

References

- [1] Apache jmeter. Jmeter user manual, Apache Software Foundation, <http://jakarta.apache.org/jmeter/> [Accessed: Oct 20, 2011].
- [2] Architecture tradeoff analysis method. Technical report, Software Engineering Institute, <http://www.sei.cmu.edu/architecture/tools/evaluate/atam.cfm> [Accessed: Sept 12, 2011].
- [3] Chapter 6: Aspect oriented programming with spring. The spring framework 2.5 reference documentation, SpringSource Inc., <http://static.springsource.org/spring/docs/2.5.0/reference/aop.html> [Accessed: Sept 08, 2011].
- [4] Cloud basics software as a service. Technical report, Microsoft Corporation., http://www.microsoft.com/industry/government/guides/cloud_computing/4-SaaS.aspx [Accessed: Oct 20, 2011].
- [5] Convert your web application to a multi-tenant SaaS solution. CT316, IBM Developer works, <http://www.ibm.com/developerworks/cloud/library/cl-multitenantsaas/?ca=drs->, Dec.
- [6] Jmeter-plugins - every load test needs some sexy features! - google project hosting. Jmeter-plugins user manual, Google Code, <http://code.google.com/p/jmeter-plugins/> [Accessed: Oct 20, 2011].
- [7] Model driven architecture (mda) faq... Frequently asked questions report, Object Management Group, Inc., http://www.omg.org/mda/faq_mda.htm [Accessed: Jan 11, 2011].
- [8] Tiles concepts. Tiles 2.0 - basic usage guide, Apache Software Foundation, <http://tiles.apache.org/tutorial/basic/concepts.html> [Accessed: Sept 08, 2011].

- [9] S. Amber. Agile modeling tools. Technical report, Agile Modeling, <http://www.agilemodeling.com/essays/simpleTools.htm> [Accessed: Jan 11, 2011].
- [10] S. W. Amber. Are you ready for the mda? Technical report, Agile Modeling, <http://www.agilemodeling.com/essays/readyForMDA.htm> [Accessed: Jan 11, 2011].
- [11] M. Armbrust, A. Fox, R. Griffith, A. D. Joseph, R. Katz, A. Konwinski, G. Lee, D. Patterson, A. Rabkin, I. Stoica, and M. Zaharia. A view of cloud computing. *Commun. ACM*, 53:50–58, April 2010.
- [12] S. Aulbach, T. Grust, D. Jacobs, A. Kemper, and J. Rittinger. Multi-tenant databases for software as a service: schema-mapping techniques. In *Proceedings of the 2008 ACM SIGMOD international conference on Management of data*, SIGMOD '08, pages 1195–1206, <http://doi.acm.org/10.1145/1376616.1376736>, 2008. ACM.
- [13] S. Aulbach, D. Jacobs, A. Kemper, and M. Seibold. A comparison of flexible schemas for software as a service. In *Proceedings of the 35th SIGMOD international conference on Management of data*, pages 881–888. ACM, 2009.
- [14] C. Bezemer and A. Zaidman. Multi-tenant SaaS applications: maintenance dream or nightmare? In *Proceedings of the Joint ERCIM Workshop on Software Evolution (EVOL) and International Workshop on Principles of Software Evolution (IWPSE)*, pages 88–92. ACM, 2010.
- [15] C. Bezemer, A. Zaidman, B. Platzbeecker, T. Hurkmans, and A. Hart. Enabling multi-tenancy: An industrial experience report. In *Software Maintenance (ICSM), 2010 IEEE International Conference on*, pages 1–8, 2010.
- [16] E. Biermann, K. Ehrig, C. Khler, G. Kuhns, G. Taentzer, and E. Weiss. Graphical definition of in-place transformations in the eclipse modeling framework. *Model Driven Engineering Languages and Systems*, pages 425–439, 2006.
- [17] I. Bojanova and A. Samba. Analysis of cloud computing delivery architecture models. In *2011 IEEE Workshops of International Conference on Advanced Information Networking and Applications (WAINA)*, pages 453–458. IEEE, Mar. 2011.
- [18] A. Brown. An introduction to model driven architecture. Technical report, IBM developer works, <http://www.ibm.com/developerworks/rational/library/3100.html> [Accessed: Jan 11, 2011].

