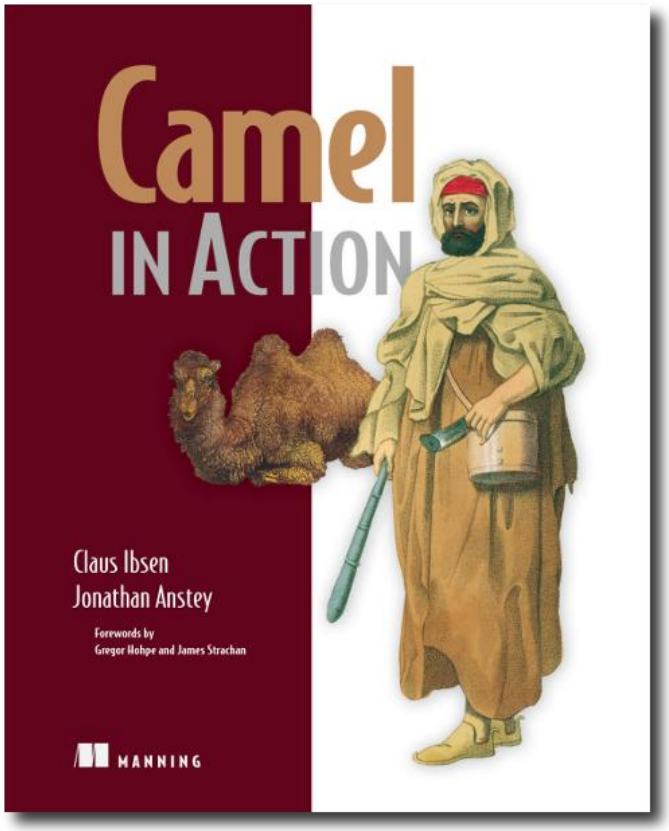
Past, Present and Future of Apache Camel

Claus Ibsen and Jonathan Anstey
FuseSource
http://fusesource.com

FuseSource
integration everywhere

Your Presenters

- Claus Ibsen and Jonathan Anstey
- Principal Engineers at FuseSource http://fusesource.com
- Committers on various Apache projects, most importantly, Apache Camel!
- Authors of Camel in Action



FuseSource
integration everywhere

© 2012 FuseSource Corp. All rights reserved.

Agenda

- How we got here
- Where Camel is today
- Camel's "cloudy" future

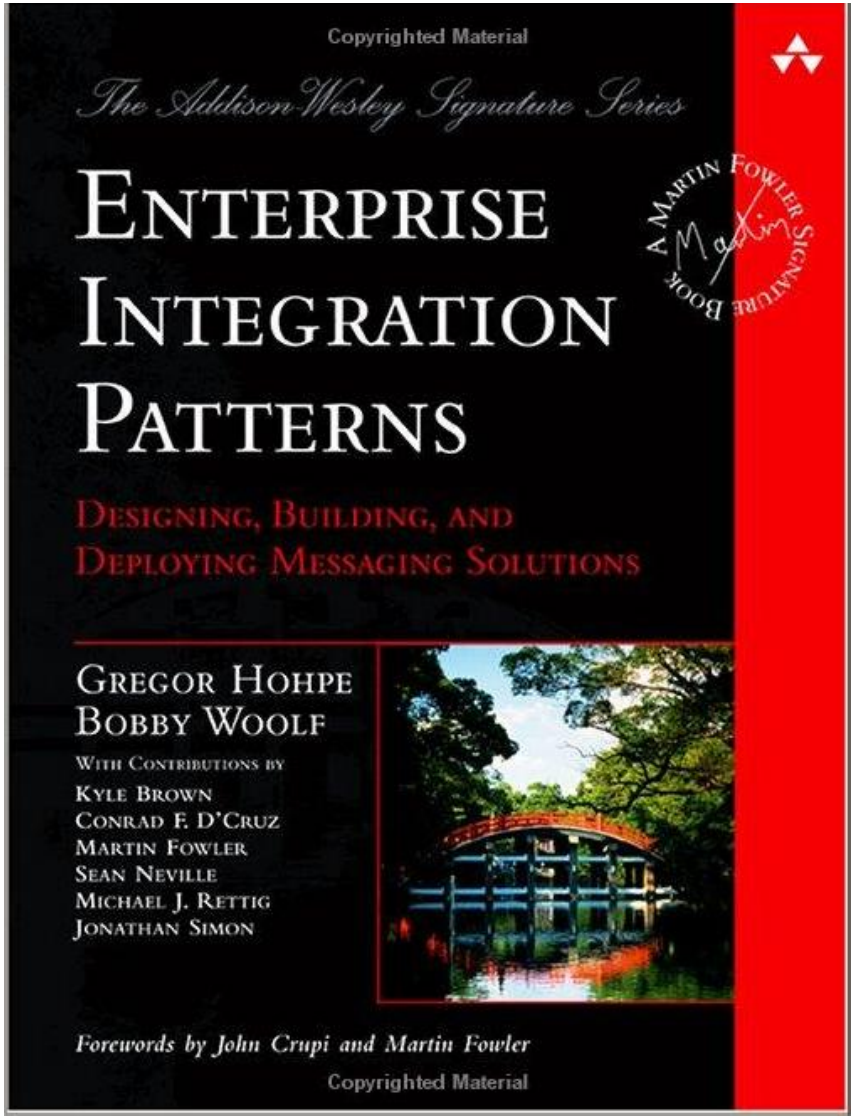
© 2012 FuseSource Corp. All rights reserved.

Integration is hard

- Multiple **applications** talking over multiple **transports** on multiple **platforms** = PAIN!
- Pain mostly due to
  1. Coming up with good solutions to messaging problems
  2. Coding against specific APIs and transports for each integration point

© 2012 FuseSource Corp. All rights reserved.

Enterprise Integration Patterns to the rescue!

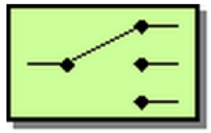
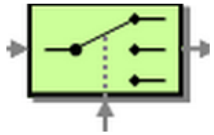
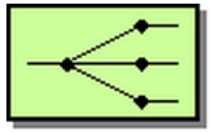
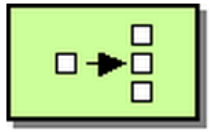
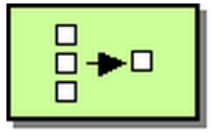
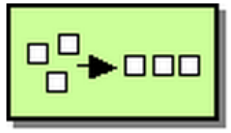


© 2012 FuseSource Corp. All rights reserved.

FuseSource
integration everywhere

Some of the patterns…

Message Routing

	Content Based Router	How do we handle a situation where the implementation of a single logical function (e.g., inventory check) is spread across multiple physical systems?
	Message Filter	How can a component avoid receiving uninteresting messages?
	Dynamic Router	How can you avoid the dependency of the router on all possible destinations while maintaining its efficiency?
	Recipient List	How do we route a message to a list of (static or dynamically) specified recipients?
	Splitter	How can we process a message if it contains multiple elements, each of which may have to be processed in a different way?
	Aggregator	How do we combine the results of individual, but related messages so that they can be processed as a whole?
	Resequencer	How can we get a stream of related but out-of-sequence messages back into the correct order?

© 2012 FuseSource Corp. All rights reserved.

But I still have to code the EIPs and connect to all those transports and APIs…

© 2012 FuseSource Corp. All rights reserved.

Enter serial project creator, James Strachan

© 2012 FuseSource Corp. All rights reserved.
FuseSource
integration everywhere

1st commit

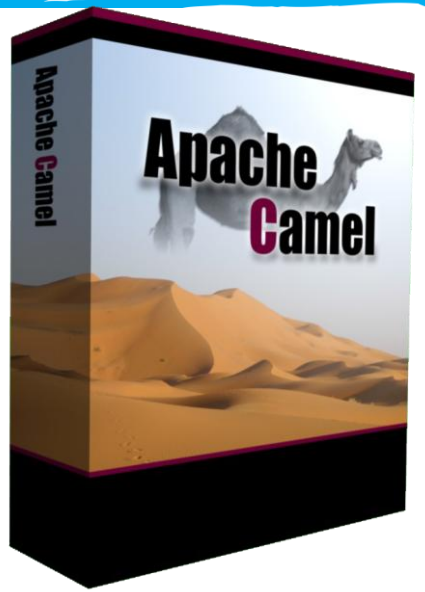
- 1st Camel commit, James Strachan:

  r519901 | jstrachan | 2007-03-19 - Initial checkin of Camel routing library

© 2012 FuseSource Corp. All rights reserved.

