

And the CFO Wept: Cost Control For AWS

By
Corey Quinn, Cloud Economist

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Has this ever
happened to you?


Twitter For Pets

 [@QuinnyPig](https://twitter.com/QuinnyPig)



@QuinnyPig



 @QuinnyPig

Message:

Blocked numbers are
1. 26345235463

To unblock reply with your choice
E.g.1 or * Previous

Reply





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LITERARIA INSTRUX

INSUPER SUPPLEG

ANNO



@QuinnyPig

NOW

THAT'S WHAT I CALL



une pipe



@QuinnyPig



- Reserved Instances
- Spot Fleet usage
- Refactoring tasks into Lambda functions
- Bigger GP volumes versus smaller Provisioned IOPs volumes
- Turn off unused instances
- Convert ELBs to ALBs (maybe)
- Release unused EIPs
- Upgrade old instances to new generations
- Delete old unneeded data
- Lifecycle policies to age out data to IA / Glacier
- Optimize your read / write patterns on RDS
- Rearchitect your replication strategy
- Delete failed multipart upload artifacts
- Understand that every million reads/writes on Aurora costs you a quarter
- Clean out unneeded EBS snapshots
- Check for orphaned EBS volumes
- Did you remember to check all regions?

We waited
30 min
NO SERRVIO

- [▲ Quickly review changed functions in your Python pull requests \(github.com\)](#)
1 point by [happy-go-lucky](#) 0 minutes ago | [flag](#) | [hide](#) | [past](#) | [web](#) | [discuss](#)
- [▲ Free Floating Social Bar \(web4future.com\)](#)
1 point by [laci27](#) 7 minutes ago | [flag](#) | [hide](#) | [past](#) | [web](#) | [discuss](#)
- [▲ Open Phoenix OS kernel source – let us help improve hardware support \(change.org\)](#)
1 point by [nkkollaw](#) 12 minutes ago | [flag](#) | [hide](#) | [past](#) | [web](#) | [discuss](#)
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- [▲ I built a chatbot in 2 hours and this is what I learned \(codementor.io\)](#)



OHHH

SHINY + NEW

NOBODY

CARES!

I don't believe you






How much did Project StairFall cost the company?

 **@QuinnyPig**

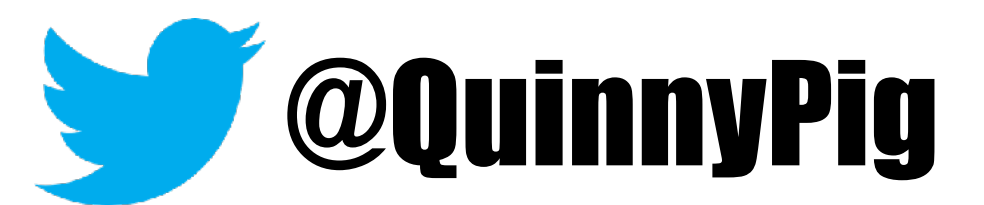


How much of the bill is R&D?

 [@QuinnyPig](https://twitter.com/QuinnyPig)



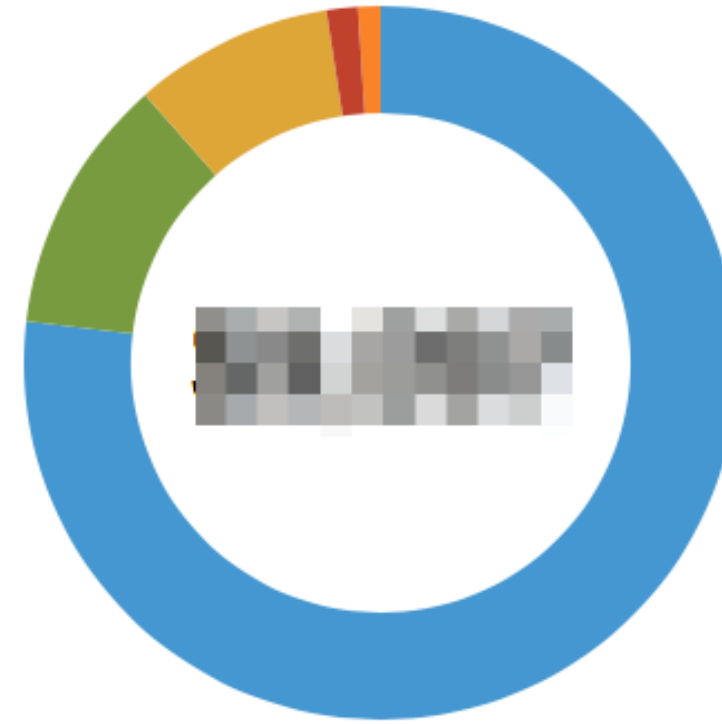
If we add another 1000 users,
what will that cost?















