

# Multiple Operating System Installation and Cloning

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## ABSTRACT

It is an approach to system maintenance in large number of PCs requiring multiple operating systems with bundle of software's installation using cloud Storage, Storage-as-a-Service offered by cloud service providers (CSPs) is a paid facility that enables organizations to outsource their sensitive data to be stored on remote servers. Local management of huge amount of data is problematic and costly due to requirements of high storage capacity and qualified personnel. Since in the present digital world many organizations produce a large amount of sensitive data which includes personal information, electronic health records and financial data. There may be a chance that these cloud service providers' may not be a trusted one. In these cases, we cannot provide security for the file which is stored in the cloud storage systems. So, in this paper we propose the implementation of new actor in the cloud storage systems. The actor is the trusted third party. In this paper, we propose a cloud-based storage scheme that allows the data owner to benefit from the facilities offered by the CSP and enables indirect mutual trust between them.

**Keywords:** Multiple Operating System, Cloning

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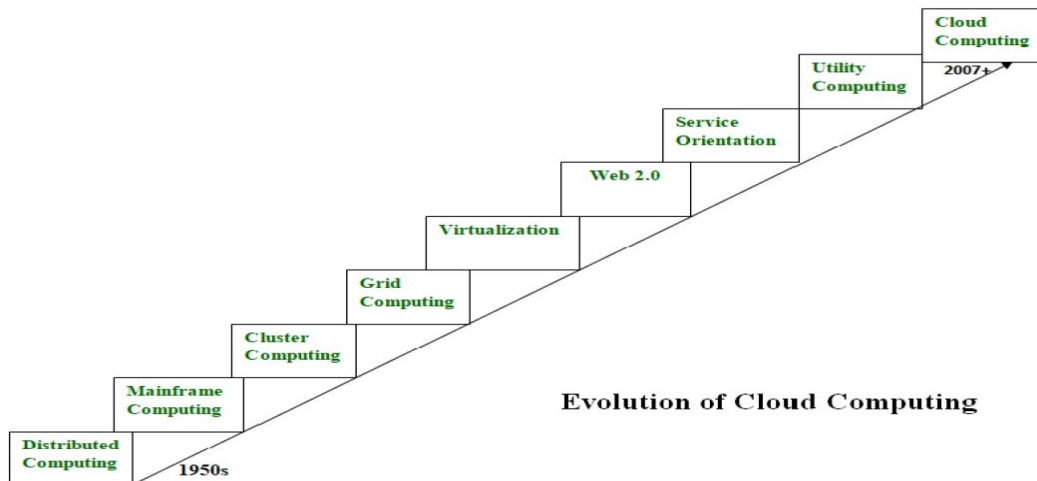
Date of Submission: 16-07-2022

Date of Acceptance: 31-07-2022

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## 1. INTRODUCTION

Cloud computing could be seen as an effort to commoditize computing, and distribute and operate it as efficiently as the electrical grid while still offering consumers the plethora of alternatives known from the transportation domain. The pre-cloud era could be compared to everyone driving around in their own car and using their own generators. The cloud era allows computing to be used similarly to public transportation and makes it possible to tap into computing power with the same ease that you plug in your appliances to the electrical grid at home. To distinguish the Cloud from its predecessors it is often defined as a use of computing resources that are delivered as a service over a network. The way in which you provision these services holds the key to the innovation.



The important mantra of the Grid was that local system administrators should have the last say and full control of the allocation of their resources. No remote users should have full control or root access to the expensive super computer machines, but could declare what kind of software they required to run their jobs. Inherently in this architecture is the notion of batch jobs. Interactive usage or continuous usage where you installed, configured and ran your own software, such as a Web server was not possible on the Grid. Virtual machine technology released the Cloud users from this constraint, but the fact that it was very clear who pays for the usage of a machine in the Cloud also played a big role. In summary, these restrictions stopped many of the Grid protocols from spreading beyond the scientific computing domain, and also eventually resulted in many scientific computing projects migrating to Cloud technology.

### CLOUD COMPUTING PRODUCTS AND SERVICES

It can be classified into 4 major categories:

- Application as service (AaaS)
- Platform as a Service (PaaS)
- Infrastructure as a service (IaaS)
- Software as a Service (SaaS)

**Application as a service (AaaS):** These are the first kind of cloud computing services that came into being. Under this, a service is made available to an end-user. The end-user is asked to create an account with the service provider and start using the application. One of first famous application was web-based email service by Hotmail started in 1996. Scores of such services are available now on the web.

**Platform as a Service (PaaS):** Cloud vendors are companies that offer cloud computing services and products. One of the services that they provide is called PaaS. Under this a computing platform such as operating system is provided to a customer or end user on a monthly rental basis. Some of the major cloud computing vendors are Amazon, Microsoft, Google etc

**Infrastructure as a service (IaaS):** The Cloud computing vendors offer infrastructure as a service. One may avail hardware services such as processors, memory, networks etc on agreed basis for specific duration and price.

