Infrastructure For EC

IT takes more than technology

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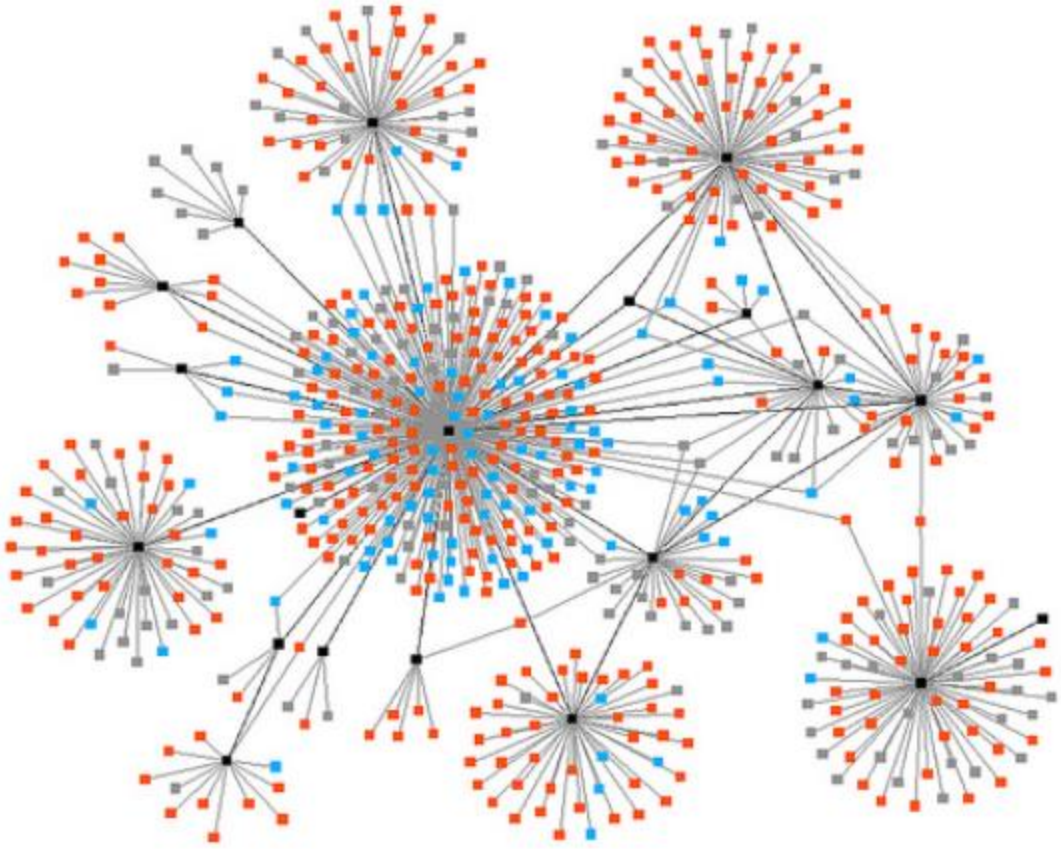
regional and expert circles as well as networking events throughout Germany. The DGQ network offers the most versatile and comprehensive platform for sharing knowledge, practical experience, and trends on quality-related topics in Germany. The DGQ is engaged in national and international initiatives, partnerships, and committees developing and accelerating key standards as well as innovation and research projects. With around 300 trainers and 1,000 practice-related training courses, the DGQ offers a wide range of trainings and awards individuals with internationally recognized certificates. It contributes effectively to anchoring “Quality made in Germany” as a principle of success in business and society. In a world of transformation, it also develops new quality approaches for the future.

A Network Of Networks

The Internet is often described as **a network of networks**. Bridging devices are the connectors that join one part of the larger **network** to another. Bridging devices differ in sophistication of the connection they provide, but they all contribute to the rapid movement of data that is the key to the Information Age.

