Systems Integration using Web Services in the IT of the BMW Group II

This diploma thesis addresses the application of Web Services as an Enterprise Application Integration solution within the IT of the BMW Group. First, the theoretical background for the EAI within the BMW Group is explained and the Web Service technologies are introduced with a special focus on Web Service Implementation with Java. Second, the application scenario is introduced, where the products and frameworks used are described in detail. The products used are the SAP Web Application Server 6.40 and the Bea Web Logic Server 8.1. The Web Services are published on the SAP Web Application Server 6.40 and consumed on the Bea Web Logic Server 8.1. Third, the Web Service solution is weighed up against other technologies and connector products. The practical part of this thesis describes the sample application and compares a SAP Connector for Java solution with various Web Service solutions. Additionally load tests compare the different solutions implemented. The outcome of the load tests is discussed and an outlook for further investigations is given.