Introducing Apache Camel

- Open source integration framework that makes integration easier by having:
  - Implementations of the Enterprise Integration Patterns (EIPs)
  - Connectivity to many transports and APIs
  - Domain Specific Language (DSL) to wire EIPs and transports together

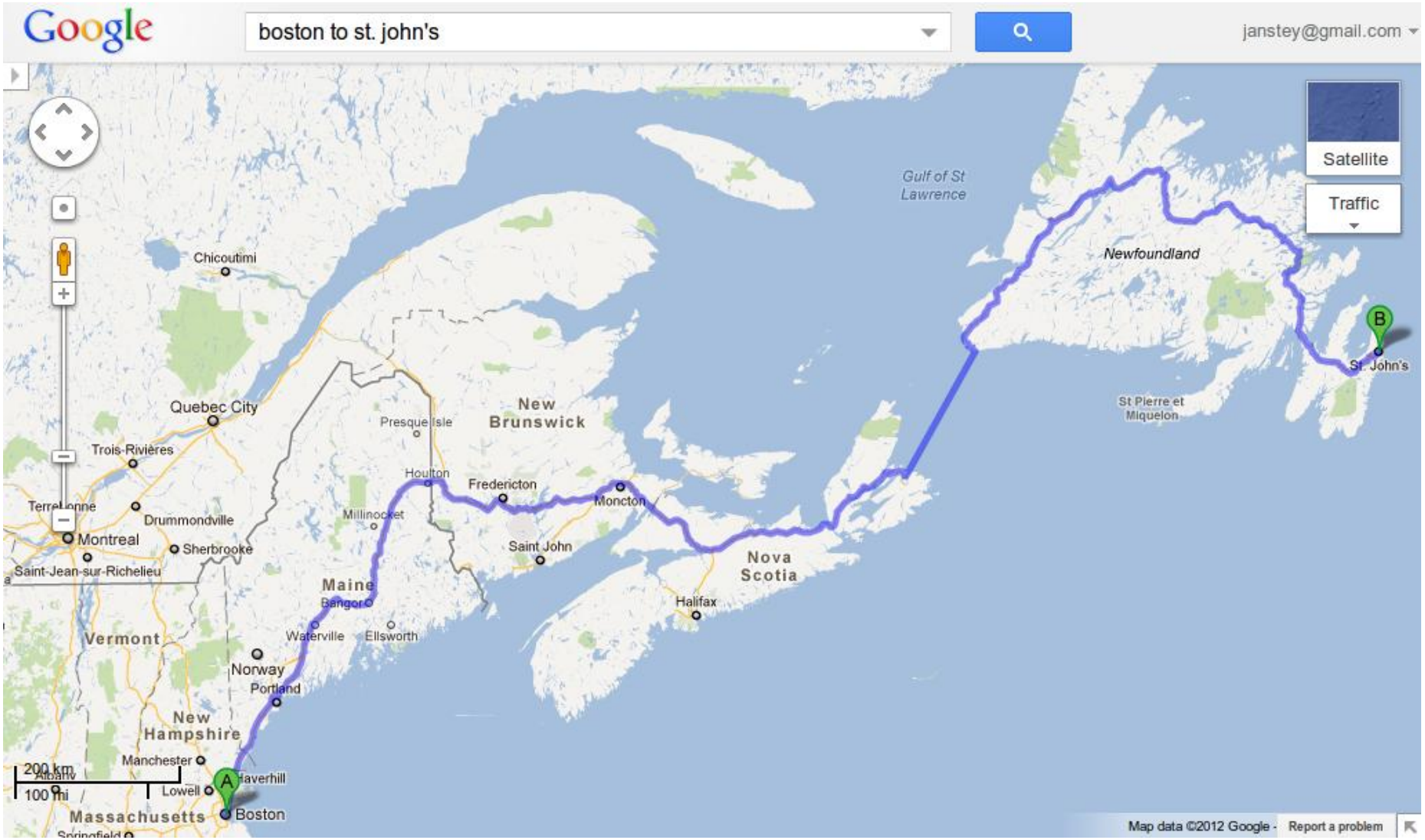


© 2012 FuseSource Corp. All rights reserved.

How we got involved…

© 2012 FuseSource Corp. All rights reserved.

Developer in St. John's, Newfoundland



© 2012 FuseSource Corp. All rights reserved.

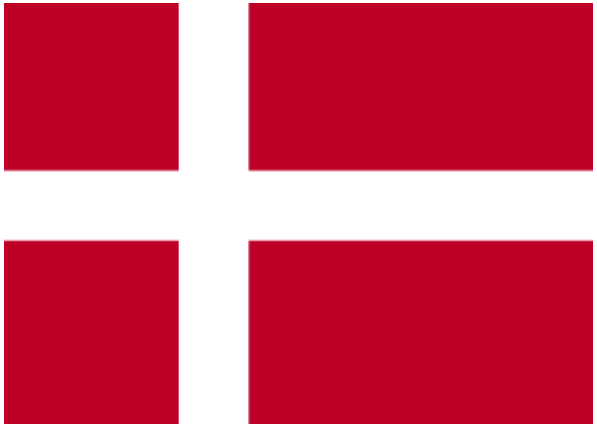
FuseSource
integration everywhere

Drinking the open source kool aid

© 2012 FuseSource Corp. All rights reserved.

FuseSource
integration everywhere

Patient with integration pain…



© 2012 FuseSource Corp. All rights reserved.

FuseSource
integration everywhere

… a Silver bullet to the rescue

© 2012 FuseSource Corp. All rights reserved.

FuseSource
integration everywhere

Easier integration as medicine

Proof of Concept

© 2012 FuseSource Corp. All rights reserved.

Looking at various products…

ServiceMix

spring

Open ESB

© 2012 FuseSource Corp. All rights reserved.

FuseSource
integration everywhere

One product stood out…

© 2012 FuseSource Corp. All rights reserved.

We were hooked…

© 2012 FuseSource Corp. All rights reserved.

© 2012 FuseSource Corp. All rights reserved.

1st commits

r640963 | davsclaus | 2008-03-25 - Added unit test for mistyped URI

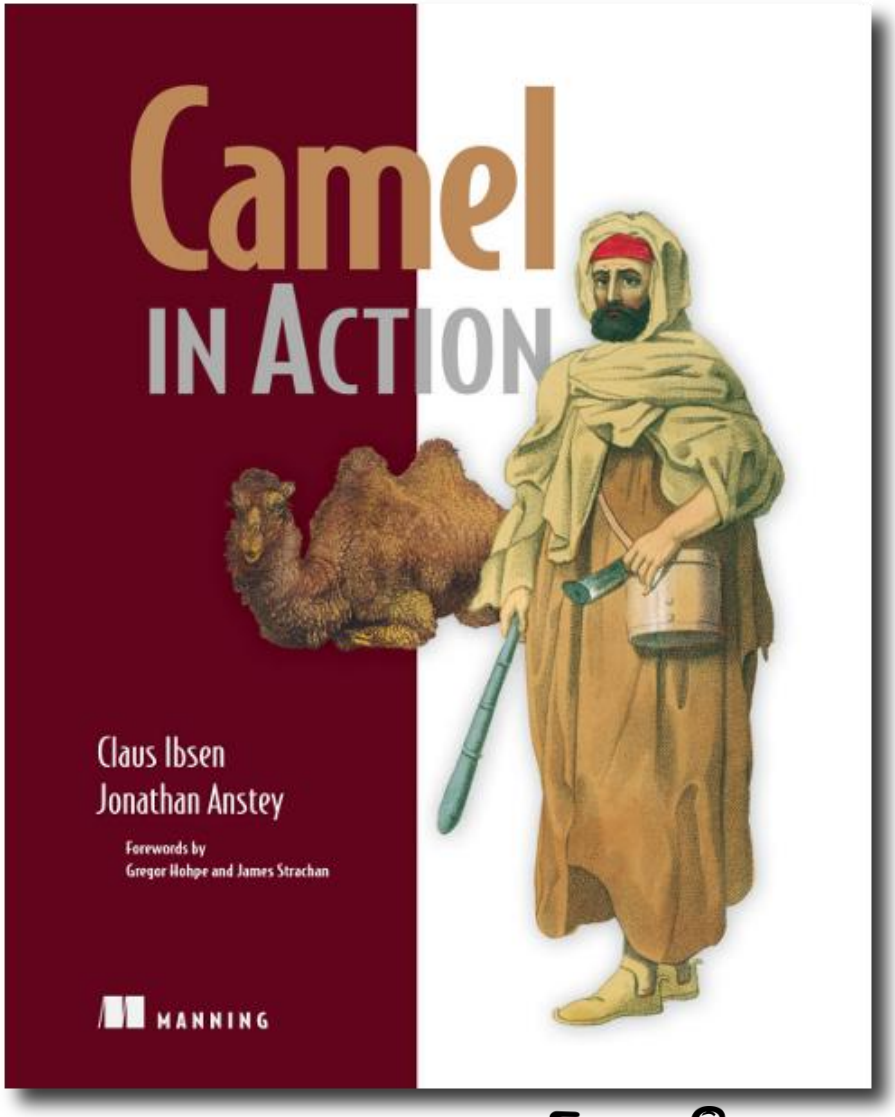
r693569 | janstey | 2008-09-09 - CAMEL-887 - Update to release version of Google Guice

