

Cloud Computing

S/N	Topic	Page
1	Introduction of Cloud computing	
1.1	Background	2 Hrs
1.2	Why Cloud Computing	
1.2.1	Pay as you go	
1.2.2	In-house Infrastructure Liability and costs	
1.2.3	Global Adoption	
2	Cloud Architecture	
2.1	Horizontal Scale design	4 Hrs
2.2	Vertical Scale design	
2.3	Auto scale elastic design	
3	Cloud Adoption and Control challenges	
3.1	Adoption barriers	4 Hrs
3.2	Data Security and storage control	
3.3	Unknown Physical security threat	
3.4	Software compatibility	
3.5	Uncertainty of SLA adherence	
4	Virtualization	
4.1	Concept and architecture	4 Hrs
4.2	Market Players	
4.2	Hyper Visor	
5	Software Defined Network and it's benefit	
5.1	Overview	4 Hrs
5.2	The Environment	
5.3	Network Layers	
5.4	Architecture	
6	Cloud Service Model	
6.1	Private Cloud	6 Hrs
6.2	Public Cloud	
6.3	Hybrid Cloud	
6.4	Infrastructure as a Service	
6.4.1	IaaS: Compute	
6.4.2	IaaS: Network	
6.4.3	IaaS: Storage	
6.4.4	IaaS: Billing Model	
6.5	Platform as a service	
6.5.1	PaaS: Developers and PaaS	
6.5.2	PaaS: Data analytics and Intelligence	

6.5.3	PaaS: Development and Integration	
6.6	Software as a service	
6.6.1	SaaS: Business challenges	
6.6.2	SaaS: Understanding Google app platform	
6.6.3	SaaS: How to build SaaS app	
7	Conclusion	
	The Future of Cloud technologies	4 Hrs
	Choosing Delivery Model	
	Pricing strategies	
8	Practical Lab	17 Hrs

Reference Books:

- 1) Cloud Computing: From Beginning to End Paperback – April 1, 2015 — By [Mr. Ray J Rafaels](#)
- 2) Cloud Computing: Concepts, Technology & Architecture and Cloud Computing Design Patterns
--- By Thomas Erl and others