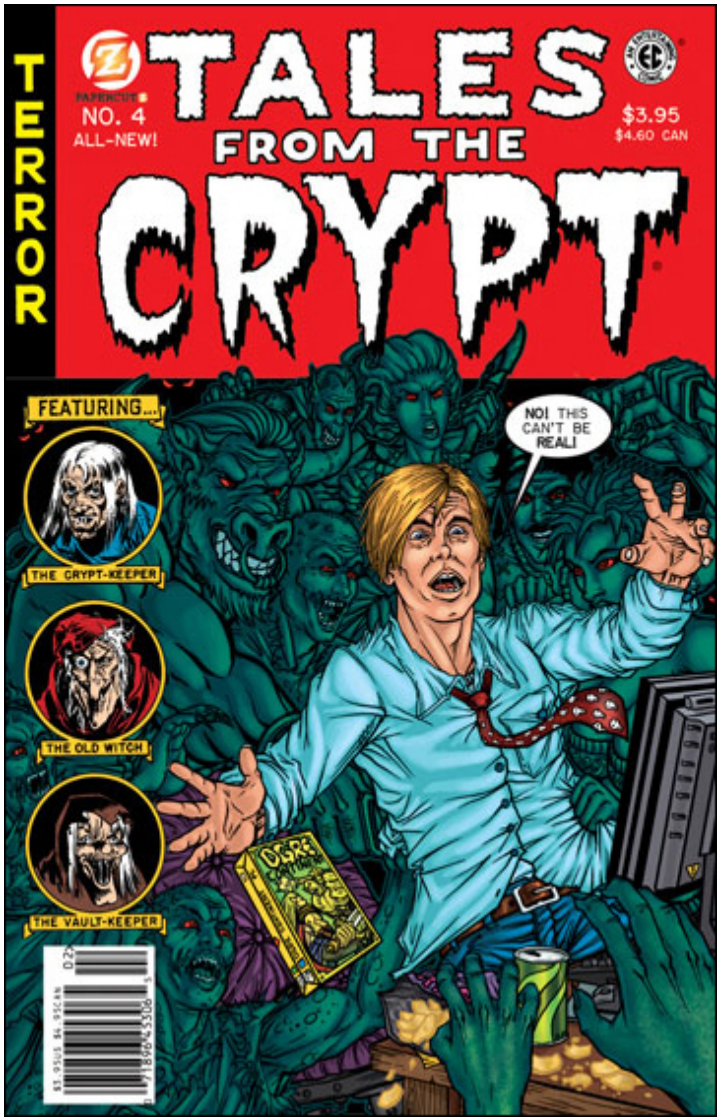
Securing memcache or,
Tales from Encryption

What's memcache?

Who’s big idea?

Why secure memcache?

- SASL authenticates
- yaSSL also encrypts



Who cares?

- Policy enforcement
- Sensitive Data
- Masking Data behind firewall

The Cloud Cares

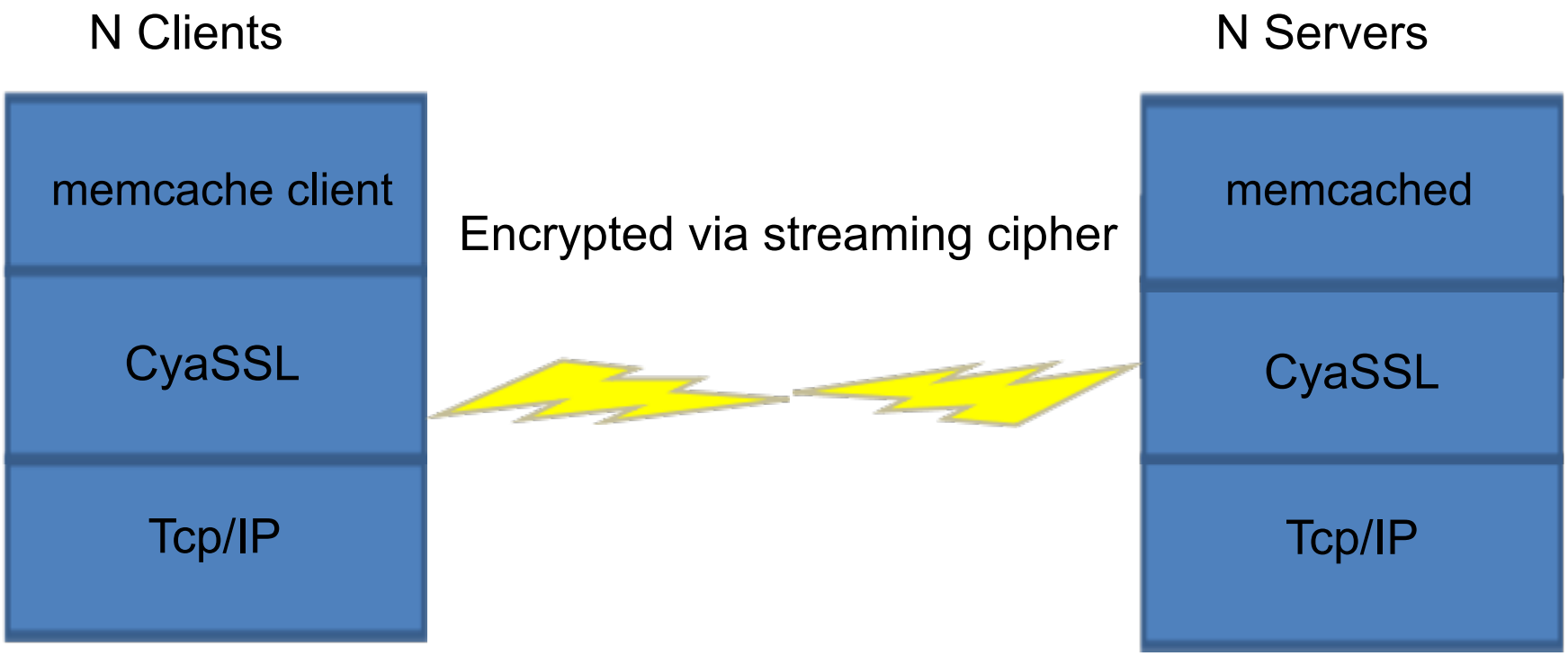
How do I use it?