Month-to-Date Spend by Service

[Bill Details](#)

The chart below shows the proportion of costs spent for each service you use.




	EC2	
	RDS	
	SupportBusiness	
	DataTransfer	
	Other Services	
	Tax	
	Total	

זען (שיש) זען





 @QuinnyPig




**Who did
this?**

**DEPARTMENT OF
REDUNDANCY
DEPARTMENT**



Build a tagging strategy that works.



 **@QuinnyPig**









CHASE



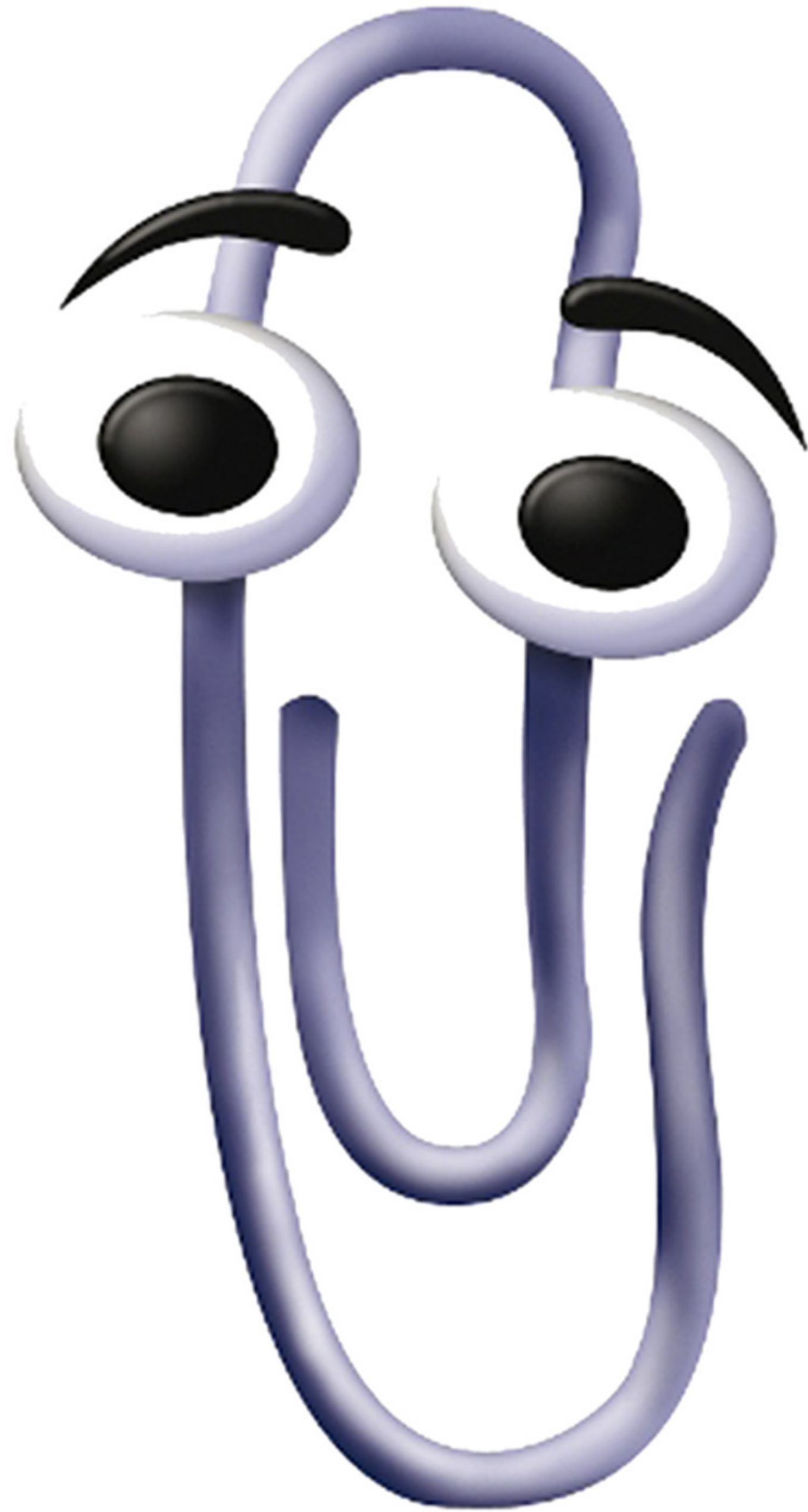




[@QuinnyPig](#)