© 2012 FuseSource Corp. All rights reserved.

Camel in Action

- Growing Camel community needed a resource for beginners and experts alike

- Started mid 2009
- Finished Dec 2010
- 552 pages

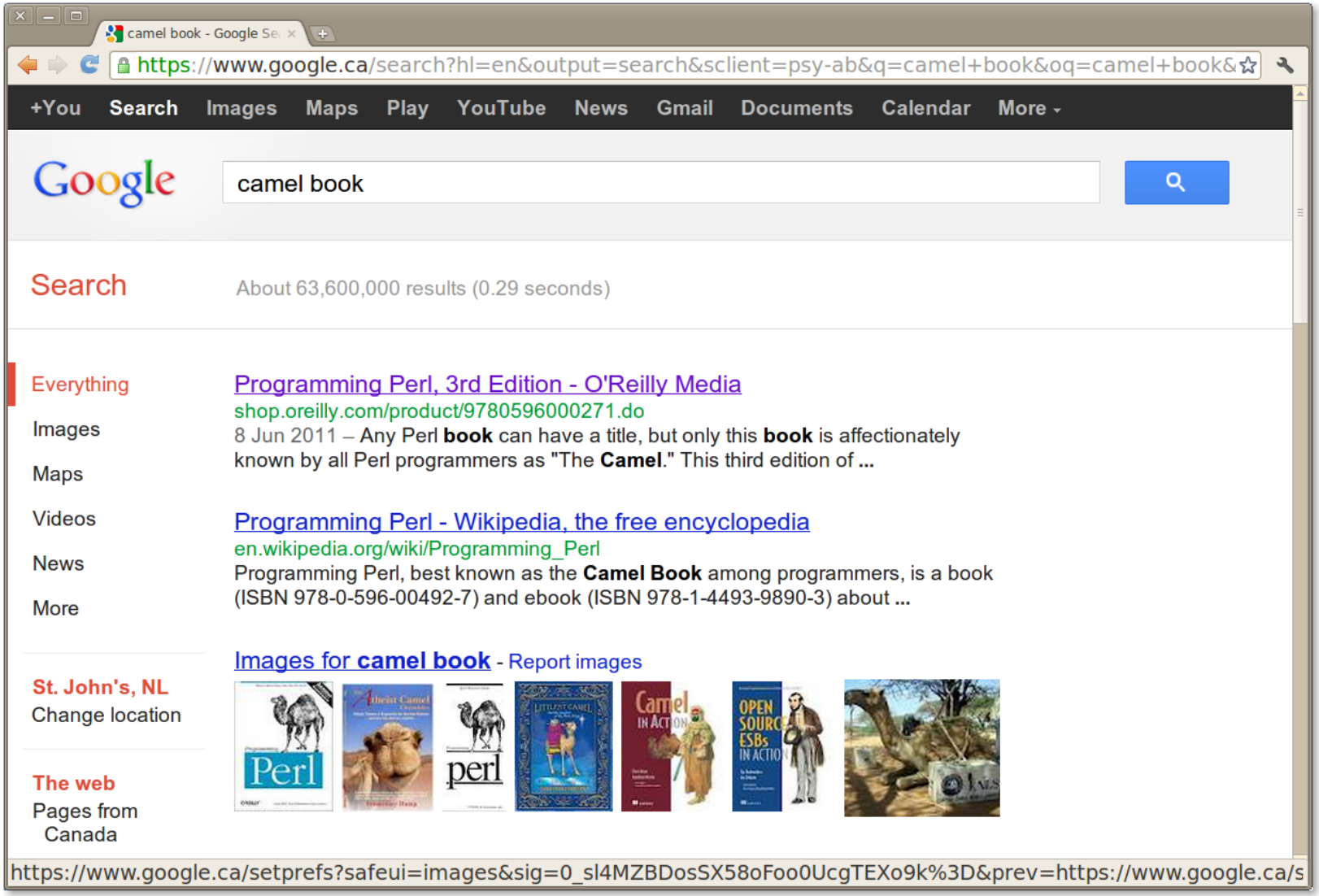


FuseSource
integration everywhere

© 2012 FuseSource Corp. All rights reserved.

Discovering drawbacks of the name

© 2012 FuseSource Corp. All rights reserved.
FuseSource
integration everywhere



© 2012 FuseSource Corp. All rights reserved.
FuseSource
integration everywhere

From Slashdot book review

Camel Book (Score:5, Informative)

by Anonymous Coward on Wednesday May 25 2011, @02:47PM (#36242204)

There is only one Camel Book [oreilly.com]

Programming Perl (Score:4, Informative)

by buglista (1967502) on Wednesday May 25 2011, @03:09PM (#36242452)

has been "the Camel book" since at least 1997, which is when I acquired my copy. Now get off my lawn.

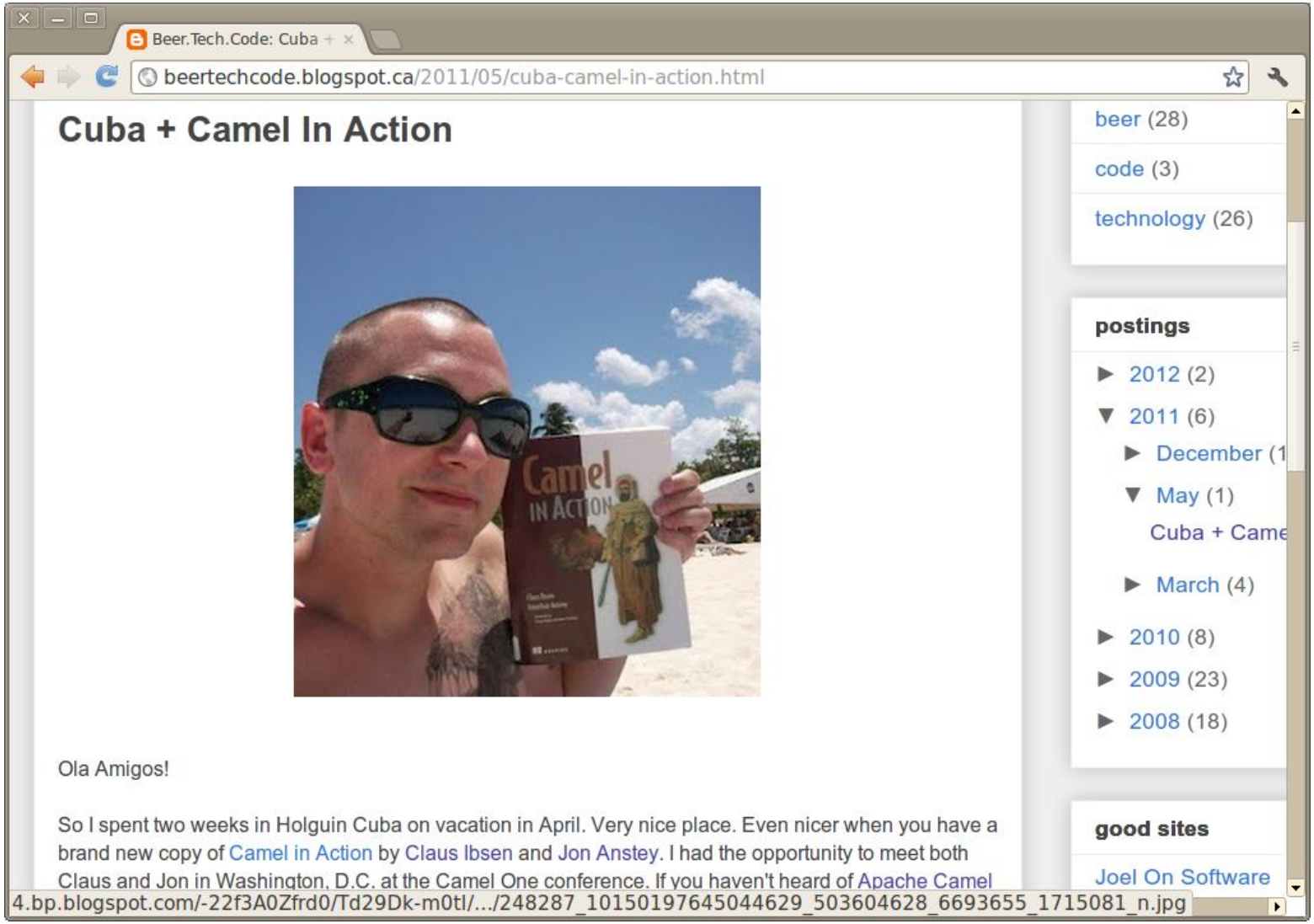
Re:Programming Perl (Score:1)

