Distributed Systems

Part 2, Part 2 (General) and Diploma, Easter term 2006 Jean Bacon (jmb@cl.cam.ac.uk)

	pages 1-29
Introduction	1-29
system, legal, social context technology-driven evolution	
software structure	
models, architecture, engineering	
domain-structured, large-scale systems	
Time	Т
event ordering	1
physical clock synchronisation	
process groups	
ordering message delivery	
Distributed algorithms and protocols	D
strong and weak consistency	D
replicas of an object, transactions on distributed objects	
concurrency control	
atomic commitment	
election algorithms	
distributed mutual exclusion	
Middleware	1-29
RPC, OOM, MOM, event-based middleware	1-27
Naming	N
Access Control	\mathbf{A}
capabilities, ACLs, RBAC and access control policy	
OASIS RBAC case study	
Case studies: Event-driven systems, access control	
Case studies. Event-uriven systems, access control	1-18
Storage services	
distribution issues, outline of Cambridge File Server	S