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Candidacy Exam – Paper List
April 10, 2003

My topic for the candidacy exam is what I call *event semantics*; this includes a selection of topics, including event systems, event-based workflow, and event correlation. I list here a selection of papers, books, and standards that I will be presenting on. The exam will be held on Monday, May 5 at 10am.

Event Correlation

1. Appleby, K., Goldszmidt, G. and Steinder, M. “Yemanja - a layered event correlation engine for multi-domain server farms.” *Integrated Network Management VII*, 2001, <http://www.cis.udel.edu/~steinder/PAPERS/yemanja-im2001.pdf>
2. Gruschke, B. “Integrated Event Management: Event Correlation using Dependency Graphs.” *Proceedings of the 9th IFIP/IEEE International Workshop on Distributed Systems: Operations & Management (DSOM 98)*, Newark, DE, USA, October 1998, <http://www.mnmteam.informatik.uni-muenchen.de/Literatur/MNMPub/Publikationen/grus98a/PDF-Version/grus98a.pdf>
3. Hasan, M., Sugla, B., and Viswanathan, R., “A Conceptual Framework for Network Management Event Correlation and Filtering Systems”, *Sloman et al.*, pp. 233-246, <http://www.bell-labs.com/user/masumh/research/publications/ec-concep.ps>
4. Luckham, D. *The Power of Events: An Introduction to Complex Event Processing in Distributed Enterprise Systems*. 2002: Addison-Wesley/Pearson Education, Indianapolis, 1st Ed. <http://www.amazon.com/exec/obidos/ASIN/0201727897/>
5. Luckham, D. “Rapide: A Language and Toolset for Simulation of Distributed Systems by Partial Orderings of Events”, *DIMACS Partial Order Methods Workshop IV*, Princeton University, July 1996, 25 pages, <ftp://pavg.stanford.edu/pub/Rapide-1.0/pom.ps.Z>
6. Mayer, A., Kliger, S., Yemini, S., and Ohsie, D. "The MODEL Language and its Application to Multimedia Management", *IFIP/IEEE International Symposium on Integrated Management*, 1997, <http://citeseer.nj.nec.com/14023.html>
7. Oates, T., Jensen, D. and Cohen, P. “Automatically Acquiring Rules for Event Correlation from Event Logs.” *Technical Report 97-14, Dept. of Computer Science, University of Massachusetts/Amherst*, 1997, <http://babs.cs.umass.edu/papers/oates97-14.pdf>
8. Ohsie, D. *Modeled Abductive Inference for Event Management and Correlation*. Doctoral Thesis, Columbia University, 1998, <http://www.cs.columbia.edu/ids/research/keypapers/papers/eventcorrelation/ohsie-thesis.pdf>
9. Porras, P.A. and Neumann, P.G. “EMERALD: Event Monitoring Enabling Responses to Anomalous Live Disturbances.” *Proceedings of the Nineteenth*

- National Computer Security Conference*, pages 353-365, Baltimore, Maryland, 22-25 October 1997, <http://citeseer.nj.nec.com/porras97emerald.html>
10. Thoenen, D., Riosa, J., and Hellerstein, J.L., "Event Relationship Networks: A Framework for Action Oriented Analysis in Event Management," *RC 21843 and IFIP/IEEE International Symposium on Integrated Network Management*, 2001, <http://www.research.ibm.com/PM/rc21843.pdf>
 11. Yemini, S.A.; Kliger, S.; Mozes, E.; Yemini, Y.; Ohsie, D. "High speed and robust event correlation," *IEEE Communications Magazine*, Vol.34, Iss.5, May 1996, p. 82-90, <http://ieeexplore.ieee.org/iel1/35/10618/00492975.pdf>
 12. Zhao, Y. and Strom, R. "Exploiting Event Stream Interpretation in Publish-Subscribe Systems." *Principles of Distributed Computing*, 2001, http://www.research.ibm.com/gryphon/Our_Research/Research_Papers/podc2001.ps