by Mindcontrolled (1388007) on Wednesday May 25 2011, @04:31PM (#36243490)

Indeed. We have some positively heretic [redacted] going on here. Burn em at the stake!

© 2012 FuseSource Corp. All rights reserved.

Camel in Action – Great Holiday Reading!



© 2012 FuseSource Corp. All rights reserved.

FuseSource
integration everywhere

Apache Camel: Current state of the beast

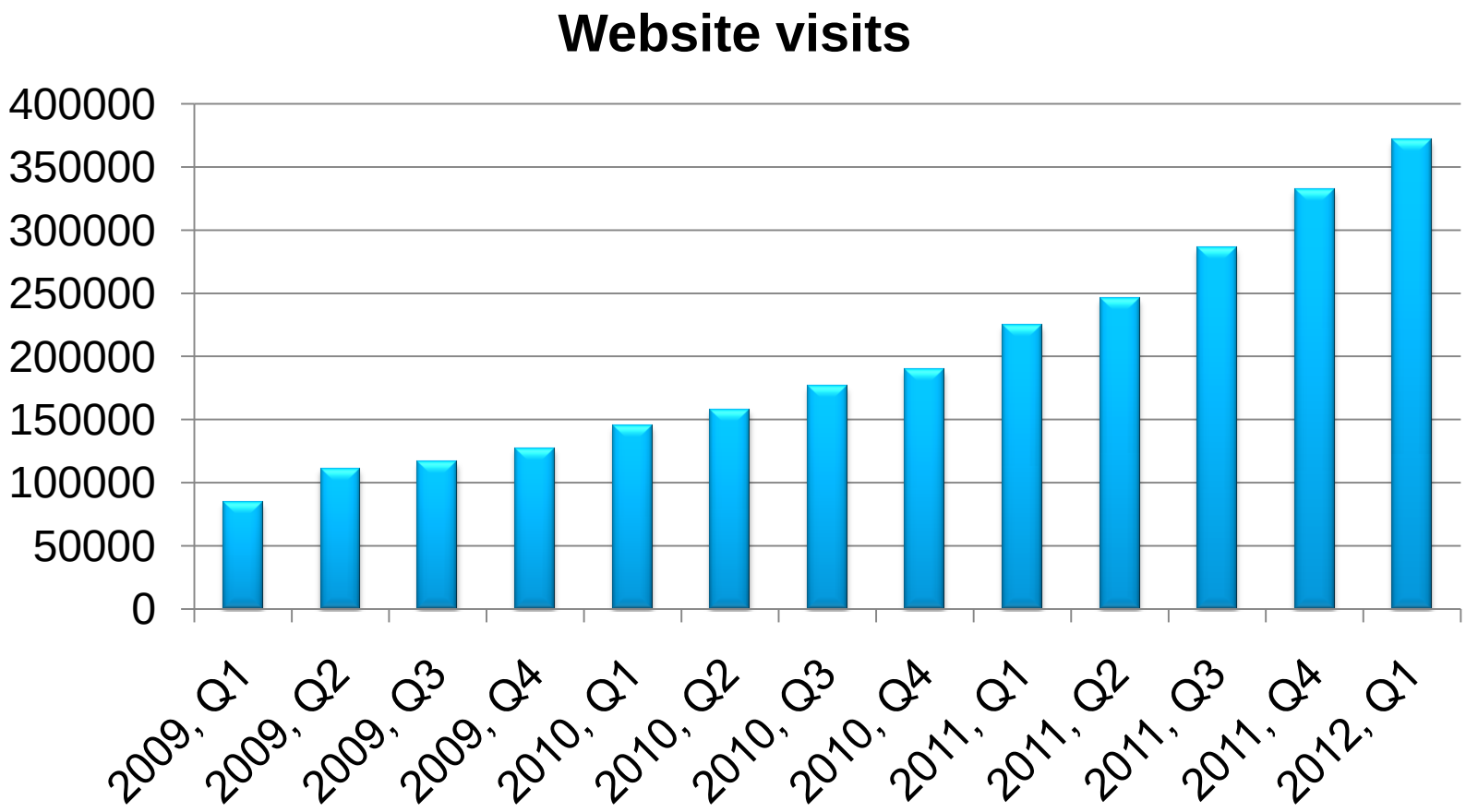
© 2012 FuseSource Corp. All rights reserved.

A community still growing

- 2nd annual CamelOne conference
- 80-100K artifact downloads per month
- 120K website views per month
- 1000 user mailing list posts per month
- Multiple companies offering commercial Camel support

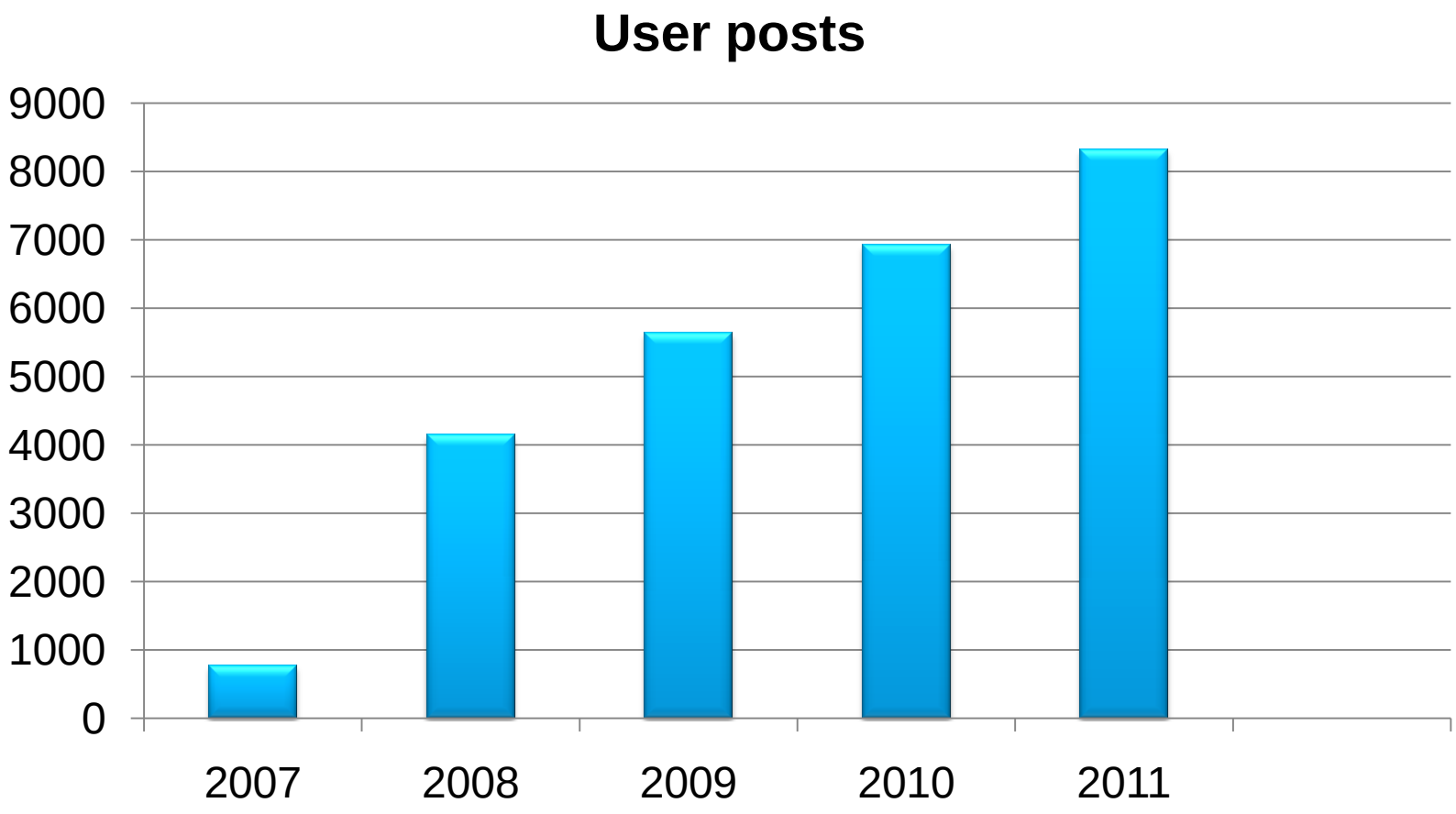
© 2012 FuseSource Corp. All rights reserved.

