Objective

The objective of this document is to show you how to configure IPv6 tunnels. The IPv6 Tunnel configuration is a method to connect IPv6 hosts or networks to each other over an IPv4 backbone. The ISATAP (Intra-Site Automatic Tunnel Addressing Protocol) enables encapsulation of IPv6 packets within IPv4 packets for transmission over IPv4 networks. This method of choice for users or networks not only allows them to connect to the IPv6 Internet with an IPv4 connection but it also permits users to communicate with other 6to4 users, as well as users of native IPv6 connections. In order to configure a tunnel, a user must configure an ISATAP tunnel and define an IPv6 interface for the ISATAP tunnel.

Applicable Devices

• Sx500 Series Stackable Switches

Software Version

• v1.2.7.76

Configure IPv6 Tunnel Settings

Step 1. Log in the web configuration utility and choose IP Configuration > Management and IP interfaces > IPv6 Tunnel. The IPv6 Tunnel page opens:
Step 2. In Source IPv4 Address field, click either Auto, None or Manual to indicate the source of the IPv4 Address.

- Auto — The switch automatically configures the source IPv4 address.
- None — The user decides there should be no address.
- Manual — The user has to enter a valid IP address explicitly.

Step 3. In Tunnel Router’s Domain Name field, click either Use Default or User Defined to define the domain name.

- Use Default — Choose this option if the user wishes to use the default name "ISATAP."
- User Defined — Choose this option if the user wishes to define another name.

Step 4. In Query Interval field, click either Use Default or User Defined to decide the time in seconds between DNS queries for this tunnel.

- Use Default — Choose this option if the user wishes the time interval to be 10 seconds.
- User Defined — Choose this option if the user wishes to set another time interval between 10-3600 seconds.

Step 5. In ISATAP Solicitation Interval field, choose either Use Default or User Defined to configure the interval between the ISATAP router solicitation messages when there is no active ISATAP router.

- Use Default — Choose this option if the user wishes the time interval to be 10 seconds.
- User Defined — Choose this option if the user wishes to set another time interval between 10-3600 seconds.
Step 6. In ISATAP Robustness field, choose either **Use Default** or **User Defined** to configure the number of DNS Query/Router Solicitation refresh messages that the device sends.

- **Use Default** — Choose this option if the user wishes the time interval to be 3 seconds.
- **User Defined** — Choose this option if the user wishes to set another time interval between 1-20 seconds.

Step 7. Click **Apply** to save the configuration.