Middleware Paper Discussion 1

Winter Term 2014/2015

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Middleware   **21.10.2014**

Download (http://www.dvs.tu-darmstadt.de/teaching/cs/material/papers/Middelware-Bernstein.pdf)
and read the paper "Middleware" by P.A. Bernstein (Communications of the ACM, Feb.1996/Vol.39
No.2).

Answer the following questions:

1. What is the definition of the following terms according to the paper:
   - Middleware
   - Framework
   - Middleware Service
2. What is the relationship between the terms *middleware* and *framework?*
3. What is the difference between an *API* and a *protocol*?
4. What are the different *types of integration* mentioned in the paper?
5. What *barriers* to using middleware systems are mentioned?
6. What is a middleware service and what properties are different to a platform-specific service?
7. What role does standardization play for middleware?
8. What are the three open challenges of middleware services?
9. In what dimensions can middleware be measured? Why are they important?
10. What is the concept of a TP Monitor?

Hand in one to two pages on paper at the beginning of the exercise session on **November 4th.** Group
submissions are not allowed, however we encourage discussing your answers with fellow students.
Don't forget to put name and student ID on your submission.