Quarterly website visits



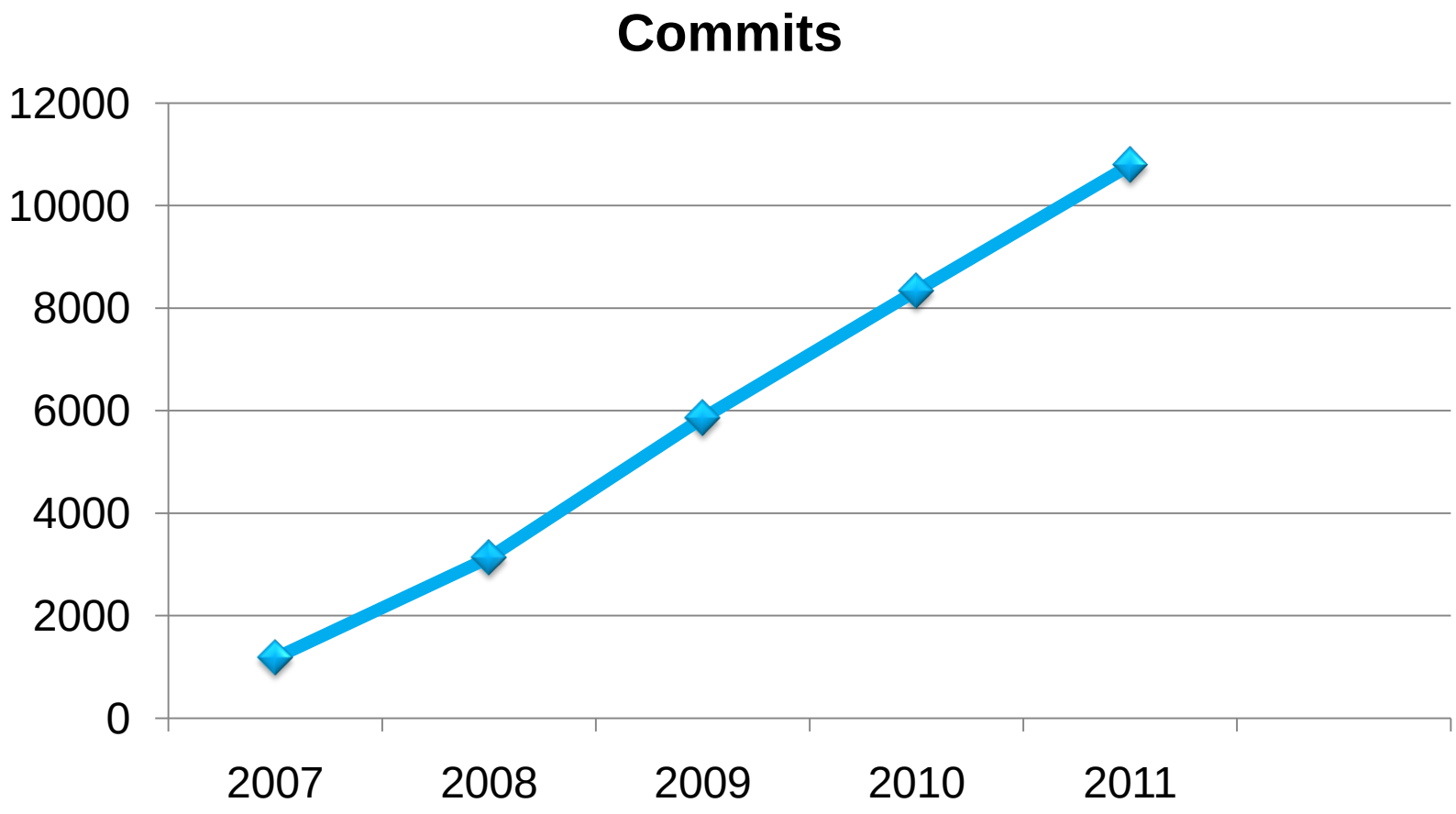
© 2012 FuseSource Corp. All rights reserved.
FuseSource
integration everywhere

User list posts



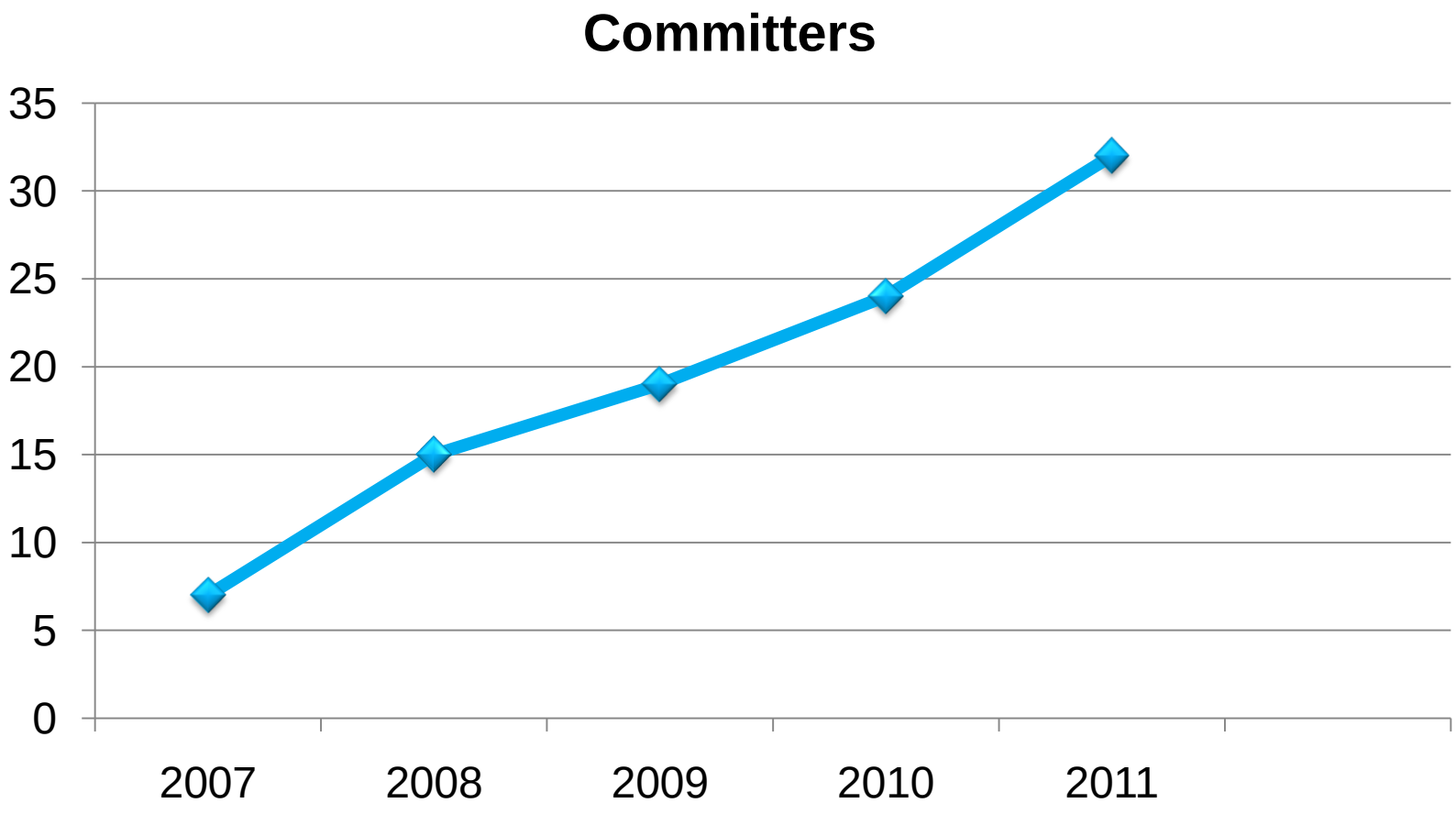
© 2012 FuseSource Corp. All rights reserved.
FuseSource
integration everywhere

