

1.	Record Nr.	UNINA990004518950403321
	Autore	Haulleville, Prosper Charles Alexandre : de <Barone>
	Titolo	Dell'avvenire dei popoli cattolici / del barone De Haulleville ; traduzione di Prospero Liberati-Tagliaferri
	Pubbl/distr/stampa	Torino : Libreria Internazionale Cattolica e Scientifica L. Romano, 1877
	Edizione	[Sulla 2. ed. francese rivista e corretta dall'Autore]
	Disciplina	261.1
	Locazione	FLFBC
	Collocazione	SG 200/B 42 261.1 HAU 1
	Lingua di pubblicazione	Italiano
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
2.	Record Nr.	UNINA9911020371503321
	Autore	Bauer Eric
	Titolo	Reliability and availability of cloud computing / / Eric Bauer, Randee Adams
	Pubbl/distr/stampa	Hoboken, N.J., : Wiley-IEEE Press, 2012
	ISBN	9786613808486 9781118394007 1118394003 9781282165175 1282165178 9781118393987 1118393988 9781118393994 1118393996
	Descrizione fisica	1 online resource (353 p.)
	Classificazione	TEC032000
	Altri autori (Persone)	AdamsRandee
	Disciplina	004.6782
	Soggetti	Cloud computing Computer software - Reliability Computer software - Quality control Computer security

Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Figures xvii -- Tables xxi -- Equations xxiii -- Introduction xxv -- I BASICS 1 -- 1 CLOUD COMPUTING 3 -- 1.1 Essential Cloud Characteristics 4 -- 1.2 Common Cloud Characteristics 6 -- 1.3 But What, Exactly, Is Cloud Computing? 7 -- 1.4 Service Models 9 -- 1.5 Cloud Deployment Models 11 -- 1.6 Roles in Cloud Computing 12 -- 1.7 Benefits of Cloud Computing 14 -- 1.8 Risks of Cloud Computing 15 -- 2 VIRTUALIZATION 16 -- 2.1 Background 16 -- 2.2 What Is Virtualization? 17 -- 2.3 Server Virtualization 19 -- 2.4 VM Lifecycle 23 -- 2.5 Reliability and Availability Risks of Virtualization 28 -- 3 SERVICE RELIABILITY AND SERVICE AVAILABILITY 29 -- 3.1 Errors and Failures 30 -- 3.2 Eight-Ingredient Framework 31 -- 3.3 Service Availability 34 -- 3.4 Service Reliability 43 -- 3.5 Service Latency 46 -- 3.6 Redundancy and High Availability 50 -- 3.7 High Availability and Disaster Recovery 56 -- 3.8 Streaming Services 58 -- 3.9 Reliability and Availability Risks of Cloud Computing 62 -- II ANALYSIS 63 -- 4 ANALYZING CLOUD RELIABILITY AND AVAILABILITY 65 -- 4.1 Expectations for Service Reliability and Availability 65 -- 4.2 Risks of Essential Cloud Characteristics 66 -- 4.3 Impacts of Common Cloud Characteristics 70 -- 4.4 Risks of Service Models 72 -- 4.5 IT Service Management and Availability Risks 74 -- 4.6 Outage Risks by Process Area 80 -- 4.7 Failure Detection Considerations 83 -- 4.8 Risks of Deployment Models 87 -- 4.9 Expectations of IaaS Data Centers 87 -- 5 RELIABILITY ANALYSIS OF VIRTUALIZATION 90 -- 5.1 Reliability Analysis Techniques 90 -- 5.2 Reliability Analysis of Virtualization Techniques 95 -- 5.3 Software Failure Rate Analysis 100 -- 5.4 Recovery Models 101 -- 5.5 Application Architecture Strategies 108 -- 5.6 Availability Modeling of Virtualized Recovery Options 110 -- 6 HARDWARE RELIABILITY, VIRTUALIZATION, AND SERVICE AVAILABILITY 116 -- 6.1 Hardware Downtime Expectations 116 -- 6.2 Hardware Failures 117 -- 6.3 Hardware Failure Rate 119 -- 6.4 Hardware Failure Detection 121. 6.5 Hardware Failure Containment 122 -- 6.6 Hardware Failure Mitigation 122 -- 6.7 Mitigating Hardware Failures via Virtualization 124 -- 6.8 Virtualized Networks 127 -- 6.9 MTTR of Virtualized Hardware 129 -- 6.10 Discussion 131 -- 7 CAPACITY AND ELASTICITY 132 -- 7.1 System Load Basics 132 -- 7.2 Overload, Service Reliability, and Service Availability 135 -- 7.3 Traditional Capacity Planning 136 -- 7.4 Cloud and Capacity 137 -- 7.5 Managing Online Capacity 144 -- 7.6 Capacity-Related Service Risks 147 -- 7.7 Capacity Management Risks 153 -- 7.8 Security and Service Availability 157 -- 7.9 Architecting for Elastic Growth and Degrowth 162 -- 8 SERVICE ORCHESTRATION ANALYSIS 164 -- 8.1 Service Orchestration Definition 164 -- 8.2 Policy-Based Management 166 -- 8.3 Cloud Management 168 -- 8.4 Service Orchestration's Role in Risk Mitigation 169 -- 9 GEOGRAPHIC DISTRIBUTION, GEOREDUNDANCY, AND DISASTER RECOVERY 174 -- 9.1 Geographic Distribution versus Georedundancy 175 -- 9.2 Traditional Disaster Recovery 175 -- 9.3 Virtualization and Disaster Recovery 177 -- 9.4 Cloud Computing and Disaster Recovery 178 -- 9.5 Georedundancy Recovery Models 180 -- 9.6 Cloud and Traditional Collateral Benefits of Georedundancy 180 -- 9.7 Discussion 182 -- III RECOMMENDATIONS 183 -- 10 APPLICATIONS, SOLUTIONS,

