

历史: evolution of computing with network:

1. network computing
2. cluster computing
3. grid computing
4. utility computing

大概知道它们的差别

cloud computing: **service and data** are in the cloud.

什么是云计算? 说了几个特点

cloud computing is (a general term used to describe) a (new) class of (network based) computing

(that takes place over the Internet, basically a step on from Utility Computing.)历史

this is a collection of integrated and networked hardware, software and internet infrastructure.(描述构成)

Using the Internet for communication and transport provides hardware, software and networking services to clients. (功能)

these platforms hide the complexity and details of the underlying infrastructure from users and applications by providing very simple GUI or API (封装)

anywhere ,any time and any place

pay for use

三个特点:

remotely hosted: services or data are hosted on remote infrastructure

ubiquitous: services or data are available from anywhere

commodified :

和传统cs模式相比，采用虚拟化的技术

virtual server:

virtual servers (seek to) encapsulate the server (software) away from the hardware

a virtual server can be serviced by one or more hosts and one host may house more than one virtual server.

if the environment built correctly, virtual servers will not be affected by the loss of a host.

can be scaled out easily (很容易生成新的虚拟机)

云计算的分层:

client

software (SaaS)

Platform(PaaS)

Infrastructure(IaaS)

server

IaaS : Infrastructure as a Service

computing resources are provided in infrastructure. And people can deploy and run arbitrary software on it.

PaaS: Platform as a Service

can create custom applications supported by the provider.

SaaS: software as a service

use provider's applications running on provider's cloud infrastructure.

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举出几个云计算的厂商：amazon, google, microsoft, salesforce

4 cloud deployment models:

private cloud

community cloud

public cloud

hybrid cloud

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