

# [Lan documentation sample](https://assignbuster.com/lan-documentation-sample/)

INTRODUCTION A computer network is a group of computers connected to each other electronically. This means that the computers can " talk" to each other and that every computer in the network can send information to the others. Usually, this means that the speed of the connection is fast - faster than a normal connection to the Internet. One of the basic type of computer networks include the Local Area Network. Local Area Network (LAN) is a computer network that interconnects computers in a limited area such as a home, school, computer laboratory, or office building using network media.

The defining characteristics of LANs, in contrast to wide area networks (WANs), include their usually higher data-transfer rates, smaller geographic area, and lack of a need for leased telecommunication lines. LANs are capable of transmitting data at very fast rates, much faster than data can be transmitted over a telephone line; but the distances are limited, and there is also a limit on the number of computers that can be attached to a single LAN. Most local area networks are built with relatively inexpensive hardware such as Ethernet cables, network adapters, and hubs.

Wireless LAN and other more advanced LAN hardware options also exist. STATEMENT OF THE PROBLEM AC Mojares Construction Company had no Local area yet supposed to be the process of communicating and receiving data is not as much faster and data is not totally secured. BACKGROUND OF THE STUDY A local area network (LAN) is a group of computers and associated devices that share a common communications line or wireless link. Typically, connected devices share the resources of a single processor or server within a small geographic area (for example, within an office building).

Usually, the server has applications and data storage that are shared in common by multiple computer users. A local area network may serve as few as two or three users (for example, in a home network) or as many as thousands of users (for example, in an FDDI network). Ethernet is by far the most commonly used LANtechnology. A number of corporations use the Token Ring technology. FDDI is sometimes used as a backbone LAN interconnecting Ethernet or Token Ring LANs. Another LAN technology, ARCNET, once the most commonly installed LAN technology, is still used in the industrial automation industry.

Typically, a suite of application programs can be kept on the LAN server. Users who need an application frequently can download it once and then run it from their local hard disk. Users can order printing and other services as needed through applications run on the LAN server. A user can share files with others at the LAN server; read and write access is maintained by a LAN administrator. A LAN server may also be used as a Web server if safeguards are taken to secure internal applications and data from outside access.

In some situations, a wireless LAN may be preferable to a wired LAN because it is cheaper to install and maintain. OBJECTIVES To create and implement an efficient Local Area Network for A. C. Mojares Construction Company that gives total security to all data related to their projects, contracts and design that saved in their computer systems. To provide fastcommunicationand sharing of files to other network or computers inside the company. Increased information exchange between different departments in an organization, or between individuals. COMPANY PROFILE A. C.

MOJARES CONSTRUCTION, with an office address at No. 400 Tandang Sora ave, brgy. Culiat, Quezon City, Metro Manila is a thirty year old company with a category “ AAA” license specializing in the construction of buildings, housing projects, site developments, roads and bridges and other related matters in the field of General Engineering and building. The company is a single proprietorship firm headed by its General Manager/Owner Alejandro C. Mojares a licensed Civil Engineer assisted by qualified and experienced technical personnel with profound knowledge in this field.

Our main goal is continuously promote and help in the country’s program in economic development through efficient and effective construction to meet the requirements set by various accepted international standards. In our thirty years of proven and satisfactory performance in the construction business, we earned the trust and confidence of the Local Government of the Quezon City our biggest clients and other agencies like PLDT, Metropolitan Waterworks and Sewage System (MWSS), Department of Public Works and Highways (DPWH), Coca Cola Bottlers of the Philippines, Inc. CCBPI), UP-Los Banos and other private corporation and institutions.

We hope that with the continuous support of our former and future clients, we will strengthen our desire to achieve ourgoalsand objectives. ACKNOWLEDGEMENT First of all I would like to thank God for giving me strength and knowledge to do this work and for providing all my needs to finish this project. To my parents, relatives, and loved ones, Who encourages and gave me strength, moral and emotional support in making this project possible. To my beloved Alma Mater, The Eulogio “ Amang” Rodriguez Institute ofScience and Technology.

To my Professor, Engr. Minerva Zoleta for his ideas for requiring me to make this project in order to learn more about this subject, our sincerest gratitude. Republic of the Philippines EULOGIO “ AMANG” RODRIGUEZ INSTITUTE OF SCIENCE AND TECHNOLOGY Nagtahan, Sampaloc Manila COLLEGE OF ENGINEERING DEPARTMENT OF COMPUTER ENGINEERING (2nd Semester S. Y. 2012-2013) LAN Design for AC Mojares Construction Company Office No. 400 Tandang Sora ave, brgy. Culiat, Quezon City, Metro Manila Submitted By: REYMOND D. BALASANGAY Submitted to: ENGR. MINERVA C. ZOLETA Date Submitted: February 19, 2013 SIGNIFICANCE OF THE STUDY

A local area network, often abbreviated to LAN is an interconnecting computer network which links up computers in one building such as a school, different rooms within a home, computer laboratory or an office or offices within a building. The term is used to describe a small localized network of joined up computers. On a larger scale a wide area network, abbreviated to WAN is often set up over a much larger area, between different buildings and sometimes stretching between different countries. Local area networks often have superior data transfer rates to wide area networks and there is usually no need for a leased telecommunication line.

One of the most important features of a local area network is how the information is shared between computers. Previously ARCNET, Token Ring and other similar technology standards have been used to connect computers on a LAN, however, these days Ethernet (over twisted pair cabling) and Wi-Fi are now the main forms of communication technology which enables computers to share information on a LAN. A big issue with LAN is safety and security of information shared. There is little doubt that tablets and smart phones have revolutionized learning for educational campuses, but safety is often overlooked.

Network security threats and challenges on traditional port-based firewalls can be a real headache for those operating a LAN. It’s important to ensure the LAN has application visibility and control to safeguard against harmful or inappropriate content too. Some companies in the Healthcare sector are now using wireless LANs to access patient medical records from mobile devices at the patient’s bedside. This has potential to improve patient care and treatment accuracy. It can also reduce the overall cost ofhealthcare delivery by alleviating duplication of effort and inefficiency associated with hard copy patient records.

Many world–leading organizations like T–Mobile, Ministry of Defense, Prudential and many sections of the NHS and the public sector now employ LANs, its big business around the world. Network companies offer their knowledge – from infrastructure to security, mobility and collaboration – for support everywhere the network reaches. They can also help a client choose a network with the smartest new technology built in. Typical areas where a third party network company can help a large company include: Systems Integration, Data Recovery, Application Development, It Support Services, Network Security Services and Penetration Testing.

From initial feasibility study and design, to full implementation and support, LANs help companies deliver the solutions that give their businesses advantages within communication, with no limits. SCOPE AND DELIMITATIONS An office is generally a room or other area where people work, but may also denote a position within an organization with specific duties attached to it the latter is in fact an earlier usage, office as place originally referring to the location of one's duty. An office is an architectural and design phenomenon and a social phenomenon, whether it is a small office such as a bench in the corner of a small usiness of extremely small size (see small office/home office) through entire floors of buildings up to and including massive buildings dedicated entirely to one company. In modern terms an office usually refers to the location where white-collar workers are employed. This design helps to create a more efficient Local Area Network design of an office that will satisfy the needs of employees/users and make the easiest way to connect with other workstations and to develop an easy way of file sharing.