SNS COLLEGE OF TECHNOLOGY

Coimbatore-35
An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A++' Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

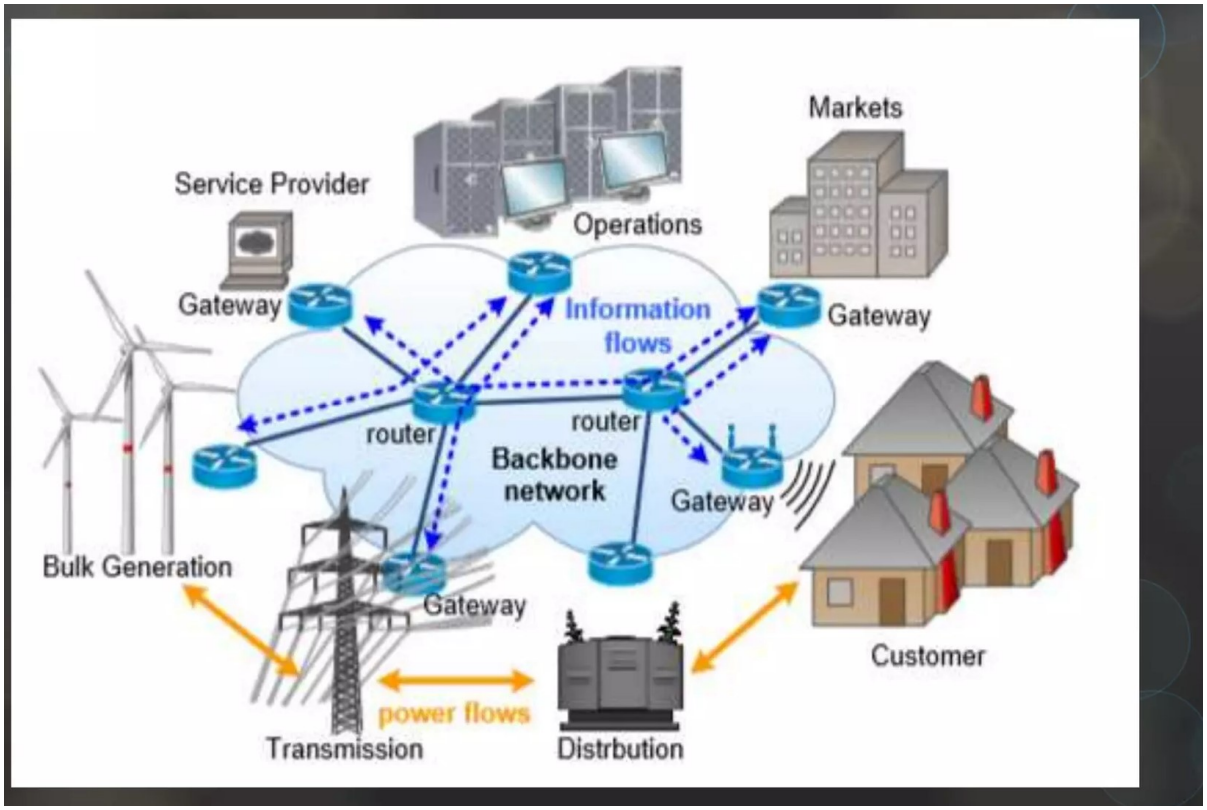
19EET304/ IOT for Electrical Sciences

III YEAR VI SEM

UNIT 3 COMMUNICATION INTERFACE

TOPIC 5 – CYBER SECURITY FOR SMART GRID

SMART GRID


Markets
Service Provider
Operations
Gateway
Information flows
Gateway
router
router
Backbone network
Gateway
Bulk Generation
Gateway
Customer
power flows
Transmission
Distrbution