-T

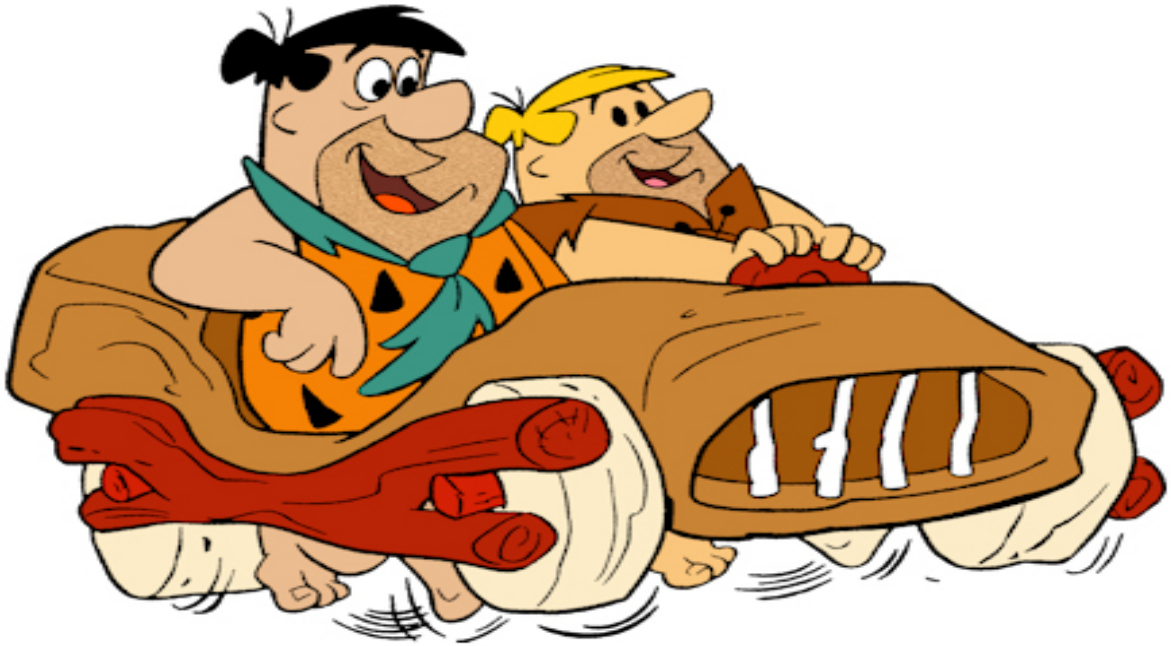
When is it available?

