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H.W 1

Chapter 1

1. Explain the term network management?

 Network management is the activities, procedures and tools that are applied to the operation, administration, provisioning and maintenance of network systems.

1. We use a patient in intensive care as one analogy to explain network management. Can you think of areas of network management where this analogy does not capture?

One area that this analogy does not capture is provisioning. Doctors cannot change their resources to suit the patient need. They use their surgical tools and equipment as best as they can to treat their patient.

1. Can u think of other area in which you would expect analogies of network management to apply?

Other areas in which analogies of network management may apply are:

Cable provider: which also includes areas such as operation, maintenance and provisioning?

Computer manufacturer: areas of operation, administration, provision, maintenance.

1. Give two examples of how network management can help an enterprise IT department save money.

Two examples of how network management can help an enterprise IT department save money are:

1. Instead of having serveral IT managers monitoring each network at several location, you can have only one system admin to monitor the entire network and cut down on hiring cost.
2. A effective network management plan is needed incase network goes down which can cost many businesses a lot of money.

1. Give two examples of how network management can help a service provider increase revenues.

Two examples of how network management can help a service provider increase revenues are:

1. Provisioning: Upgrading their existing equipment to better handle workload and demands of customers in a more efficient way.
2. Maintenance: making sure that existing equipment are in their optimal operational capacity,
3. A famous requirement for availability is “five nines.” This refers to the requirement that a device or a service must be available 99.999 percent of the time. Assume that you have a device with hardware availability of 99.9995 percent. Now assume that an operational error is made that causes the device to go offline for 5 minutes until the error is corrected. Calculated over a period of a month, how much has the operational error just caused.

Seconds in a month= 30days x 24hours x 60mins x 60sec = 2592000

2592000 x 99.9995 = 259198704

5minutes of downtime = 2591987 – 5x60 = 2591984

Percentage downtime = 2591984/2591987 \*100% = 99.988

1. How does the perspective under which network management is approached often differ for an

enterprise IT department compared to a service provider?

Network providers are encourage to exercise provisioning. They are expected to upgrade their equipment to meet demands made by the competitive market and their customers. In the other hand network management is more conservative. They work within a budget to get the job done.

1. Name at least two factors that can be important to the business success of a third-party

management application vendor that potentially has to compete with a network management

offering of a network equipment vendor.

1. Being able to provide equipment that are compatible with other vendors or other equipment that are already owned by the consumer.
2. Provide better support for the equipment that are being sold to their consumers.
3. What does the term swivel-chair syndrome refer to, and why is this undesired?

Swivel chair syndrome refers to

Swivel chair syndrome refers to lack of management application that requires the network operator to use multiple terminals at once to switch between terminals to get the job done. This is undesirable because it requires extra resource and fund to perform the job in this manner and can cause inefficiency.

1. Name two or more reasons for network management applications to be approached as

Distributed Systems.

Two reason why network management applications to be approached as distributed systems are:

Chapter 2