

# UID Registration via Cloud

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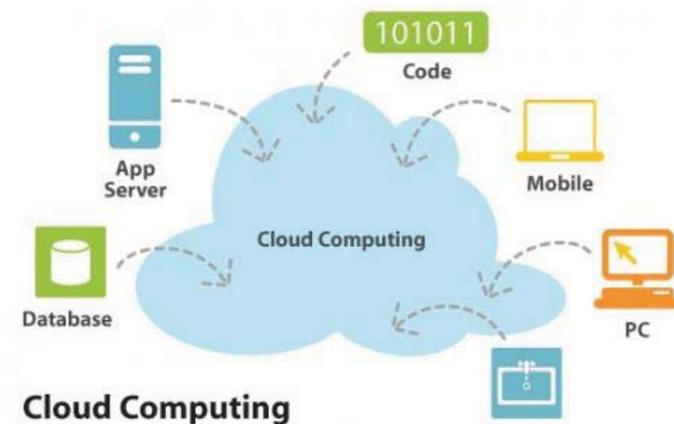
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**Abstract - Cloud computing is the use of computing resources (hardware and software) that are delivered as a service over a network (typically the Internet). The name comes from the use of a cloud-shaped symbol as an abstraction for the complex infrastructure it contains in system diagrams. Cloud computing entrusts remote services with a user's data, software and computation. Cloud computing can be used for UID registration. By this project we can easily reduce the cost constraint. Implementation of UID via Cloud is very easy and can be access by any one and everywhere. As we use private cloud so, Security is not an issue.**

**Keywords: Cloud, Private Cloud, UID, PaaS, SaaS.**

## I. INTRODUCTION

Businesses today depend upon IT to drive innovation and accelerate past competitors. Increasingly cloud computing enables business to deliver new services, enter into new markets, get closer to customers, and make increasingly mobile and demanding employees more productive. The most successful organizations use cloud technologies as a catalyst to put in place new systems and processes that free IT organizations to maximize not just operational metrics, but business results.



## II. ABOUT CLOUD COMPUTING

Cloud computing is set of resources and services offered through the Internet. Cloud services are delivered from data centers located throughout the world. Cloud computing facilitates its consumers by providing virtual resources via internet. General example of cloud services is Google apps, provided by Google and Microsoft SharePoint. The rapid growth in field of “cloud computing” also increases severe Implementation issues. Network has remained a constant issue for Open Systems and internet, when we are talking about Speed and Routing Technique cloud really needs high cost Networking Resources. Lack of Networking Resources is one of hurdle in wide adoption of cloud computing. Cloud computing is surrounded by many network issues like Communication Channel, Routing Technique and the utilization of cloud by the cloud computing vendors. The boom in cloud computing has brought lots of Cloud Adoption challenges for the Vendors and service providers. Our work will enable solutions to know

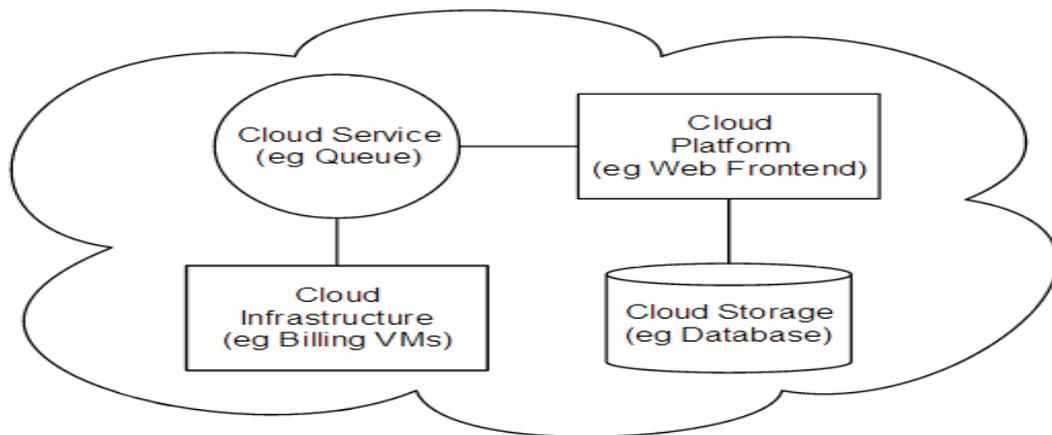
about users and vendors concerns and critical analysis about the different communication channels and routing technique models and tools proposed.

