IPv6

Protocol of the Future

Advantages

- Larger Address Space

- More Efficient Routing

- New Configuration Options

- Integrated Security

- Standard QoS Support

Larger Address Space

- 128 Bit Addresses

- $3.4 * 10^{38}$

- More Levels of Subnetting

- Can use IPv4 and IPv6

More Efficient Routing

- Not Behind NAT or Firewall

- Much Smaller Routing Tables

- Direct Connections

New Configuration Options

- Can Still Manually Configure

- Link Local Addressing

- Extensible Headers

Integrated Security

- IPSec Completely Integrated

- Not OS Dependent

Standard QoS Support

- Routers Can Identify Flow

- QoS Included in Packet Header

- QoS + IPSec