FEATURES OF WEB SERVICES

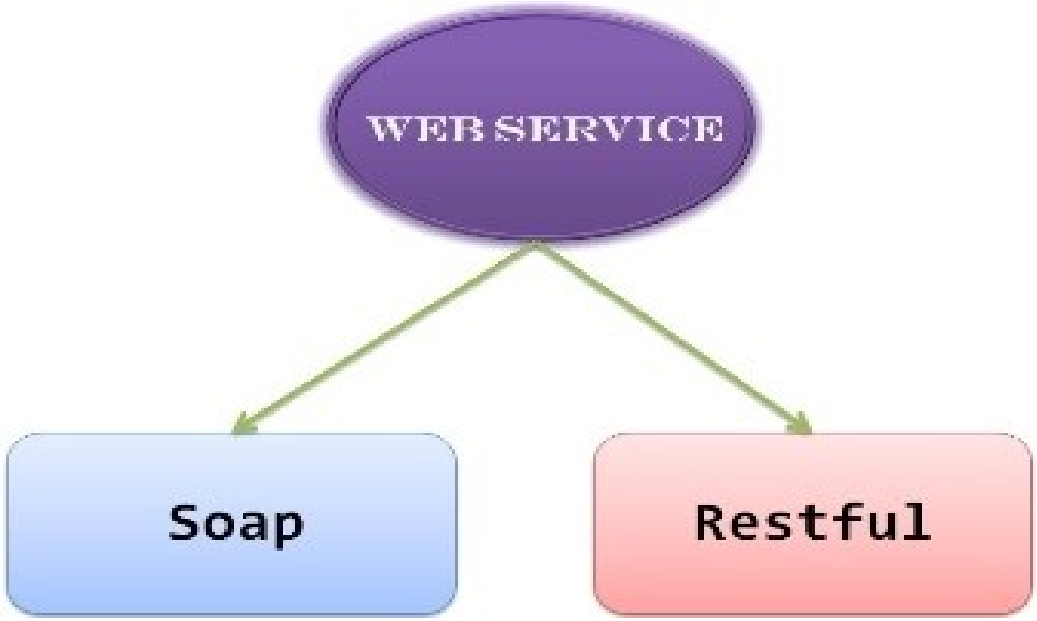
1. Web services are based on open standards like XML, HTTP. So these are operating system independent.

1. Web services are programming language independent. A Java application can consume a PHP web service.

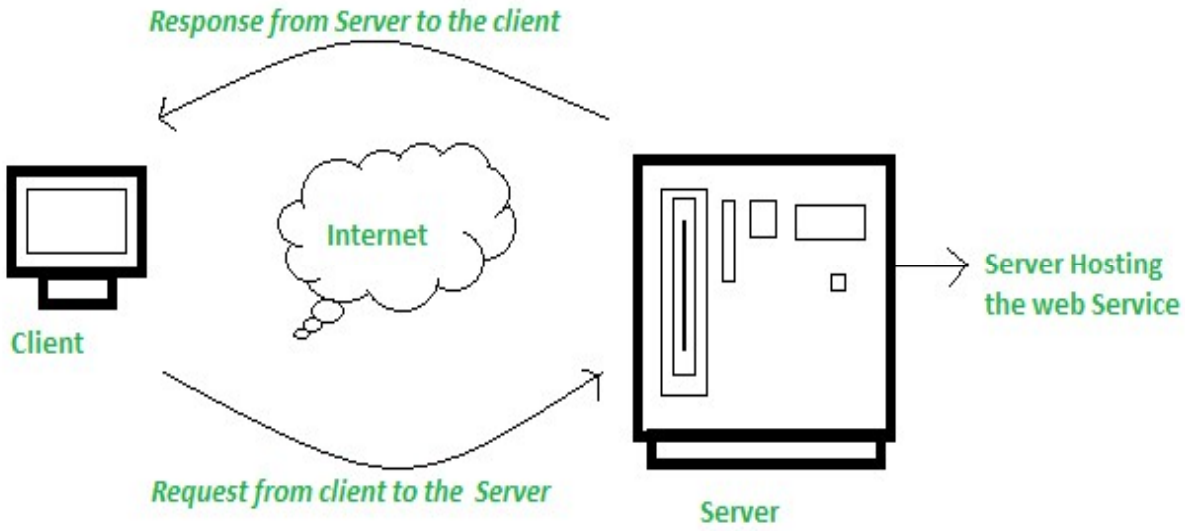
2. Web services can be published over the internet to be consumed by other web applications.

3. The consumer or the client of the web-service is loosely coupled with the web service. So the web services can update or change its underlying logic without affecting the consumer.

TYPES OF WEB SERVICES



HOW DOES WEB SERVICE WORK?