Network nodes are network computer devices that originate, route and terminate data communication.[1] They are generally identified by network addresses, and can include hosts such as personal computers, phones, and servers, as well as networking hardware such as routers and switches. Two such devices can be said to be networked when one device is able to exchange information with the other device, whether or not they have a direct connection to each other. In most cases,

application-specific communications protocols are layered (i.e. carried as payload) over other more general communications protocols.



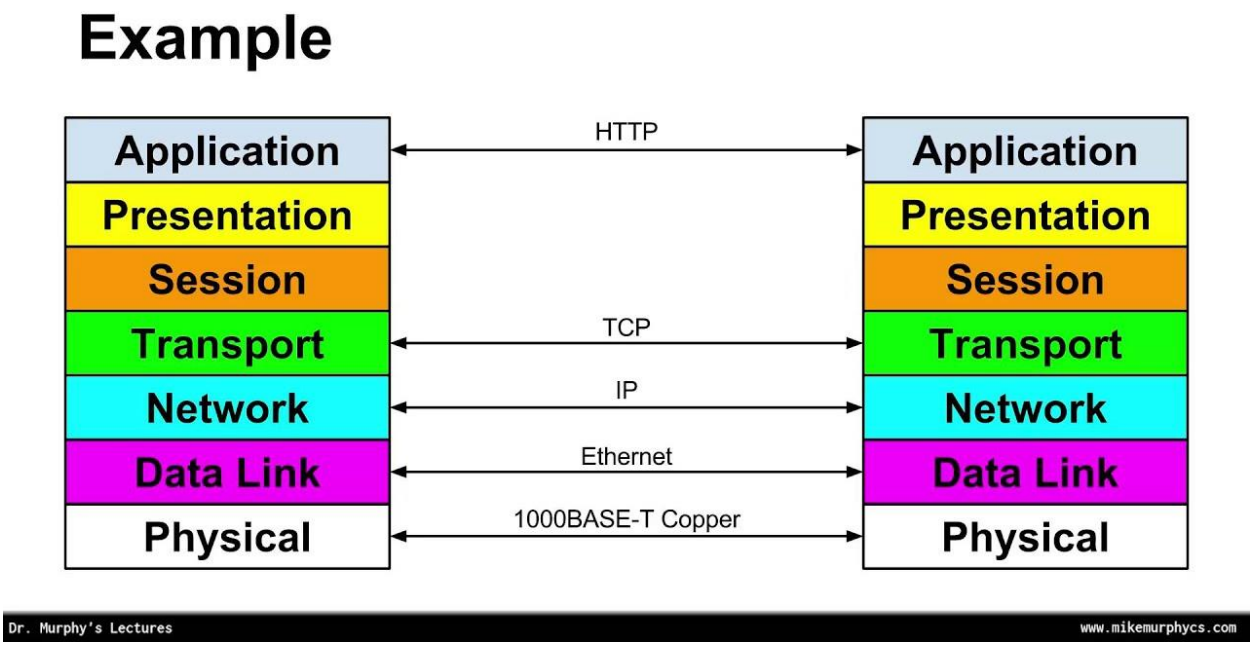
Internet Protocols

The **Internet Protocol** (**IP**) is the principal communications protocol in the Internet protocol suite for relaying datagrams across network boundaries.
Its routing function enables internetworking, and essentially establishes the Internet.

IP has the task of delivering packets from the source host to the destination host solely based on the IP addresses in the packet headers. For this purpose, IP defines packet structures that encapsulate the data to be delivered. It also defines addressing methods that are used to label the datagram with source and destination information.

Historically, IP was the connectionless datagram service in the original Transmission Control Program introduced by Vint Cerf and Bob Kahn in 1974, which was complemented by a connection-oriented service that became the basis for the Transmission Control Protocol (TCP). The Internet protocol suite is therefore often referred to as *TCP/IP*.

