A Cloud at the lowest level

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Michael Truog
mjtruog@gmail.com

BSD LICENSED
Why do you want CloudI?

- Cloud computing without virtualization to maximize resource utilization with dependable performance (Efficiency)
- Provide real-time fault-tolerance guarantees with a polygot service abstraction (Fault-tolerance)
- Private deployment with natural scalability, e.g., making unscalable source code scale (Scalability)
20k HTTP clients (10k req/sec peak)

- C/C++  1 / 27 / 135
- Erlang  1 / 23 / 161
- Java   1 / 33 / 155
- PythonC 2 / 200 / 350
- Python  2 / 3200 / 3300
- Ruby   2 / 3500 / 3700

low/mean-max/max in milliseconds (during .5hr)
single process, single thread (worst case code)
2.9 to 3.7 GB max on 64bit (local proto v1.2.2)
Fault-tolerance with Erlang

Erlang services

CloudI

CloudI API

Forked OS process single thread (external)

non-Erlang services

C/C++
Java
Python
Ruby

HTTP
Loadtest
Clients

(perform by Tsung)

dynamic
XML
Erlang

AXD 301 99.9999999% (9-9s) uptime

Scalability
+ Fault-tolerance
Scalability

- Erlang implements the Actor Model by providing concurrent Erlang processes and message passing.
- The Erlang VM provides per-process garbage collection for real-time fault-tolerance!
- CloudI extends Erlang's Actor Model implementation to other programming languages, using a service abstraction (SOA, services that use the CloudI API).
Thanks :-)

version 1.3.0 release by October 21st
More info at
http://cloudi.org

Questions?