Automate Service Architecture on the Cloud by using Semantic Methodology

Bhavana Jayant Adgaonkar¹, Prof. Patil D.R.²
¹²Amarutvahini College of Engineering, Sangamner, India

Abstract—The appearance of Cloud Computing is changing the way in which software services are delivered and consumed. There is increased the need for Cloud environment to control the quality and standards of software offered on their environment by having different kinds of policy. Virtualized service models are now appearing and redefining the way of Information Technology is delivered.

Dealing with all these services perform on the cloud is the open challenge. This integrated method for architecture of services that delivered on the cloud. These services are divided into five parts of specification, finding, interposition, configuration, utilization. These five parts are very important in the architecture of services and also describe the high level framework for services. The purpose of this to automating composite IT related services using interposition process.

Keywords—Automation, Cloud Computing, Design of life cycle, Framework design, web-based services.

I. INTRODUCTION

According to the Information technology (IT) as a service is fastly changing the business mode within the organization. In IT services the purchasing the IT specifications throughout the world. This can be as service demand.

These demanding services are run on the cloud & delivered to the organization via internet or mobile devices. For constructing the architecture of IT services, it involves organization, procedure, devices and technology. Basically the service on the cloud is not permanently occupy the space . This service is easily changing the mode of execution; utilization is good and greater responsiveness.

The organization successfully managing the IT services on the cloud but there is a drawback of automation methodology for creation & deploys the service & that why it goes not give the division between function of separate parts. Our most fundamental requirement for supporting operation ability at semantic level.

II. EXISTING SYSTEM

The cloud computing is nothing but the provide the services on the cloud. In the system there is methodology for developing and creating the services using architecture.

So there is no flexibility in developing and crating the services. Next factor comes is service quality; when creating or developing a services the quality factors are also important. But these operations are considered for only single service.

For software development there are number of architecture having different stages & according to those stages overall framework is executed. In this system the stages of service architecture is not automatically executed on the cloud.

This paper presents service architecture that automatically runs using semantic methodology. Aim of this to give the facility to deploy and execute application on Clouds...

1. Semantic Web :

The Semantic Web is evaluating of the Web by users to discover, allocate, and merge information more easily on the cloud. Semantic web used for improving the cycle of service architecture. It also converts the data into machine readable language. It also store the metadata. This semantic methodology is used for to conference between all the users and use data as well as services of other users. It also gives the automatic retrieval of the data.

III. PROPOSED SYSTEM

In the proposed system IT services are run on the cloud automatically using service architecture. Service architecture can maintain the details of services such as service data, service quality, service cost, logs etc. For this maintained we divide service architecture into five parts. They are specification, finding, interposition, configuration, utilization.
In this system, our focus is on these five parts to automate the multiple IT services on the cloud. These five parts are described in the below:

**Figure: Life-cycle of Service**

1. **Specification**: This is the first part in service architecture. This specification can be given by the Users. Users may give the functional or technical or non-functional specification according to which service user wants. Specification may contain IT components, operating system etc constraints.

2. **Finding**: In this second part according to the specification given by users, the service providers are allocated. For allocating the service providers there are some rules. Cloud can identify validation of service providers as well as service certification. If both are validated then only allocates the service provider to the user request.

3. **Interposition**: There is the communication between the service provider and user w.r.t. accepting and delivering the service. In this stage user specify the details of services and according to that service provider can collect the services from the different users and accordingly to that specification automatically execute the service on the cloud.

4. **Configuration**: In this stage combine the reports of all users’ service that run on the service provider and send the single service report to each and every user.

5. **Monitoring**: This is the last part of the service architecture. In this part user can receive the service using interposition part. In this case suppose user is not fulfilled his/her specification then automatically service may be stop or terminated by user.

**IV. CONCLUSION**

This paper presents the automating the service architecture on the cloud. All the five parts are automating using this framework. This architecture can support the SaaS cloud, And IaaS Clouds. And also maintain the quality of services on the cloud.

**REFERENCES**


[9] K. Joshi, “Automating the architecture for IT services perform on the cloud”,09
