



Open Message Queue

mq.dev.java.net

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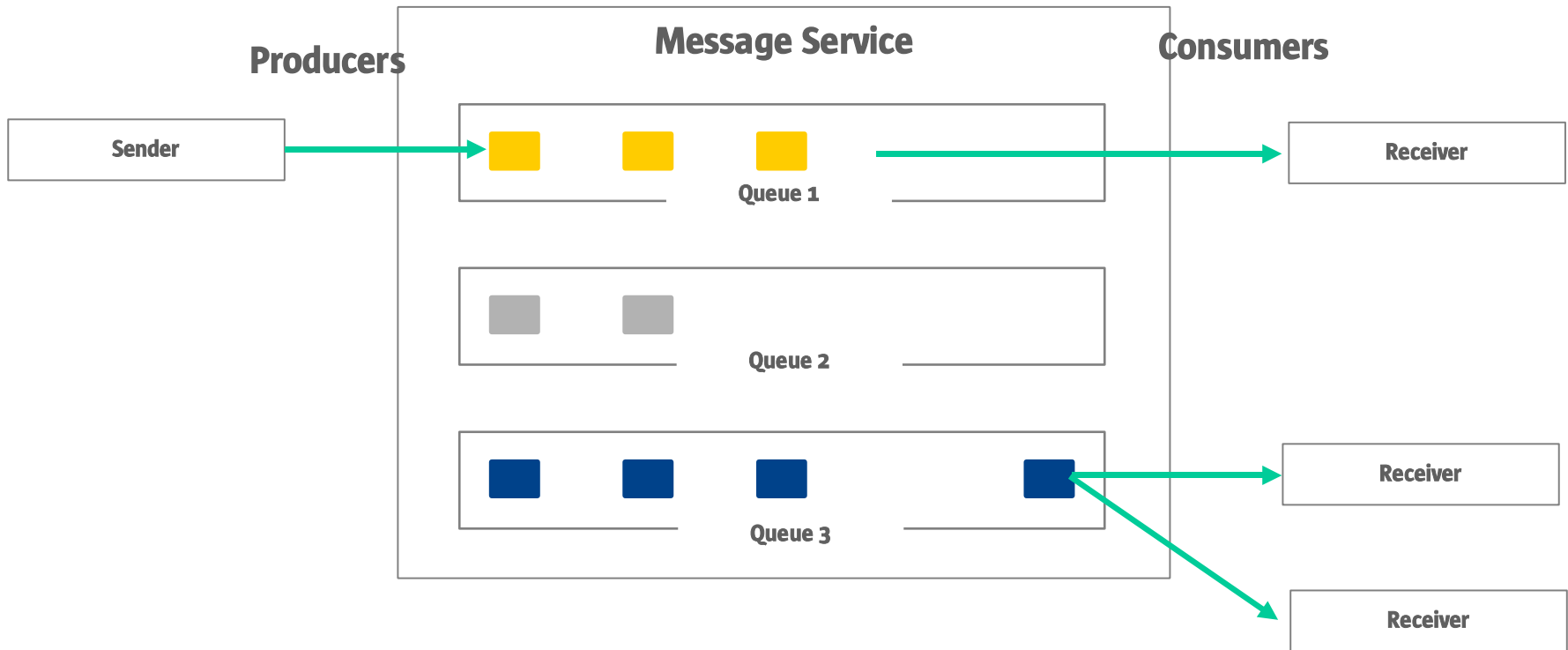
Open Message Queue

- mq.dev.java.net
- Member of GlassFish project community
- Community version of Sun Java System Message Queue
 - > No feature differences between commercial and community versions
- The JMS Provider distributed with GlassFish
- Complete source; Stable and Promoted builds
- Community feedback, commentary, updates

What is JMS?

