



The Open Source Journey of the Most Unlikely Contributor in the History of History Itself



Why OSS at DevWeek?

- Brian Behlendorf – Apache; Hyperledger
- Robin Ginn – OpenJS Foundation
- David Schwartz – Ripple
- Rachel Potvin – GitHub
- Alex Balazs – Intuit
- Chris Van Tuin - Redhat

Hi!

Who Are We?

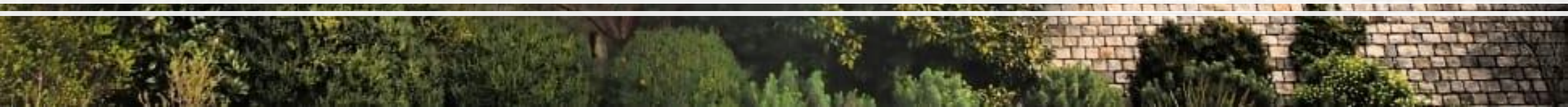
- Alex Scammon - Head of Open Source Development
 - Caterina Rindi - Director of Open Source Community
-
- Who is G-Research?

G-Research and Security Posture

- The most not-open setup ever
- Isolated & insular
- Yet, we do OSS



G-Research Secure Zone





G-Research Secure Zone



You've Got Mail... somewhere



CREATE TODAY. PREDICT TOMORROW.



Quick History of Big Data

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- 2005: Hadoop, The term "Big Data" coined
- 2006-Present: Cassandra, HBase, Hive, Elasticsearch, Spark, Storm, Flink, Tez, Flume, Sqoop, Pig, Mahout, Drill, Avro, Thrift, Oozie, Ambari, Keras, Tensorflow, Torch, R, Beam, Neo4j, OpenRefine, Weka, BigML, Redshift, Amazon EMR, Athena, Kinesis, Kafka, BigQuery, Bigtable, Dataproc, CouchDB, Apex, Ignite, Tajo, Helix, Parquet, Accumulo, Zeppelin, OODT, MetaModel, Kibble, Phoenix, Airavata, Beam, Fluo, Knox, Bigtop, Samza, ORC, Falcon, Drill, Hama, Daffodil, Trafodion, Lens, PredictionIO, BookKeeper, Kudu, Camel, DirectMemory, DataFu, Sqoop, Giraph, Crunch, Edgent, Calcite, REEF, VXQuery, CarbonData, Couchbase, Qubole, Infinispan, PingCAP, m3db, CockroachDB, Pilosa, Strimzi, Salesforce, OrientDB, RocketMQ, Iguazio, Hazelcast Jet, Vertica, deepstream, CloudEvents, ScyllaDB, Heron, FoundationDB, Azure Event Hubs, Pachyderm, Blueflood, RabbitMQ, NuoDB, Vitess, KubeMQ, Seata, Stolon, TiDB, Talend Data Streams, Redis, PostgreSQL, Siddhi, Druid, Crux, TiKV, NATS, Percona, Snowflake, Ignite, ArangoDB, NiFi, OpenMessaging, RethinkDB, BigchainDB, Neo4j, Hadoop, MongoDB, Beam, MariaDB, Presto, Google Cloud Dataflow, Pulsar, Sorint.Lab, Storm, ShardingSphere, Crate.io, StreamSets, MemSQL, YugaByte DB, JUXT, Dgraph... ad infinitum

OSS at GR in 2019

- SSOooooooo much OSS!
 - Programming Languages
 - Operating Systems
 - Orchestration
 - Monitoring
 - Graphing
 - On and on....

Our Realizations

- Business/Financial Benefit:
 - We mustn't fork internally! An anti-pattern that costs more in the long-run
- Software/tools improvement
 - OSS allows us to focus on improving our core business
 - Customization
- Talent acquisition & retention, employee satisfaction & reputation

What We Did

- Merged Pending Contributions Upstream
- Contributed Code Where We Could
- Offered to Help Maintain Unhealthy Projects
- Last Resort: Open-Sourced Original Works
- Hiring: a wide array of part-time and full-time developers

Practical issues that arose

- Working out licenses and CLA logistics
- Remote contractors logistics
 - (ed: people expect to get paid for OSS? Shocking!)
- Public GitHub contributions from secure offices
- Internal employee communications-socializing role of OSS team and help with problem-solving

Not Just Technical teams

- Legal team training
- Finance
- Recruiting
- Marketing
- Corporate Social Responsibility

Specific Contributions

OpenStack	Kolla	Aeron	Arrow/Parquet	ParquetSharp	Fantomas/F#
Geras (Thanos Plugin)	LibreNMS	OpenTSDB	TCollector	Prometheus- config-loader	Storm
TensorFlowSharp	Kubernetes	Horovod	Spark	SparkMagic	Gokrb5
		Helm	Ray		

Takeaway

- Remember, we're the most isolated company you've never met
- If we can do it, so can you
- You NEED to
- Think about OS as you get hired

Hiring, Uncommonly

- G-Research HQ
 - <https://www.gresearch.co.uk/join-us/>
- G-Research OSS
 - A wide range of projects

- DevWeek Office Hours:
 - Room 213, 10:30 – 11:00am, Friday 14th



www.gresearch.co.uk