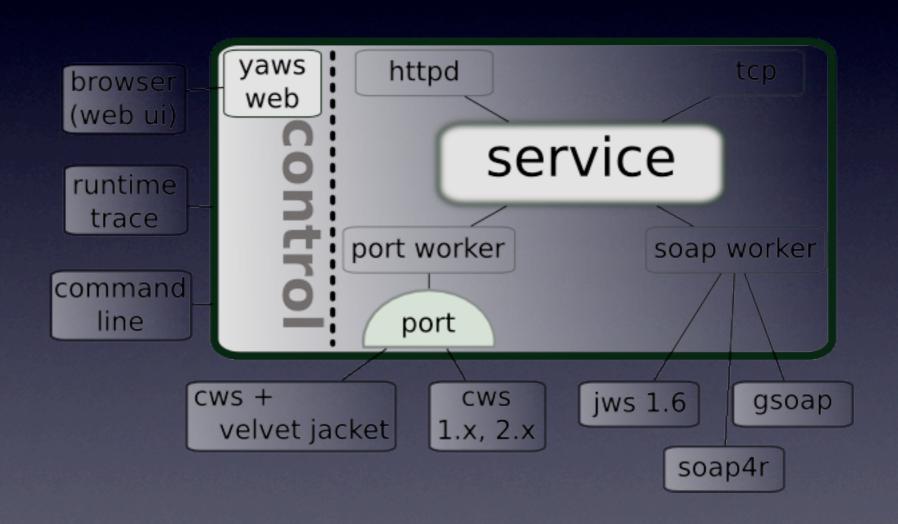
Erlang at E*TRADE

Horst Stohrer

Overview



What is it?

- A SOAP and Web Service Container
- Manages Pools of Worker Processes
 - Automatically Restarts
 - State based Routing and Queueing
- Accounting (Calls and Failures per Service)
- Multi Language Service Support

Services API

- Synch and Async Services calls
 - Fire and Forget
 - Scatter Gather
- Service Call Forwarding
- Dynamic Service Advertisement

How we chose Erlang

- Strong History and Support
- Erlang style concurrency
 - "Let it Crash"
 - Failure Detection (links and monitors)
 - Fault Isolation
- Performance under load
- Open Source

Aha! Gotcha

- Garbage Collection and Hibernate
- Logging
- Inets http client

Pleasant Surprises

- Memory use under 100MB
- Predictable Performance
- Sequential Tracing
- 5 to 1 code reduction (20+K to 4K)

Adoption

- Running in Production
- Expanded deployment across core systems in 2010