Cloud computing refers to computing with a pool of virtualized computer resources. A cloud can Host different workloads, allows workloads to be deployed/scaled-out on-demand by rapid provisioning of virtual or physical machines, supports redundant, self-recovering, and highly-scalable programming models and allows workloads to recover from hardware/software failures and rebalance allocations. The idea is to move desktop computing to a service-oriented platform using server clusters and huge databases at data centers.

### 2.1 Private Cloud

Private cloud is cloud infrastructure operated solely for a single organization, whether managed internally or by a third-party and hosted internally or externally. Undertaking a private cloud project requires a significant level and degree of engagement to virtualize the business Environment, and it will require the organization to reevaluate decisions about existing resources. When it is done right, it can have a positive impact on a business, but every one of the steps in the project raises security issues that must be addressed in order to avoid serious vulnerabilities.

They have attracted criticism because users "still have to buy, build, and manage them" and thus do not benefit from less hands-on management, essentially "[lacking] the economic model that makes cloud computing such an intriguing concept"



## 2.2 Cloud Services

### 2.2.1 Platform as a service (PaaS) :

In the PaaS model, cloud providers deliver a computing platform typically including operating system, programming language execution environment, database, and web server. Application developers can develop and run their software solutions on a cloud platform without the cost and complexity of buying and managing the underlying hardware and software layers.

### 2.2.2 Software as a service (SaaS):

In the SaaS model, cloud providers install and operate application software in the cloud and cloud users access the software from cloud clients. The cloud users do not manage the cloud infrastructure and platform on which the application is running. This eliminates the need to install and run the application on the cloud user's own computers simplifying maintenance and support.

### 2.3 Current UID Registration Requirement:

1) Web Cam-The face photo was captured and cropped, it was displayed on a small frame during the capture of all other biometrics. This would allow the operator to avoid mistakes.

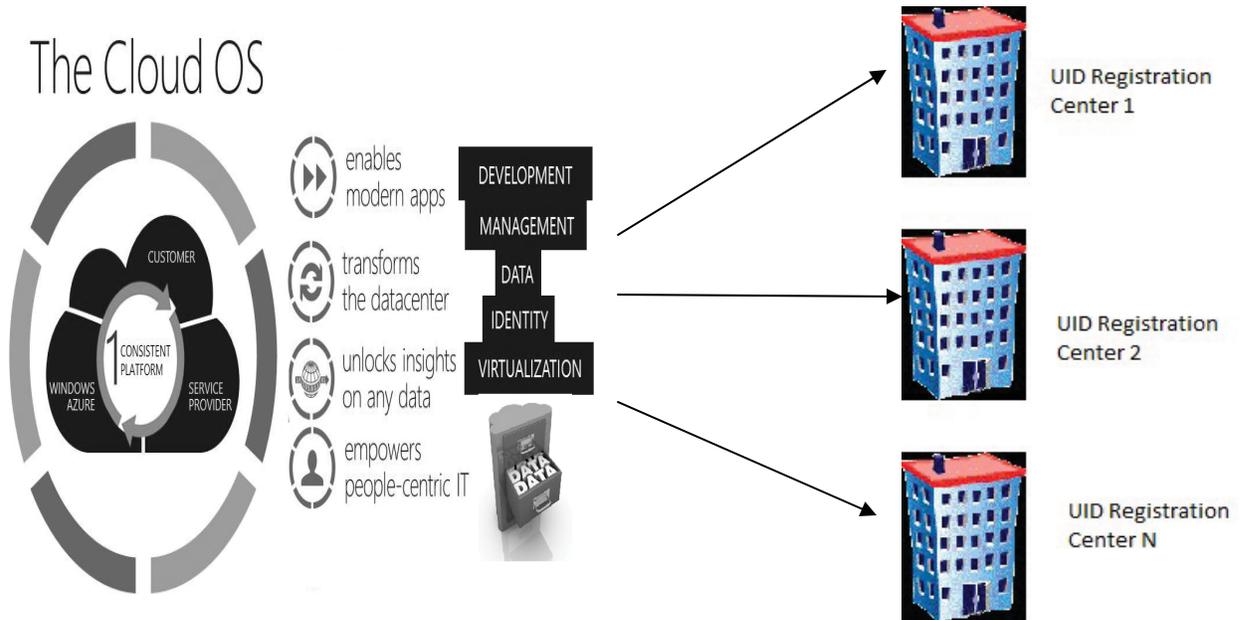
2) Finger print Scanner-The 10 fingerprints was scanned and three slaps to capture all ten fingerprints.

