

Domanda n.1

Che differenza c'è tra un sistema operativo client (es. Windows 11) e uno server (es. Windows Server)?

Misure minime di sicurezza ICT per le pubbliche amministrazioni

The Network Layer part 1

The network layer controls the operation of the subnet. A key design issue is determining how packets are routed from source to destination. Routes can be based on static tables that are “wired into” the network and rarely changed, or more often they can be updated automatically to avoid failed components

Domanda n.2

Che cosa si intende per **macchina virtuale**?

Tipologie di mezzi fisici cablati e wireless a supporto delle reti locali

The Transport Layer part 1

The basic function of the transport layer is to accept data from above it, split it up into smaller units if need be, pass these to the network layer, and ensure that the pieces all arrive correctly at the other end. Furthermore, all this must be done efficiently and in a way that isolates the upper layers from the inevitable changes in the hardware technology over the course of time

Domanda n.3

Servizio di rete DHCP Server

Cos'è un hypervisor? Esempio

The Session Layer

The session layer allows users on different machines to establish sessions between them. Sessions offer various services, including dialog control (keeping track of whose turn it is to transmit), token management (preventing two parties from attempting the same critical operation simultaneously), and synchronization to allow them to pick up from where they left off in the event of a crash and subsequent recovery).

Domanda n.4

Come gestisce le risorse il sistema operativo?

Differenza tra indirizzi IP pubblici e privati

The Presentation Layer

Unlike the lower layers, which are mostly concerned with moving bits around, the presentation layer is concerned with the syntax and semantics of the information transmitted. In order to make it possible for computers with different internal data representations to communicate, the data structures to be exchanged can be defined in an abstract way, along with a standard encoding to be used “on the wire.

Domanda n.5

Reti locali wireless

Come si accede a un server Linux da remoto?

The Application Layer

The application layer contains a variety of protocols that are commonly needed by users. One widely used application protocol is HTTP (HyperText Transfer Protocol), which is the basis for the World Wide Web. When a browser wants a Web page, it sends the name of the page it wants to the server hosting the page using HTTP

Domanda n.6

Cos'è il CERT-AGID e quali sono le sue funzioni

Che cos'è una snapshot in un ambiente virtuale?

The OSI reference model.

This model is based on a proposal developed by the International Standards Organization (ISO) as a first step toward international standardization of the protocols used in the various layers (Day and Zimmermann, 1983).

Domanda n.7

Le funzionalità principali di un Database Management System

Qual è la differenza tra interfaccia a riga di comando (CLI) e interfaccia grafica (GUI)?

The OSI model has seven layers. The principles that were applied to arrive at the seven layers can be briefly summarized as follows:

1. A layer should be created where a different abstraction is needed.
2. Each layer should perform a well-defined function.
3. The function of each layer should be chosen with an eye toward defining internationally standardized protocols

Domanda n.8

Protocolli di sicurezza per una rete wireless

Che cos'è un servizio in un sistema operativo server? Esempio

The Physical Layer

The physical layer is concerned with transmitting raw bits over a communication channel.

The design issues have to do with making sure that when one side sends a 1 bit it is received by the other side as a 1 bit, not as a 0 bit.

Domanda n.9

Quali sono i principali sistemi operativi server attualmente utilizzati?

Quali sono alcuni software comuni per la virtualizzazione?

The Data Link Layer

The main task of the data link layer is to transform a raw transmission facility into a line that appears free of undetected transmission errors. It does so by masking the real errors so the network layer does not see them.

Domanda n.10

Servizio di rete Log Server e raccolta dei dati secondo la circolare AgID 2/2017

Qual è il vantaggio di utilizzare la virtualizzazione rispetto a un'infrastruttura fisica tradizionale?

Typical questions here are what electrical signals should be used to represent a 1 and a 0, how many nanoseconds a bit lasts, whether transmission may proceed simultaneously in both directions, how the initial connection is established, how it is torn down when both sides are finished, how many pins the network connector has, and what each pin is used for

Domanda n.11

Differenze nelle frequenze radio utilizzate nelle reti wireless

A cosa serve Active Directory in Windows Server?

The Network Layer part 2

More generally, the quality of service provided (delay, transit time, jitter, etc.) is also a network layer issue. When a packet has to travel from one network to another to get to its destination, many problems can arise.

Domanda n.12

Responsabilità della PA secondo il Codice dell'Amministrazione Digitale

Qual è la funzione di un router?

The Network Layer part 2

The addressing used by the second network may be different from that used by the first one. The second one may not accept the packet at all because it is too large. The protocols may differ, and so on. It is up to the network layer to overcome all these problems to allow heterogeneous networks to be interconnected.

Domanda n.13

Caratteristiche di un Database Management System

Come si può verificare se un host è raggiungibile in rete?

The Transport Layer part 1

The basic function of the transport layer is to accept data from above it, split it up into smaller units if need be, pass these to the network layer, and ensure that the pieces all arrive correctly at the other end. Furthermore, all this must be done efficiently and in a way that isolates the upper layers from the inevitable changes in the hardware technology over the course of time

Domanda n.14

Quali sono i linguaggi di un Database Management System

Vantaggi e svantaggi di un sistema operativo Open Source

The Transport Layer part 2

The transport layer is a true end-to-end layer; it carries data all the way from the source to the destination. In other words, a program on the source machine carries on a conversation with a similar program on the destination machine, using the message headers and control messages