Sreenidhi Institute of Science and Technology
Department of Computer Science and Engineering
B.Tech Computer Science and Engineering
Research Laboratory

Cloud Computing Lab (Lab No:2209)

Objective:

Cloud computing is a style of computing in which dynamically scalable and often virtualized resources are provided as a service over the Internet. Cloud computing services usually provide common business applications on-line that are accessed from a web browser, while the software and data are stored on the servers. It is expected that Cloud Computing will help in pooling of computing resources of Government Departments into large clouds thereby increasing utilization of computing resources effectively. Besides, the self-service nature of cloud computing allows organizations to create elastic environments that expand and contract; based on the workload and target performance parameters.

Activities carried out in the Lab:

- Installation and Configuration of Virtual Machine Using VMware
- Installation and Configuration of virtualization using KVM.
- Study and implementation of Infrastructure as a Service
- Study and implementation of Storage as a Service
- Study and implementation of identity management
- Working and installation of Google App Engine
- Working and installation of Microsoft Azure
- Study and implementation of Storage as a Service
- Study and implementation of Single-Sign-On (SSO).
- Study and implementation of relational database service (RDS).

Configuration and requirements:

- Two physical computers that meet the minimum hardware requirements
- 64 bit Intel Virtualization Technology (Intel VT) or AMD Virtualization (AMD-V) processor (2.8 Ghz dual core or better recommended)
- Dual 320 GB hard disks
- 8 GB RAM
- DVD drive optional
- Network adapter
- For client machine Windows 7/8 or Windows Server 2008R2/2012 are required.