# Troubleshooting Process:

1. Define the Problem
2. Gather Information
3. Analyze Information
4. Eliminate Possible Causes
5. Propose Hypothesis
6. Test Hypothesis
7. Solve the Problem

OSI Layers

Application, Presentation, Session – End System

Transport, Network – Router, Multilayer Switch

Data Link – Standard Switch

Physical – Cables, Ports, Interfaces

1.2.5 Network Cloud Services and Applications

There are three basic types of cloud computing:

1. SaaS- Software as a Service
2. PaaS- Platform as a Service
3. IaaS- Infrastructure as a Service

SaaS applications are focused on the end user. Instead of the application being installed locally on the end-user’s computer, the application is accessed over the network usually using a web browser. In a traditional computing environment, the user would access their word processing application software stored in the local hard disk drive.

SaaS applications include: Google Sheets, Google Calendar, Google Maps, Office 365, Salesforce, Google Docs

PaaS is used primarily by software developers. PaaS allows developers to focus on their code and not on the underlying software and hardware needed to run their programs. The PaaS cloud provides the servers, storage, security, tools, database and other services to host the consumers application.

PaaS services include: Microsoft Azure, Salesforce Lightning, AWS Lambda, AWS Elastic Beanstalk, Google App Engine etc.

IaaS is a service where computing resources are supplied by a cloud services provider. The IaaS cloud provides the virtual machines for storage, networking and other services. IaaS is a service used by software developers and system administrators. Because the VMs and the applications are managed by the IaaS cloud provider, organizations don’t have to host these systems in their own data center.

IaaS services include: Cisco Metacloud, Microsoft Azure, DigitalOcean, Google Compute Engine, Rackspace etc.