Internet Protocol is the dominant general purpose networking protocol in use today. It runs over an astounding number of physical media. Internet Protocol version 4 (IPv4) – is the fourth iteration of the Internet Protocol (IP) – is the basis of the TCP/IP communication protocols used to transport data, voice and video packets over the Internet. Internet Protocol version 6 (IPv6) is the next-generation network protocol, which has been standardized to replace the
current IPv4. It holds great promise to become the backbone of the future of the Internet and offers a significant improvement over IPv4 in terms of scalability, security, mobility and convergence.

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**Index Terms**

Computer Science  
Ubiquitous Computing

**Key words**

IPv6  
IPV4  
Network Address  
Translation(NAT)  
Header