AND ACCOUNTABILITY 185 -- 10.1 Application Configuration Scenarios 185 -- 10.2 Application Deployment Scenario 187 -- 10.3 System Downtime Budgets 188 -- 10.4 End-to-End Solutions Considerations 197 -- 10.5 Attributability for Service Impairments 201 -- 10.6 Solution Service Measurement 204 -- 10.7 Managing Reliability and Service of Cloud Computing 207 -- 11 RECOMMENDATIONS FOR ARCHITECTING A RELIABLE SYSTEM 209 -- 11.1 Architecting for Virtualization and Cloud 209 -- 11.2 Disaster Recovery 216 -- 11.3 IT Service Management Considerations 217 -- 11.4 Many Distributed Clouds versus Fewer Huge Clouds 224 -- 11.5 Minimizing Hardware-Attributed Downtime 225 -- 11.6 Architectural Optimizations 231. 12 DESIGN FOR RELIABILITY OF VIRTUALIZED APPLICATIONS 244 -- 12.1 Design for Reliability 244 -- 12.2 Tailoring DfR for Virtualized Applications 246 -- 12.3 Reliability Requirements 248 -- 12.4 Qualitative Reliability Analysis 256 -- 12.5 Quantitative Reliability Budgeting and Modeling 259 -- 12.6 Robustness Testing 260 -- 12.7 Stability Testing 267 -- 12.8 Field Performance Analysis 268 -- 12.9 Reliability Roadmap 269 -- 12.10 Hardware Reliability 270 -- 13 DESIGN FOR RELIABILITY OF CLOUD SOLUTIONS 271 -- 13.1 Solution Design for Reliability 271 -- 13.2 Solution Scope and Expectations 273 -- 13.3 Reliability Requirements 275 -- 13.4 Solution Modeling and Analysis 279 -- 13.5 Element Reliability Diligence 285 -- 13.6 Solution Testing and Validation 285 -- 13.7 Track and Analyze Field Performance 288 -- 13.8 Other Solution Reliability Diligence Topics 292 -- 14 SUMMARY 296 -- 14.1 Service Reliability and Service Availability 297 -- 14.2 Failure Accountability and Cloud Computing 299 -- 14.3 Factoring Service Downtime 301 -- 14.4 Service Availability Measurement Points 303 -- 14.5 Cloud Capacity and Elasticity Considerations 306 -- 14.6 Maximizing Service Availability 306 -- 14.7 Reliability Diligence 309 -- 14.8 Concluding Remarks 310 -- Abbreviations 311 -- References 314 -- About the Authors 318 -- Index 319.

Sommario/riassunto

"The book is intended for IS/IT system and solution architects, developers and engineers, as well as technical sales, product management, and quality management professionals"--
