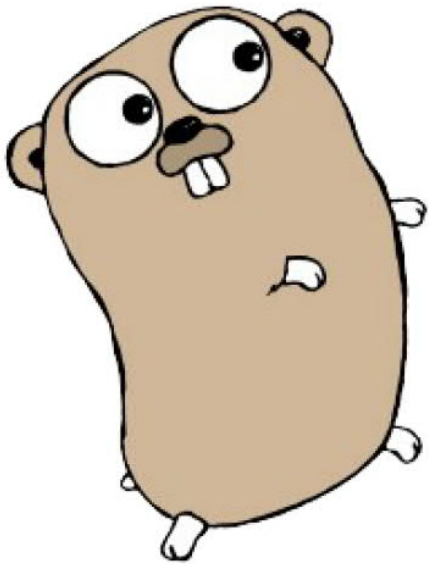
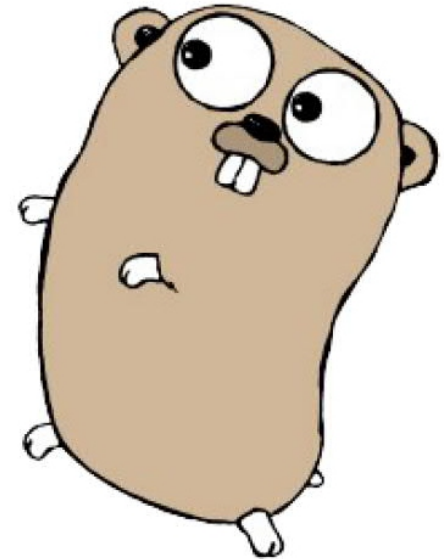


tiedot – your NoSQL engine powered by Go



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What is tiedot

- Finnish word for “data”
- High performance – gives higher throughput compare to alternatives
- Low resource usage and easily embeddable
- Cross platform (*nix, Windows)
- Small and clean – 4K LOC
- Search for “tiedot” on Google or Github

tiedot features

- NoSQL – schema free, document oriented storage
- JSON documents, JSON query with flexible set operations
- Regular HTTP API
Will also support Go RPC in the future
- Hash table index
- Highly paralleled IO

A taste of tiedot – HTTP API

- **`/create?col=Article&numparts=4`**
- **`/insert?col=Article`**
doc={ "Name": "Golang 1.2 is here!",
"Source": "golang.org" }
- **`/index?col=Article&path=Source`**
- **`/query?col=Article`**
q={ "eq": "golang.org", "in": ["Source"] }
- **`/delete?col=Article&id=531`**