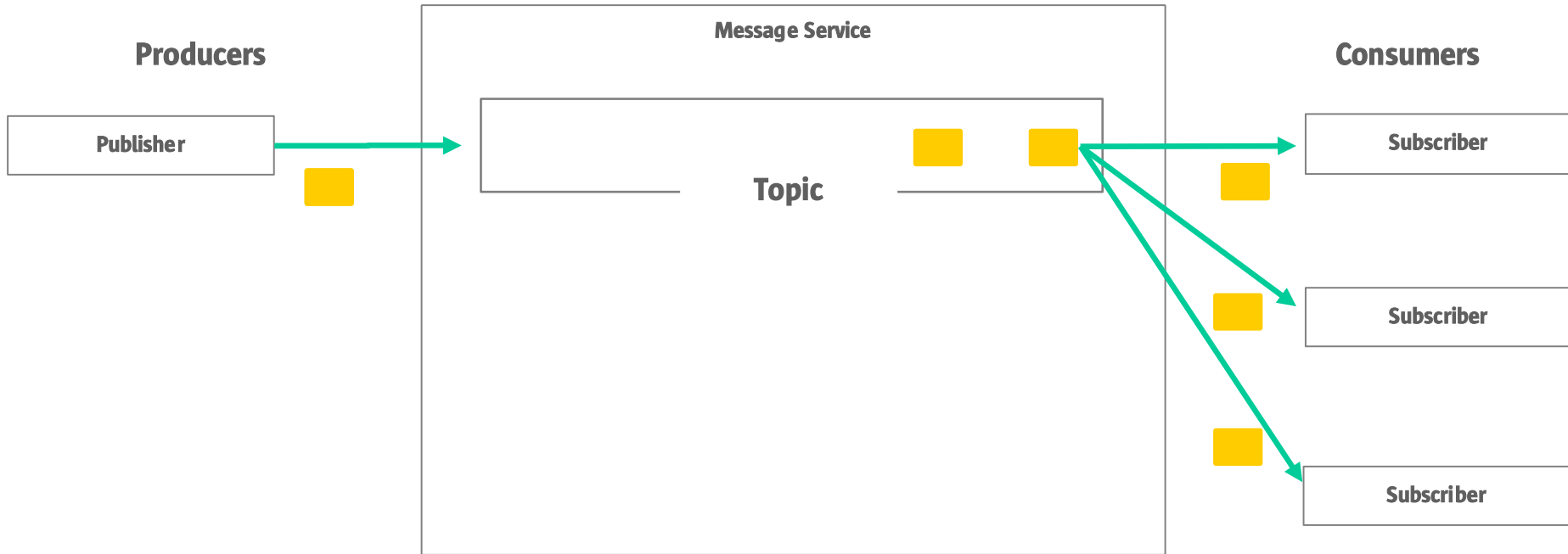
- A Java API for Message Oriented Middleware
- From Wikipedia
 - > *Java Message Service (JMS) API is a Java Message Oriented Middleware (MOM) API for sending messages between two or more clients. JMS is a specification developed under the Java Community Process as JSR 914.*
- A messaging server implements JMS
 - > Each product can have unique implementation details and features, beyond what is required by JMS
- Other language APIs exist, but are not standardized

Point to Point Messaging



Messages from producers delivered to consumers
 Held in Queue
 Delivered, in order – *Guaranteed*

Publish and Subscribe Messaging



Publishers are independent from subscribers
 Message expiration is configured
 Subscriptions may be “durable”

