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IPv6 vs. IPv4

IPv6 is a new system of creating IP addresses to replace the old IPv4 system. Each device that connects to the internet needs a unique IP address, but under the IPv4 system there are only 4.3 billion possible addresses (Rashid, 2018). There are many more than 4.3 billion devices connected to the internet, and that number is increasing more and more quickly. IPv6 allows the creation of up to 340 undecillion addresses (Rashid, 2018). That is an enormous number that should last us a couple thousand years into the future.

One of the advantages for businesses implementing IPv6 in their networks is increased security. IPv6 is the most modern and secure version of IP addresses.

Switching an entire network over to IPv6 is a complex, expensive, and time-consuming process. Due to the increased complexity, the IT staff needs to be retrained on the new system. Retraining costs can be huge because of network down time, errors caused by the new system, and security lapses (Spindel, 2018). There are a lot of new compatibility issues with legacy hardware as well. Older devices don’t recognize IPv6 and requires software to bridge the gap between IPv6 and IPv4 (Spindel, 2018). All these obstacles are slowing the adoption of IPv6 in business, even though it is a better protocol than IPv4.

Works Cited

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