Minor Project- Report

Aug-2019-2020

Course Faculty: Swapna Racherla Course Name & code: Computer Networks & 19CS5DCCNW

Semester:V-C Date:

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| TITLE OF THE PROJECT | Client Server Architecture using Cisco Packet Tracer | | | |
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| INDIVIDUAL  CONTRIBUTION |  |  |  |  |
| GUIDE | Swapna Racherla | | | |
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| PROJECT ABSTRACT : | Generalization/Inheritance is a feature in network topology that **allows access control entry for an object whose network routes are being configured to be propagated to other objects**.This project shows how a higher department in an organization gets access to multiple (here two) objects while the sub-departments gets access to their respective objects. Here lets consider the departments as department A with object A, department B with object B and department S which has access to both object A and object B, here objects can be a server,database etc.  To make sure the servers are accessed by genuine users, sniffers are implemented through which we can keep a track of MAC addresses of the Systems accessing the servers.  The above topology which was implemented for one organization with sub departments is expanded through a router and is connected to an another organization which implements the same concept.  The complete topology as mentioned above could be considered as a server organization. This server organization provides information regarding the organization to its clients through 2 information servers.  In the client side network **OSPF has been implemented in order to provide faster access** to the information servers and faster communication between the clients. | | | |
| PLATFORM USED  (H/W & S/w tools to be used | Cisco Packet Tracer | | | |
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| Introduction | This project is about designing a topology that implements generalization property where objects from two LANs (departments) is being accessed by a super LAN, along with communication between the three LANs.  Consider a college network scenario which consists of two branch departments and a IT department.For example,from DSCE , we are considering the branches as CSE and ISE .Assuming a scenario where CSE branch students are to receive a notice,question paper etc from **server X** and ISE branch students from **server Y**.To validate these notices the IT department needs access to both server X and server Y. This topology can also provide security and authentication from server side.Similarly we can also consider a network scenario in an organization with many departments arranged in hierarchical order.  This project also implements client server architecture topology where the server provides information about its environment to the client(students) ,here we can consider an organization as a server and the clients as the students, the organization provides the information regarding its nature of academics through servers which can be accessed by the students. The students interact amongst themselves and with their servers in a well established and fast network. | | | |
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| Design |  | | | |
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| Project Source Code Link (Github/ Google DRive) |  | | | |
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| Conclusion /FUTURE ENHANCEMENT |  | | | |
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| Ui sCreenshots |  | | | |