The first major version of IP, Internet Protocol Version 4 (IPv4), is the dominant protocol of the Internet. Its successor is Internet Protocol Version 6 (IPv6), which has been in increasing deployment on the public Internet since c. 2006.



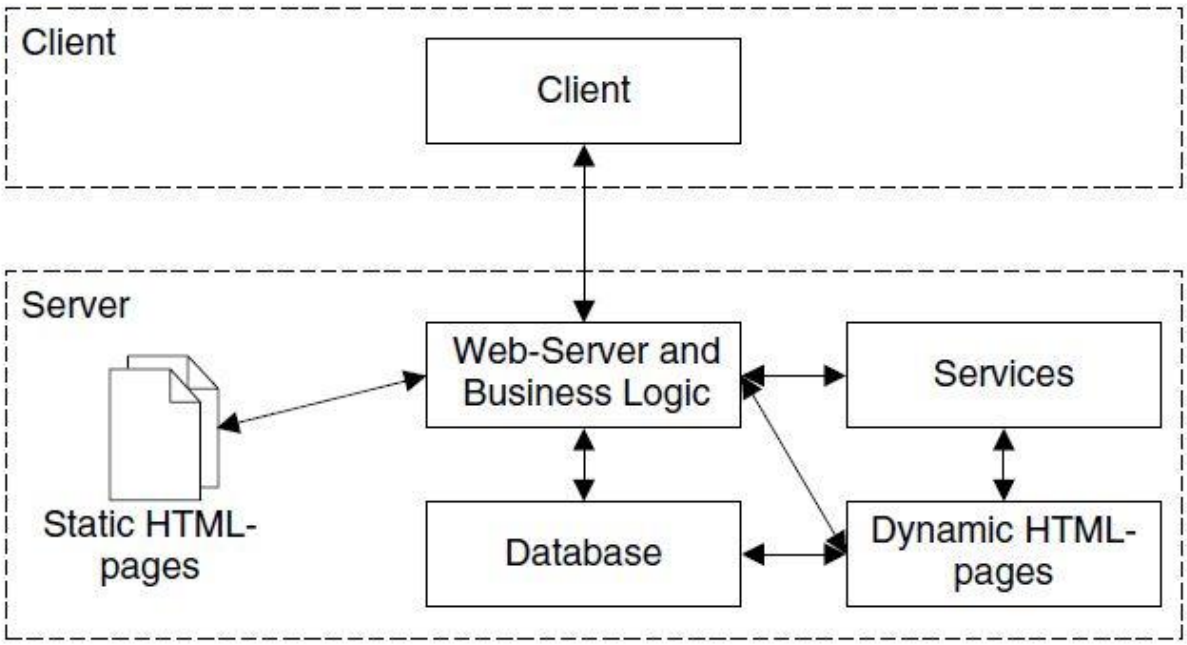
Web-Based client/server

Client–server model is a distributed application structure that partitions tasks or workloads between the providers of a resource or service, called servers, and service requesters, called clients.[1] Often clients and servers communicate over a computer network on separate hardware, but both client and server may reside in the same system. A server host runs one or more server programs, which share their resources with clients. A client does not share any of its resources, but it requests content or service from a server. Clients, therefore, initiate communication sessions with servers, which await incoming requests. Examples of computer applications that use the client-server model are Email, network printing, and the World Wide Web.

The *client-server* characteristic describes the relationship of cooperating programs in an application. The server component provides a function or service to one or many clients, which initiate requests for such services. Servers are classified by the services they provide. For example, a web server serves web pages and a file server serves computer files. A shared resource may be any of the server computer's software and electronic components, from programs and data to processors and storage devices. The sharing of resources of a server constitutes a *service*.

Whether a computer is a client, a server, or both, is determined by the nature of the application that requires the service functions. For example, a single computer can run a web servers and file server software at the same time to serve different data to clients making different kinds of requests. Client software can also communicate with server software within the same computer.[2] Communication between servers, such as to

synchronize data, is sometimes called *inter-server* or *server-to-server* communication.



