Minor Project- Report

Aug-2021-2022

Course Faculty: Ramya KM Course Name & code: CN Lab,19CS5DlCNL

Semester: V Date: 16-12-2021

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| TITLE OF THE PROJECT | IPSEC VPN Tunnelling | | | |
|  |  | | | |
| STUDENT NAME | Abhishek Battula | Abhishek PV | Adarsh Shenoy | Adhoksh P |
| USN | 1DS19CS005 | 1DS19CS006 | 1DS19CS007 | 1DS19CS008 |
| GUIDE | Dr. Deepak G, Prof Sunanda, Prof Ramya KM | | | |
|  |  | | | |
| PROJECT ABSTRACT: | IP-sec is a group of protocols that are used together to set up encrypted connections between devices. It helps keep data sent over public networks secure.  IP-sec is often used to set up VPNs, and it works by encrypting IP packets, along with authenticating the source where the packets come from  Within the term "IP-sec," "IP" stands for "Internet Protocol" and "sec" for "secure." The Internet Protocol is the main routing protocol used on the Internet; it designates where data will go using IP addresses.  VPN is an encrypted connection between two or more PC. VPN connections take place over public networks, but the data exchanged over the VPN is still private because it is encrypted.  It is used to transfer the important data over public internet securely.  In our project we will demonstrate IPSEC VPN Tunneling using Cisco Packet Tracer (CPT). We will accomplish this using the capabilities offered by CPT and simulating an environment where we can see a VPN working. | | | |
|  |  | | | |
| DESIGN | R1 config  r1  ISP config  isp  License  license  Access List  acl  IPSEC config  ipsecConfig  IPSEC Transform  ipsecTransform  ISAKMP  isakamp  Basic Topology  design | | | |
| PLATFORM USED  (H/W & S/W TOOLS TO BE USED | Cisco Packet Tracer | | | |
|  |  | | | |
| PROJECT SOURCE CODE LINK (GITHUB/ GOOGLE DRIVE) |  | | | |
|  |  | | | |
| CONCLUSION /FUTURE ENHANCEMENT | IPSEC VPN Tunneling is achieved and data is encrypted and transferred successfully.  We aim to create multiple tunnels between different networks to allow for secure transmission of data between these networks | | | |
|  |  | | | |
| UI SCREENSHOTS | 12design  sec | | | |