

Assignment No: 1

cloud Computing Services

- a) SaaS → Software as a Service
 - b) PaaS → Platform as a Service
 - c) IaaS → Infrastructure as a Service
 - d) Iaas → Infrastructure as a code.
- 1) SaaS

we don't know How to create a website, which language we used, How to write code by that language, How host a website, How to create frontend, backend we don't know anything. then we told to cloud service provider to create this type of website

This system come under Software as a service (SaaS) software update, bug fixes and general software maintenance are handled by the provider and user connect to the app via a dashboard or API.

Example: Google app

if we have an email account with a web based service like Gmail. Example we can log into our account and get our email from any computer, anywhere

2) PaaS

we know how to write code in specific language but we have platform to do this type of coding, compiler. So we take that platform from platform as a service (PaaS)

In this platform some work is our and mostly work of this platform.

Example: AWS, Azure

3) IaaS

we know all things How to create website, coding, etc, but we have storage, network, infrastructure to host that website, so that we can use this platform as a service Infrastructure as a service.

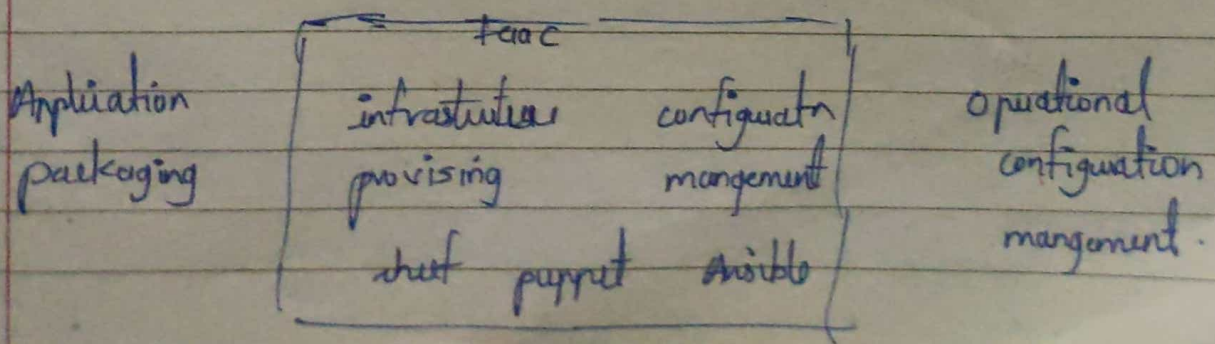
Example: Amazon S3

Drawbacks:

the possibilities of provider security issues, multi-tenant system where the provider must share infrastructure resources.

4) IaC

Infrastructure as code is the process of managing and provisioning computer data centers through machine-readable definition files, rather than physical hardware configuration or interactive configuration tools.



Iaas Tools:

- a) AWS cloudformation → Allow users to model their infrastructure within a JSON or XML template file.
- b) Azure resource manager → Microsoft tool, user can provision infrastructure and handle dependencies in one seamless cycle to ~~AR~~ through ARM.
- c) Google cloud deployment manager → Google tool. The tool bases its execution on configuration file (XML) and template all within the Google cloud platform.

d) Terraform → Hashicorp

Terraform automation comes in various shapes and is orchestrated in varying degree with the focus on the core plan/apply cycle then step a) write b) plan

c) Apply.

Some other tool are available like,

puppet, chef, Ansible

Most advanced
interface in this
list.

Most flexible Iaas tool.