



ADVANCED MESSAGE QUEUING PROTOCOL

Internet Protocol for Business Messaging

AMQP in Action

By members of the AMQP Working Group
QCon London, March 2009

Cisco Systems
Credit Suisse
Deutsche Börse Systems
Envoy Technologies
Goldman Sachs
iMatix
IONA
JPMorgan Chase
Microsoft
Novell
Rabbit Technologies
Red Hat
Tervela
TWIST
WSO2
29West



Who's talking today

John O'Hara, JPMorgan

- Started AMQP, Chair of AMQP Working Group
- JPMorgan Senior Architect and Distinguished Engineer

Pieter Hintjens, iMatix

- CEO iMatix and creator of OpenAMQ and 0MQ

Alexis Richardson, CohesiveFT

- Director of CohesiveFT who sponsor Rabbit MQ

Carl Trieloff, Red Hat

- Senior Consulting Engineer, Director for Red Hat MRG
- Chair of Apache Qpid project



AMQP was born of frustration

MOM needs to be everywhere to be useful

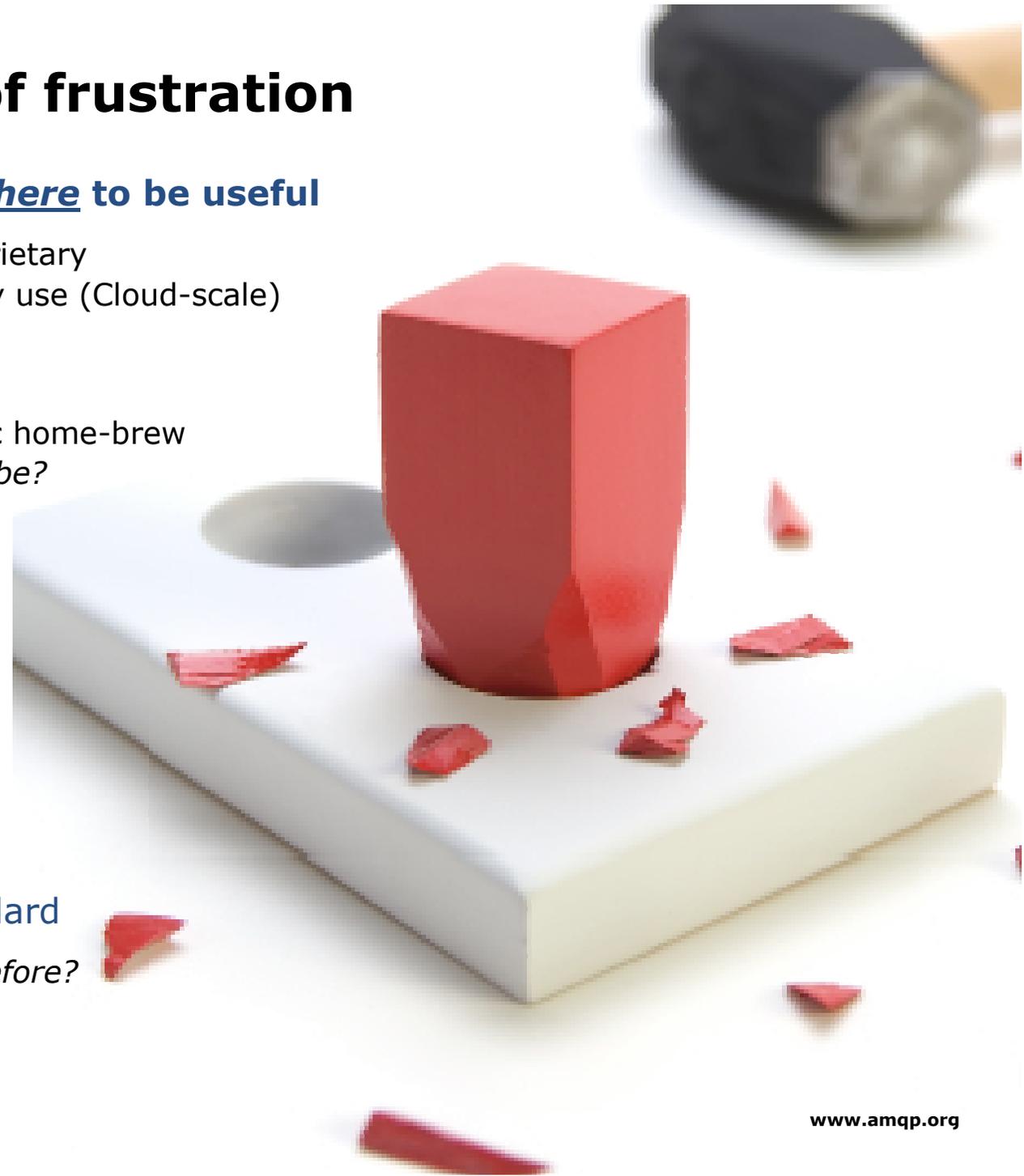
- dominant solutions are proprietary
 - too expensive for everyday use (Cloud-scale)
 - they don't interoperate
 - incumbents stagnating
- has resulted in lots of ad-hoc home-brew
 - *how hard can middleware be?*

