- ***Network***
- ***Eng/ Ahmed sayed***
- ***Ahmed Abdelgaber Mortada***
- ***17/7/2023***

What is IPV6:

Internet Protocol version 6 (IPv6) is the most recent version of the Internet Protocol (IP), the communications protocol that provides an identification and location system for computers on networks and routes traffic across the Internet. IPv6 was developed by the Internet Engineering Task Force (IETF) to deal with the long-anticipated problem of IPv4 address exhaustion, and was intended to replace IPv4.[1] In December 1998,

IPv6 NAT:

IPv6 NAT helps to translate IPv4 addresses to IPv6 addresses of network devices. IPv6 NAT also helps to translate the address between IPv6 hosts. IPv6 NAT supports source NAT, destination NAT, and static NAT.

What Is A Public IPv6 Address?

A public IPv6 address is an IP address which is accessible by anyone on the Internet. To avoid upsetting the order, the public IPv6 address is often globally unique. It can only be assigned to a unique device such as a web server, an email server or any server device directly accessible from the Internet. Therefore the public IPv6 address is usually provided by the Internet Service Provider (ISP).

What Is Private IPv6 Address?

Taking up a small part of the massive IPv6 address space, the private IPv6 is for special requirements and private use in IPv6 networks. These private IPv6 addresses are only local to a specific link or site, therefore they are never routed outside a particular network. Based on their scope, private IPv6 addresses can further be divided into site-local and link-local addresses. The site-local address has the scope of an entire site or organization. Link-local address, on the other hand, has a smaller scope and only refers to a particular physical link.