

California State University San Bernardino  
School of Computer Science and Engineering

**CSE 595 Undergraduate Independent Study**

**Date**

June 1, 2020

**Time**

11:00

**Location**

ZOOM <https://csusb.zoom.us/j/3401231760>

**Title**

Comparison of Microsoft and Amazon cloud services

**Student**

Wen Zhang

**Advisor**

Yan Zhang

**Abstract**

Microsoft:

1. Enterprise-level quality and enterprise customers: from data center construction, global fiber optic network to virtualization technology (Hyper-V) to operating system (WinServer) to the basic software (SQL, IIS) running cloud services are all The mature products developed by

Microsoft have a history of running in the enterprise environment for years or even decades, and its stability and reliability are beyond doubt. In addition, security will be enhanced accordingly. You should not forget the OpenSSL heartbleed vulnerability that scared many companies this year and the Xen Hypervisor vulnerability that just recently broke out.

2. Public cloud and private cloud mashup (the legendary hybrid cloud): Those who pay attention to Microsoft cloud computing should pay attention to the product that Satya recently mentioned in San Francisco "pack Azure in a box and sell it to enterprises". This product has been developed internally by Microsoft for a long time. Simply put, it is to sell you a ready-made similar Azure private cloud, you can manage and use it according to the needs of the enterprise. Then this private cloud, both in terms of interface and experience, is highly unified with Azure and can be seamlessly extended to the public cloud. This is undoubtedly attractive to many large enterprises that want to "step on two boats" (hybrid cloud). Amazon and Google still haven't heard of afterburner in this area.

Amazon:

1. First of all, as the market leader and the forerunner of commercial cloud computing, Amazon's biggest advantage lies in its pre-emption. A series of ecosystems and developers formed with EC2 and S3 are Amazon's currently extremely strong barriers. In addition, overall, Amazon is still ahead of Microsoft and Google in some key services and functions. For example, AWS storage services provide three different products according to the user's data characteristics: high-read and write hot data includes SSD storage, common read-write data includes S3, and cold backup data includes Glacier. And Microsoft just recently released SSD-based storage. Google has only one storage product.

2. Amazon started as an Internet company, and this also runs through the genes and style of the Internet from the inside out. These reflect his listening and understanding of user needs, rapid iteration of product functions, and various grounded promotion activities. At this point, the obscure ms and the high gg should think amazon more.