- [19] F. Budinsky, S. Brodsky, and E. Merks. *Eclipse modeling framework*. Addison-Wesley Boston;, 2003.
- [20] G. Butler. Object oriented frameworks. In *15th European Conference on Object-Oriented Programming, Tutorial Budapest*, 2001.
- [21] C. chang Kung. Jmeter tips. Technical report.
- [22] C. Chinnam. Architecture of force.com platform. Technical report, Sales-Force.com Inc., <http://architectforce.com/forceplatform/architecture-of-force-com-platform/> [Accessed: Jul 17, 2011].
- [23] F. Chong and G. Carraro. Architecture strategies for catching the long tail. Technical report, Microsoft Corporation, <http://msdn.microsoft.com/en-us/library/aa479069.aspx> [Accessed: Oct 23, 2010].
- [24] M. Chonoles and J. Schardt. *UML 2 for Dummies*. For Dummies, 2003.
- [25] E. Ciurana. *Developing with Google App Engine*. Springer, 2009.
- [26] P. Clements, L. Northrop, et al. A framework for software product line practice. *Web Document, version, 4*, 2004.
- [27] S. M. U. Dan Ma. The business model of software-as-a-service. 2007.
- [28] P. S. Denise Cook, Peter Cripps. Technical report.
- [29] B. Douglass. *Real time UML: advances in the UML for real-time systems*. Addison-Wesley Professional, 2004.
- [30] A. Faed, C. Wu, and E. Chang. Intelligent CRM on the cloud. In *2010 13th International Conference on Network-Based Information Systems (NBIS)*, pages 216–223. IEEE, Sept. 2010.
- [31] M. Fokaefs, R. Mikhaiel, N. Tsantalis, E. Stroulia, and A. Lau. An empirical study on web service evolution. In *2011 IEEE International Conference on Web Services (ICWS)*, pages 49–56. IEEE, July 2011.
- [32] M. Fontoura, W. Pree, and B. Rumpe. *The UML profile for framework architectures*. Addison-Wesley Professional, 2002.

- [33] I. Foster, Y. Zhao, I. Raicu, and S. Lu. Cloud computing and grid computing 360-degree compared. In *Grid Computing Environments Workshop, 2008. GCE'08*, pages 1–10. Ieee, 2008.
- [34] E. Gamma, R. Helm, R. Johnson, and J. Vlissides. Design patterns: Abstraction and reuse of object-oriented design. *ECOOP93 Object-Oriented Programming*, pages 406–431, 1993.
- [35] M. Godse and S. Mulik. An approach for selecting Software-as-a-Service (SaaS) product. In *IEEE International Conference on Cloud Computing, 2009. CLOUD '09*, pages 155–158. IEEE, Sept. 2009.
- [36] S. Graf, I. Ober, and I. Ober. A real-time profile for uml. *International Journal on Software Tools for Technology Transfer (STTT)*, 8(2):113–127, 2006.
- [37] C. Guo, W. Sun, Y. Huang, Z. Wang, and B. Gao. A framework for native multi-tenancy application development and management. 2007.
- [38] E. Halili. Apache jmeter. 2008.
- [39] J. Han and G. Kim. Integration technology of literature contents based on SaaS. In *2011 International Conference on Information Science and Applications (ICISA)*, pages 1–5. IEEE, Apr. 2011.
- [40] D. Haywood. Mda: Nice idea. shame about the... Technical report, TheServer-Side.com, http://www.theserverside.com/tt/articles/article.tss?l=MDA_Haywood [Accessed: Jan 11, 2011].
- [41] D. Jacobs, S. Aulbach, et al. Ruminations on multi-tenant databases. *BTW Proceedings*, 2007.
- [42] S. Jansen, S. Brinkkemper, G. Ballintijn, and A. van Nieuwland. Integrated development and maintenance of software products to support efficient updating of customer configurations: A case study in mass market ERP software. 2005.
- [43] S. Jansen, G. J. Houben, and S. Brinkkemper. Customization realization in multi-tenant web applications - case studies from the library sector. In B. Benatallah, F. Casati, G. Kappel, and G. Rossi, editors, *Web Engineering*, volume 6189 of *Lecture Notes in Computer Science*, pages 445–459. Springer, 2010.

