

Guile and the Web

Greetings!

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Goal

Shameless promotion

To inform, and to entertain

Agenda

Brief intro

Live-hack a twitter-alike

Forward-looking statements

What is Guile?

The GNU extension language

Implementation of Scheme

What is Scheme?

A pretty sweet programming language

Python: `foo("a", "b")`

Scheme: `(foo "a" "b")`

Python: `1 + 2 + 3`

Scheme: `(+ 1 2 3)`

More examples

```
beer = "tasty"  
(define beer "tasty")
```

```
def poke(whom):  
    return "hey!"  
(define (poke whom)  
    "hey!")
```

Alternately:

```
(define poke  
(lambda (whom) "hey!"))
```

Guile 2.0

Bytecode virtual machine

Compiler, and compiler toolkit

Module set: threads, ffi, web, OOP

Fantastic REPL

Much of this is new

Awesome new REPL

Debugger on error

Profiler

Tracing and tracepoints

Breakpoints

Source stepping

Dynamic FFI

Bind C libraries without C code

Seatbelts not included

Prompts

Composable, delimited
continuations

catch, throw implemented in
Scheme

More powerful than call/cc

Process abstractions in userspace

Others

Elisp work, R6RS support, LALR and PEG parser generators, SSAX, sxml-match, statistical profiler, futures, code coverage...

Web stack

HTTP, URI parsers and serializers

WSGI-like abstraction for web programs

Now that we have web modules, let's make a CPAN, finally

Peeples

[hack goes here]

The Future

CPAN

Native compilation

2.2, 2.4, ...

Guile & GNU

Unix or the Lisp Machine?

Guile & Emacs

Implement Elisp for Guile
runtime

Allow Scheme (& JS, Lua) in
Emacs

No rewrites

Status

Guile & You

Give it a hack!

Questions?

www.gnu.org/software/guile

wingolog.org/git/skeleton.git

wingolog.org/git/people.git

Thanks for listening!