
MAX_SURVIVABILITY**

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NO EXECUTORS ON
MASTER NODE

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NO WEB-HOOKS

use pollCSM trigger

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ELASTIC IP



JENKINS WORKERS ON **SPOT** INSTANCES

EC2 FLEET JENKINS PLUGIN

- Official AWS plugin
- Configuration on AWS side
- Spot Fleet can start instances in different AZs
- Starts two times more instances than needed (PR#29)
- On scale-down AWS terminates instances under load (issues#36)
- New Spot Fleet id on changes

AMAZON EC2 PLUGIN

- Most popular plugin
- Configuration on Jenkins side
- Possible to use external ssh process as transport
- Has init script which executed before agent start
- Starts instances one by one
- Instances cannot be started in different AZs
- Instance cap is tied to AMI (PR#274)
- Doesn't tag spot instances (JENKINS-19058)

JENKINS WORKER

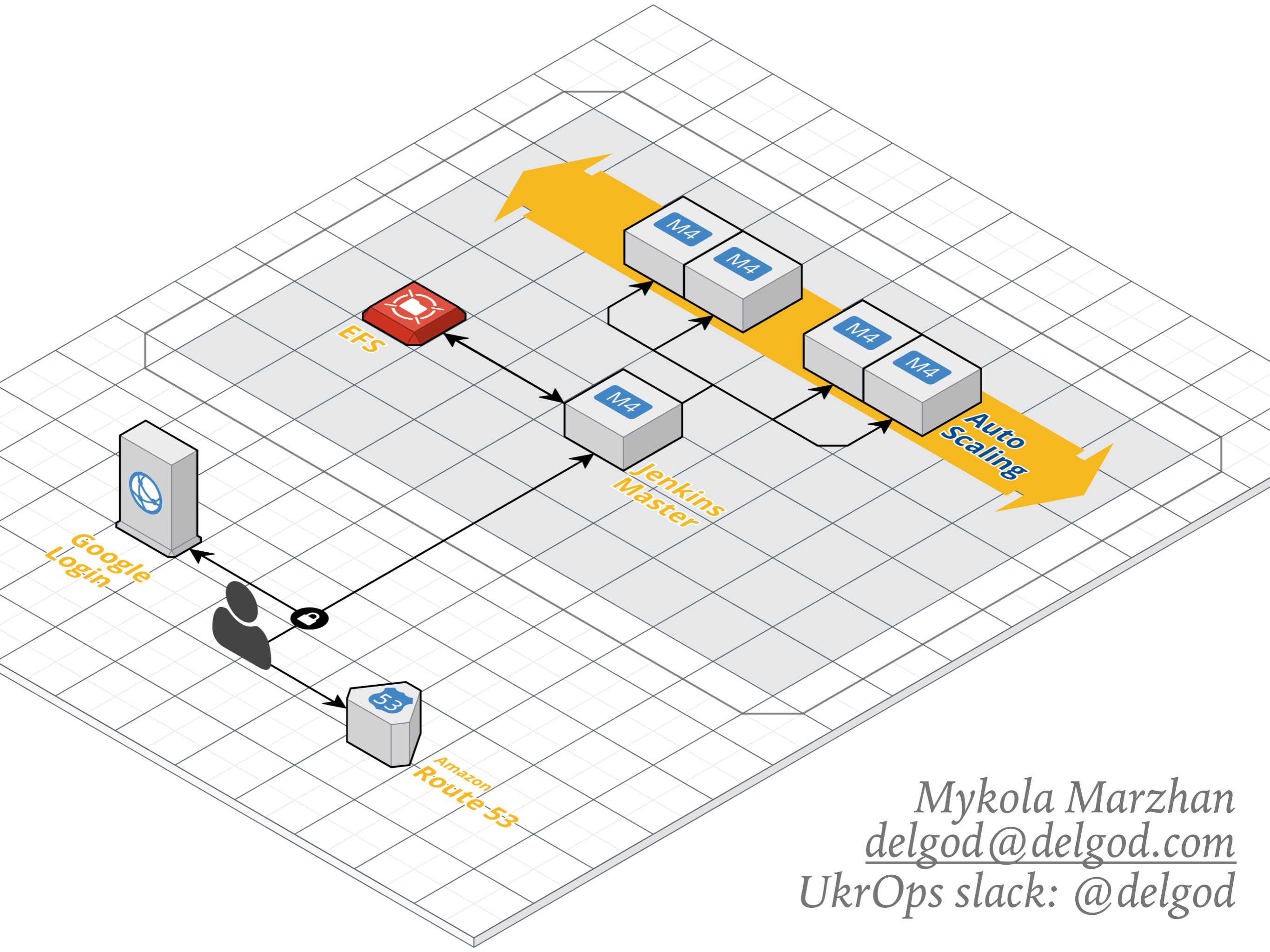
RETRY 

EXPENSES

	Master USD/month	Worker USD/month
Percona Monitoring and Management	5.13 / 43.27	10.87
Percona Server for MySQL	15.33 / 19.70	288.92
Percona Server for MongoDB	21.36 / 10.83	70.15
Percona XtraBackup	20.92 / 12.37	184.18

CLOUDFORMATION CONFIG





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