3) IRIS Scanner-The eyes image of the enrollee were captured with a single eye or two eye iris capture device.

4) Software-The basic process and associated workflow enforced by the enrolment software is described in different devices used and the differences in demographic data collection. And Operating System Windows Based.



2.4 Proposed Scheme For UID Registration:



2.5 Process For UID Registration:

2.5.1 Cloud Center:

Cloud Center Provide the Storage, Services and Software facilities to the UID registration Centers. All the data is stored in the cloud center in separate storage medium.

Services like OS, Operating Software's are also provided as platform as service of cloud.

2.5.2 UID Registration Center:

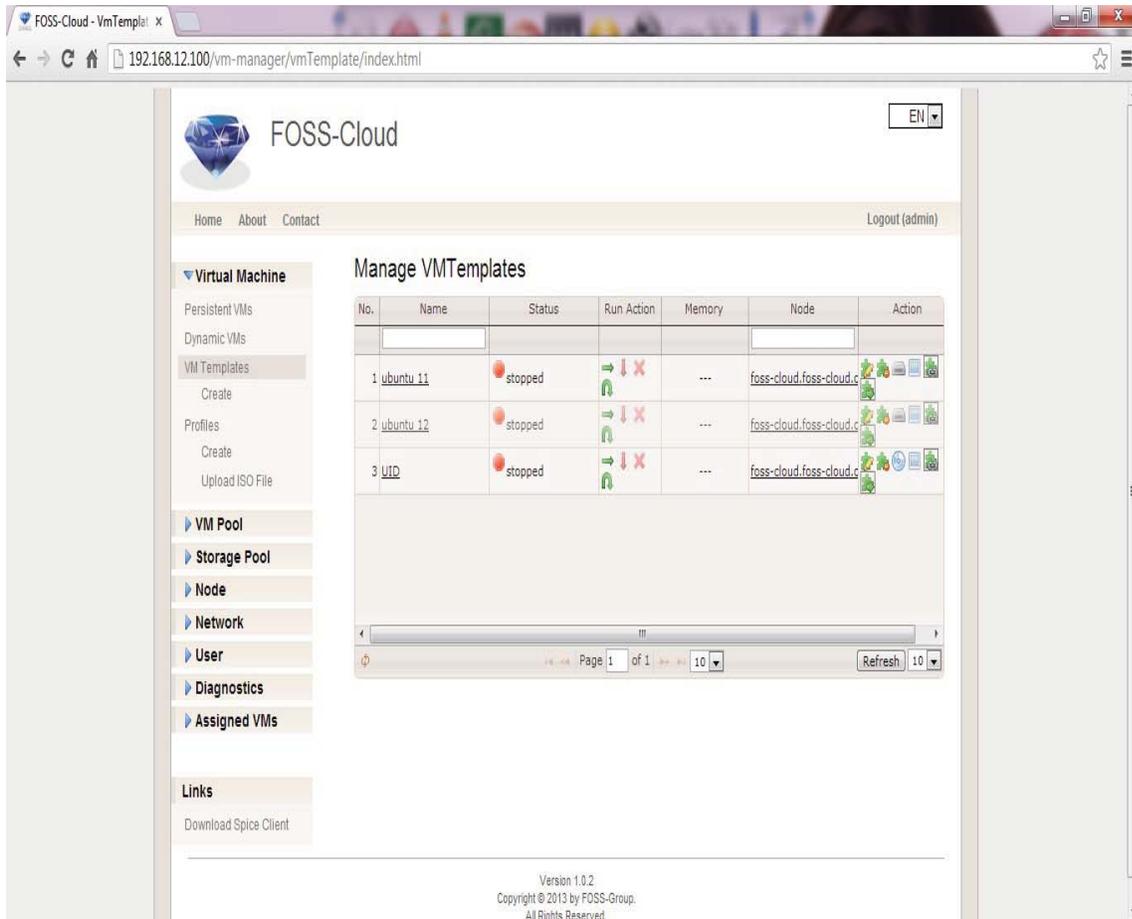
In these centers the UID clod is access by only browser and no need to install different OS and no need for install software in client computer. So complexity is reduced.