Middleware Hell

- 100's of applications
- 10,000's of links
- every connection different
- massive waste of effort

The Internet's missing standard

- *Why has no one done this before?*





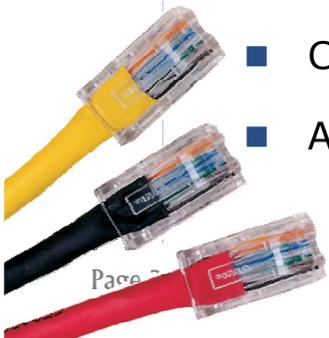
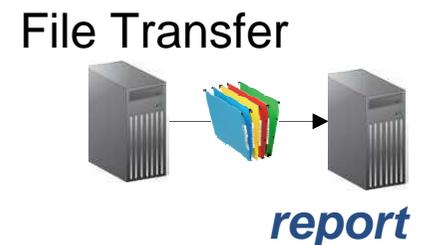
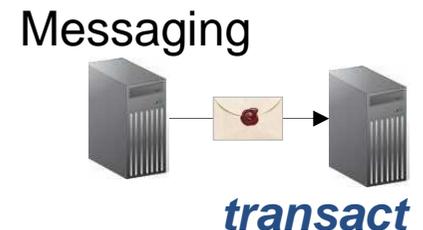
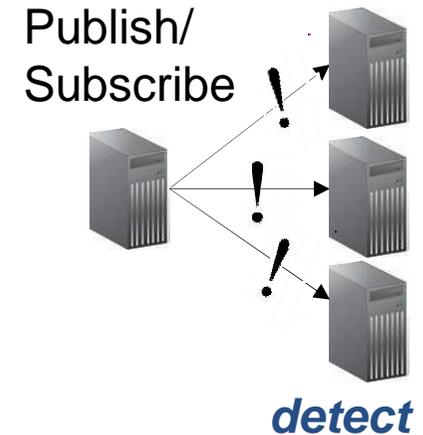
AMQP Capabilities

An *Internet Protocol* for *Business Messaging*

- A Protocol (not an API) for maximum interoperability
- Queuing with strong Delivery Assurances
- Event distribution with Flexible Routing
- Large Message capability (gigabytes)
- Global Addressing Scheme (email-like)
- Meet common requirements of mission-critical systems
 - Robust, available, scalable, secure, resilient
 - Aims to be stable over the long run
 - **Platform agnostic and totally open**

AMQP delivers this in one handy protocol

- Candidate for a common infrastructure for the enterprise
- A foundation for other protocols and products





AMQP Roadmap

- **AMQP 1.0 this year**

- Key features
 - Simplified Architecture
 - Stronger Transaction Model
 - Global Addressing
 - E.g. "forex@jpmorgan.com"