FEATURES/CHARACTERISTICS OF WEB SERVICE

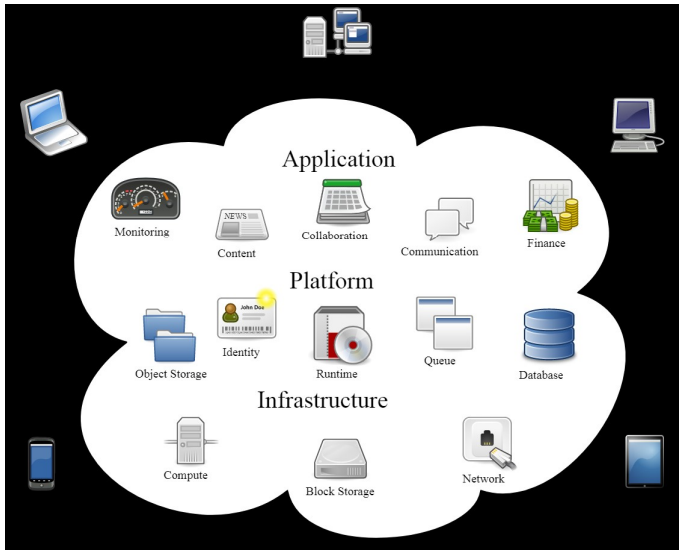
1. XML BASED
2. Loosely Coupled
3. Capability to be Synchronous or Asynchronous
4. Coarse-Grained
5. Supports Remote Procedural Call
6. Supports Document Exchanges

ADVANTAGES OF WEB SERVICE

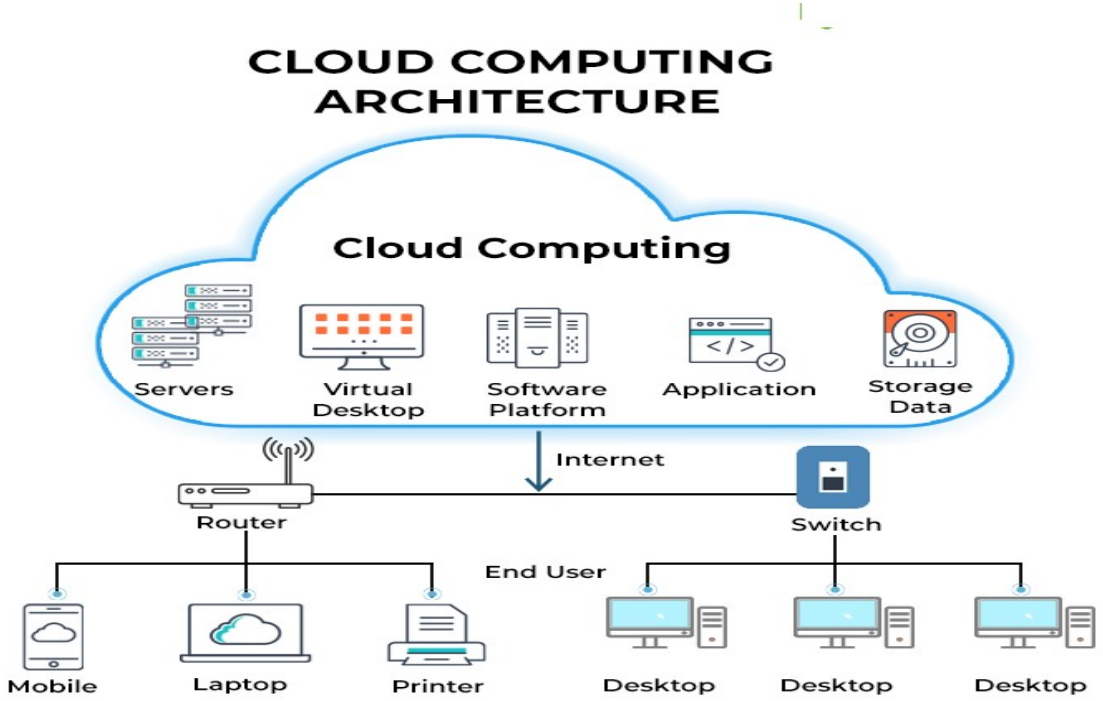
1. Business Functions can be exposed over the Internet
2. Interoperability
3. Communication with Low Cost
4. A Standard Protocol that Everyone Understands
5. Reusability

CLOUD COMPUTING

Cloud computing is on-demand access, via the internet, to computing resources—applications, servers (physical servers and virtual servers), data storage, development tools, networking capabilities, and more—hosted at a remote data center managed by a cloud services provider (or CSP). The CSP makes these resources available for a monthly subscription fee or bills them according to usage.



CLOUD COMPUTING ARCHITECTURE



ASSESSMENT – 1

EXPLAIN THE ROLES OF WEB SERVICES?

ASSESSMENT – 2

CAN YOU EXPLAIN THE APPLICATIONS OF CLOUD COMPUTING ?

References

- https://www.geeksforgeeks.org/what-are-web-services/
- https://artoftesting.com/what-is-a-web-service
- https://www.ibm.com/topics/cloud-computing