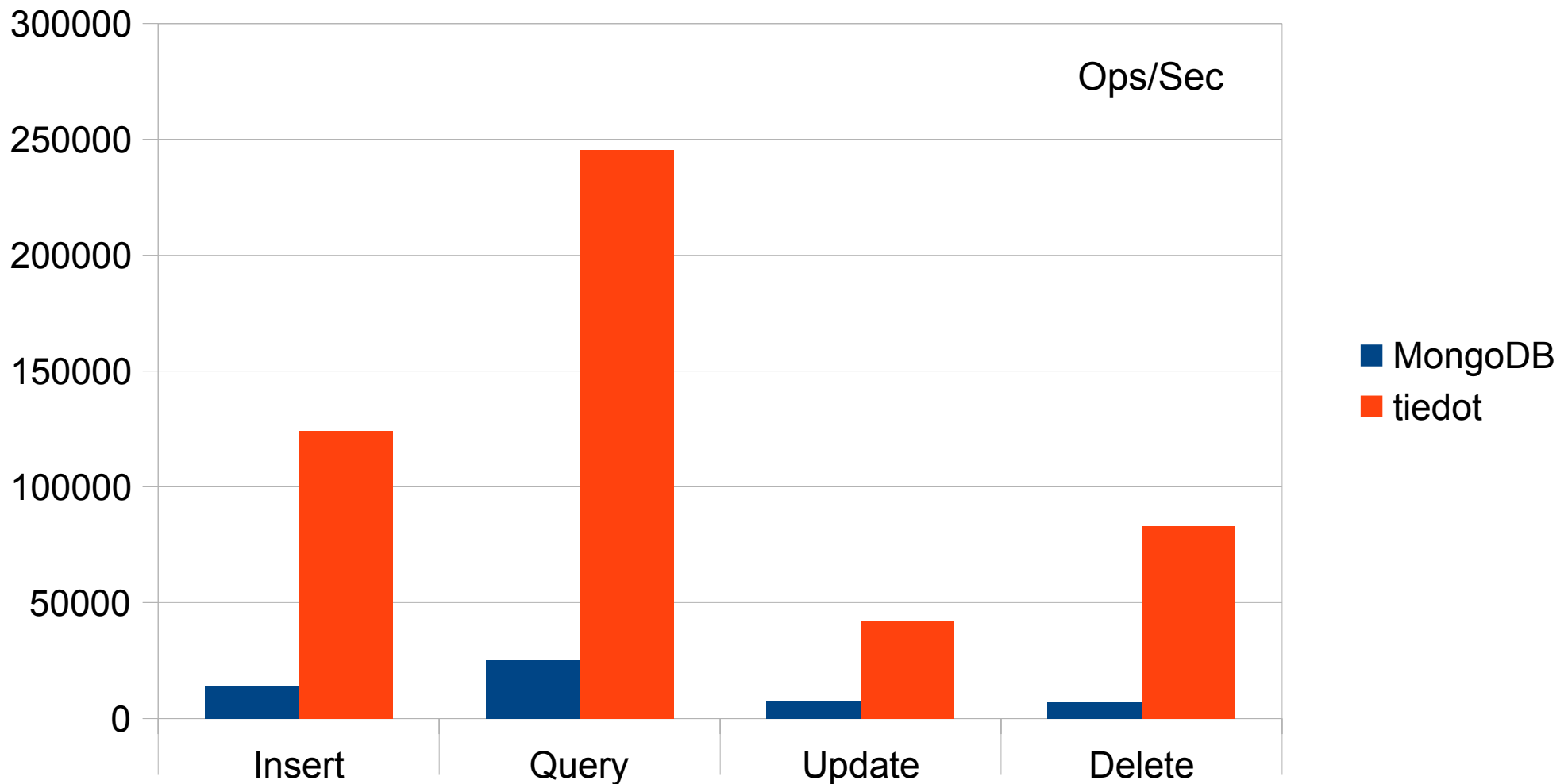
A taste of tiedot – Go API

- `myDB, _ := db.OpenDB(dir)`
`myDB.Create("Feeds", 2)`
- `feeds := myDB.Use("Feeds")`
`docID, _ := feeds.Insert(newGoRelease)`
- `queryStr := `{"eq": "New Go release", "in": ["Title"]}``
`result := make(map[uint64]struct{})`
`db.EvalQuery(query, feeds, &result)`
- `for id := range result {`
 `var doc interface{}`
 `feeds.Read(id, &doc)`
`}`

