

Contents

1	Cloud Computing Evolution	1
1.1	Introduction	1
1.2	Growth of Technology	3
1.3	A Paradigm Shift in Computing	5
1.4	Global Marketplace	8
1.5	Distributed Nature of Service Provisioning	9
1.6	Supporting Entrepreneurship	13
1.7	Summary	15
1.8	Review Questions	15
	References	16
2	Basic Cloud Computing Types	17
2.1	Introduction	17
2.2	SaaS	19
2.3	PaaS	24
2.4	IaaS	26
2.5	Public Cloud	29
2.6	Private Cloud	31
2.7	Hybrid Cloud	33
2.8	Community Cloud	35
2.9	Storage Services	38
2.10	Summary	39
2.11	Review Questions	40
	References	40
3	Understanding Cloud Computing	43
3.1	Introduction	43
3.2	Advantages of Cloud Computing	45
3.3	Drawbacks of Cloud Computing	48
3.4	Essential Components for a Cloud Contract	51
3.5	Major Outages	54
3.6	Trust Enhancers for Cloud Service	56

3.7	Summary	58
3.8	Review Questions	59
	References	59
4	Cloud Computing Providers	61
4.1	Introduction	61
4.2	Major Cloud Service Providers	63
4.2.1	Amazon Web Services (AWS)	64
4.2.2	Google Apps	66
4.2.3	Microsoft Windows Azure and Office 365	67
4.2.4	HP Cloud	68
4.2.5	Rackspace	68
4.2.6	CSC Corp.	70
4.2.7	Verizon Terremark	70
4.2.8	Dropbox	71
4.2.9	Box	72
4.3	Niche Cloud Service Providers	73
4.4	Third Party Facilitators	76
4.5	Emerging Cloud Standards	78
4.6	Summary	79
4.7	Review Questions	79
	References	80
5	Cloud Computing Security	81
5.1	Introduction	81
5.2	Security Best Practices	86
5.3	Compliance and Certifications	91
5.4	Access Control	94
5.5	Organizational Control	96
5.6	Summary	98
5.7	Review Questions	98
	References	99
6	Assessing Cloud Computing for Business Use	101
6.1	Introduction	101
6.2	Benefits to Business	103
6.3	Risks of Cloud Computing	107
6.4	Cost Factors in Cloud Computing	110
6.5	Variation on Outsourcing	113
6.6	Summary	116
6.7	Review Questions	117
	References	117

7 Hidden Aspects of a Cloud Computing Contract	119
7.1 Introduction	119
7.2 Service Level Agreement	122
7.3 Sharing Log Data	127
7.4 Service Uptime Guarantee	130
7.5 Privileged Users	131
7.6 Data Portability	134
7.7 Summary	137
7.8 Review Questions	137
References	138
 Index	 141

<http://www.springer.com/978-1-4614-7698-6>

Cloud Computing Basics

Srinivasan, S.

2014, XVII, 142 p. 10 illus., 5 illus. in color., Softcover

ISBN: 978-1-4614-7698-6