Microsoft Azure



30%



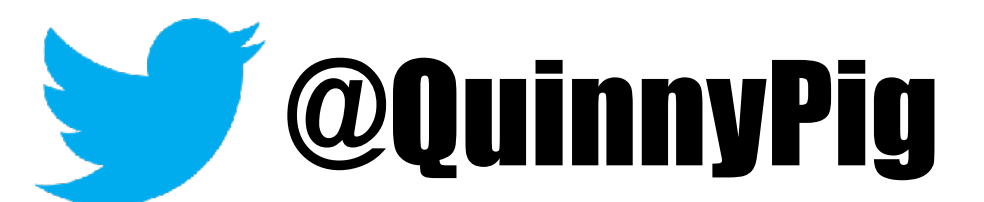
THE DATA-DRIVEN

FUTURE





Exercise Judgement.





STRATEGY

PLAN A

PLAN B

- Have a plan.
- Understand where your money is going.
- Be able to allocate spend

Now some thoughts on cost control

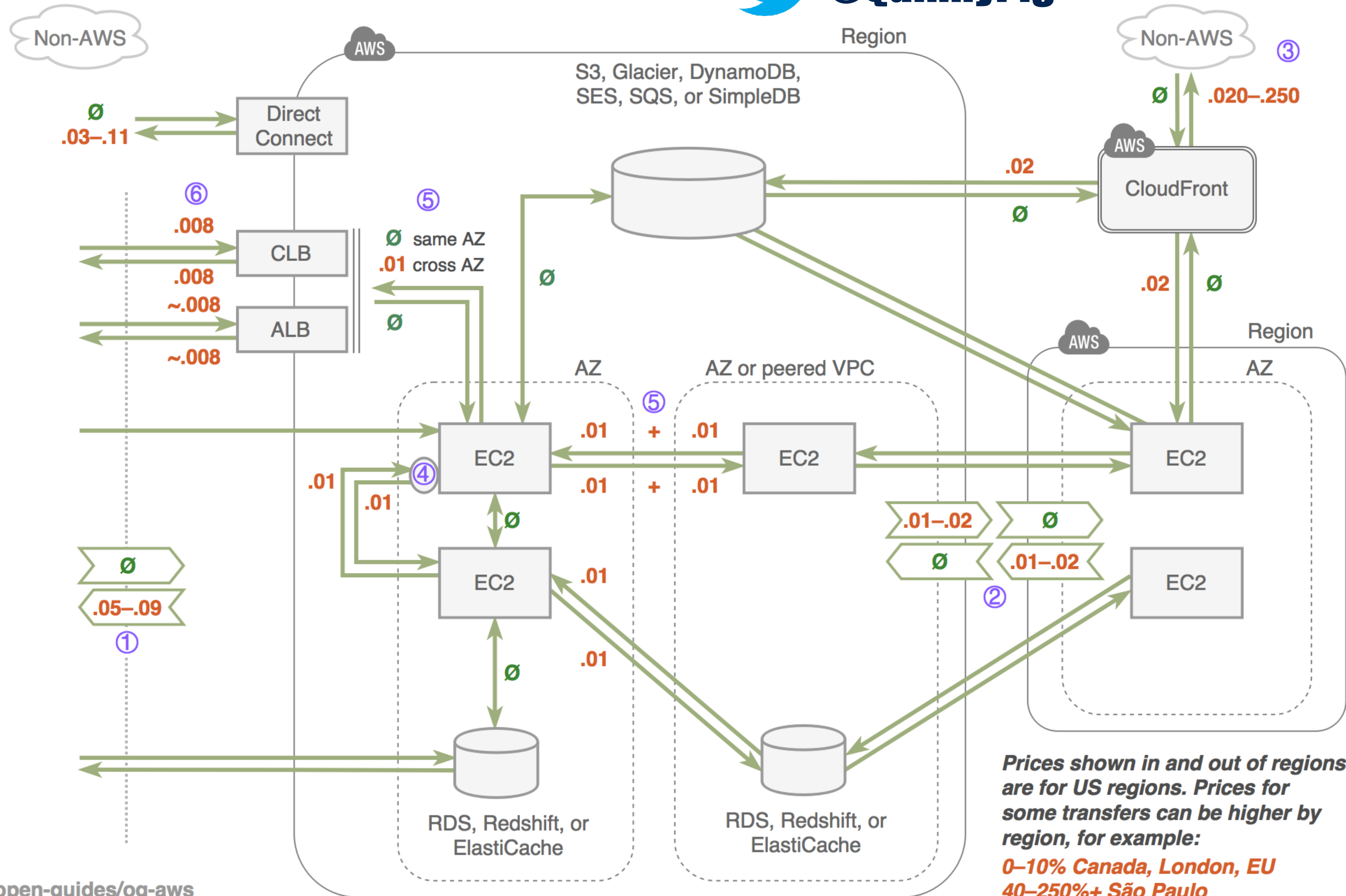
- Reserved Instances
- Spot Fleet usage
- Refactoring tasks into Lambda functions
- Bigger GP volumes versus smaller Provisioned IOPs volumes
- Turn off unused instances
- Convert ELBs to ALBs (maybe)
- Release unused EIPs
- Upgrade old instances to new generations
- Data transfer between Ohio and Virginia is half price.
- Lifecycle policies to age out data to IA / Glacier
- Optimize your read / write patterns on RDS
- Rearchitect your replication strategy
- Delete failed multipart upload artifacts
- Understand that every million reads/writes on Aurora costs you twenty cents.
- Clean out unneeded EBS snapshots
- Check for orphaned EBS volumes
- Did you remember to check all regions?



