

EMI Messaging PT Status Update

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EMI 3rd All Hands Meeting – Padova, 18th October 2011

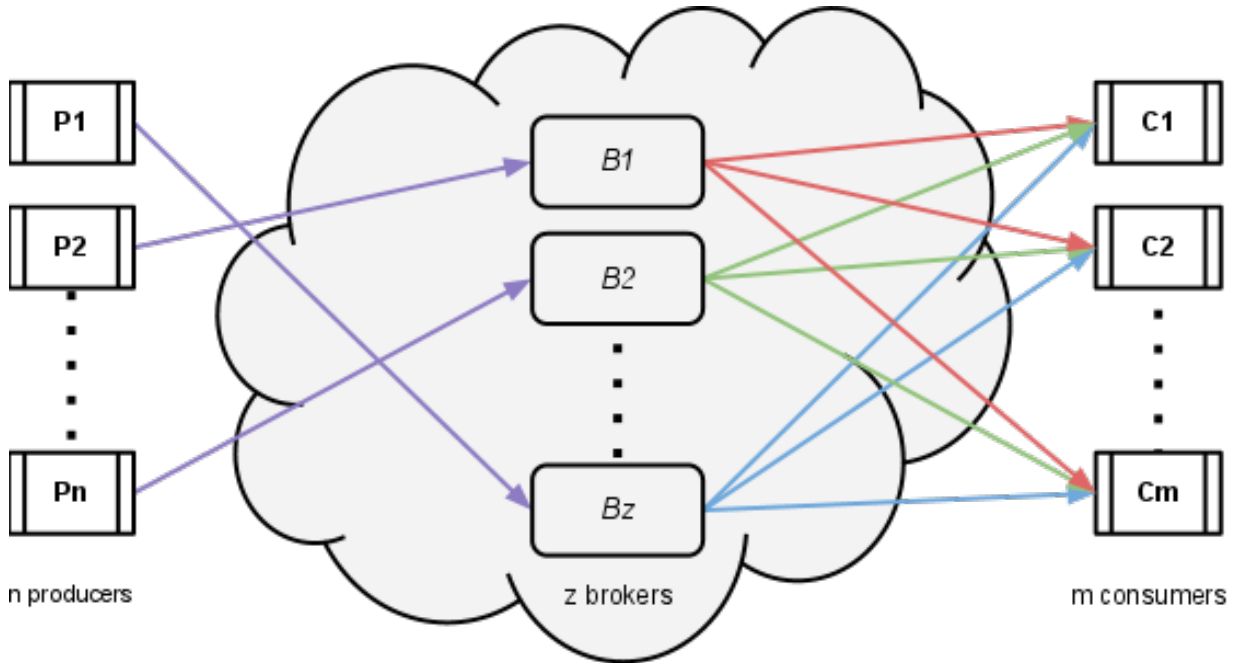
- Year 2
 - Based on the requirements from year 1 as well as practical tests, recommend which messaging solution(s) should be used within EMI
 - Prototype the additional software that complements the chosen messaging solution(s)
 - Improve the messaging documentation with best practices and examples
 - Provide consultancy to help the other product teams with messaging integration

- Paper released at the end of the summer
 - <http://goo.gl/OQNXg>
- Three products have been found satisfactory
 - Apache ActiveMQ
 - Apache ActiveMQ Apollo
 - RabbitMQ



- No clear winner but clear recommendations
 - Use STOMP
 - Avoid vendor lock-in
 - Isolate messaging components
 - Use dedicated messaging services made of independent brokers
 - Test, benchmark and validate your use cases
 - *Real environment matters!*
 - Messaging guidelines: <http://goo.gl/q62ol>

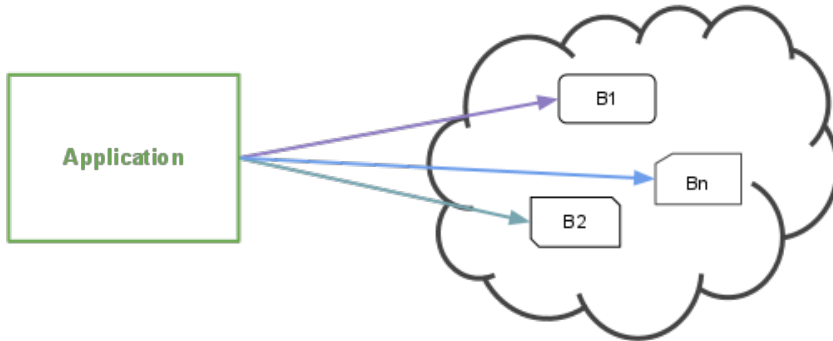
- Messaging software needs to be deployed on servers to provide a messaging service
 - Just like many other services: web, database, ...
- Different messaging services are available
- Test
 - EMI should have one as part of SA2
 - CERN has one *dev* service
 - You can always deploy your own for specific needs
- Production
 - EGI operates a service with four brokers
 - WLCG operates two dedicated messaging services



- Messaging brokers and client libraries are already available (open source software)
- Additional software has been prototyped
 - Libraries to ease messages manipulation
 - Reusable basic blocks to isolate messaging dependent code

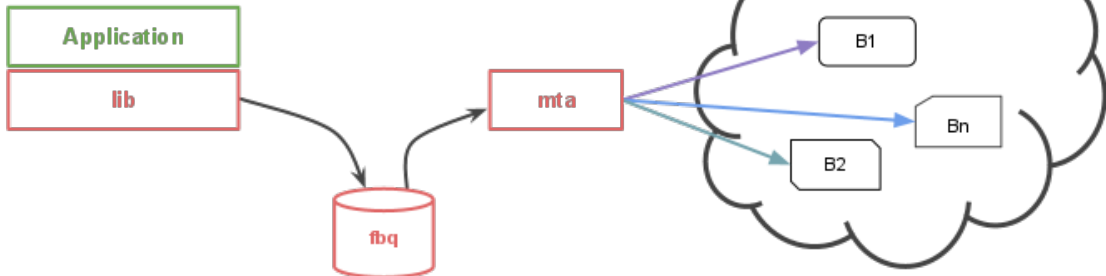
...feedback is welcome!

Simplifying Messaging Clients



before

after



- Improve the messaging documentation with best practices and examples
 - We are constantly improving documentation
 - Feedback is very welcome

- The more feedback we get the better it will get!

- Provide consultancy to help the other product teams with messaging integration
 - We are happy to help you
 - Use the mailing list

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- APEL Client
- ARC (not using messaging)
- CERN Data Management – LFC
- gLite Information System
- gLite Job Management
- Logging & Bookkeeping
- Service Monitoring Task Force

Thank you!

- Develop and document the additional software part of the EMI messaging solution(s)
- Provide consultancy to help the other product teams with messaging integration
- Improve and finalise the messaging documentation