Akka IO and Netty

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Agenda

- Reintroduction to Netty
- Introduction to Akka I/O
  - The Akka module, not the Akka domain name
- A comparison, using Netty's examples
  - The good
  - The bad
  - The ugly

Netty's place in the Scala world

- Transport for akka-remote (for now)
- Foundation for Play (for now)
- Transitively used by Dispatch
- A couple of you are using it directly with Scala

Netty: the good

- Maturity
  - Netty has been out there a long time
  - Solid documentation
- Java
  - Still a much larger community than Scala
  - Will still work on the next version of Java
  - Will still work on the next version of Scala

Netty: the bad

- Again, Java
  - The mutability
    - But you can wrap this
  - The non-standard futures
    - But you can wrap this
  - Results in interoppy code
    - But you can wrap this
- But I don't want to wrap this.

Netty: the ugly

- [Examples](#)

Enter Akka IO

- Introduced in Akka 2.2.
- Still experimental
- What Netty does is a good fit for the actor model
- If you rebuild it on actors, you address a lot of "Netty: the bad"

Akka IO: the good

- Scala and Akka
  - Immutable model
  - Looks more like the rest of your code
  - Case classy
  - Concise
- ByteString
  - I yearn for this to move into the stdlib
  - I'd like to use this even where I don't like to use Akka

Akka IO: the bad

- Scala and Akka
    - The Scala API churns much faster than Java
    - The Akka API churns much faster than Scala
    - And Akka IO is experimental by Akka standards. *gulp*

Akka IO: the ugly

- Docs not yet up to par with the rest of the ecosystem.
- Few examples.
- Both of these are improving.

To the GitHubs!

Let's port the Netty User Guide examples to Akka.

https://github.com/indyscala/akka-io-demo

Which is better?

- It's a T-word that rhymes with braid cough.
- Stick with Netty if you:
  - are a Java shop dipping your toe into the Scala waters.
  - want to write it once and run it forever
  - already know it inside out
- Jump on Akka IO if you:
  - like the JVM but are totally over Java
  - want cleaner looking Scala code
  - can afford to jump on the version treadmill

About me

- [@rossabaker](), or rossabaker on FreeNode
- I work with Akka every day at CrowdStrike
- I work with Netty now and then at CrowdStrike
- [We're hiring]() and [we're selling stuff]()

CROWDSTRIKE

Thanks and good night

- Thanks to E-gineering for hosting.
- Thanks to Brad Fritz (@bfritz) of Fewer Hassles for organizing
- Materials: http://github.com/indyscala/akka-io-demo