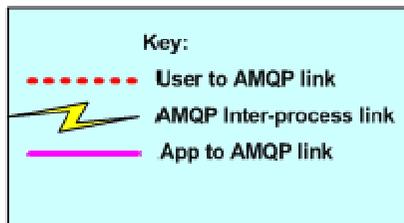
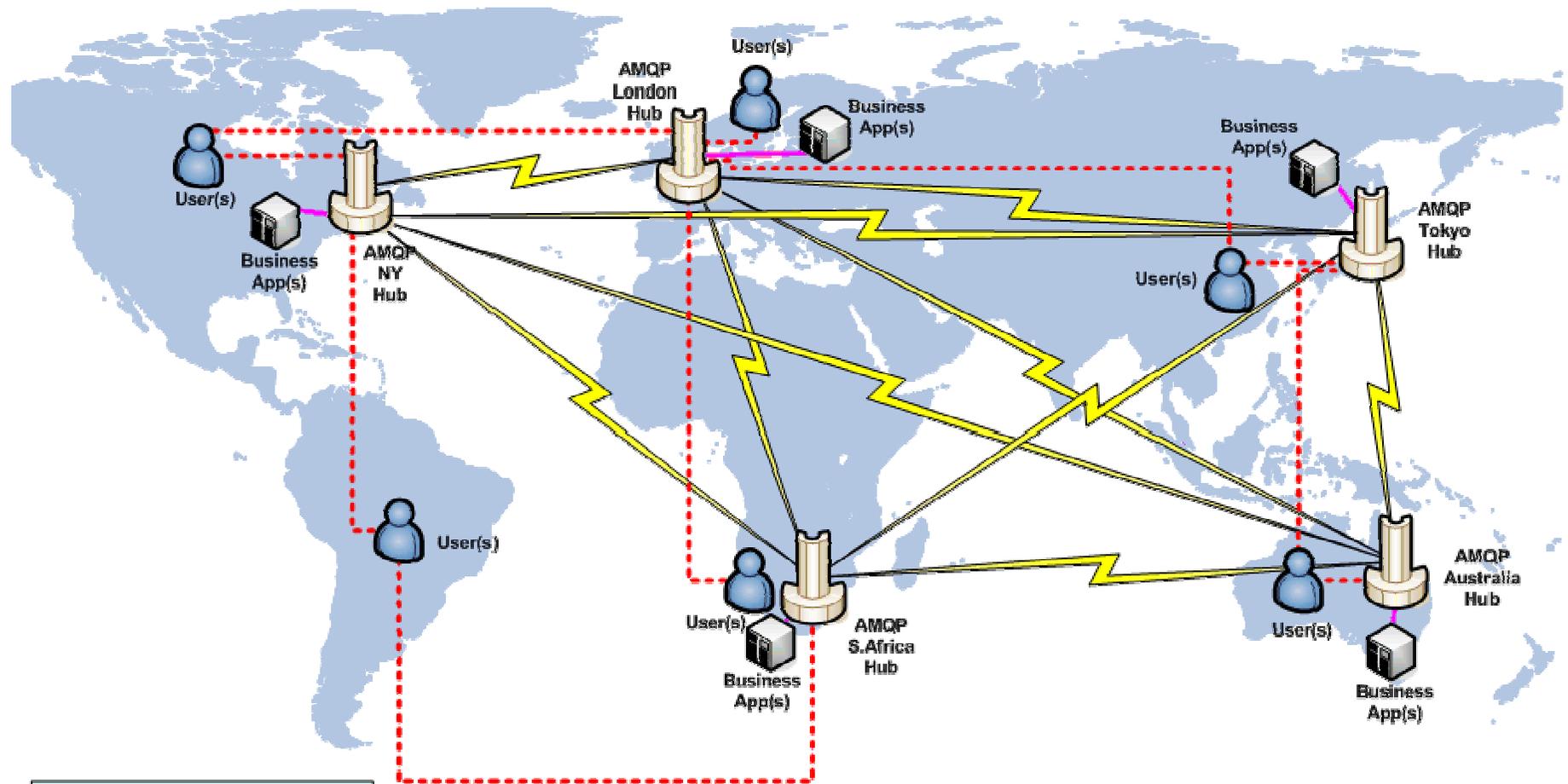
- Current implementations are AMQP v0-91 and v0-10
 - Implementer commitment to painless 1.0 migration
 - 1.0 will be finalised only after extensive inter-op testing
 - Now is the right time to embrace AMQP

- **Join us at the AMQP Conference**
 - Presenting AMQP 1.0 Public Review
 - April 1, University of California at San Diego
 - **www.amqp.org for details**





"High touch" global trading application



- Hundreds of client GUI's subscribe and unsubscribe to only update the visible screen as users scroll through thousands of stocks!
- Routes messages based on header properties – not a topic tree
- Runs across Windows, Linux, Solaris; C++, Java, .NET
- 1 billion messages per day; live for 3 years