OpenLambda Dev Meeting: June 7

Discussion Topics

- **Applications**
- First release
- Website
- HotCloud
- Tools
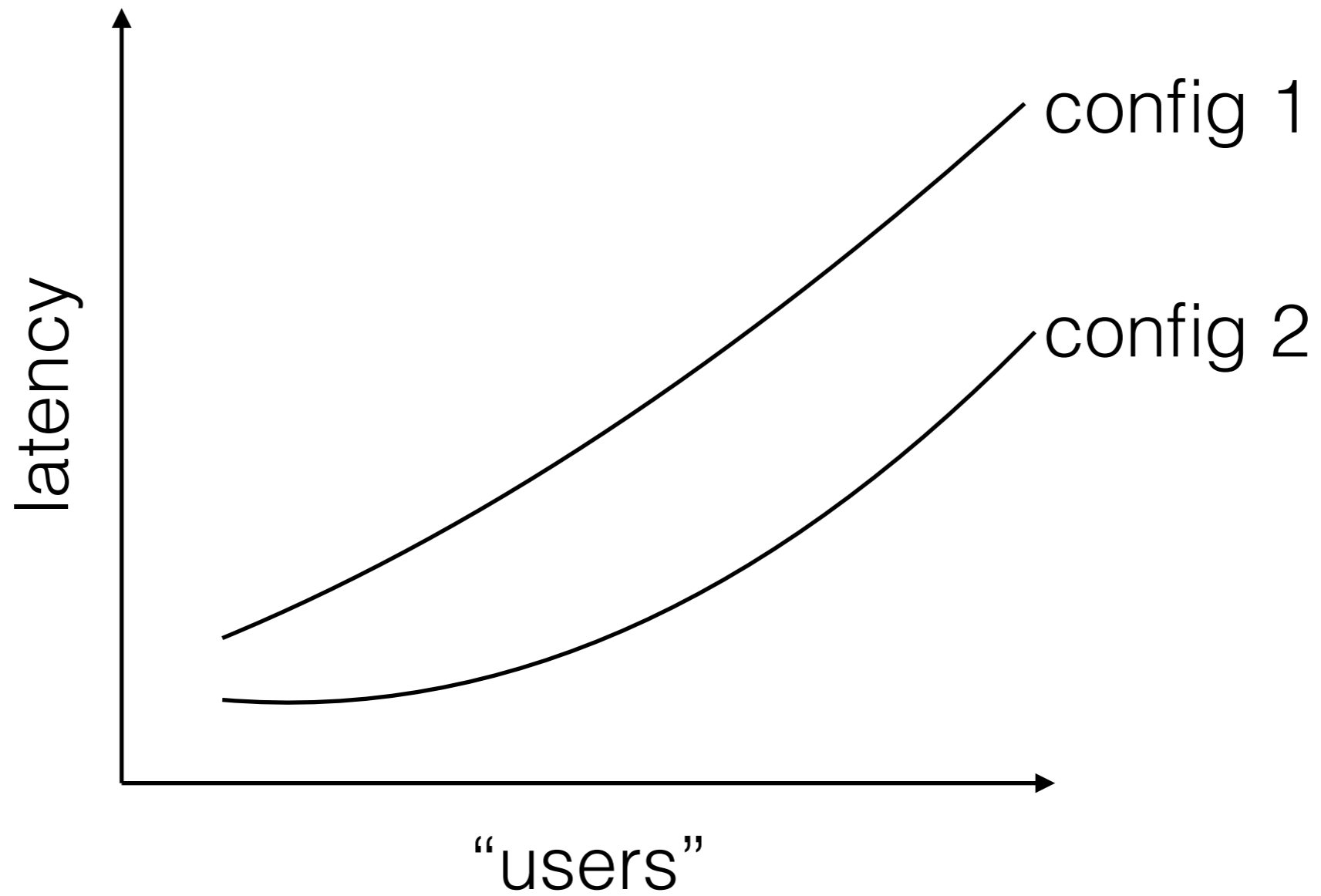- Differentiation
- Research projects

Applications/demos

- Better chat
- Blog tool (with comments)
- **Mike:** Concert tickets
- Multiplayer game
- Nearby friends
- **Stephen:** Calendar (with email reminders)
- Stock alert cron job
- **Ben:** Autocomplete
- Simple search engine
- Document conversion
- **Ed:** OCR service
- **Tyler:** Kindle flash cards

Next steps

- Make it work on AWS Lambda and OL
- Turn it into a benchmark
- Evaluate single-node OL

Example eval

Discussion Topics

- Applications
- First release
- Website
- HotCloud
- Tools
- Differentiation
- Research projects

Version 0.1

Deadline: June 20th
- **Tyler:** multiple nodes: load balance w/ nginx
- **Stephen:** security: Lambdas can't reach engine
- **Ed:** bug fixes: paused issue
- **Everybody:** integration tests
- **Ben:** environment setup scripts
- **Tyler:** move repo to https://github.com/open-lambda
- ???

Discussion Topics

- Applications
- First release
- Website
- HotCloud
- Tools
- Differentiation
- Research projects

http://www.open-lambda.org

Help needed
- **Ed:** general design
- **Compete:** logos
- **Ben:** documentation
- **Everybody:** code examples
- **Ben+Tyler:** youtube demo
- **Tyler:** slides
- **Stephen**: NEWS, GSOC proposal/info/link
- **Tyler+Brian:** HTTPS
- **Stephen:** Use OL on email registration
- **Everybody**: "the team" page

Discussion Topics

- Applications
- First release
- Website
- HotCloud
- Tools
- Differentiation
- Research projects

HotCloud Workshop

June 20th
- Talk (scheduled soon)
- Poster (feedback appreciated)

Discussion Topics

- Applications
- First release
- Website
- HotCloud
- Tools
- Differentiation
- Research projects

Tools Needed

Tracing
- Trace all data to/from Lambdas
- Collect enough data to replay
- Record timings, queries issued by Lambdas

Debug log consolidation
- Many logs: each worker, each Lambda
- Single tool should show all

Deployment
- Need single tool to deploy to AWS and OL
- Need generic DB interface

Discussion Topics

- Applications
- First release
- Website
- HotCloud
- Tools
- Differentiation
- Research projects

More open-source serverless platforms

Azure Functions
- https://github.com/Azure/azure-webjobs-sdk-script
- 414 commits

OpenWhisk
- https://github.com/openwhisk/openwhisk
- 380 commits

Lever OS
- https://github.com/leveros/leveros
- 114 commits

Run these, then briefly present highlights to group?

Discussion Topics

- Applications
- First release
- Website
- HotCloud
- Tools
- Differentiation
- Research projects

Potential Projects

Application study
- what are typical RPC patterns?
- how portable are legacy apps to serverless?
- how large are libraries/apps, how much is used?

Serverless Load Balancing
- how to achieve locality for DB, code, sessions?
- how chatty should DB be?
- how to make very low-latency decisions?

Execution engine
- how to quickly provision?
- how to reduce paused overheads?