

Cloud Computing Task

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What are the 3 types of Cloud Computing Services?

- SaaS
- PaaS
- IaaS

What is Saas?

- Definition: Software as a Service(SaaS) is a system in which an individual or consumer is provided access to an application software. It is often referred to as “On Demand Software”. Usually the individual does not have to worry about installation, setting up or running the application.
- The service provider does the installation, setting up and running of the application, which is one good thing the consumer or individual will not have to worry about.
- You just have to pay and use it through some client.
- An example is **Google Apps, Microsoft Office 365, Gmail, Google+**

Why it works Best for Example

SaaS works best especially in Office 365, Drop box, Dynamics CRM such as Sales Force.

These are all based on multi-tenant architecture, because a single version of the application is used for all consumers who are licensed through a monthly or annually subscription.

SaaS is like going by bus. Buses have assigned routes and you share the ride with other passengers

In relation to AWS, Athena which is a UI for you to query tables in S3. You open the browser, login to AWS and just begin running your queries. You do not have to worry about RAM/Storage/CPU/number of clusters and everything else is taken care of by the cloud

These are all public cloud examples.

Advantages and Disadvantages of SaaS

Advantages:

Lower Cost

Scalability and Integration

New Release (Upgrades)

Disadvantages:

Data Exchange Challenges

Less Customization

Lack of Integration

What is Paas?

Paas (Platform as a Service) is a complete development and deployment environment in the cloud that refers to cloud computing services that supply an on-demand environment for developing, testing, delivering, and managing software applications.

Paas is designed to make it easier for developers to quickly create web or mobile apps without having to worry about setting up or managing the underlying infrastructure or servers, storage, network, and databases needed for development.

What is an example of a PaaS platform?

- An example of a PaaS platform is **Salesforce Heroku**
- **Salesforce Heroku** is a platform built on AWS for data as well as apps that provides a secure, scalable database-as-a-service with developer tools like database followers, forking, dataclips and automated health checks.
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- Developers **use Heroku** to deploy, manage, and scale modern apps.
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- PaaS works well for Salesforce Heroku because it allows developers to build, manage, and deploy their applications all in one place.
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- The type of cloud that would be best for this type of service would be a public cloud because that allows clients to access these services and manage their accounts in the browser.
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What is IaaS?

- **Definition:**

This is the cloud based infrastructure provided in the form of a physical machine, or most often as a virtual machine. It can be modified on demand and the customer will only have to pay for the capacity that is used. This reduces the burden of managing and maintaining infrastructure, as it's handled by the service provider.

What is IaaS?

- **Example:**

Rackspace

- **Why it works best for example:**

They have tailor-made physical machines, as well as many of the most popular virtualization options. The networks have optimizations for load balancing, and protection behind a firewall specific to your needs. Storage space sizes are scalable on demand and offer backups with many disaster recovery options.

Which type of cloud is best for each situation?

IaaS is best for when you need specific hardware (or virtualized systems) without the burden of having to build, manage, and customize infrastructure specifics yourself.

PaaS is best used with a public cloud because it allows clients to access these services and manage their accounts in the browser.