- [44] X. Jiang, Y. Zhang, and S. Liu. A well-designed SaaS application platform based on model-driven approach. In *Grid and Cloud Computing, International Conference on*, volume 0, pages 276–281, Los Alamitos, CA, USA, 2010. IEEE Computer Society.
- [45] R. Johnson. J2ee development frameworks. *Computer*, 38(1):107–110, 2005.
- [46] R. Johnson, E. Gamma, R. Helm, and J. Vlissides. Design patterns: Elements of reusable object-oriented software. *Addison-Wesley*, 1(1-2):33–57, 1995.
- [47] J. Kaplan. SaaS: Friend or Foe? *Business Communications Review*, 37(6):48, 2007.
- [48] R. Kazman, M. Klein, P. Clements, and C.-M. U. P. P. S. E. INST. *ATAM: Method for architecture evaluation*. Citeseer, 2000.
- [49] A. Kleppe, J. Warmer, and W. Bast. *MDA explained: the model driven architecture: practice and promise*. Addison-Wesley Longman Publishing Co., Inc. Boston, MA, USA, 2003.
- [50] Á. Lédeczi, A. Bakay, M. Maroti, P. Volgyesi, G. Nordstrom, J. Sprinkle, and G. Karsai. Composing domain-specific design environments. *Computer*, 34(11):44–51, 2001.
- [51] A. Lenk, M. Klems, J. Nimis, S. Tai, and T. Sandholm. What’s inside the cloud? an architectural map of the cloud landscape. In *ICSE Workshop on Software Engineering Challenges of Cloud Computing, 2009. CLOUD '09*, pages 23–31. IEEE, May 2009.
- [52] G. Lewis. Basics about cloud computing. Technical report, Software Engineering Institute, <http://www.sei.cmu.edu/library/assets/whitepapers/Cloudcomputingbasics.pdf> [Accessed: Feb 17, 2011].
- [53] H. Li, Y. Shi, and Q. Li. A Multi-granularity Customization Relationship Model for SaaS. In *2009 International Conference on Web Information Systems and Mining*, pages 611–615. IEEE, 2009.
- [54] Y. Li, Y. Zhang, J. Liu, S. Zhang, and F. Zhang. The exploration of cloud computing. *Advances in Computer Science, Environment, Eco informatics, and Education*, pages 335–340, 2011.

- [55] H. Lin, K. Sun, S. Zhao, and Y. Han. Feedback-control-based performance regulation for multi-tenant applications. In *2009 15th International Conference on Parallel and Distributed Systems*, pages 134–141. IEEE, 2009.
- [56] R. Mathew and R. Spraez. Test Automation on a SaaS Platform. In *Software Testing Verification and Validation, 2009. ICST'09. International Conference on*, pages 317–325. IEEE, 2009.
- [57] P. Mell and T. Grance. The nist definition of cloud computing. Technical report, National Institute of Standards and Technology, Information Technology Laboratory, July 2009.
- [58] S. Mellor, M. Balcer, et al. *Executable UML: A foundation for model-driven architectures*. Addison-Wesley Longman Publishing Co., Inc., 2002.
- [59] R. Mietzner, A. Metzger, F. Leymann, and K. Pohl. Variability modeling to support customization and deployment of multi-tenant-aware Software as a Service applications. In *Proceedings of the 2009 ICSE Workshop on Principles of Engineering Service Oriented Systems*, pages 18–25. IEEE Computer Society, 2009.
- [60] R. Mietzner, T. Unger, R. Titze, and F. Leymann. Combining different multi-tenancy patterns in service-oriented applications. In *Enterprise Distributed Object Computing Conference, 2009. EDOC'09. IEEE International*, pages 131–140. IEEE, 2009.
- [61] D. Oberle. Service modeling language. Technical report, W3C, <http://www.w3.org/TR/sml/> [Accessed: Sept 05, 2011].
- [62] D. Oberle. Software-as-a-service efforts. Technical report, W3C, http://www.w3.org/2005/Incubator/usdl/wiki/D1#Software-as-a-Service_Efforts [Accessed: Sept 05, 2011].
- [63] C. Pettey and H. Stevens. Gartner fact checks the five most-common saas assumptions. Technical report, Gartner, Inc., <http://www.gartner.com/it/page.jsp?id=889713> [Accessed: Oct 23, 2010].
- [64] C. Raistrick and P. Francis. *Model driven architecture with executable UML*. Cambridge Univ Pr, 2004.

