



SNS COLLEGE OF TECHNOLOGY

Coimbatore-35

An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with ‘A++’
Grade

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai



DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

19ECE308- WIRELESS TECHNOLOGIES FOR IOT

III ECE / VI SEMESTER

UNIT 3 DATA COLLECTION, STORAGE AND COMPUTING USING A CLOUD

PLATFORM

TOPIC 2 – Cloud service models, IoT Cloud- based data collection



Four cloud deployment models



- Public Cloud: provisioned by educational institutions, industries, government institutions or business or enterprise
- Private Cloud: exclusive for use by institutions, industries, business or enterprise and is meant for private use in the organisation by the employees
- Community Cloud: Exclusive for use of a community formed by institutions, industries, businesses or enterprises, and for use within the community
- Hybrid Cloud: A set of two or more distinct clouds (public, private or community) with distinct data stores and applications that are binding between them deploy the proprietary or standard technology



Everything as a Service (XaaS) Service Model



- Cloud Computing = SaaS + Paas + IaaS + DaaS
- Software as a service
- Platform as a Service
- Infrastructure as a Service
- Data as a Service



SaaS



- The responsibilities of the cloud service provider—
- The software control,
- Maintenance,
- Up-dation to new version and infrastructure, and
- Platform and resource requirements



PaaS



- Responsibilities of the cloud service provider as per the developers' requirements.
- The platform,
- Network,
- Resources,
- Maintenance,
- Updation, and
- Security



PaaS Examples



- Google App Engine,
- MS Azure
- Xively, Nimbits,
- AWS IoT,
- IBM IoT Foundation,
- Cisco IoT, IOx and Fog,
- TCS CUP



IaaS



- IaaS the responsibilities of the cloud service provider—
- A service model where the applications develop or use the infrastructure (computing systems, network and security) which made available through Internet on demand on rent (pay as per use in multi tenancy model) by a developer or user



DaaS



- Responsibilities of a data centre service provider—
- Service model where the data store or data warehouse s made available through Internet on demand on rent (pay as per use in multi tenancy model) to an enterprise
- Data centre management, 24×7 power, control, network, maintenance, scale up, data replicating and mirror nodes and systems as well as physical security

Google App Engine,
MS Azure, Xively,
Nimbits, AWS IoT,
IBM IoT Foundation,
Cisco IoT, IOx and
Fog, TCS CUP

Platform as a
Service

DB

DB

Infrastructure as
a Service

DW

Amazon Web Services and
Virtual Servers, GoGrid Virtual
Servers, EC2, Cloud.com Open
Source IaaS, Cisco IaaS

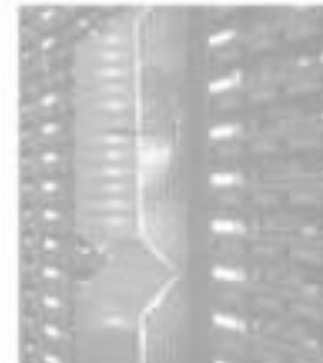
SW
Software
as a Service SW
SW SW

Google Docs, Office
365, MS Windows Live,
MS Exchange Labs.,
Salesforce.com,
extensible CRM

Data as a
Service

Data Centre

Tata
Communications,
GoGrid virtual
servers, Amazon
Virtual Servers, EC2





THANK YOU