**Literature Review:**

There has been a branch of research activity in assessing the performance of virtualized resources, in cloud computing environments and in general. A Performance Analysis of EC2 Cloud Computing Services for Scientific Computing [13]

The above work is only specific to EC2 of Amazon web services. In this work performance analysis are categorized in two method i.e. Cloud specific evaluation and Infrastructure uncertain evaluation. In cloud specific evaluation, the duration of resource acquisition and release over short time and long periods of time. And in Infrastructure uncertain evaluation they have designed two methods of workload i) SJSI (run one or more Single process jobs on single instance). ii) MJSI (Single misprocess jobs on multiple instances). Also they have done the analysis of Resource acquisition and release, Single instances, multiple instances, Performance of SJSI workloads, Compute Performance, I/O Performance , Memory Hierarchy Performance, Performance of MJMI workloads , reliability, HPL performance.

Performance Comparison of AODV, DSDV and I-DSDV Routing Protocols in Mobile Ad Hoc Networks [14]. In this work author has considered mainly three protocols that are AODV (Ad-hoc on demand distance vector), DSDV (Destination Distance Vector Algorithm) and I-DSDV (Improvement of DSDV).

These Protocols are ad-hoc network protocol which is used to designed ad-hoc network. In the above paper, Performance analysis of ad-hoc network protocols (AODV, DSDV, I-DSDV) was done by using NS-2 simulation model and compared in terms of Packet delivery ratio, end to end delay , routing overhead in different environment like varying number of nodes, speed and pause time.

On Demand Cloud Computing Performance Analysis with Low Cost for QoS Application [15].In this paper author has focused on performance comparison analysis with low cost with different QoS. This paper has considered the three factors i.e. Network bandwidth ,Quality of Service and Cost. The main objective of this paper is performance comparison analysis with low cost with different Quality of Service. This framework is implemented by OPNET SIMULATION Model 14.5.

QoS is the major factor of service performance, which determines the degree of satisfaction of user. There are two concerns of service a) Technology Oriented b) Service oriented .In this work the degree of satisfaction is expressed by the following qualitative measures

- End–to–end delay
- Delay variations
- Throughput
The process of providing these QoS requirements is called as **Provisioning**. Some of the main importance of QoS Provisioning is:

a. Traffic can be differentiated and provided different levels of service.

b. The amount of traffic network can be controlled based on the resources.

c. QoS make it possible to implement the policies across devices and end users.

d. QoS can enable networks to deliver defined levels of service with existing network infrastructure.

This main objective in this paper was investigate an alternative real time distribution and delivery method for multimedia applications such as live video streaming, live TV, Video on demand using on demand cloud as a service.

In contrast to these studies, our target is measure the performance of ad-hoc cloud networks by using different ad – hoc network protocols. We are having Performance metrics in much broader size and scope.

It performs much more in-depth measurements, compares clouds with other off the shelf clusters. The applications used in our study are closer to the mainstream HPC scientific community.

Our performance evaluation results extend and complement these previous findings and give more insights into the different protocols used for ad-hoc cloud computing (AODV, DSR, ABR, DSDV etc.)

On the other hand scientists begin to adapt the cloud infrastructure for their scientific computing. They run their calculations in the cloud [2], extend clusters on demand with IaaS resources [1] and execute big workflows on a resource mix from traditional grids and clouds [6]. This shows the growing importance of IaaS cloud providers for scientific computing and the need to have performance estimates for the different offered types beyond the marketing information offered by the providers.