Commits



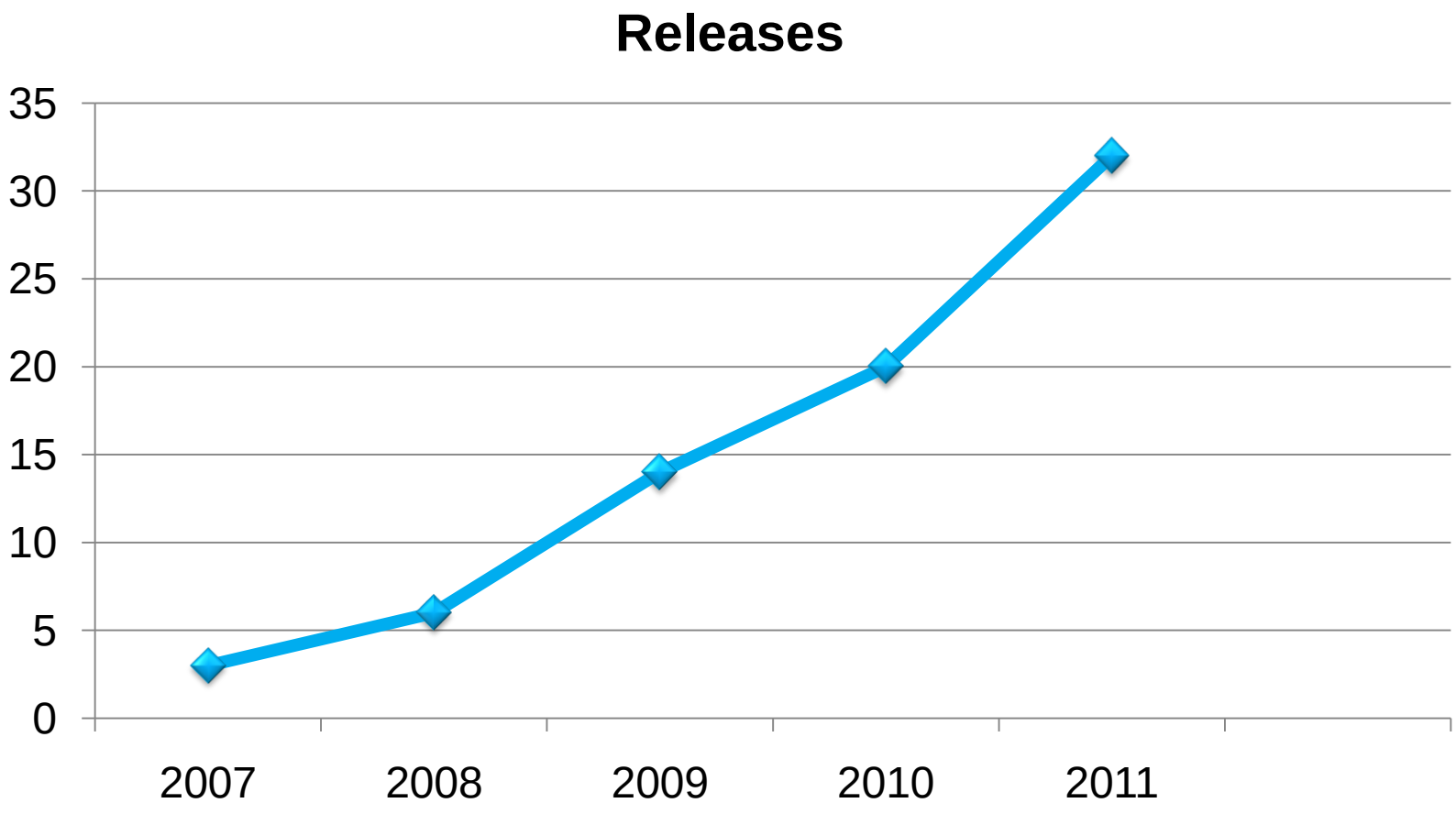
© 2012 FuseSource Corp. All rights reserved.
FuseSource
integration everywhere

