



## MANAGING CLOUD COMPUTING

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**Abstract**—Today cloud computing is emergency technology that has generated efficient option for future business environment as well as technology researchers. While cloud computing provide many features but still it has a lots of shortcomings that need to abolish and manage carefully. Problem like relatively high operating cost for public and private cloud. Here introduction of life cycle of cloud. This cycle help in taking the idea how and where the use of cloud brings wonders in society. Service Level Agreements (SLA) are rising like flames in field of IT. In case of growing the dynamic environment of the cloud is daily maintenance is basic on Quality of Service attributes is necessary to enact SLAs. Also abundant other factors like most as trust (on the cloud provider) come into thoughtfulness, particularly for enterprise customers that might outsource its critical data. The complex temperament of cloud services grants a complicated means of managing SLAs. The context of this paper follows the different stages of cloud life and gives other fields view on SLAs in a cloud computing environment by the Web Service Level Agreement (WSLA) framework, developed for the SLA monitoring and SLA enforcement in the Service Oriented Architecture (SOA). We used the other supporting feature of WSLA to delegate monitoring and enforcement jobs to other entities in so as to solve the trust issues. We also presented the real world use case to validate the proposal.

**Keywords**—cloud computing, service sector, services, technology

### I. INTRODUCTION

Despite all of the claims of cloud computing, it is not a complete solution for all the problems faced by the companies and the IT departments. Bitter experience has shown that the IT department is struggling to output services, a shift to cloud computing will leave them in the same mess or potentially make it far worse. The key challenges for cloud models are:-

#### Standard Architecture:-

In cloud services there is no standardized architecture for delivering services. Important cloud provider provides various different type of architecture that is uncommon to one another. Because of these customers have to suffer the most. Specially the business consortiums. Organizations can come easily to the respective users. After analyzing this problem deeply the reputed consortium has come to address to a particular life cycle of a project. Many leading industries like Microsoft, Cisco, The Boston Consulting Groups & Fujitsu, Intel referred as not-for-profit sector with collaboration to other university worked on a cycle for managing cloud reallocation of projects. This measure will help to reduce the cons faced by organization that want to join the cloud computing environment. In this we can come to know that how a cloud migrated project can be work out.

This cycle also associates with the IT Capability Maturity Framework. Here we will give the idea that how the cycle is designed for managing cloud resources to utilize in a well manner. The development of the life cycle starts with review of stage and then permit to another level of where design science research is organized to give guidelines by Hevner. The aspects that it might put customer demand on the other better and effective services are listed below. These are the shortcomings that needed to deal with today latest technology that is the cloud computing. According to these conditions cloud is not a best alternative.

**Enterprise Support and Service Maturity:-**

Managing the large data for enterprise cloud may not that reliable hereservice oriented architecture (SOA)is needed to translate according to one of the organization’s architecture and implementation. Deciding factors are which standards, technology, and software is use implement the SOA. This is a complex process and this also result in less satisfaction f Is the cloud supplier mature enough for your needs?

**Loss of Data:** - Data stored in the cloud can be imitated across multiple machines. But not all cloud services have the same method for disaster recovery, so it can be hazardous to our confidential data. Absolutely the curiosity is toward that does the cloud supplier have an appropriate disaster recovery strategy?

**Return on Investment:-**The expectation is that the external cloud computing can reduce costs a lot. However, there are other factors cost advantages for large enterprises it may not be as simple as for SMEsCurrently, many large enterprises can collect the benefits of significant economies of large scale is in their own internal IT operations. What is the real TCO (total cost of ownership) of the cloud service?

Requirement for online connectivity:-Cloud computing is obviously impossible if you can’t connect to the Internet. Without Internet connection means it is impossible to work, and in areas where Internet connections are only few or inherently unreliable, this can be a problem. What network joblessness exists between you and the cloud supplier both .In order to overcome these challenges are organizations and need a systematic means for reviewing their business needs and weighing up the potential gains & opportunities against the risks, so that the shift to cloud computing is understandable? So from all calculation towards the rising cloud to deliver the services in better way it need to overcome the cons to be faced by organizations that want to migrate to cloud. [2] There is now a need to define a proper management framework for how a cloud resettlement project can be successfully managed. But because the field is unique and evolving, few guidelines and best The cloud cycle includes both the external as well as internal clod resources which have the request encountering to the provisioning of respective resources to clients. Cloud life cycle management dedicates surety of successful use of clod by implementing its own policies of provisioning. If we compare our audience most of them have a little idea of implementing it in real life, but they want to implement it for better performance and experimental activities .We can discover a way to it which is honest and friendly which all this will include in life cycle of cloud management .with cloud management our traditional ITcanachieve fundamental goals like agility,more optimizecost saving ,space management .our visitors has a well-definedknowledge of very important technology of cloud computing that is virtualization .they have already experience the virtualization in their data Centre. Extending this trend BCMcloud life cycle management has operational model of clod services .each action in cloud service will go through it and provide facilities according to it.Outsourcing projects using a life cycle.

