

# **A semi-automatic and trustworthy scheme for continuous cloud service certification**

## **ABSTRACT**

Cloud computing paradigm supports a new vision of IT where software and computational resources are released as services over a virtualized ICT infrastructure accessible through the Internet. The convenience introduced by cloud computing in terms of flexibility, and reduced costs of owning, operating, and maintaining the computational infrastructures, comes at a price of increased risks and concerns. Users deploying a service in the cloud in fact lose full control over their data and applications, which are fully or partially in the hands of cloud providers.

## **EXISTING SYSTEM**

In Existing System, Assurance and verification techniques (e.g., audit, certification, and compliance) need to be adapted to fit the dynamics of the cloud ecosystem. The advent of cloud in fact makes traditional techniques inappropriate, because assurance claims and information were assumed to be all available a priori at the time of evaluation and before service deployment. Cloud assurance aims to increase cloud trust and transparency, and therefore needs to manage claim verification and evidence collection in a post-deployment environment.

## **DIS ADVANTAGES**

- Lose full control over their data and applications.
- Producing evolving certificates, though more complex.

## **PROPOSED SYSTEM**

In Proposed System, a rigorous and adaptive assurance technique based on certification, towards the definition of a transparent and trusted cloud ecosystem. It aims to increase the confidence of cloud customers that every piece of the cloud (from its infrastructure to hosted applications) behaves as expected and according to their requirements. We first present a test-based certification scheme proving non-functional properties of cloud-based services. The

scheme is driven by non-functional requirements defined by the certification authority and by a model of the service under certification. We then define an automatic approach to verification of consistency between requirements and models, which is at the basis of the chain of trust supported by the certification scheme. We also present a continuous certificate life cycle management process including both certificate issuing and its adaptation to address contextual changes. Finally, we describe our certification framework and an experimental evaluation of its performance, quality, applicability, and practical usability in a real industrial scenario.

## ADVANTAGES

- Aims to increase cloud trust and transparency.
- Aim to implement a secure, trusted, and transparent cloud by specifying a dynamic delegation.

## SYSTEM REQUIREMENTS

### H/W System Configuration:-

Processor	-	Pentium –III
RAM	-	256 MB (min)
Hard Disk	-	20 GB
Key Board	-	Standard Windows Keyboard
Mouse	-	Two or Three Button Mouse
Monitor	-	SVGA

### S/W System Configuration:-

Operating System	:	Windows95/98/2000/XP
Application Server	:	Tomcat5.0/6.X
Front End	:	HTML, Jsp

Scripts : JavaScript.  
Server side Script : Java Server Pages.  
Database : MySQL 5.0  
Database Connectivity : JDBC