Committers



© 2012 FuseSource Corp. All rights reserved.
FuseSource
integration everywhere

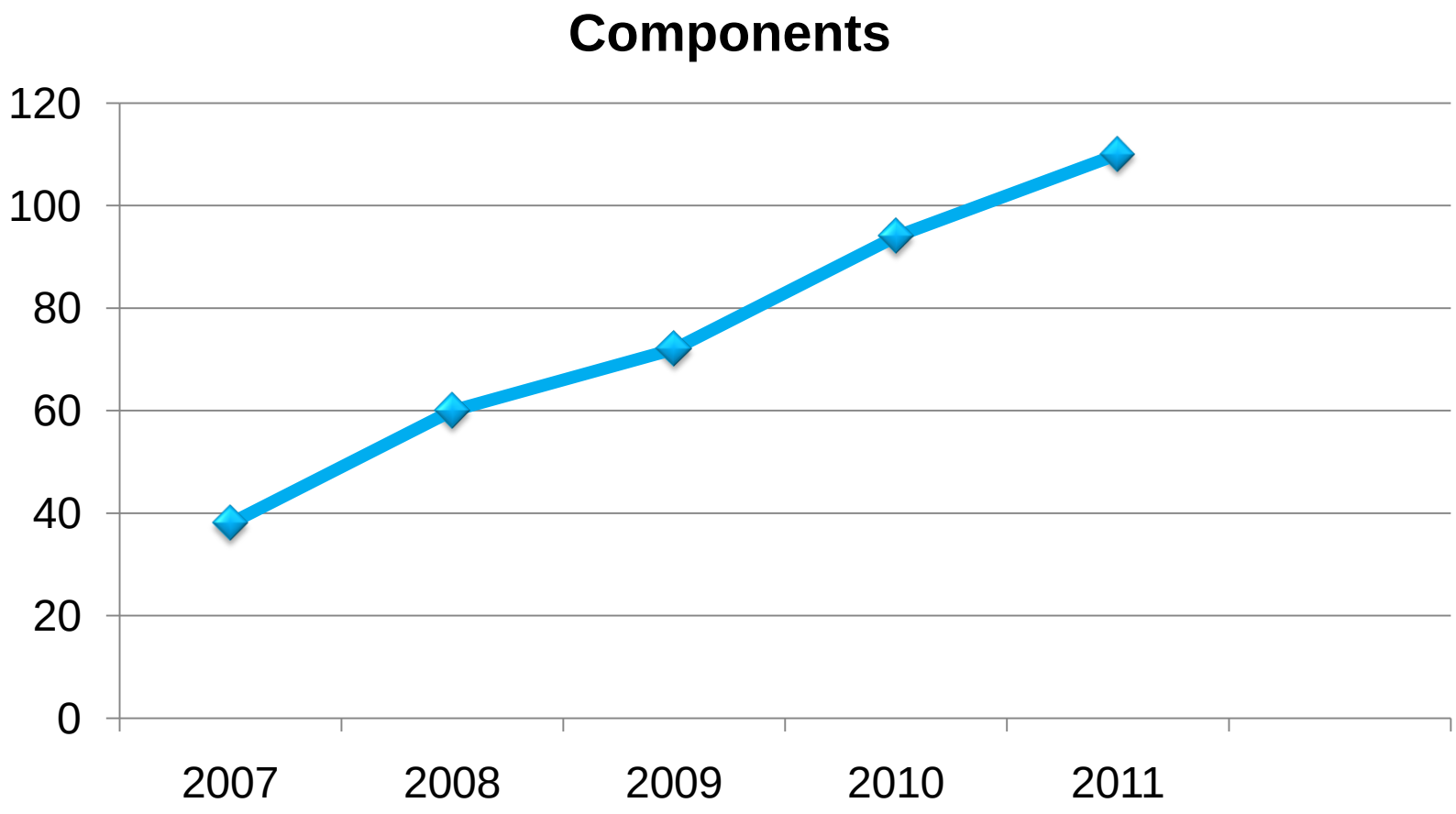
Releases



© 2012 FuseSource Corp. All rights reserved.

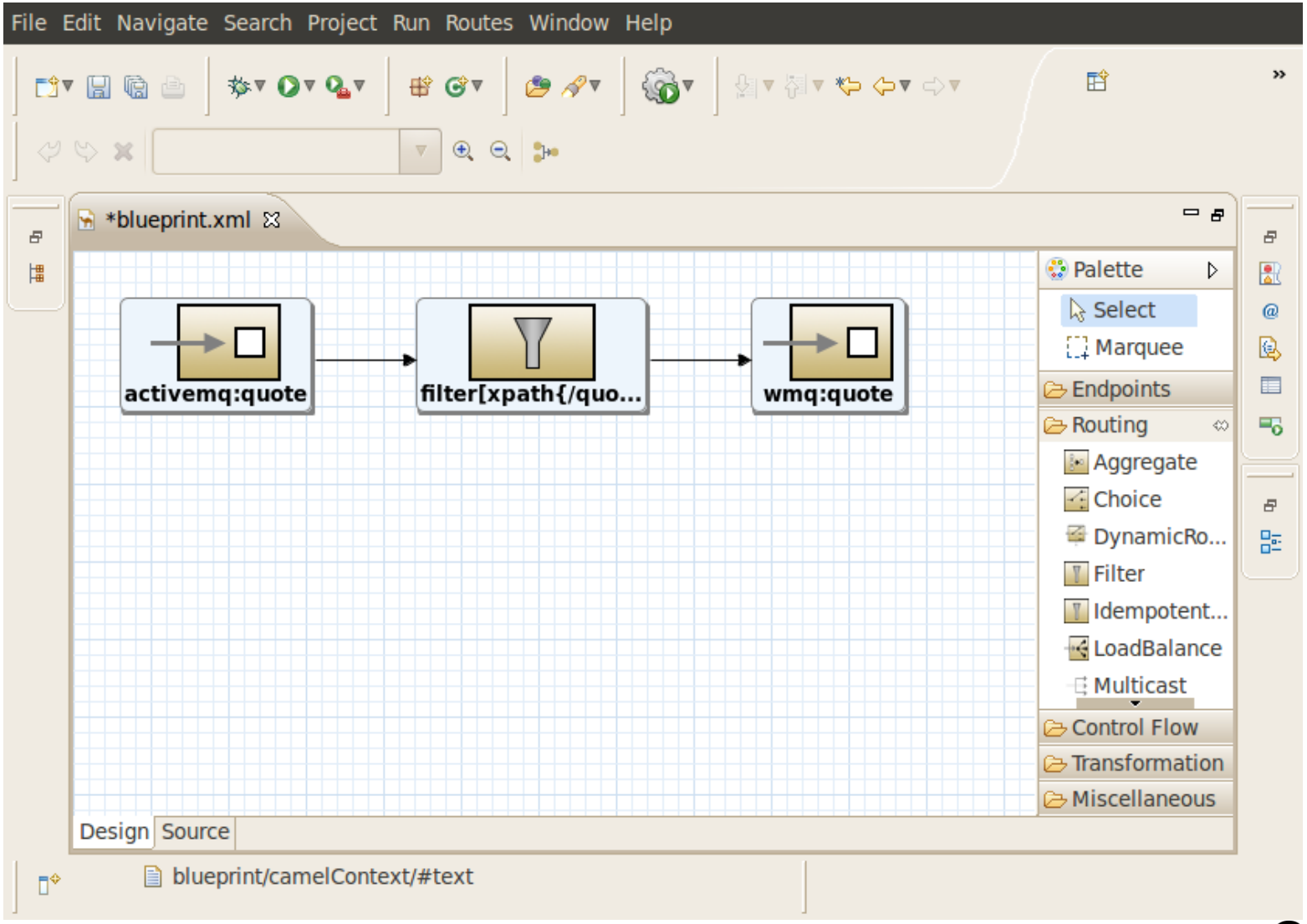
FuseSource
integration everywhere

Components



© 2012 FuseSource Corp. All rights reserved.
FuseSource
integration everywhere

Fuse IDE



© 2012 FuseSource Corp. All rights reserved.
FuseSource
integration everywhere

Camel's "Cloudy" Future

© 2012 FuseSource Corp. All rights reserved.

Camel's "Cloudy" Future

- We envision Camel being used for integration everywhere

- In the cloud, in the data center, and on the devices of the future

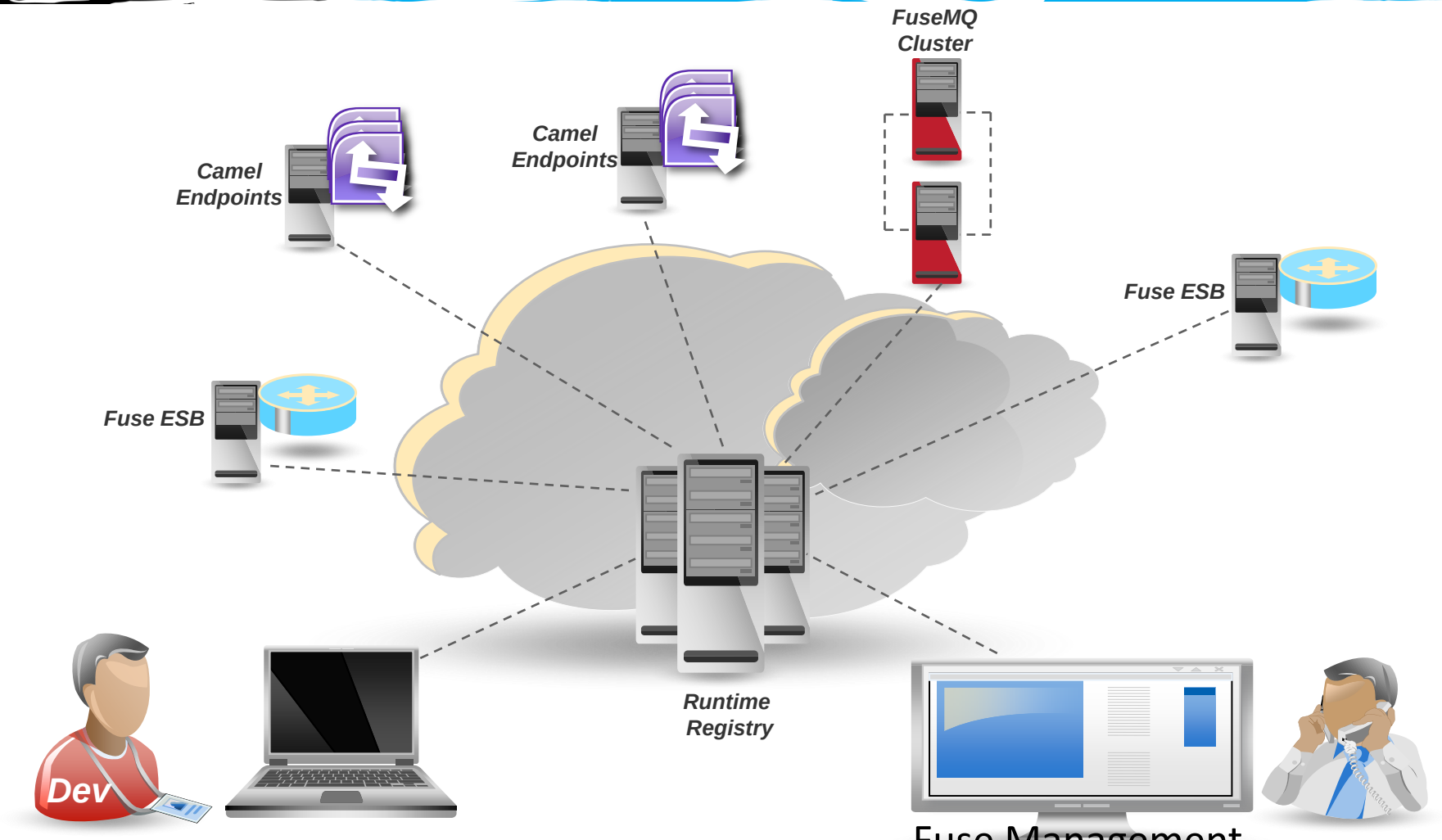
© 2012 FuseSource Corp. All rights reserved.

