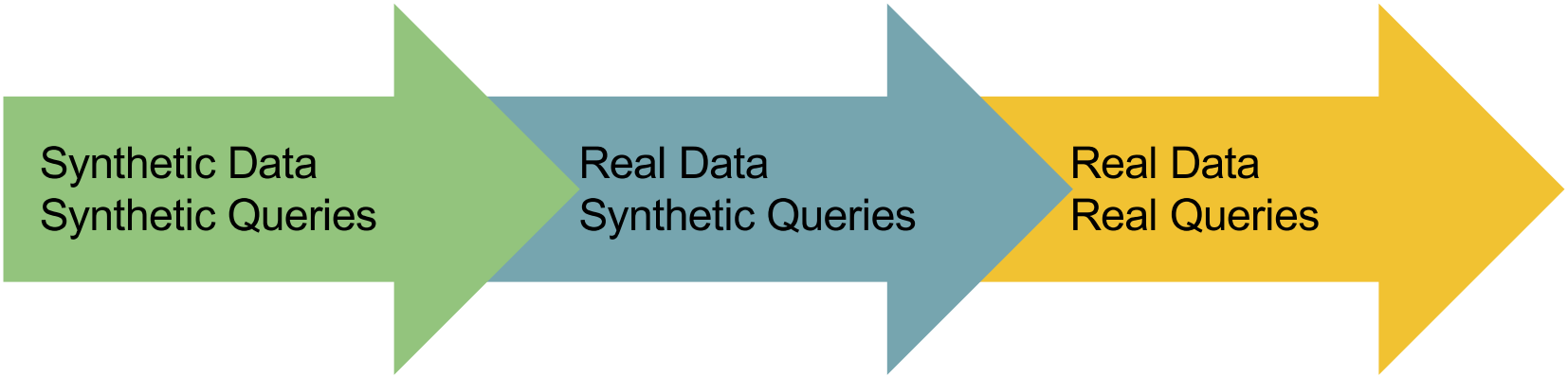
IGUANA

INTEGRATED SUITE FOR
BENCHMARKING SPARQL WITH UPDATES

Road Map Of Benchmarking

1. Synthetic Data, Syntethic Queries
2. Real Data, but not Real Queries
3. Real Data, Real Queries,

   But no realistic test



What Are Current Problems?

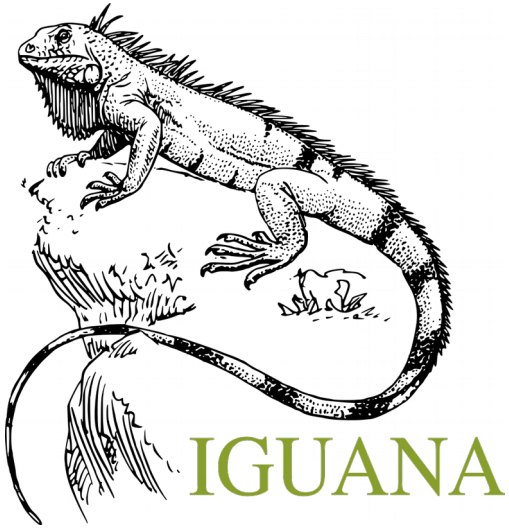
- Every Benchmark has its own execution platform - not good for comparison
- You can not easily change those to your needs
- No Realistic scenarios
- Evaluations can be very stressful and time consuming
- Can only guess but probably evaluations are not double checked, because of time and stress

Solution

- A Framework which can handle each yet developed benchmark
- A Framework which can handle realistic scenarios
- A Framework which is easily configurable
- A Framework which is easily extendable

Iguana

- What is Iguana?
- Stresstest
- Comparison
- Easily extendable
- Making older benchmarks newer

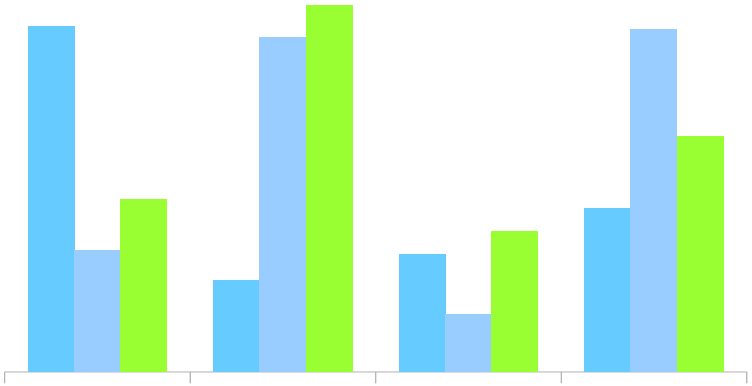


What is Iguana?

- Iguana is a generic SPARQL Benchmark Execution Framework
- Thus it can execute SPARQL benchmarks
- It can execute SPARQL as well as UPDATES
- It is extendable, to fit your needs
- It is easy to configure, but has a lot of configurations
- It makes benchmarking a little bit easier

Comparison

- Iguana provides the following metrics
  - Queries Per Second
  - No of Queries per Timelimit
  - No of Failed Queries for each Query
  - No of Succeded Queries for each Query
  - Total Time of each Query



- Each metric will be provided in a csv file
- Each metric will be provided per User, as the overall performance and as the common User performance

Stresstest

- Iguana tries to aim a realistic scenario
- This will be done with the Stresstest
- A Test where you can define how many SPARQL and UPDATE Users are querying the TripleStore in a specific amount of time/query mixes
- It allows you also to simulate a network delay, as well as generating Query instances out of Patterns

Extend Iguana

- You can extend Iguana with Data Generators, Query Generators, and most of all Testcases
- To implement those, you simply need to add Iguana as a library to your project and implement the specific Interface.
- Adding your project to the classpath of Iguana will then allow you to use your Extension

Making old Benchmarks newer

1. Configure Iguana with an old Benchmark

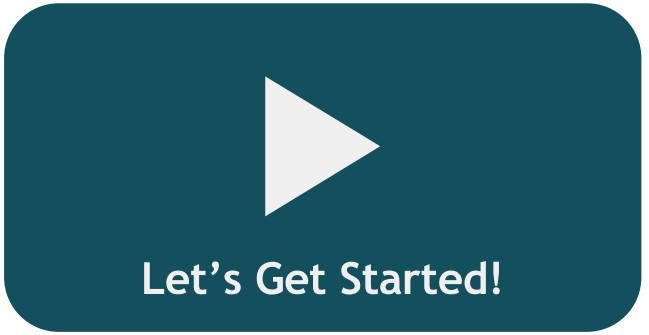
   (e.g. LUBM)

2. Make use of Iguanas Stresstest

3. Execute old Benchmark in realistic scenario

How To Get Started

- Go to the getting started page
- Try the tutorial
- Change Parameters, get a feeling
- Create the Benchmark which fits your needs
- But most of all, ...



Have exciting Evaluations!