## II. DEFINING THE LIFE CYCLE

Our The cloud life cycle applies is proven and documentedproject principles that are known by most IT and businessmanagers.[6][7] It breaks down the project into differentmanageable stages that allows the industry to gather thecorrect info to make a decision before forwarding to thenext stage. The life cycle ensures proper pre-planning sothat the correct partners are selected and that the effects onthe business are properly understood & controlled. For example it allows an industry to identify the correct services to shiftto the cloud and to compose plans for the impact on staffdirectly and indirectly. It also gives a method of building gap a repository of info and best practices is to fill thecurrent gap created by this unique use of this technology,with its lack of standards and best practice.

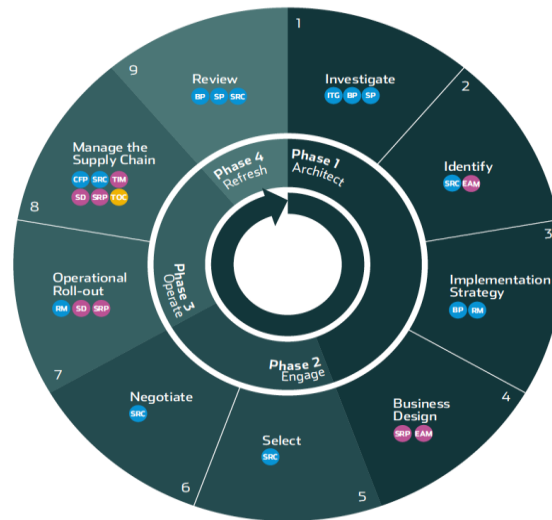


Fig. 1. Different phases of cloud life cycle.[8]

### III.THE CLOUD LIFE CYCLE

The cloud life cycle is broken down into four groups that are further divided into 9 steps as illustrated in Figure 1. Each step requires the way for the following step, so that the sequence is important and must be followed to have a successful outcome. The reason for such an approach that it allows the organizations to break down its planning and workload to meet its requirements. The basic premise is that the industry needs only commits resources one step at a time – so, as each step is finished, there is the option to Stop without giving up the initial investment. This incremental approach reduces the risk attached with cloud projects.

The four groups of the cloud life cycle are:-

1. **Architect:-** The first group starts with the investigation and planning of the cloud project. Typically a company will only commit a few numbers of high-level resources in order to decide if they should go further with a full-scale project.
2. **Engage:-** The second group selects a service provider that can deliver the required cloud service.[9][10] Many industries decide to stop at this stage because the appropriate cloud services is not here, or because there is no cloud provider that they are sure to deliver the required cloud services.
3. **Operate:-** The third group is to apply and the everyday management of the cloud service.
4. **Refresh:-** The fourth group is the ongoing review of cloud services.

This is layered architecture with partitioning, the very first and promising step is transforming one architecture to another to correct mistakes related to the layering where the possibility is allowed. The code is inspected and consolidated so that it can reuse and orderly deployed. Supposing that layering violations are located(particular at a place),which make sense to start a service application layer that is application programming interface(API) normally exist in user interface layer and Business Logic Layer that is basically to see services and supporting business logic and data that can be replaced easily by an alternative services. This is applied without negative impact on other sectors of architecture provides a constraint is that one service domain can access another service domain through an interface. Such kind of facilities is required to simplify management of a program to portfolio implementation. The next step is implementation of Outside-In architecture in both business and infrastructure policies from any given functionality provisioning services, our use of constraints in the business functionality system make constraints on infrastructure that provisions the

functionality. These can conclude accounting rules which business follows, it is a role-based access control on business functionality, cooperate policy is the maximum allowed hotel room rate that a nonexecutive worker can purchase during using an online reservation service that rules about peak business traffic which further determine when a new virtualized image of the application system could be deployed which may ahead give censer A more preference over consumer B. This externalizing policy shows the significant distinction between Inside-Out and Out-Inside architecture design. Whata Inside-Out architecture usually use legacy program

In which policy is embedded and therefore externalized. Program policy is differ in typical corporate environment, it converts the responsibilities of integrated middleware to apply logic that might work well to harmonize policy over few numbers of integrated systems, But we cannot generalize it will be the case of larger value chains. TO address the problem related to To show issues related to scaling system where the policy is distributed throughout it.[12]the last and final step is converting the Inside-Out to Outside-In platform to replace the business program code which coordinate invocation of many services with composite services in case of availability we refer composite service to which is combination of both business as well as industrial services.to form a coarse business that peer with program functionality management . Let us take a situation where we may see services to manage other fulfillment, invoice deposit and payment processing, orchestrations with which billing members use to prepare for invoicing, logistics planning, and so forth.[13][14] As a kind of mental mapping between the composite service functionality in maps to business logic that has been leaked into Web pages of the Web application in that are used to manage order fulfillment.

#### **IV. CONCLUSION AND FUTURE WORK**

The need for a cloud life cycle has been shown to be a very good system for organizations to control and handle not only their migration but also the ongoing, everyday management of their public cloud environment.[15] The research for each of the nine steps given above clearly shows the need of using a cloud life cycle to control and manage the shift to cloud. The cloud life cycle gives an organization with a management structure to highlight the following:-

- The growth of an organization to move to the public cloud.
- How the company is managing the new environment on an everyday basis after it is shifted.
- What new services can be shifted to a public cloud environment?

Future development on the cloud computing life cycle will highlight on the development of a cloud vendor assessment that provides both the IT-CMF and the cloud life cycles is to help the consumer to determine the exact cloud computing service offering for their needs.

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