Lesson 3
Cloud Deployment Models and Cloud Services Models

Four cloud deployment models:

1. Public Cloud: provisioned by educational institutions, industries, government institutions or business or enterprise
- 2. Private Cloud: exclusive for use by institutions, industries, business or enterprise and is meant for private use in the organisation by the employees

Cloud Deployment Models

3. Community Cloud: Exclusive for use of a community formed by institutions, industries, businesses or enterprises, and for use within the community
4. 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
- Infrstructure 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 of ─
- 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.

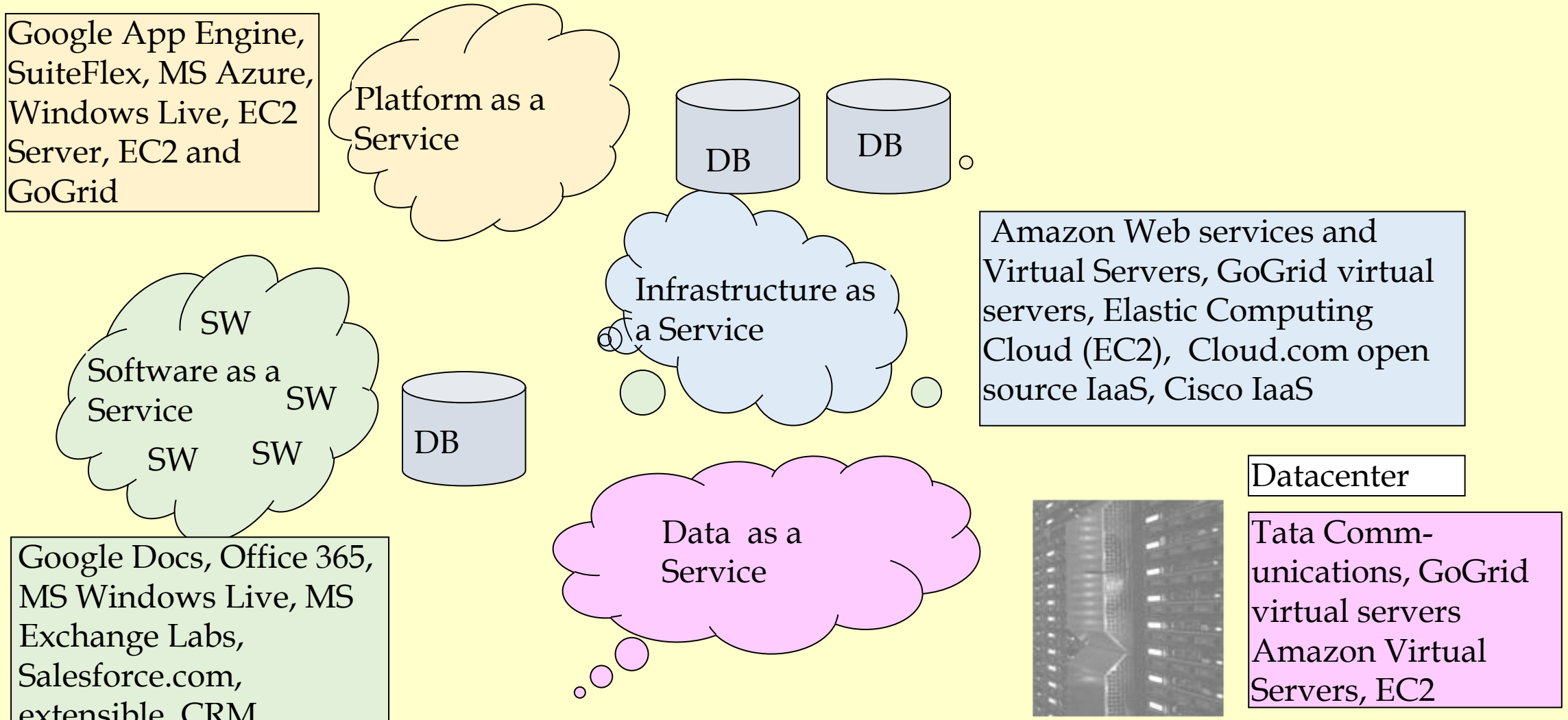

Fig. 6.2 PaaS, SaaS, IaaS and DaaS Cloud Services

Insert → Shapes→ Choose Callouts

Summary

We learnt

- Public, Private, Community and Hybrid cloud deployment models
- SaaS, PaaS, IaaS and DaaS models of service, responsibility of cloud service provider
- PaaS: Google App Engine, MS Azure, Xively, Nimbits, AWS IoT, IBM IoT Foundation, Cisco IoT, IOx and Fog, TCS CUP

End of Lesson 3 on
Cloud Deployment Models and Cloud Services Models