## 2.6 Advantage Of Proposed Architecture

- 1] In our proposed architecture no need to by Software's for each and every center because UID cloud provide software's and operating system through PaaS and SaaS.
- 2] So, Due to above reason cost is reduced on each center.
- 3] No need for appointing high skilled labor on each center.
- 4] No head hack for installing software on each center.
- 5] Easily maintaining a single server and storage for confidentiality purpose.

## III. IMPLEMENTATION OF UID CLOUD

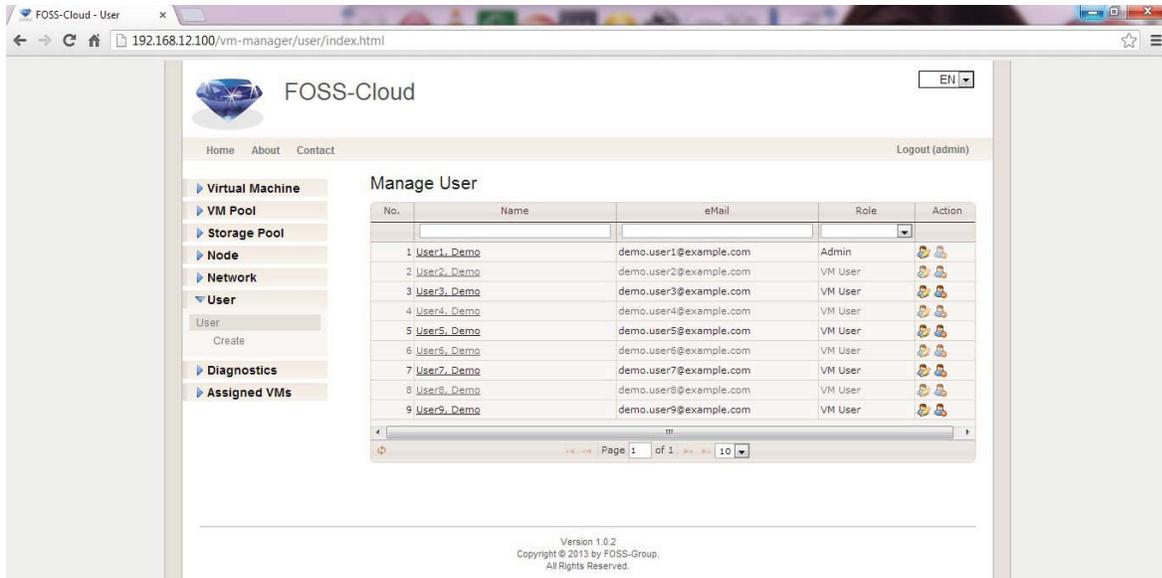
### 3.1 Developing Cloud For UID :



