

RELEASE

October 2011 -- March 2015



Scaling

VM
Language
Tools
Case studies

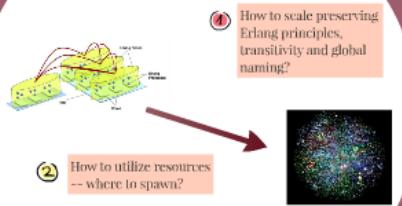
VM

- BenchErl
<http://release.softlab.ntua.gr/bench Erl/>
- ETS tables
- Memory allocation, internal process management, tracing support, etc.
(Ri6B -- 18.0)

Tools

- Consumer -- solution for distributed load testing consumer nodes
<http://www.consumer.eu/>
- Http -- solution for generating, monitoring and analysing of distributed load testing requests
<http://www.http.eu/>
- Machine -- solution for distributed load testing
<http://www.machine.eu/>
- Moniter -- solution for distributed load testing
<http://www.moniter.eu/>
- Perfmon -- performance monitoring tool
<http://www.perfmon.eu/>
- Whisper -- solution for distributed load testing
<http://www.whisper.eu/>
- Whisper -- solution for distributed load testing
<http://www.whisper.eu/>

Language



- SD Erlang
<http://www.dcs.gla.ac.uk/research/sd-erlang/>
 - s_groups
 - attribute libraries

Case Studies

- Ant Colony Optimization (ACO)
- BenchErl
- DE-Bench
- Instant Messenger (IM)
- Orbit
- Riak
- Sim-Diasca (City Instance)

<http://www.release-project.eu/>

RELEASE

October 2011 -- March 2015



Scaling

VM
Language
Tools
Case studies

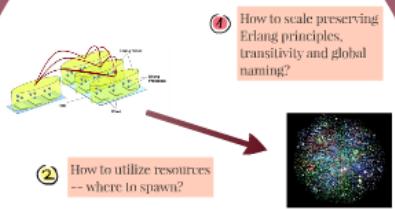
VM

- BenchErl
<http://release.softlab.ntua.gr/bench Erl/>
- ETS tables
- Memory allocation, internal process management, tracing support, etc.
(Ri6B -- 18.0)

Tools

- Consumer -- workload generator for testing consumer needs
<http://www.release-project.eu/consumer>
- Http -- web server for generating requests to the system under test
<http://www.release-project.eu/http>
- Machine -- tool to monitor Erlang runtime
<http://www.release-project.eu/machine>
- Mininet -- stateless
<http://www.release-project.eu/mininet>
- Perfmon -- Erlang concentrator performance monitoring
<http://www.release-project.eu/perfmon>
- Wandbox Erl -- generator and monitor for network traffic
<http://www.release-project.eu/wandbox-erlang>
- Wandbox Erl -- Erlang traffic reflecting and code inspection tool
<http://www.release-project.eu/wandbox-erlang>

Language



- SD Erlang
<http://www.dcs.gla.ac.uk/research/sd-erlang/>
- s_groups
- attribute libraries

Case Studies

- Ant Colony Optimization (ACO)
- BenchErl
- DE-Bench
- Instant Messenger (IM)
- Orbit
- Riak
- Sim-Diasca (City Instance)

<http://www.release-project.eu/>

http://www.release-project.eu

ation, internal process tracing support, etc.

<http://www.release-project.eu/>



RELEASE

October 2011 -- March 2015



Scaling

VM

Language

Tools

Case studies

Devo -- online SD Erlang profiling tool
<https://github.com/RefactoringTools>

SD-Mon -- tool to monitor SD Erlang applications
<https://github.com/luigij/SDMon>

Dialyzer -- static analysis
<http://www.erlang.org/doc/apps/dialyzer.html>

Percept2 -- Erlang concurrency profiler
<https://github.com/luigij/percept2>

Wimbut AOM -- operations and management
<https://www.erlang-solutions.com/pom>

Wrangler -- interactive refactoring
<http://www.cs.kent.ac.uk/projects/wrangler/>

VM

- BenchErl

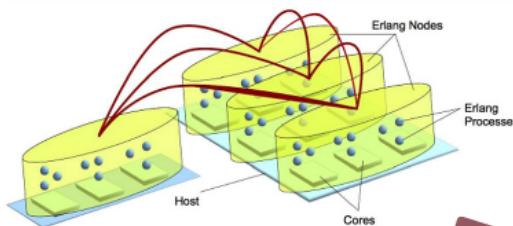
<http://release.softlab.ntua.gr/bencherl/>

- ETS tables
- Memory allocation, internal process management, tracing support, etc.
(R16B -- 18.0)

Language

①

How to scale preserving
Erlang principles,
transitivity and global
naming?



②

How to utilize resources
-- where to spawn?



SD Erlang

<http://www.dcs.gla.ac.uk/research/sd-erlang/>

- s_groups
- attribute libraries

Tools

Concueror -- systematic testing tool for finding concurrency errors
<http://concueror.com/>

Devo -- online SD Erlang profiling and visualisation tool
<https://github.com/RefactoringTools/devo>

SD-Mon -- tool to monitor SD Erlang systems
<https://github.com/RefactoringTools/SD-Mon>

Dialyzer -- static analysis
http://www.erlang.org/doc/apps/dialyzer/dialyzer_chapter.html

Percept2 -- Erlang concurrency profiling tool
<https://github.com/huiqing/percept2>

WombatAOM -- operations and maintenance framework
<https://www.erlang-solutions.com/products/wombat>

Wrangler -- interactive refactoring and code inspection tool
<http://www.cs.kent.ac.uk/projects/wrangler/Wrangler/Home.html>



Case Studies

- Ant Colony Optimization (ACO)
- BenchErl
- DE-Bench
- Instant Messenger (IM)
- Orbit

- Riak
- Sim-Diasca (City Instance)

<http://www.release-project.eu/>

RELEASE

October 2011 -- March 2015



Scaling

VM
Language
Tools
Case studies

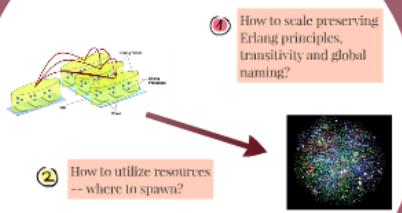
VM

- BenchErl
<http://release.softlab.ntua.gr/bench Erl/>
- ETS tables
- Memory allocation, internal process management, tracing support, etc.
(Ri6B -- 18.0)

Tools

- Consumer -- workload generator for testing consumer needs
<http://www.release-project.eu/consumer>
- Http -- web traffic generator, can generate different types of traffic
<http://www.release-project.eu/http>
- Machine -- test harness for Erlang code
<http://www.release-project.eu/machine>
- Moniter -- state monitor
<http://www.release-project.eu/moniter>
- Perfmon -- performance monitoring tool
<http://www.release-project.eu/perfmon>
- Whisper -- Erlang reflecting and code inspection tool
<http://www.release-project.eu/whisper>

Language



- SD Erlang
<http://www.dcs.gla.ac.uk/research/sd-erlang/>
- s_groups
- attribute libraries

Case Studies

- Ant Colony Optimization (ACO)
- BenchErl
- DE-Bench
- Instant Messenger (IM)
- Orbit
- Riak
- Sim-Diasca (City Instance)

<http://www.release-project.eu/>