AWS DATA TRANSFER COSTS

Numbers are data transfer in \$/GB. Transaction and hourly prices are not shown. See notes.

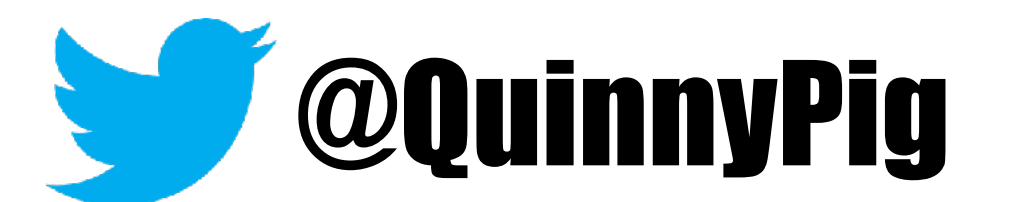
- ∅ Free. Inbound traffic is mostly free —you pay on the way out. Some but not all internal traffic is free.
- ① Direct outbound data starts at **\$.09/GB** for <10TB, and discounts with volume. First 1GB free.
- ② Region-to-region traffic is **\$.02/GB** when it exits a region for indicated services except between us-east-1 and us-east-2, where it's **\$.01/GB**.
- ③ Outbound CloudFront prices are highly variable by geography and regional edge cache and start at **\$.085/GB** in US/Canada.
- ④ Internal traffic via public or elastic IPs incurs additional fees in both directions.
- ⑤ Cross-AZ EC2 traffic within a region costs as much as region-to-region! ELB-EC2 traffic is free except outbound crossing AZs.
- ⑥ Elastic Load Balancing: Classic LB is priced per GB. Application LB costs are in LCUs, not \$/GB.



Prices shown in and out of regions are for US regions. Prices for some transfers can be higher by region, for example:
0-10% Canada, London, EU
40-250%+ São Paulo

Sadly, I have nothing to sell you.

lastweekinaws.com



Code

Issues 95

Pull requests 1

Projects 0

Insights

Amazon Web Services — a practical guide

738 commits

1 branch

0 releases

115 contributors

Branch: master

New pull request

Create new file

Upload files

Find file

Clone or download

QuinnyPig committed on GitHub Merge pull request #494 from victorelu/master

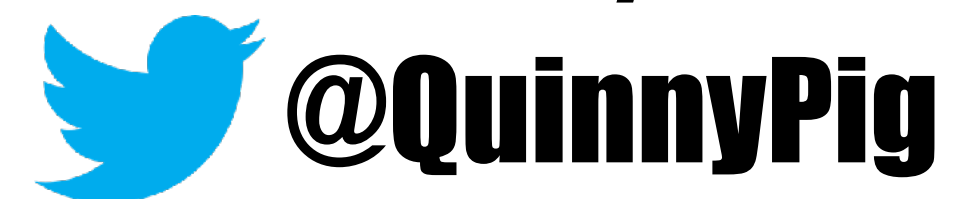
Latest commit 7f9a3ba 3 days ago

admin

Gentle formatting fixes we can run more often. (#443)

4 months ago

github.com/open-guides/og-aws/



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