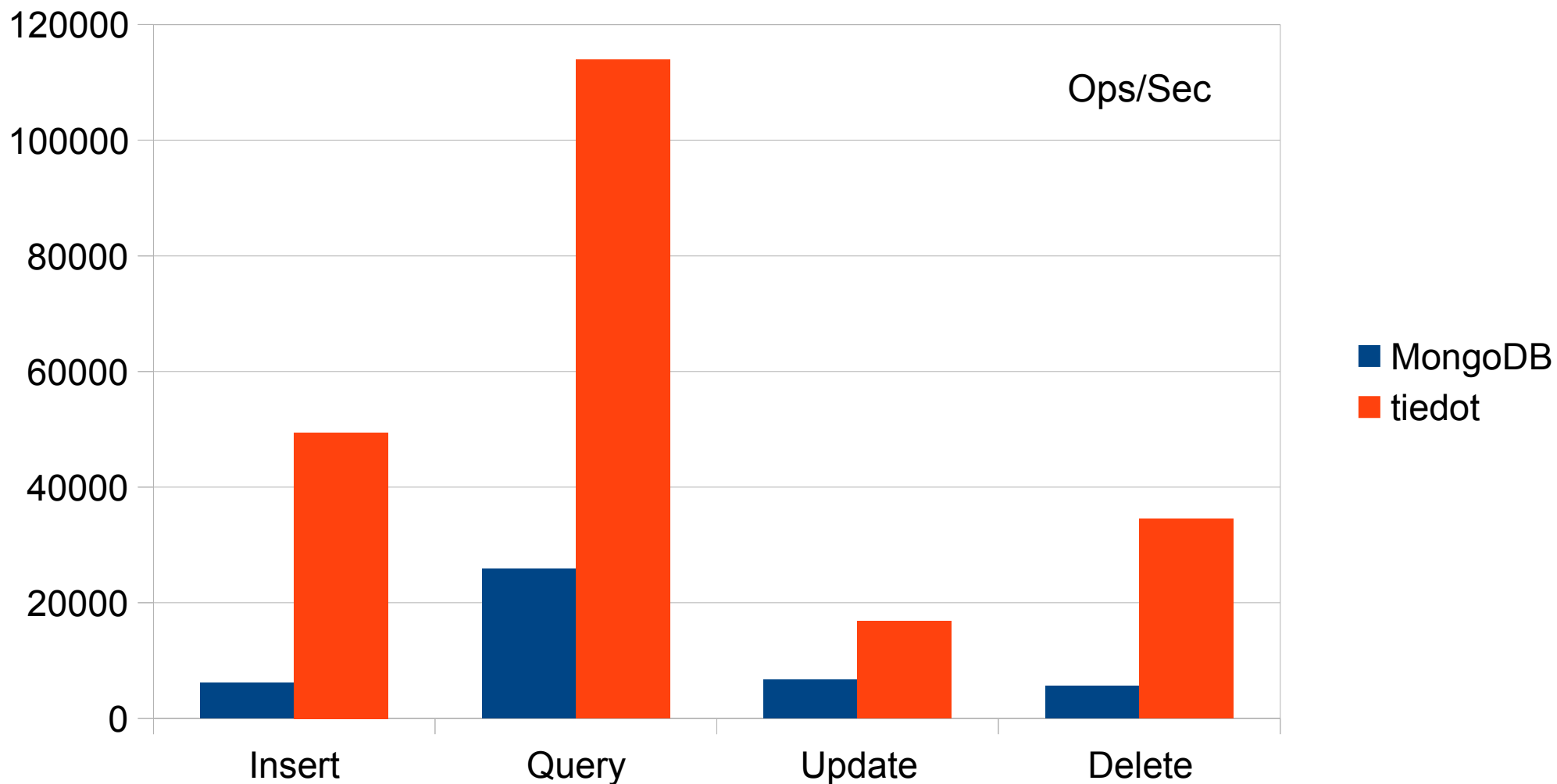
Throughput Benchmark

- Sample document size 1KB, two indexes
- Document CRUD + Lookup query
- 8 clients on an Intel Core i7 2.6GHZ
- tiedot built-in benchmark
 - Native Go code
- In comparison with: MongoDB
 - Native C++ multi-threaded client “benchrun”

