Client server architecture

Design, Architecture

The term originally referred to the large cabinets that housed the central processing unit and main memory of early computers but as of today those cabinets are no longer cabinets but then powerful I high-end commercial machines which also are used in client server networking as servers and this has overshadowed most of the disadvantages of the old traditional mainframes that led to the many problems as like those faced by Hares company.

The disadvantages of the way Mainframes were used in the Good old days is that there was no flexibility as mix and matching was not accommodated but they only revered so-called dumb terminals on the users' desktops meaning you had to be wired to the mainframe to access data, also software platforms were specific and maintenance and system management were costly as every component of the system needed to be maintained. Like any other company would have done to keep up with keep up with growing business demands, Hares implemented its first information system in 1987 purchasing a mainframe computer.

But then because of the revolution from the Good Old Days as explained above to the client [server they probably faces all the disadvantages pertaining to flexibility, maintenance and yester management, and it was difficult for them to connect with the outside world and so they had to also change their system to Client/Server . With Client Server advantages of flexibility gives a greater solution space than that which single computer models can achieve. Another advantage is the Openness as number of different platforms can be used in a network; all that is needed is some common protocol for them to communicate.

Openness also lives the freedom of choice the implementation at any of the ends It is also reliable and this can be accomplished by production of the same programs and data around a network; this meaner that when en server breaks down another takes over. Servers also can be created specifically for a certain service. Client/server computing is also Scalable as more servers can be added to a network depending on the increase of application demand in though the increase in power is not linear I. E number of servers. And this is what Hares Company is faces in the present proving that also there present problems are not unique as well.

The solution to this problem on the other hand is to increase hardware capabilities of the server and desktops. Another problem Hares faces is u to the configuring applications into client-server modules and in modifying the configuration in response to user feedback and this problem is Common in organizations using traditional (2-tier) client server in their business. 2. Suggest alternative architectures that could be used to overcome the problems faced by Hares' current Client/ServertechnologyAn alternative Architecture that can over comer problems faced by current Client/ Server is the Three- tier model and N-tier model architectures.

Three-tier architecture meets the requirements of large scale Internet and intranet client/server applications. It is more scalable, robust and flexible and can integrate data from multiple sources. This can solve the problem the company is facing of difficulty in configuring applications into client-server modules and in modifying the configuration in response to user feedback as the scalability is wider and the multiple sources of were data can be

integrated make it easily possible for user feedback. Three-tier model is also easier to manage and deploy on the network as most of the code runs on the servers.

Network interchange between applications is also minimized as abstract levels of service are created were instead of interacting erectly with the client calls business logic on the server. It is the business logic that accesses the database on behalf of the client. Three- tier as compared to tier 2 being used by Hares is less complex but can be centrally managed on the sever as application programs are made visible to standard system management. Security is also high, performance is Better and application reuse is excellent. N tier client server architecture is wider than the 3 tier though the 3 tier can also be considered as an N tier.

The N tier has no limits and is able to the growing in number of applications that have spilled over in to the world and is able to meet the challenge of the requirement poised buy these Intergalactic applications. This is because N tier clients frequently combine Middleware tier components within a single business transaction and a component can call other components to help in request and this could be very useful in Hares looking at the problem of user feedback they have as the requesting system will be much better than the one in place. 3. NNE of the suggestions proposed by Hares' IS department is the use of intranet web technology.

Examine the pros and cons of such an idea. Intranet is an internal organizational network that uses Internet Protocol technology to share information, computing services and operational systems. This can be a

company's internal network or a broader part of the organization's technology structure, and can be composed of multiple local area networks. The idea behind this is to organize different user's desktops in the organization at a low cost, also saving time and effort to be more productive, There are so many things that are good about having a functional intranet and that's why the IS department proposed the use of it.

Pros of Intranet Single information source-Because data and information are kept in one place in an organized way it reduces on confusion of where information has begin kept and it can be easily accessed when needed as people will always know where to look thus saving on time. Common corporatecultureis promoted: The ability for every user to view the same information within the Intranet makes it easy for an organization not to have different information which on the same things.

Updates are Immediate: live coverage of changes to your audience is made possible by Intranets and keeping them up to date thus limiting the company's liability. Time: information to employees is distributed on an as-needed basis. Employees can also access information at their convenience, rather than receiving electronic mail that may distract them indiscriminately. Business management and operations: The Intranet platform is begin used for developing and deploying applications that support business operations and decisions across the world wide web.

Cost-effective: Saving on the hustle to maintaining physical documents, users can still view information and data via web-browser and this can save the businessmoneyused on printing/ duplicating comments and also

maintenance of produced documents. CONS of Intranet Security: It's easy for individuals to have unauthorized access in to the intranet network and they may abuses materials. Software/Hardware incompatibility problems: because of the evolving technology upgrades are needed to keep up with the worlds demands otherwise a lot of problems in functioning of the intranet are faced.

Availability of access to all employees: Some of the desks of employees may not have desktops and so it would make it difficult for them to access the intranet at their convenience. Information overload: As time moves on and information is posted n the intranet the presentation and design that helps users to filter out what they don't need, and get only the information that they really want becomes difficult and this begins to consume time thus undermining the advantage of intranet in time. Moderation: In case objectionable content is posted on to the intranet network someone has to clean up the mess.

And this is very possible because all users have access and security is not strong so it is prone to cyber crime and so content that is objectionable can easily be posted. 4. Do you think the popularity of intranet software and the Internet pose threats to rotational Client/Server systems? Intranet software is the software that runs on servers and provides service facilities such us HTTP publishing like world which is the worldwide web, searching and indexing and FTP file retrieval facilities.

Web browsers are the software used by clients to access pages on the web and because the protocols used by the intranet are the same as those by the web in makes it standard for users to use any web browser that is tested and

these can be acquired free of charge or paid for at small cost. The internet is like a gold mine of anything one can need in connection with intranet footwear as one can get everything they need to the proper functionality of intranet networks.

And the modern intranet has been able to come out of one building and via the internet basically do the exact thing client/server architecture is all about. In other words intranet software and the internet are a modern client server type of system. Intranet software and the internet are able to create true intranet applications by employing existing client/server applications and also it is able to integrate applications in the Web browser that normally don't work and play well together.

The Intranet then makes it possible for information to become available on the Internet from the same applicationenvironmentand interface. Because of flexibility of Intranet software to operate on the internet many companies have flown that direction to save cost rather than implementing the traditional client server architecture. It is difficult and costly to spread the traditional client over geographical areas and because the internet makes this easy eliminating the hardware and is more effective the popularity of intranet software has increased and continues to be ore of preference to big organizations today.