**Software as a service (SaaS):** Software package such as CRM or CAD/CAM can be accessed under cloud computing scheme. Here a customer upon registration is allowed to use software accessible through net and use it for his or his business process. The related data and work may be stored on local machines or with the service providers. SaaS services may be available on rental basis or on per use basis.

### SCOPE OF THE PROJECT

The aim of the Ongoing Project is to install Operating system through Networking Mode. To propose a scheme that addresses important issues related to outsourcing the storage of data namely dynamic data. The remotely stored data (.iso) can be used directly for the purpose of installing the operating system. Remote server is used as dedicated cloud server or shared server in this project. Mutual trust between the data owner and the CSP is

another imperative issue, which is addressed in this work. A mechanism is introduced to determine the dishonest party, i.e., mis-behaviour from any side is detected and the responsible party is identified. The access control allows the owner to grant or revoke access rights to the outsourced data.

## CHALLENGES

**Cloud migration:** Moving data to and from the cloud can take time. Companies might not have access to their critical data for weeks, or even months, while large amounts of data are first transferred to the cloud.

**Cloud Security:** When trusting a provider with critical data, organizations risk security breaches, compromised credentials and other substantial security risks. Also, providers may not always be transparent about security issues and practices. Companies with specific security needs may rely on open-source cloud security tools, in addition to the provider's tools.

**Performance and outages:** Outages, downtime and technical issues on the provider's end can render necessary data and resources inaccessible during critical business events.

**Complicated contract terms:** Organizations contracting cloud service providers must actively negotiate contracts and service-level agreements (SLAs). Failure to do so can result in the provider charging high prices for the return of data, high prices for early service termination and other penalties.

**Vendor lock-in:** High data transfer costs or use of proprietary technologies that are incompatible with competitor services can make it difficult for customers to switch CSPs. To avoid vendor lock-in, companies should have a cloud exit strategy before signing any contracts.

## 2. LITERATURE SURVEY

Redbug may find fewer code clones, but gains scale, speed, reduces the false detection rate, and is language agnostic. We evaluated ReDeBug by checking all code from all packages in the Debian Lenny/Squeeze, Ubuntu Maverick/Oneiric, all Source Forge C++ projects, and the Linux kernel for unpatched code clones. ReDeBug processed over 2.1 billion lines of code at 700,000 Lock/min to build a source code database, then found 15,546 unpatched copies of known vulnerable code in currently deployed code by checking 376 Debian/Ubuntu security-related patches in 8 minutes on a commodity desktop machine.<sup>1</sup> As a novel approach to software maintenance in large clusters of PCs requiring multiple OS installations, we implemented partition cloning and partition repositories as well as a set of OS independent tools for software maintenance use entire partitions, thus providing a clean abstraction of all operating system configuration state. We identify the evolution of software installations (different releases) and the customization of installed systems (different machines) as two orthogonal axes. Using this analysis, we devise partition repositories as an efficient, incremental storage scheme to maintain all necessary partition images for versatile, large clusters of PCs.<sup>2</sup>

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1. Jiyong Jang, Abeer Agrawal, David Brumley, "ReDeBug: Finding Unpatched Code Clones in Entire OS Distributions" *IEEE Symposium on Security and Privacy*, pp. 48-62, year 2012

2. Felix Rauch, Christian Kurmann, and Thomas M. Stricker, "Partition Repositories for Partition Cloning - OS Independent Software Maintenance in Large Clusters of PCs", *Proceedings IEEE International Conference on Cluster Computing*, Dec 2000

## EXISTING SYSTEM

Commonly to install the operating system for large number PCs is done using the following two methods

- install the operating system individually for each PCs
- in other hand install the operating system for one PCs it considers for master disk and copy for remaining using third party software

## DISADVANTAGES

- Need man power and more time
- Unwanted hardware problem created

## LIST OF MODULES

- Clone Program for Client side
- Clone Program for Server side
- Authorized User
- Installation via Dedicated Server or Cloud Storage
- Cloning

## **CLONING**

Cloned applications and programs are often customized applications. In many cases, they are technically superior to the original, as in the case of Linux. Cloning allows programmers to copy the values of an object or source code of an application program to another without the need for writing the explicit code. Certain programming languages, for example Java, have keywords and functionalities to support cloning. Clone () is one such function. There are certain benefits associated with cloning. Cloning can help a new program or application is more compatible with existing applications or environments. If there is no violation of copyright of original source code or software, cloning can help in improving the software.

## **3. CONCLUSION**

Cloud-computing trends gives solution to companies current and future needs. Because technology is essential to firms, Cloud Computing allows companies to store and access their data at any time. To align with those plans, Internet service providers will enhance Internet speeds and reduce times when computers are offline, enabling users to rely on the cloud to access data instantly. Companies that do not join in this effort are likely to be less competitive. Accuracy of this method is 99 percentage, Future work of this project Store .iso image file in cloud Operating system install via cloud with security.

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