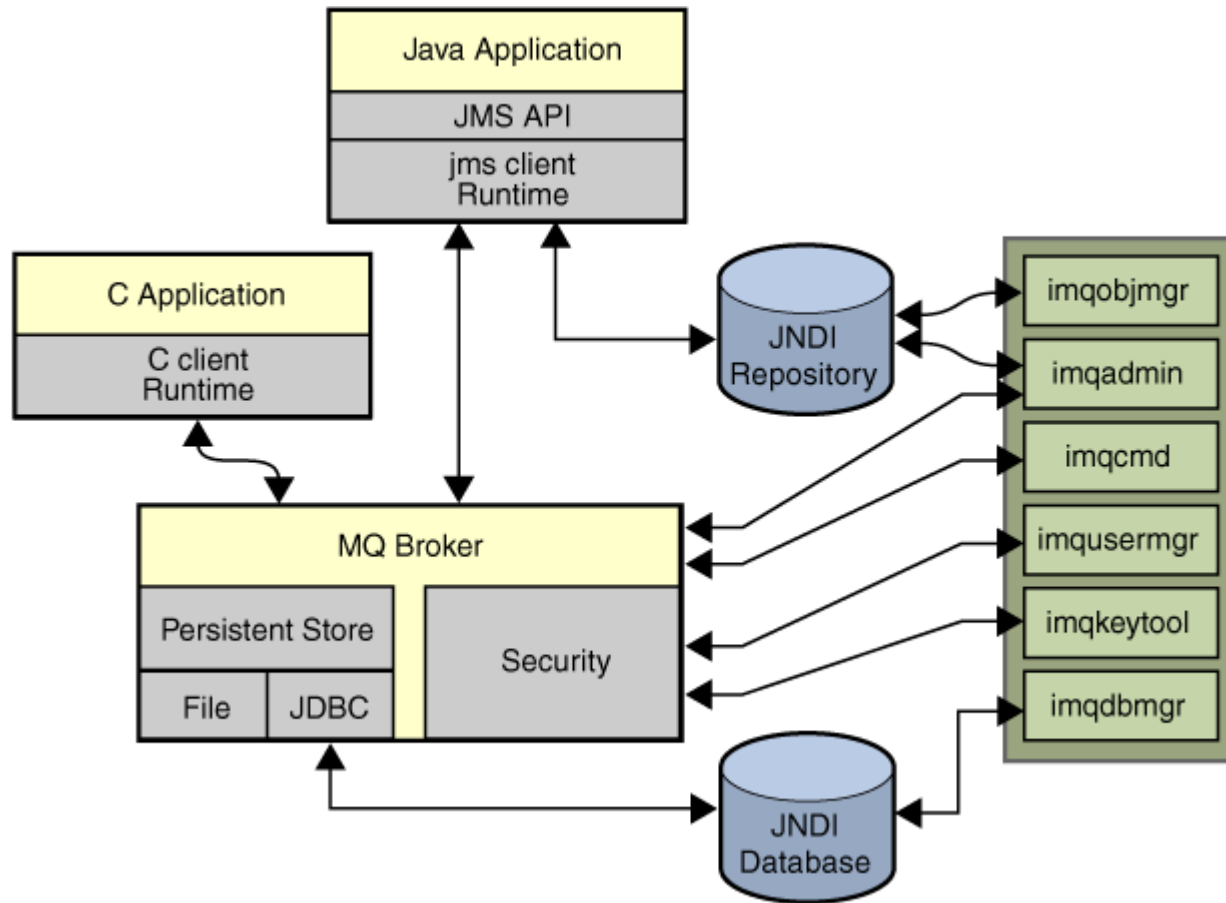
JMS Terminology

- Destinations
 - > The target intermediary of all messages
 - > Maybe temporary (useful in Request / Response)
- Producers, Consumers
 - > Clients produce messages (i.e. place them on a Queue or Topic); and Consume messages (i.e. remove them from a queue or topic)
- Connections
 - > Abstract client to broker context
- Sessions
 - > Abstract the message context

What's Available at Open MQ

- Complete stand-alone messaging server
- Fully supports JMS
- GUI installer or zip, file-based install
- Command line and GUI administration tools
- JMX Monitoring
- Provides many additional features (beyond JMS)
- JCA 1.5 compliant resource adapter

System block diagram



Well organized and easy to browse source

New Features

- HA support -- with GlassFish Enterprise profile
 - > When used with appropriate High Availability database (e.g. HADB, MySQL)
- Optimized, embedded deployment when used in GlassFish Developer profile
- Improved GlassFish integration
 - > Configuration is replicated automatically
- GUI installer based on Open Installer
 - > Interactive and script based install supported

Current Features

- Platforms
 - > Solaris SPARC/x86
 - > Linux
 - > Windows
 - > Vanilla Unix (zip-install only)
- Support for embedded message store as well as JDBC storage
- Distributed broker cluster deployments

Current Features (Contd.)

- Other APIs
 - > C-client API
 - > SOAP / HTTP
- Dead Message Queue
- Message Body Compression
- Configurable acknowledge modes
 - > Tunable for performance
- Destination controls
 - > Message count limits
 - > Limits on number of consumers

Current Features (Contd.)

- Connection event notifications
- Administration via command line, GUI, or JMX
 - > Includes improved administration shutdown capabilities
 - Quiesce to drain
 - Shutdown at time
- Security Highlights
 - > SSL / TLS security
 - > Programmable Access Control Rules (ACLs)
 - > JAAS -- for custom authentication
- Client and Server side logging to aid debugging

What is at mq.dev.java.net

- Complete Source Code
 - > Dual license (CDDL or GPL), same as GlassFish
- Stable binaries (with source) from each release
 - > Since 4.0 / GlassFish V1
 - > Now 4.1 / GlassFish V2
- Promoted binaries (with source) from current development program
- Build tools for NetBeans
- Community discussion lists
- Forum hosted at SDN

Feature Plans

- Improvements in performance
- Integrated HA file store with distributed cache
- Store and forward messaging
- Content based message selectors
- Destination hierarchies
 - > For selecting destination names
 - > For synchronization between related message groups
- Easier configuration
 - > Auto-discovery

Is something missing?

We want to hear from you Tell us what you want

users@mq.dev.java.net

Want To Participate?

- Join the community
 - > mq.dev.java.net
- Download the latest build
 - > GlassFish or Open MQ
- Give us feedback on features
- Find a bug?
 - > Use Issuetracker at mq.dev.java.net
- Post questions

Want More Information?

- It all starts at the community site
 - > mq.dev.java.net
- Complete documentation is available
- Free Online training courses are available

- E-mail us at
 - > users@mq.dev.java.net
- Forum at
 - > <http://forum.java.sun.com/forum.jspa?forumID=711>



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