- [65] T. Schattkowsky. Uml 2.0-overview and perspectives in soc design. In *Proceedings of the conference on Design, Automation and Test in Europe-Volume 2*, pages 832–833. IEEE Computer Society, 2005.
- [66] D. Schmidt. Model-driven engineering. *IEEE computer*, 39(2):25–31, 2006.
- [67] B. Schnhage. Bringing mda to eclipse, using a pragmatic approach. Technical report, java-forum-stuttgart.de, http://www.java-forum-stuttgart.de/jfs/2006/foalien/A5_Schoenhage_Compuware.pdf [Accessed: Jan 11, 2011].
- [68] E. Seidewitz. What models mean? *Software, IEEE*, 20(5):26–32, 2003.
- [69] S. Sendall and W. Kozaczynski. Model transformation: The heart and soul of model-driven software development. *Software, IEEE*, 20(5):42–45, 2003.
- [70] M. Sinnema and S. Deelstra. Classifying variability modeling techniques. *Information and Software Technology*, 49(7):717–739, 2007.
- [71] F. L. Siqueira and P. S. Silva. Mapping the WRSPM model to Model-Driven architecture models. In *2011 Eighth International Conference on Information Technology: New Generations (ITNG)*, pages 750–753. IEEE, Apr. 2011.
- [72] R. Soley and the OMG Staff Strategy Group. Model driven architecture. Technical report, Object Management Group, <http://elrond.tud.ttu.ee/material/enn/IDY0201/Lecture2/00-11-05.pdf> [Accessed: Jan 11, 2011].
- [73] W. Sun, K. Zhang, S. Chen, X. Zhang, and H. Liang. Software as a service: An integration perspective. In B. J. Krmer, K. Lin, and P. Narasimhan, editors, *Service-Oriented Computing ICSOC 2007*, volume 4749, pages 558–569. Springer Berlin Heidelberg, Berlin, Heidelberg, 2007.
- [74] W. Sun, K. Zhang, S. Chen, X. Zhang, and H. Liang. Software as a service: An integration perspective. *Service-Oriented Computing–ICSOC 2007*, pages 558–569, 2010.
- [75] K. Tang, J. M. Zhang, and Z. B. Jiang. Framework for SaaS management platform. In *2010 IEEE 7th International Conference on e-Business Engineering (ICEBE)*, pages 345–350. IEEE, Nov. 2010.

- [76] L. Weiping. An analysis of new features for workflow system in the saas software. In *Proceedings of the 2nd International Conference on Interaction Sciences: Information Technology, Culture and Human*, ICIS '09, pages 110–114, <http://doi.acm.org/10.1145/1655925.1655946>, 2009. ACM.
- [77] C. D. Weissman and S. Bobrowski. The design of the force.com multitenant internet application development platform. In *Proceedings of the 35th SIGMOD international conference on Management of data*, SIGMOD '09, pages 889–896, <http://doi.acm.org/10.1145/1559845.1559942>, 2009. ACM.
- [78] X. Xiao, S. Hailong, L. Xiang, and Z. Chao. A Basing on Model-Driven Framework of Service-Oriented Software Production Line. In *Computational Intelligence and Design, 2009. ISCID'09. Second International Symposium on*, volume 2, pages 139–145. IEEE, 2009.
- [79] L. Ying, Z. Bin, L. Guoqi, W. Deshuai, and Z. Yichuan. Personalized Modeling for SaaS Based on Extended WSCL. In *2010 IEEE Asia-Pacific Services Computing Conference*, pages 355–362. IEEE, 2010.
- [80] L. Zhong, T. Wo, J. Li, and B. Li. A Virtualization-Based SaaS enabling architecture for cloud computing. In *2010 Sixth International Conference on Autonomic and Autonomous Systems (ICAS)*, pages 144–149. IEEE, Mar. 2010.