Enter Fuse Fabric

- Apache licensed open source software – built by the FuseSource team
- Provides a framework for configuring, provisioning and running Fuse and Apache integration software on any number of machines

© 2012 FuseSource Corp. All rights reserved.

Fuse Fabric



Fuse IDE

Fuse Management Console

© 2012 FuseSource Corp. All rights reserved.

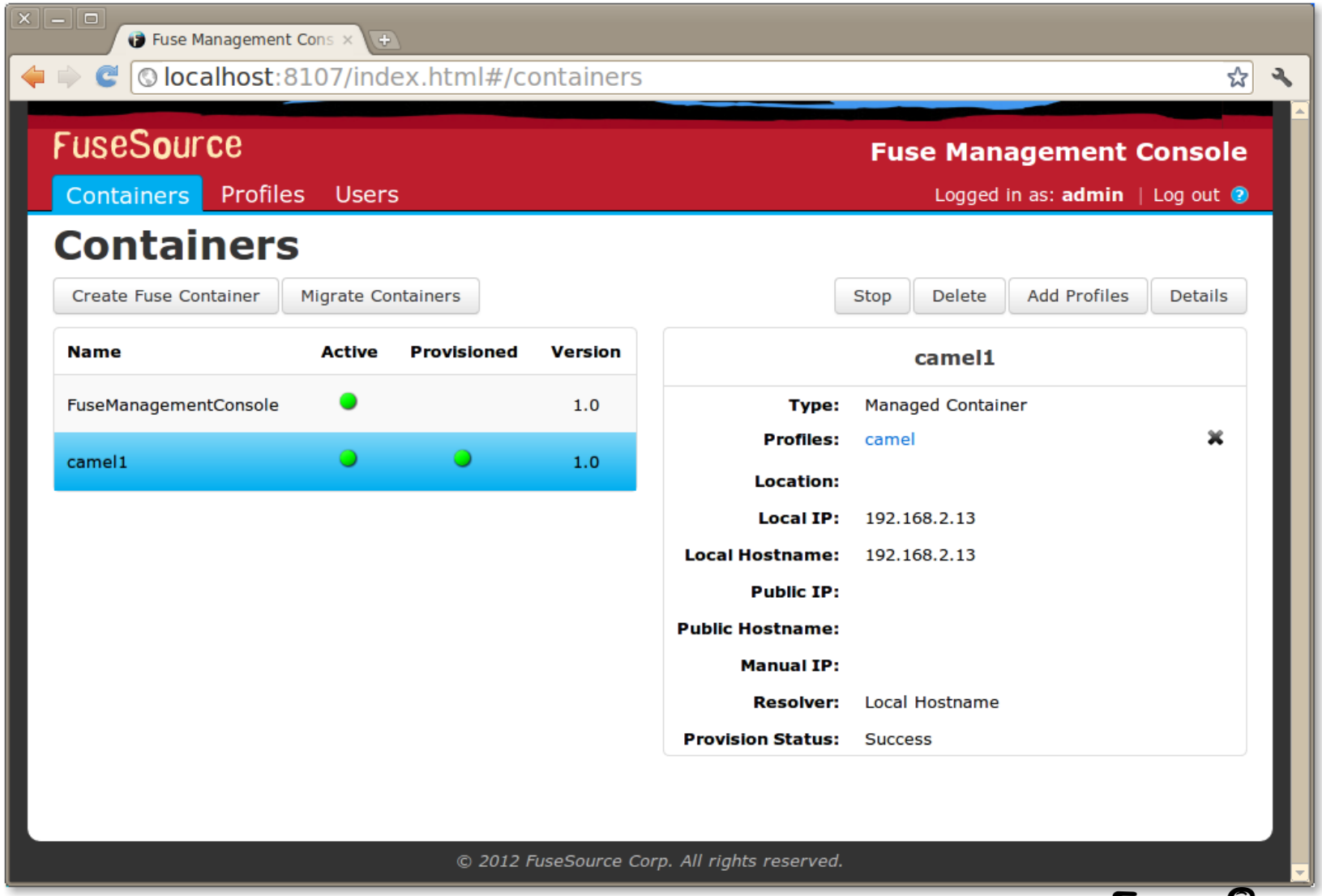
FuseSource
integration everywhere

Camel Fabric Discovery & Loadbalancing

- Exposing Camel endpoints into the fabric
  - from("fabric:myName:jetty:http://0.0.0.0:8181").to("bean:foo1");
  - from("fabric:myName:jetty:http://0.0.0.0:8182").to("bean:foo2");
  - …
- Invoking a remote Camel endpoint
  - from("direct:bar").to("fabric:myName");

© 2012 FuseSource Corp. All rights reserved.

Fuse management console

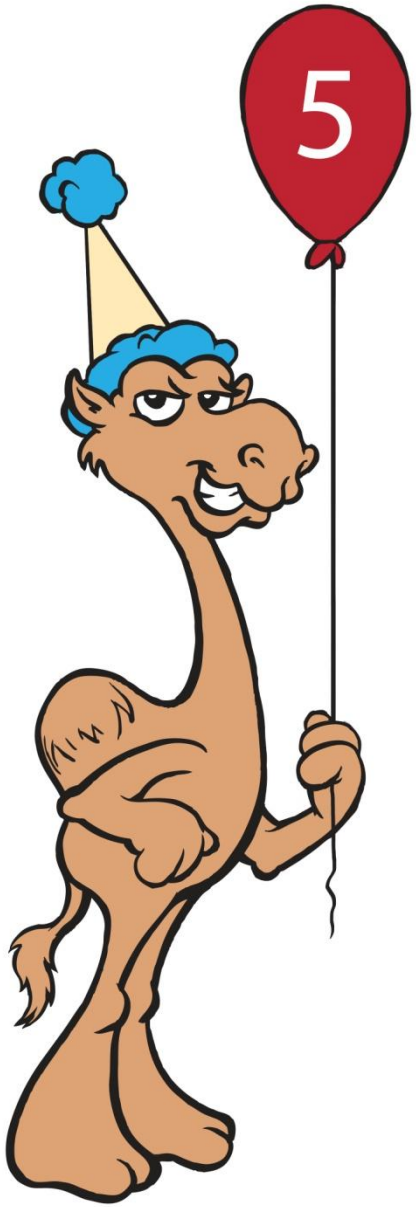


© 2012 FuseSource Corp. All rights reserved.

FuseSource
integration everywhere

5th birthday of Camel

- The Apache Camel project turned 5 in March 2012



© 2012 FuseSource Corp. All rights reserved.
FuseSource
integration everywhere

Useful references

- FuseSource - http://fusesource.com
- Fuse IDE - http://fusesource.com/products/fuse-ide
- Fuse Management Console
  - http://fusesource.com/products/fuse-management-console
- Apache Camel – http://camel.apache.org
- Camel in Action - http://manning.com/ibsen
- Fuse Fabric - http://fuse.fusesource.org/fabric

© 2012 FuseSource Corp. All rights reserved.

Any Questions?

No vendor lock-in

Free to redistribute

Enterprise class….

FuseSource
integration everywhere