Movable Code

Agenda

- Varieties

- Applications

- Why

Varieties

- Java

- Classloaders

  - Under exploited

  - Under maintained

Varieties

- Lisp
  - Code is just data
  - Move your "data" anywhere
  - Eval()
  - All those ()'s....

Varieties

- Javascript
  - Code is data
  - Getting faster
  - Some neat features - under developed
  - Mostly stuck in the browser....for now

Applications

- Grids
  - Who wants manual management?

Applications

- Concurrent processing
  - Similar model to grid
    - Code the same "shape"
      - Not "shipped" across machines

Applications

- The Web

  - Duh!

  - Sophisticated client behaviours with limited prior knowledge

Applications

- SOA
  - Distributed Services
  - Who wants to manage stubs?

Why?

- Late binding
  - Transport details
  - Security credentials
  - Implementation

Why?

- Minimal client knowledge
  - Need a "hook"
    - At most an interface

Why?

- Distribution of code becomes easier

- No one likes stubs

- Worst case:

  - Bundle it up

  - Put it somewhere

  - Platform does the rest

Why?

- A step towards dynamic upgrades
  - Still plenty to think about
    - Lifecycles
      - Threads or messages etc

Conclusion

- Powerful
  - Leverage

Conclusion

- Fly in the ointment
  - Difficult to understand/predict
  - Versioning becomes important
    - Very quickly exceeds human ability to reason

Q & A