Event-Based Workflow

13. Geppert, A. and Tombros, D. "Logging and Post-Mortem Analysis of Workflow Executions based on Event Histories." *Proc. 3rd Intl. Workshop on Rules in Database Systems*, Skoevde, Sweden, June 1997, <ftp://ftp.ifi.unizh.ch/pub/techreports/TR-97-ifi-97.02.ps.gz>
14. Weijters, T., van der Aalst, W.M.P. "Process Mining: Discovering Workflow Models from Event-Based Data." *Proceedings of the 13th Belgium-Netherlands Conference on Artificial Intelligence (BNAIC 2001)*, pages 283-290, 2001, <http://tmitwww.tm.tue.nl/staff/wvdaalst/Publications/p128.pdf>
15. Tari, Z. and Pande, V. "Dynamic Workflow Management in CORBA Distributed Object Systems" *Proceedings of the Int. Symposium on Software Engineering for Parallel and Distributed Systems (PDSE)*, Limerick (Ireland), 2000, <http://www.cs.rmit.edu.au/~zahirt/Papers/pdse00.ps>

Event Notification Systems

16. CORBA: Harrison, T., Levine, D., and Schmidt, D. "The Design and Performance of a Real-time CORBA Event Service," *Proceedings of OOPSLA '97*, Atlanta, GA, October 1997, <http://citeseer.nj.nec.com/harrison97design.html>
17. Elvin: Segall, B., Arnold, D., et. al. "Content-based routing with Elvin4." *Proc. AUUG2K*, June 2000, <http://elvin.dstc.edu.au/doc/papers/auug2k/auug2k.pdf>
18. Field: Reiss, S.P. "Connecting tools using message passing in the Field environment." *IEEE Software*, Vol.7, Iss.4, Jul 1990, p. 57-66, <http://ieeexplore.ieee.org/iel1/52/2044/00056450.pdf>
19. Gryphon: Banavar, G., Kaplan, M. "Information Flow Based Event Distribution Middleware." *Middleware Workshop at the International Conference on Distributed Computing Systems*, 1999, http://www.research.ibm.com/gryphon/Our_Research/Research_Papers/ICDCS_9_9_Middleware_Workshop_Final.pdf
20. *Java Message Specification v1.1*, 2002, <http://java.sun.com/products/jms/>
21. JECho: Zhou, D., Schwan, K., Eisenhauer, G., and Chen, Y., "JECho - interactive high performance computing with Java event channels", *Proceedings of the*

- International Parallel and Distributed Processing Symposium (IPDPS 2001)*, April 2001, <ftp://ftp.cc.gatech.edu/pub/people/zhou/jecho/Zhou01JEC.pdf>
22. JEDI: Cugola, G., Nitto, E. D., and Fuggetta, A. "The JEDI event-based infrastructure and its application to the development of the OPSS WFMS." *IEEE TSE*, 27(9):827--850, 2001, <http://www.cefriel.it/~alfonso/documents/Papers/TSEJedi.PDF>
 23. Siena: Carzaniga, A., Rosenblum, D., and Wolf, A., "Achieving scalability and expressiveness in an Internet-scale event notification service", *Symposium on Principles of Distributed Computing*, 2000, <http://www.ics.uci.edu/~dsr/old-home-page/podc2000.pdf>
 24. TIB (TIBCO): Oki, B., Pfluegl, M., Siegel, A., and Skeen, D. "The Information Bus: an architecture for extensible distributed systems" *Proceedings of the fourteenth ACM symposium on Operating systems principles*, 1993, pp. 58-68, <http://doi.acm.org/10.1145/168619.168624>
 25. WebFilter: Pereira, J., Fabret, F., et. al. "WebFilter: A High-throughput XML-based Publish and Subscribe System", *The VLDB Journal*, 2001, pp. 723-724, http://caravel.inria.fr/LeSubscribe/VLDB01_demo.ps
 26. YEAST/READY: Gruber, R. E., Krishnamurthy, B., and Panagos, E. "The architecture of the READY event notification service." *Proceedings of the 19th IEEE International Conference on Distributed Computing Systems Middleware Workshop*, 1999, <http://www.research.att.com/~bala/papers/ready-new.ps.gz>

Internet Standards and RFCs

27. *CORBA Event Service Specification*, The Object Management Group, 3/01, <http://www.omg.org/docs/formal/01-03-01.pdf>
28. *CORBA Notification Service Specification*, The Object Management Group, 8/02, <http://www.omg.org/docs/formal/02-08-04.pdf>
29. Gudgin, M., et. al. *SOAP Version 1.2 Part 1: Messaging Framework*, W3C Candidate Recommendation, 2002, <http://www.w3.org/TR/2002/CR-soap12-part1-20021219/>
30. Rose, M., ed. *RFC 1215: A Convention for Defining Traps for use with the SMTP*. <http://www.ietf.org/rfc/rfc1215.txt>