The screenshot shows the FOSS-Cloud web interface. The main content area is titled "Manage VM Templates" and contains a table with the following data:

No.	Name	Status	Run Action	Memory	Node	Action
1	ubuntu_11	stopped		---	foss-cloud.foss-cloud.c	
2	ubuntu_12	stopped		---	foss-cloud.foss-cloud.c	
3	UID	stopped		---	foss-cloud.foss-cloud.c	

The interface also includes a sidebar with navigation options: Virtual Machine (Persistent VMs, Dynamic VMs, VM Templates, Profiles), VM Pool, Storage Pool, Node, Network, User, Diagnostics, and Assigned VMs. The footer indicates "Version 1.0.2 Copyright © 2013 by FOSS-Group. All Rights Reserved."



FOSS-Cloud - User

192.168.12.100/vm-manager/user/index.html

FOSS-Cloud EN

Home About Contact Logout (admin)

Virtual Machine

VM Pool

Storage Pool

Node

Network

User

Diagnosics

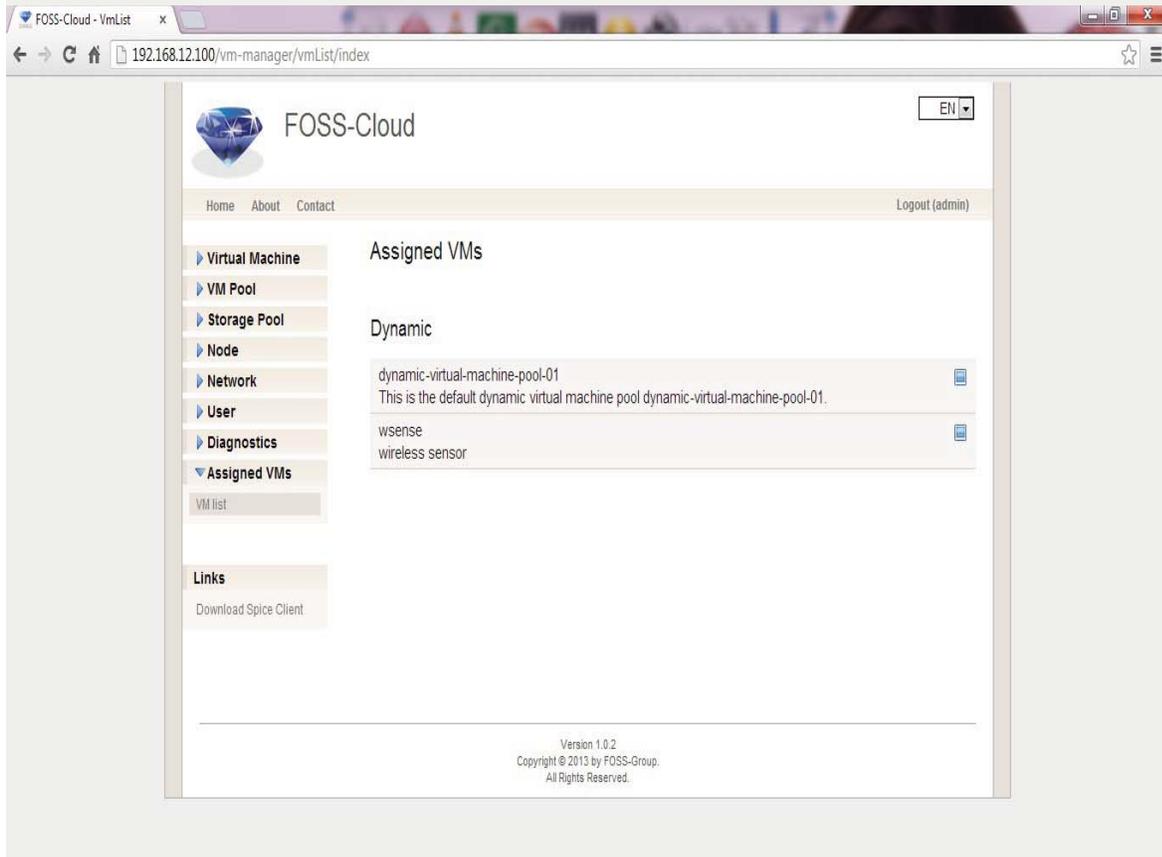
Assigned VMs

### Manage User

No.	Name	eMail	Role	Action
1	User1_Demo	demo.user1@example.com	Admin	
2	User2_Demo	demo.user2@example.com	VM User	
3	User3_Demo	demo.user3@example.com	VM User	
4	User4_Demo	demo.user4@example.com	VM User	
5	User5_Demo	demo.user5@example.com	VM User	
6	User6_Demo	demo.user6@example.com	VM User	
7	User7_Demo	demo.user7@example.com	VM User	
8	User8_Demo	demo.user8@example.com	VM User	
9	User9_Demo	demo.user9@example.com	VM User	

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FOSS-Cloud - VmList

192.168.12.100/vm-manager/vmList/index

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Virtual Machine

VM Pool

Storage Pool

Node

Network

User

Diagnosics

Assigned VMs

VM list

### Assigned VMs

Dynamic

dynamic-virtual-machine-pool-01  
This is the default dynamic virtual machine pool dynamic-virtual-machine-pool-01.

wsense  
wireless sensor

Links

Download Spice Client

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VM Pool  
Storage Pool  
Node  
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User  
Diagnostics  
Assigned VMs

### Manage Storage Pools

No.	Name	Description	Action
