

Academic Year 2015-2016 Semester I

420312 - Middleware Techniques and Platforms

Assignment 2

Requirement

Each team, consisting of 3 or 4 members, is required to explore and study one message-oriented middleware (MOM) technique/protocol/specification/framework/platform/system/product/service, excluding Java Message Service (JMS) and Apache ActiveMQ which have been addressed in the lectures. Candidate topics include (but are not limited to):

- ActiveMQ Apollo
- Advanced Message Queuing Protocol (AMQP)
- Amazon Simple Queue Service (Amazon SQS)
- Apache Qpid
- Azure Service Bus
- EasyNetQ
- Event-driven SOA
- Extensible Messaging and Presence Protocol (XMPP)
- FioranoMQ
- HornetQ
- IBM Message Hub
- IBM MQ
- IBM MQ Light
- IronMQ
- JORAM
- Message Driven Beans

- Microsoft Message Queuing (MSMQ)
- MQTT
- Open Message Queue (Open MQ)
- OpenJMS
- RabbitMQ
- Simple Text Oriented Message Protocol (STOMP)
- StormMQ
- SwiftMQ
- ZeroMQ

The explorative study should cover the following aspects of the middleware:

1. The history
2. Major design objectives
3. Architecture, framework and components
4. Major functionalities and features
5. Application scenarios
6. Comparison with other related middleware
7. Major steps and issues involved in using the middleware

Presentation

Each team is required to present the explorative study within 15 minutes, including a QA session.

The presentation can be delivered in either English (preferred) or Mandarin, while the presentation slides should be composed in English only. The presentation must cover all aspects listed above.

Presentation time slots and venues:

- A. Wed, 18 Nov 2015, 13:30-15:05, SSE430 (6 teams)
- B. Thu, 19 Nov 2015, 10:00-11:40, SSE516 (6 teams)
- C. Mon, 23 Nov 2015, 10:00-11:40, SSE430 (6 teams)

- D. Tue, 24 Nov 2015, 10:00-11:40, SSE516 (6 teams)
- E. Thu, 26 Nov 2015, 10:00-11:40, SSE516 (6 teams)
- F. Mon, 30 Nov 2015, 10:00-11:40, SSE430 (6 teams)
- G. Wed, 2 Dec 2015, 13:30-15:05, SSE430 (6 teams)
- H. Thu, 3 Dec 2015, 10:00-11:40, SSE516 (6 teams)

Submission

Prior to the presentation, each team should submit the presentation slides to the course instructor or teaching assistant, with the first slide presenting the name of the middleware and the full names and matriculation numbers of all team members. (*Format: PPT/PPTX/PDF; document size: less than 100 MB.*)

Grading Criteria

<i>Grading Criterion</i>	<i>Weight</i>
The history	5%
Major design objectives	10%
Architecture, framework and components	10%
Major functionalities and features	15%
Application scenarios	5%
Comparison with other related middleware	10%
Major steps and issues involved in using the middleware	15%
Quality of presentation slides	15%
Quality of presentation	15%

THE END