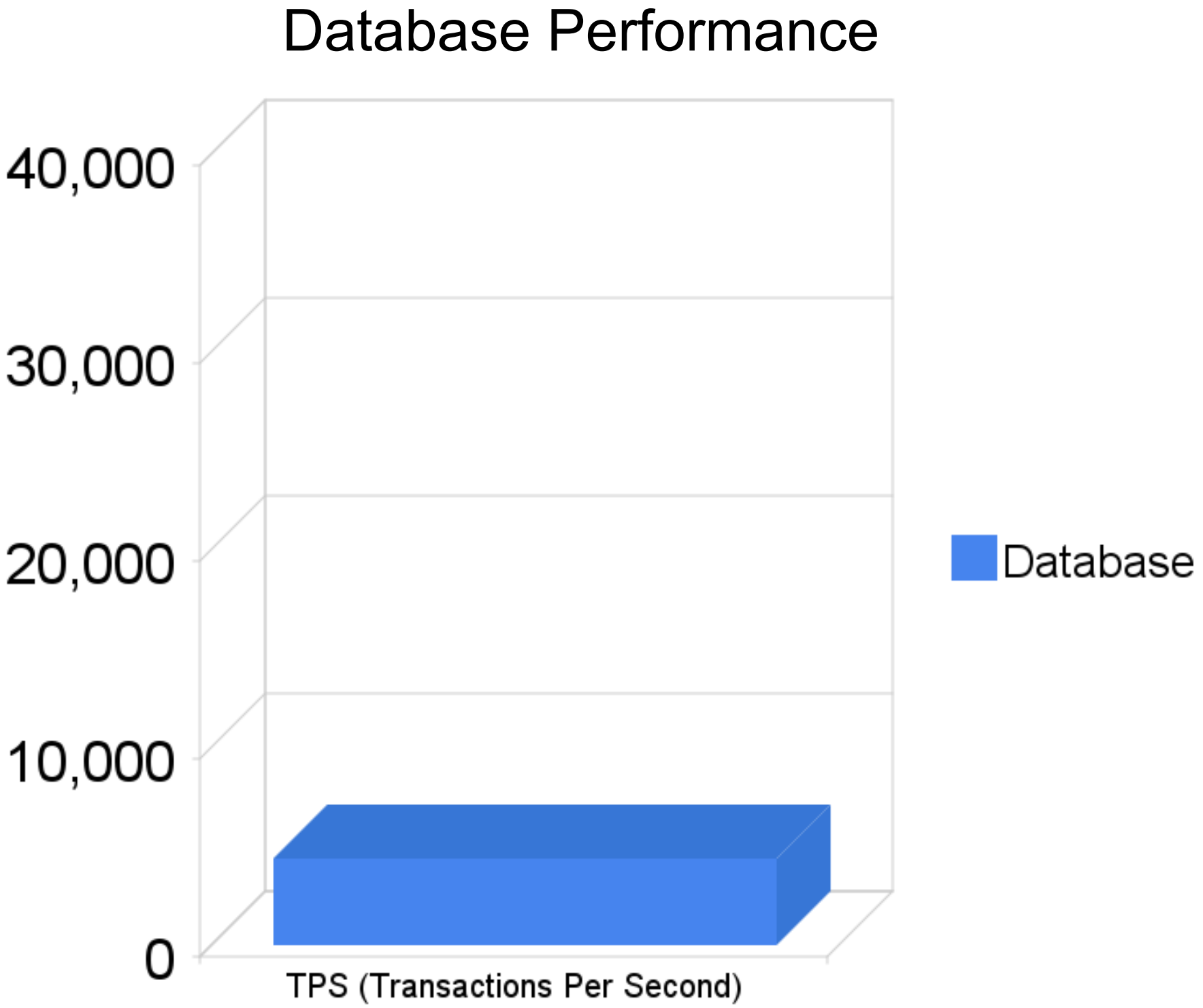
- Beta now

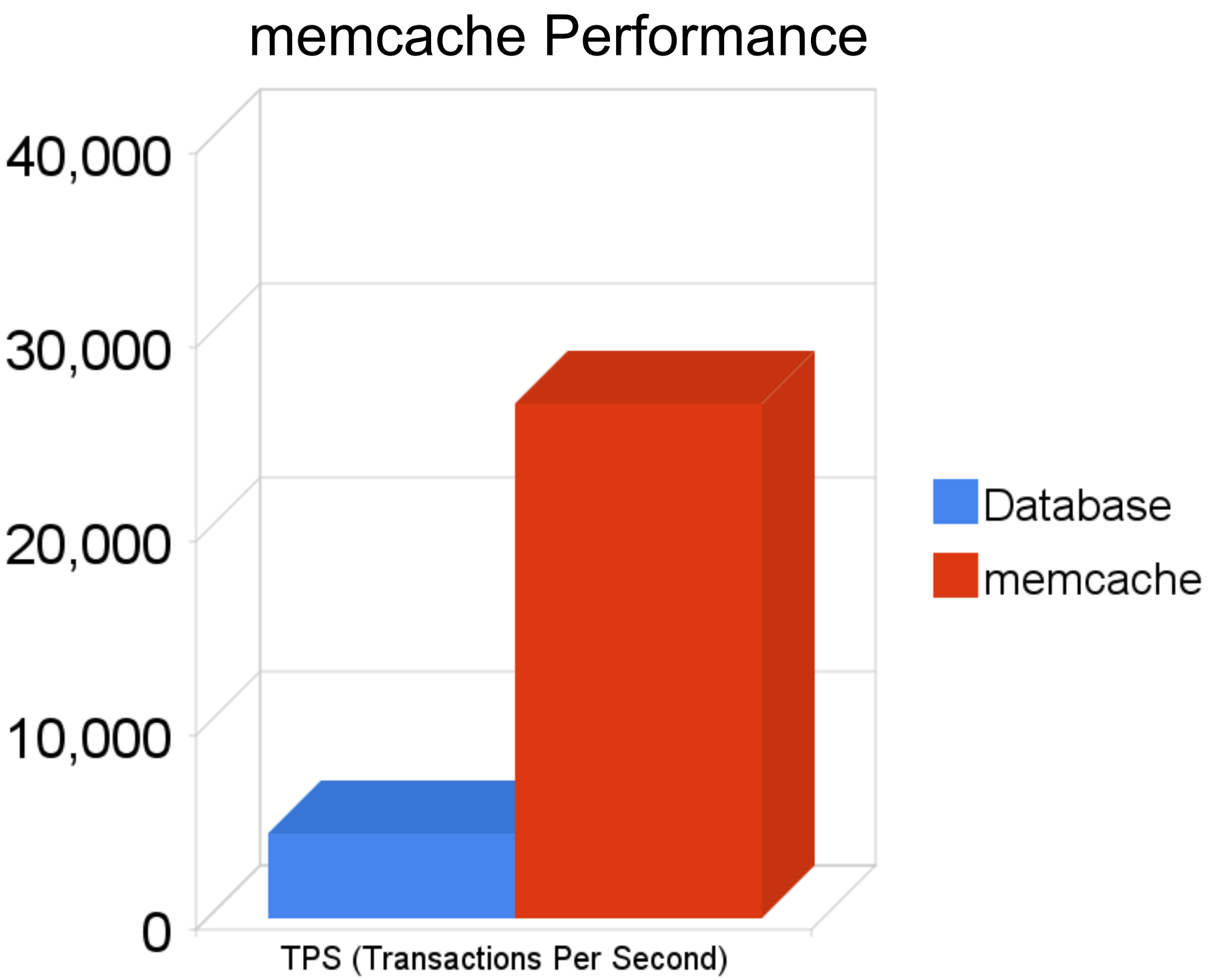
How it works

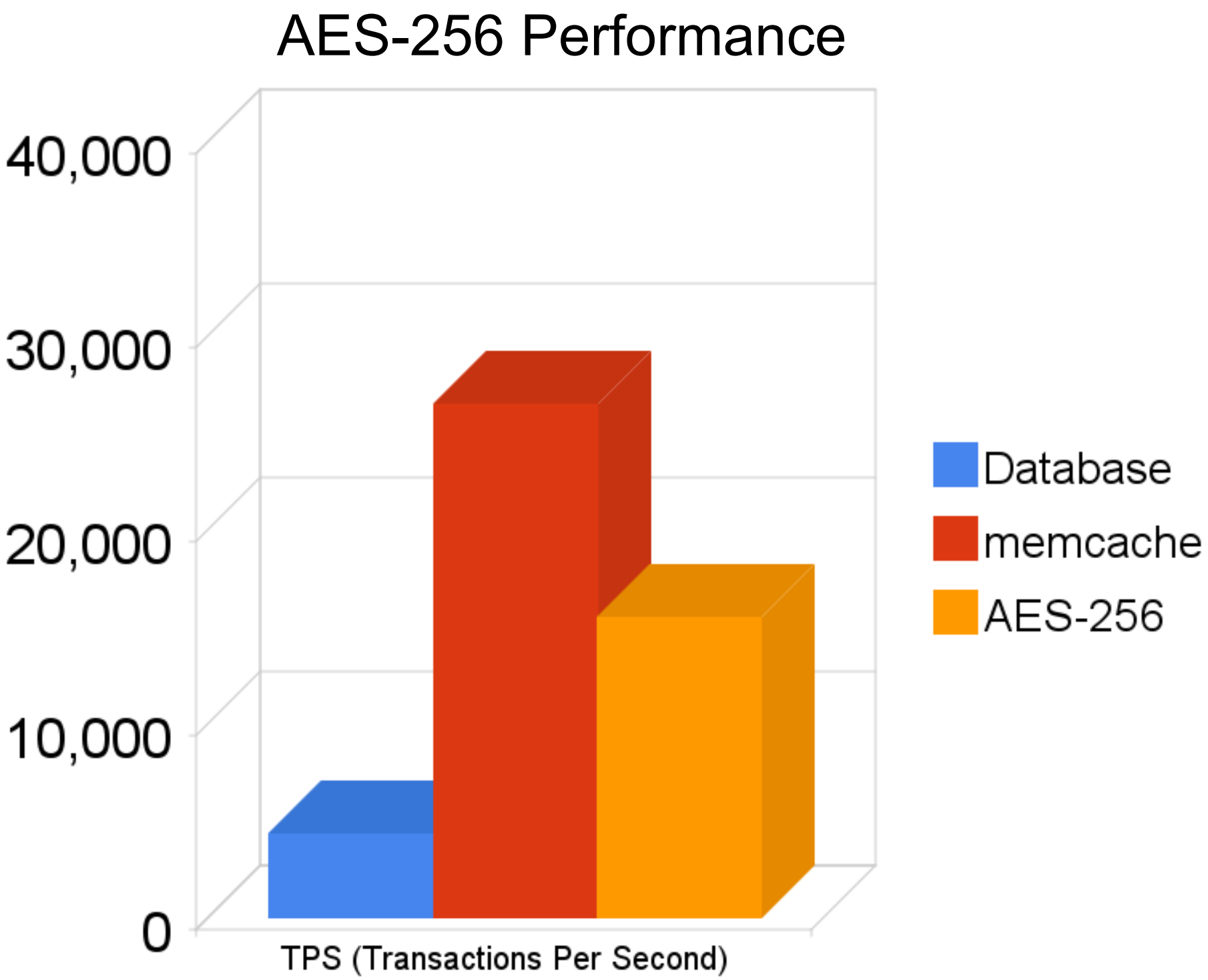

N Clients
memcache client
CyaSSL
Tcp/IP
Encrypted via streaming cipher
N Servers
memcached
CyaSSL
Tcp/IP

What's the Cost?