Internet Security

Internet security is a branch of computer security specifically related to not only Internet, often involving browser security and the World Wide Web[*citation needed*], but also network security as it applies to other applications or operating systems as a whole. Its objective is to establish rules and measures to use against attacks over the Internet.[1] The Internet represents an insecure channel for exchanging information, which leads to a high risk of intrusion or fraud, such as phishing,[2] online viruses, trojans, worms and more.

Many methods are used to protect the transfer of data, including encryption and from-the-ground-up engineering. The current focus is on prevention as much as on real time protection against well known and new threats.

Selling On The Web

Online shopping is a form of electronic commerce which allows consumers to directly buy goods or services from a seller over the Internet using a web browser. Consumers find a product of interest by visiting the website of the retailer directly or by searching among alternative vendors using a shopping search engine, which displays the same product's availability and pricing at different e-retailers. As of 2020, customers can shop online using a range of different computers and devices, including desktop computers, laptops, tablet computers, smartphones, and smart speakers.

An online shop evokes the physical analogy of buying products or services at a regular "bricks-and-mortar" retailer or shopping center; the process is called business-to-consumer (B2C) online shopping. When an online store is set up to enable businesses to buy from another businesses, the process is called business-to-business (B2B) online shopping. A typical online store enables the customer to browse the firm's range of products and services,

view photos or images of the products, along with information about the product specifications, features and prices.

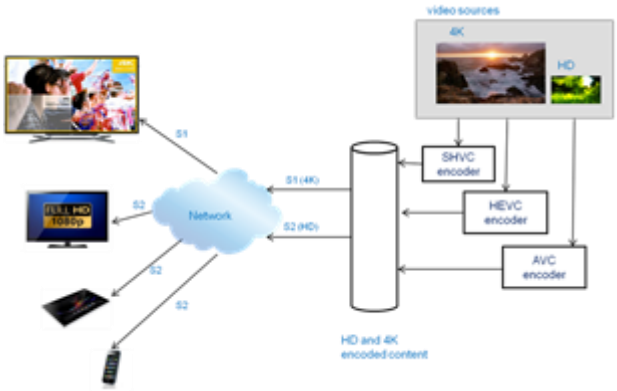
Online stores usually enable shoppers to use "search" features to find specific models, brands or items. Online customers must have access to the Internet and a valid method of payment in order to complete a transaction, such as a credit card, an Interac-enabled debit card, or a service such as PayPal. For physical products (e.g., paperback books or clothes), the e-tailer ships the products to the customer; for digital products, such as digital audio files of songs or software, the e-tailer usually sends the file to the customer over the Internet. The largest of these online retailing corporations are Alibaba, Amazon.com, and eBay.[1]

Chatting On The Web

A **web chat** is a system that allows users to communicate in real-time using easily accessible **web** interfaces. It is a type of **Internet** online **chat** distinguished by its simplicity and accessibility to users who do not wish to take the time to install and learn to use specialized **chat** software.

Multimedia Delivery

Multimedia delivery is the distribution of rich **multimedia** content to users. **Multimedia** content is the presentation of integrated text, graphics, video, animation and sound. OEMs and third parties **deliver** diverse types of **multimedia** content, through a variety of media.



Analyzing Web Visits

1. Page Views: This tallies the amount of times **visitors** landed on each page on your **website**. ...
2. **Visits**: Here you'll get the overall number of **visits** to your site, regardless of how many pages each **visitor** viewed.
3. Unique **Visitors**: This metric provides the number of unique **visitors** to your **website**.

Managerial Issues

The most common management problems are as follows:

- Poor communication between various sections.
- Constant change (moving the goal posts).
- Too much to do; not enough time to do it.
- Difficult people who don't do what you want them to do.
- Poor morale. (Which leads to poor motivation and therefore poor productivity).