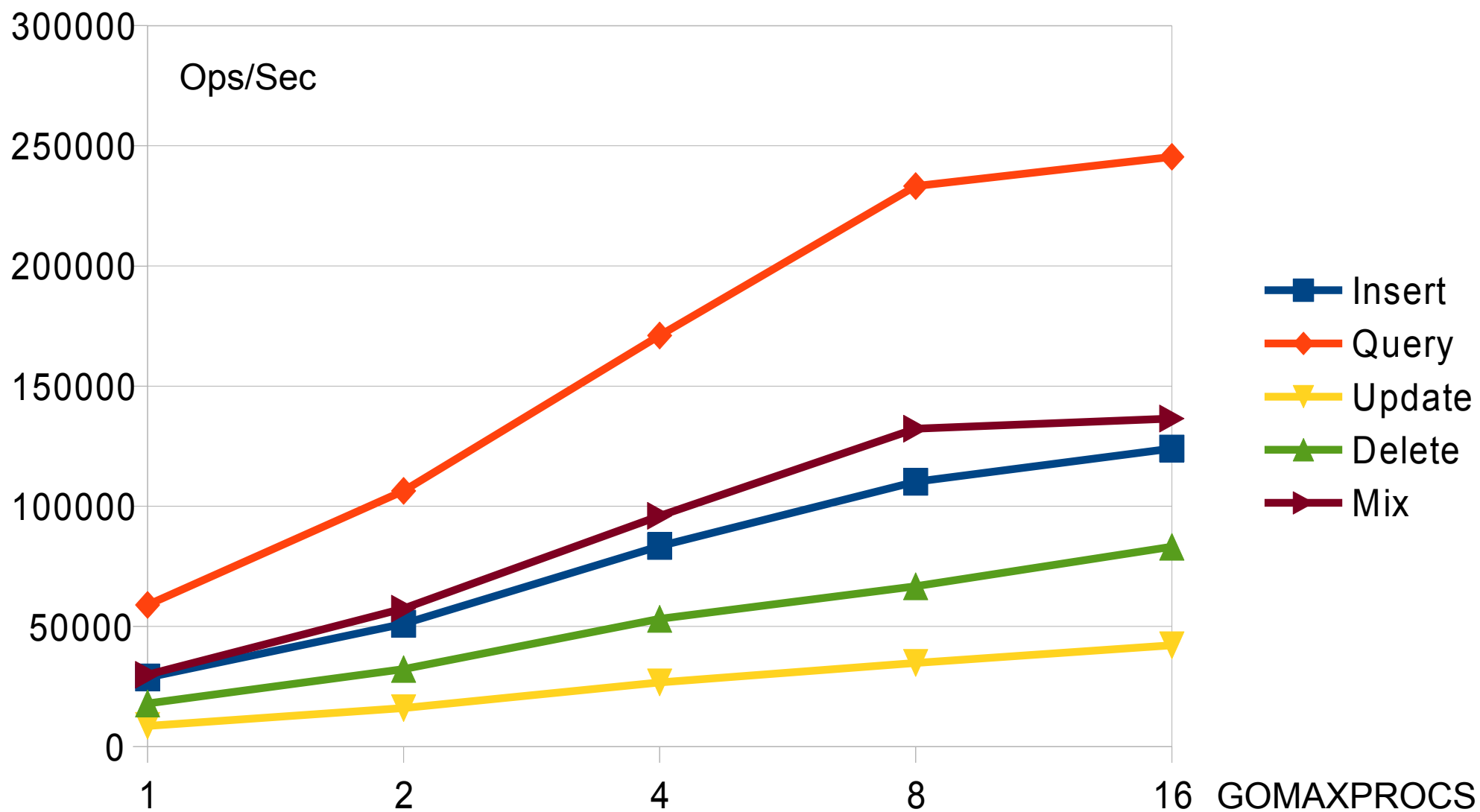
Throughput – Intel i7 2.6GHZ



Throughput – EC2 c3.xlarge



Scalability



Coming up next



Yuko Honda©

- Better scalability
Linear-scaling is our goal!
- More query features
- More API options – RPC
- High availability features
- Looking for more collaborators!

Thanks for your attention!
Feel free to ask questions!