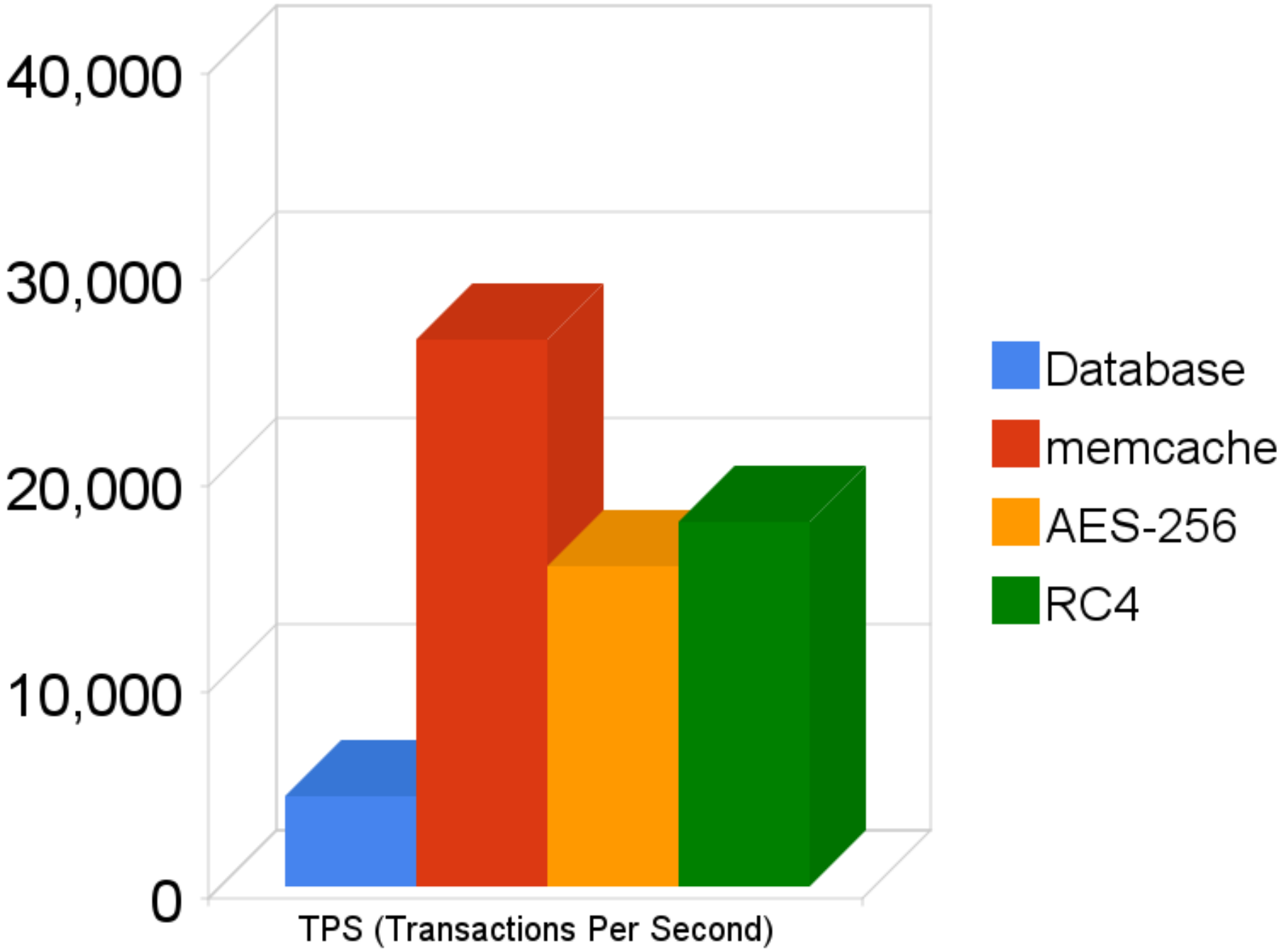



Database Performance
40,000
30,000
20,000
10,000
0
TPS (Transactions Per Second)
Database

