

Erlang and OCaml

Ulf Wiger
Ericsson AB

Why???

- Erlang is very good at concurrency
- Not so good at raw sequential processing
- Strong momentum in systems programming

- OCaml has a reputation for speed
- No particular momentum in concurrency programming

- We should try to lower the barriers between different FP languages

Today's low-level option

- Linked-in driver in C
- Unsafe
- A bug is likely to crash the Erlang VM

Safe driver programming

- Try to link OCaml code into the Erlang runtime...
- Static typing
- Safe memory management
- Speed that rivals C
- Stay within the functional paradigm
- (maybe lure some OCaml:ers into Erlang programming)

Status

- No particular progress yet
- A google group and Google Code project exist
 - ErlOCaml (?)
 - No code submitted
- Some enthusiastic, but busy, members
- OTP group cautiously favour the idea

OCaml

- The OCaml runtime is almost completely written in OCaml
- Fairly common to link OCaml into legacy C code
- Powerful preprocessor (camlp4) – good for parsing
- Some issues re. dynamic linking of native code