

Contents of Volume 40, 2001

Number One (G321-0140)

Trends in e-business technologies <i>R. A. Smith</i>	4
The IBM Application Framework for e-business <i>G. Flurry and W. Vicknair</i>	8
WebSphere as an e-business server <i>D. F. Ferguson and R. Kerth</i>	25
CICS and Enterprise JavaBeans <i>A. Bainbridge, J. Colgrave, A. Colyer, and G. Normington</i>	46
Business-to-business integration with tpaML and a business-to-business protocol framework <i>A. Dan, D. M. Dias, R. Kearney, T. C. Lau, T. N. Nguyen, F. N. Parr, M. W. Sachs, and H. H. Shaikh</i>	68
IBM WebSphere Commerce Suite Product Advisor <i>J. J. Rofrano</i>	91
Java Management Extensions for application management <i>H. Kreger</i>	104
Security challenges for Enterprise Java in an e-business environment <i>L. Koved, A. Nadalin, N. Nagarathnam, M. Pistoia, and T. Shrader</i>	130
Transcoding: Extending e-business to new environments <i>K. H. Britton, R. Case, A. Citron, R. Floyd, Y. Li, C. Seekamp, B. Topol, and K. Tracey</i>	153
Intermediary-based transcoding framework <i>S. C. Ihde, P. P. Maglio, J. Meyer, and R. Barrett</i>	179
Application hosting for pervasive computing <i>S. G. Hild, C. Binding, D. Bourges-Waldeg, and C. Steenkeste</i>	193
In-process metrics for software testing <i>S. H. Kan, J. Parrish, and D. Manlove</i>	220

Number Two (G321-0141)

Deep computing for the life sciences <i>W. C. Swope</i>	248
Computational challenges in structural and functional genomics <i>T. Head-Gordon and J. C. Wooley</i>	265
Computational protein folding: From lattice to all-atom <i>Y. Duan and P. A. Kollman</i>	297
Blue Gene: A vision for protein science using a petaflop supercomputer <i>IBM Blue Gene team</i>	310
Load balancing of molecular dynamics simulation with NWChem <i>T. P. Straatsma and J. A. McCammon</i>	328
Mapping, modeling, and visual exploration of structure-function relationships in the heart <i>R. L. Winslow, D. F. Scollan, J. L. Greenstein, C. K. Yung, W. Baumgartner, Jr., G. Bhanot, D. L. Gresh, and B. E. Rogowitz</i>	342
Large-scale virtual screening for discovering leads in the postgenomic era <i>B. Waszkowycz, T. D. J. Perkins, R. A. Sykes, and J. Li</i>	360
Functional classification of proteins by pattern discovery and top-down clustering of primary sequences <i>A. H. Liu and A. Califano</i>	379
Intelligent decision support for protein crystal growth <i>I. Jurisica, P. Rogers, J. I. Glasgow, S. Fortier, J. R. Luft, J. R. Wolfley, M. A. Bianca, D. R. Weeks, and G. T. DeTitta</i>	394
Convergent evolution of protein structure prediction and computer chess tournaments: CASP, Kasparov, and CAFASP <i>N. Siew and D. Fischer</i>	410
New techniques for extracting features from protein sequences <i>J. T. L. Wang, Q. Ma, D. Shasha, and C. H. Wu</i>	426

Fastfinger: A study into the use of compressed residue pair separation matrices for protein sequence comparison <i>B. Robson</i>	442	Security on z/OS: Comprehensive, current, and flexible <i>R. Guski, J. C. Dayka, L. N. Distel, W. B. Farrell, K. A. Gdaniec, M. J. Kelly, M. A. Nelson, L. H. Overby, and L. G. Robinson</i>	696
A high-throughput distributed DNA sequence analysis and database system <i>J. T. Inman, H. R. Flores, G. D. May, J. W. Weller, and C. J. Bell</i>	464	An architecture for the Internet Key Exchange Protocol <i>P.-C. Cheng</i>	721
DiscoveryLink: A system for integrated access to life sciences data sources <i>L. M. Haas, P. M. Schwarz, P. Kodali, E. Kotlar, J. E. Rice, and W. C. Swope</i>	489	A method for designing secure solutions <i>J. J. Whitmore</i>	747
K2/Kleisli and GUS: Experiments in integrated access to genomic data sources <i>S. B. Davidson, J. Crabtree, B. P. Brunk, J. Schug, V. Tannen, G. C. Overton, and C. J. Stoeckert, Jr.</i>	512	Ethical hacking <i>C. C. Palmer</i>	769
Transparent access to multiple bioinformatics information sources <i>C. A. Goble, R. Stevens, G. Ng, S. Bechhofer, N. W. Paton, P. G. Baker, M. Peim, and A. Brass</i>	532	Characteristics of production database workloads and the TPC benchmarks <i>W. W. Hsu, A. J. Smith, and H. C. Young</i>	781
GeneX: An Open Source gene expression database and integrated tool set <i>H. Mangalam, J. Stewart, J. Zhou, K. Schlauch, M. Waugh, G. Chen, A. D. Farmer, G. Colello, and J. W. Weller</i>	552	Number Four (G321-0143)	
An integration platform for heterogeneous bioinformatics software components <i>A. C. Siepel, A. N. Tolopko, A. D. Farmer, P. A. Steadman, F. D. Schilkey, B. D. Perry, and W. D. Beavis</i>	570	Knowledge management technology <i>A. D. Marwick</i>	814
The GeneMine system for genome/proteome annotation and collaborative data mining <i>C. Lee and K. Irizarry</i>	592	Communities of practice and organizational performance <i>E. Lesser and J. Storck</i>	831
Number Three (G321-0142)		Evolving communities of practice: IBM Global Services experience <i>P. Gongla and C. R. Rizzuto</i>	842
Enhancing security and privacy in biometrics-based authentication systems <i>N. K. Ratha, J. H. Connell, and R. M. Bolle</i>	614	The knowledge management puzzle: Human and social factors in knowledge management <i>J. C. Thomas, W. A. Kellogg, and T. Erickson</i>	863
Securing e-business applications using smart cards <i>E.-M. Hamann, H. Henn, T. Schäck, and F. Seliger</i>	635	Views of knowledge are human views <i>G. Dueck</i>	885
The Internet public key infrastructure <i>M. Benantar</i>	648	Linking e-business and operating processes: The role of knowledge management <i>L. Fahey, R. Srivastava, J. S. Sharon, and D. E. Smith</i>	889
Separation of duties for access control enforcement in workflow environments <i>R. A. Botha and J. H. P. Eloff</i>	666	Knowledge resource exchange in strategic alliances <i>S. Parise and J. C. Henderson</i>	908
Practical server privacy with secure coprocessors <i>S. W. Smith and D. Safford</i>	683	Knowledge portals and the emerging digital knowledge workplace <i>R. Mack, Y. Ravin, and R. J. Byrd</i>	925
		The Lotus Knowledge Discovery System: Tools and experiences <i>W. Pohs, G. Pinder, C. Dougherty, and M. White</i>	956
		Text analysis and knowledge mining system <i>T. Nasukawa and T. Nagano</i>	967
		Toward speech as a knowledge resource <i>E. W. Brown, S. Srinivasan, A. Coden, D. Poncelson, J. W. Cooper, and A. Amir</i>	985
		Where did knowledge management come from? <i>L. Prusak</i>	1002
		Note—Numbers in parentheses after issue numbers denote the issue order numbers.	