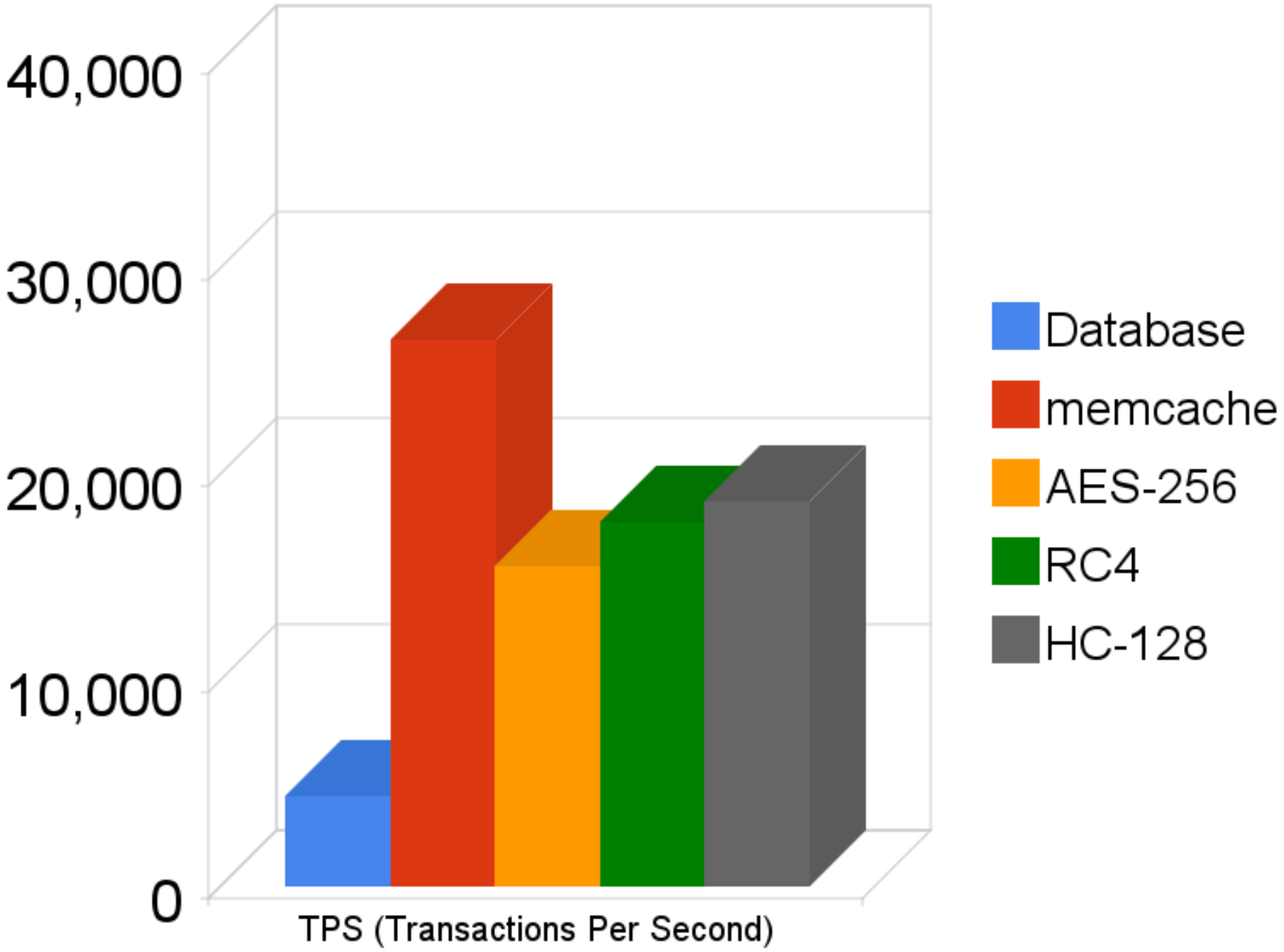

memcache Performance
40,000
30,000
20,000
10,000
0
TPS (Transactions Per Second)
Database
memcache


AES-256 Performance
40,000
30,000
20,000
10,000
0
TPS (Transactions Per Second)
Database
memcache
AES-256

