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|  | |  |  | | --- | --- | | VPNS | PROXY | | Reroute the whole operating system | Only reroute the application traffic | | VPNs are risky according to security to security | Less safe than VPNs according to security | | They are vulnerable to cyber attacks | Proxy owners may be able to view the other data | | Are encrypted | Are not encrypted | | Use fully encrypted tunnels | Offer strict no-log policies |     **DIFFENCES BETWEEN IPV6 AND IPV4**   |  |  | | --- | --- | | **IPV4** | **IPV6** | | Deployed in 1981 | Deployed in 1998 | | 32-bit Ip address | 128-bit Ip address | | 4.3 billion addresses | 7.0\*10^22 addresses | | Addresses must be reused and masked | Every device has a unique address | | Numeric dot decimal notation | Alphanumeric hexadecimal notation | | DHCP or manual configuration | Supports autoconfiguration | |  |  | |  |  |     **WELL, KNOWN MAIN PORTS**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **PORT** | **TCP** | **UDP** | **NAME** | **DESCRIPTION** | | 1 | / | / | Tcp | Tcp port multiplexer | | 18 | / | / | Msp | Sends text messages | | 22 | / |  | Ssh | Secure shell service | | 23 | / |  | telnet | telnet service | | 25 | / |  | Smtp | Simple mail transfer protocol | | 53 | / | / | Domain | DNS name resolver | | 69 | / | / | tftp | Trivial, file transfer protocol | | 80 | / | / | http | Hypertext transfer protocol | | 88 | / | / | Kerberos | Network authentication system | | 109 | / |  | Pop2 | Post office protocol v2 for email communication | | 110 | / |  | Pop3 | Post office protocol v3 for email communication | | 161 |  | / | Snmp | Simple network management protocol | | 162 | / | / | Snmptrap | Simple network management protocol | | 220 | / | / | Imap3 | IMAP v3 for email communication | | 443 | / |  | https | HTTPS (HTTPS over SSL/TLS | | 444 | / | / | Snppp | Simple network paging protocol | | 464 | / | / | Kpasswd | Kerberos password change | | 520 |  | / | Router | Routing information protocol | | 992 | / |  | Telnets | telnet over SSL/TLS | | 993 | / |  | Imaps | IMAP over SSL/TLS | | 995 | / |  | Pop3s | POP3 over SSL/TLS |     DATA ENCAPSULATION -The process in which some extra information is added to the data item to add some features on it.  **TYPES OF PORTS**  ·         Serial port  ·         Parallel port  ·         USB port  ·         Ps/2 port  ·         VGA port  ·         Modem port  ·         Firewall port  ·         Sockets  ·         Infrared port  ·         Game port  ·         Digital video interface (DVI) port  ·         Ethernet port   |  |  | | --- | --- | |  |  | |  |