Analysis of IPv6 Stateless Address Auto configuration in Campus Network Environment

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Abstract: The techniques and methods used by campus network designer during IPv6 (Internet Protocol version 6) implementation in campus network design, The most important stages of systems development are analysis and design, which represent a solid foundation to build strong systems that are free from errors. The motivation of this research is the existence of problems that impede getting exact output after the IPv6 deployment by the campus network designer. Several techniques have already been developed in IPv6, even though many different and complex problems must be solved in IPv6 design, problems are manifestly compounded when campus networks are designed. Issues arise which May not easy to trace back the owner of a Stateless Address Auto configuration (SLAAC) when it is no more live in network. In this paper present an IPv6 design and philosophy that supports the sharing of resources that exist in campus network environment. The research concentrates on discovering the problems during the IPv6 implementation in campus network. The required data were collected using Graphical Network Simulator (GNS) which formulated and judged and distributed to the target problems.

Keywords: IPv6, Campus Network, Stateless Address Auto configuration, Stateful DHCP for IPv6