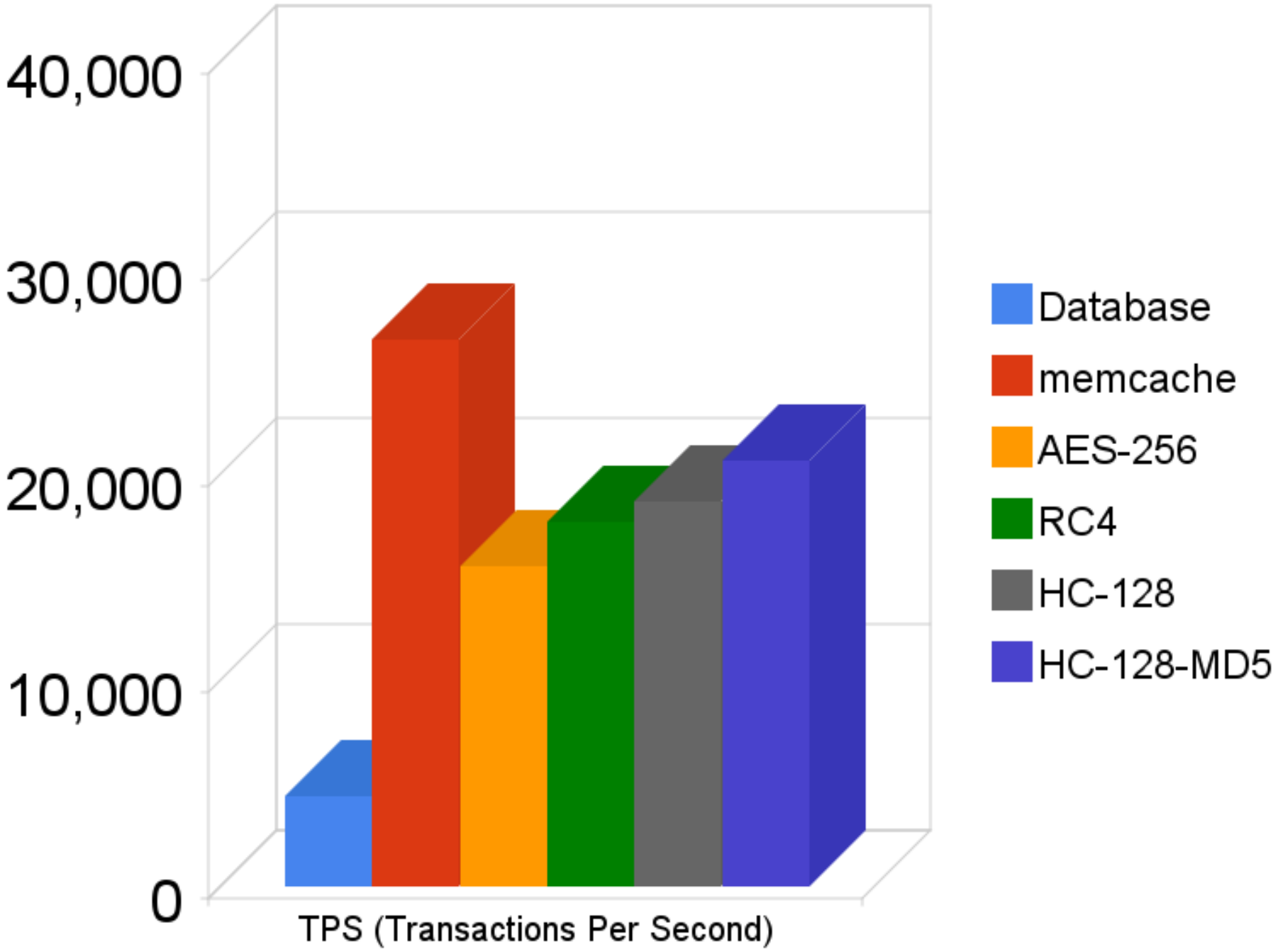
Stream RC4 Performance



HC-128 Performance



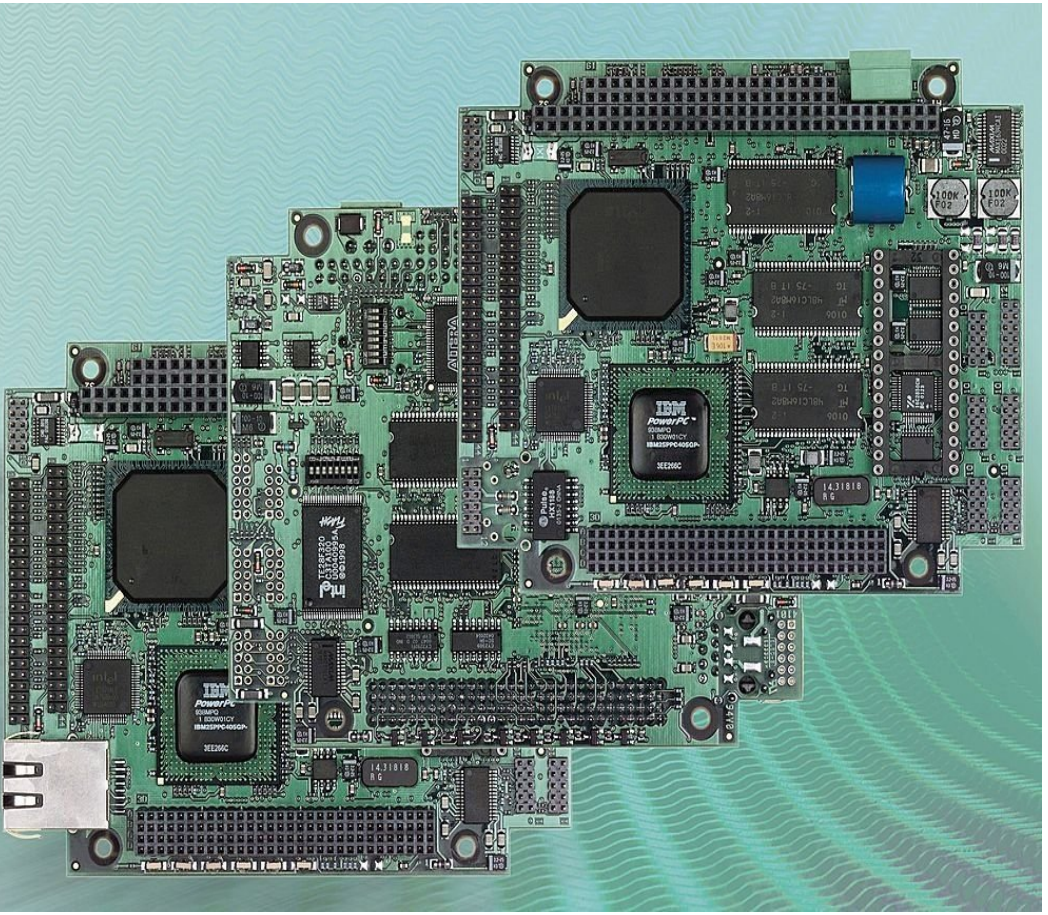
MD5 HC-128 Performance

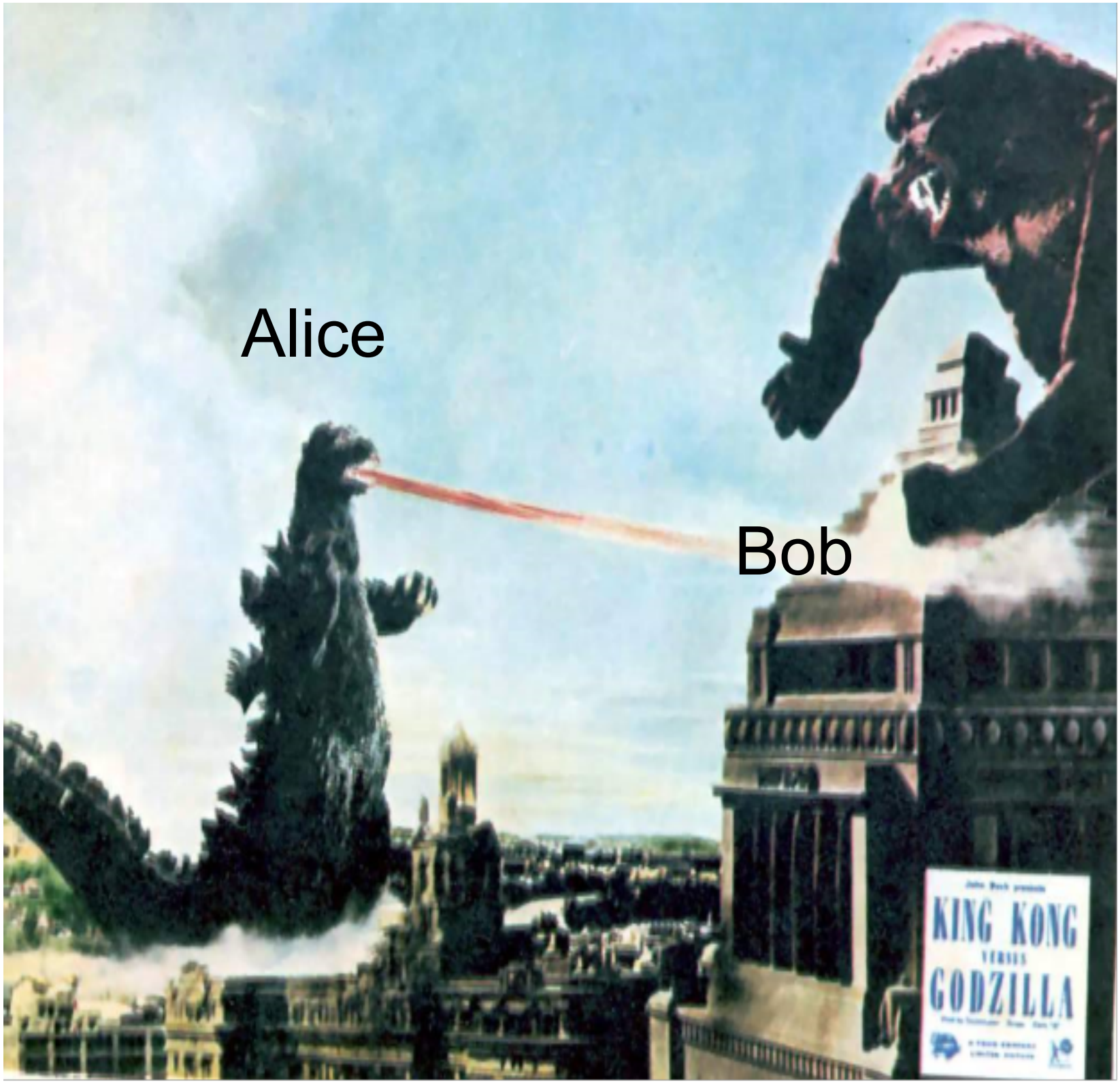


Future Performance Directions

AES-NI

Hardware offloading




Alice
Bob
KING KONG
VERSUS
GODZILLA

Thanks!

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