1	static-storage-pool-01	This is the default static storage pool static-storage-	
2	template-storage-pool-01	This is the default template storage pool template-st	
3	dynamic-storage-pool-01	This is the default dynamic storage pool dynamic-stc	
4	wsense	wireless sensor	

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FOSS-Cloud

Home About Contact Logout (admin)

Virtual Machine  
VM Pool  
Storage Pool  
Node  
Network  
User  
Diagnostics  
Assigned VMs

### Edit VM Pool "vm-template-virtual-machine-pool-01"

Fields with \* are required.

Type  
template (readonly)

StoragePool \*  
5b77d2f6-061f-410c-8ee7-9e61da6f1927 (readonly)

Name \*  
UID vm-template-virtual-machine-pool

Description \*  
This is the default vm-template virtua

Nodes \*  
foss-cloud.foss-cloud.org

Range \*  
172.31.255.65 - 172.31.255.126

Save

Version 1.0.2

The screenshot shows the FOSS-Cloud web interface. The main content area is titled "Manage VM Templates" and contains a table with the following data:

No.	Name	Status	Run Action	Memory	Node	Action
1	ubuntu_11	stopped	[Run] [Stop] [Delete]	---	foss-cloud.foss-cloud.c	[Refresh] [Download] [Upload]
2	ubuntu_12	stopped	[Run] [Stop] [Delete]	---	foss-cloud.foss-cloud.c	[Refresh] [Download] [Upload]
3	UID	stopped	[Run] [Stop] [Delete]	---	foss-cloud.foss-cloud.c	[Refresh] [Download] [Upload]

The interface also features a sidebar with navigation options: Virtual Machine, VM Templates, Profiles, VM Pool, Storage Pool, Node, Network, User, Diagnostics, and Assigned VMs. The footer indicates "Version 1.0.2 Copyright © 2013 by FOSS-Group. All Rights Reserved."

#### IV. CONCLUSION

We are successfully implemented UID registration via cloud. It will reduce cost and effort for implementing infrastructure for UID centers.

#### V. FUTURE SCOPE

In Future it is possible that UID registrations can be occurred in homes via cloud. Only the hardware limitation can be a hurdle. So it is easy to maintain and database and registration process simple.

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