

1) Zeroshell Installation

cf. <http://digilander.libero.it/smasherdevourer/schede/linux/Zeroshell%20su%20HD-EN.pdf>

2) Setting up the QoS system on Zeroshell

In Order to install a QoS system with Zeroshell, you need to have 3 NICs on you computer. The third NIC ETH02 will be dedicated to the web management of Zeroshell, the first two ETH00, ETH01 will be used for the bridge which will help us to control and monitor the QoS.

After having choice the different interfaces functions, you will have to create a bridge between two interfaces here ETH00, ETH01 in the zeroshell System > Setup > Network menu by clicking on New bridge.

The screenshot shows the Zeroshell Net Services web interface. The 'Network' tab is selected, displaying a list of network interfaces and a newly created bridge named BRIDGE00 (ETH00,ETH01). The bridge is in 'Forwarding State' and is a member of the BRIDGE00. The interface ETH02 is also visible, which is dedicated to web management. The system status shows CPU (2) Intel(R) Xeon(TM) CPU 2.40GHz, 2392MHz, Uptime 0 days, 16:45, Load 0.00 0.00 0.00.

Bridge Interface Configuration

>> Interface: BRIDGE01

Save Close

Description

Forwarding Parameters

Forward Delay
Ageing Time
 Spanning Tree Protocol
Bridge Priority
Hello Time
Max Age

Available Interfaces

>>>
<<<

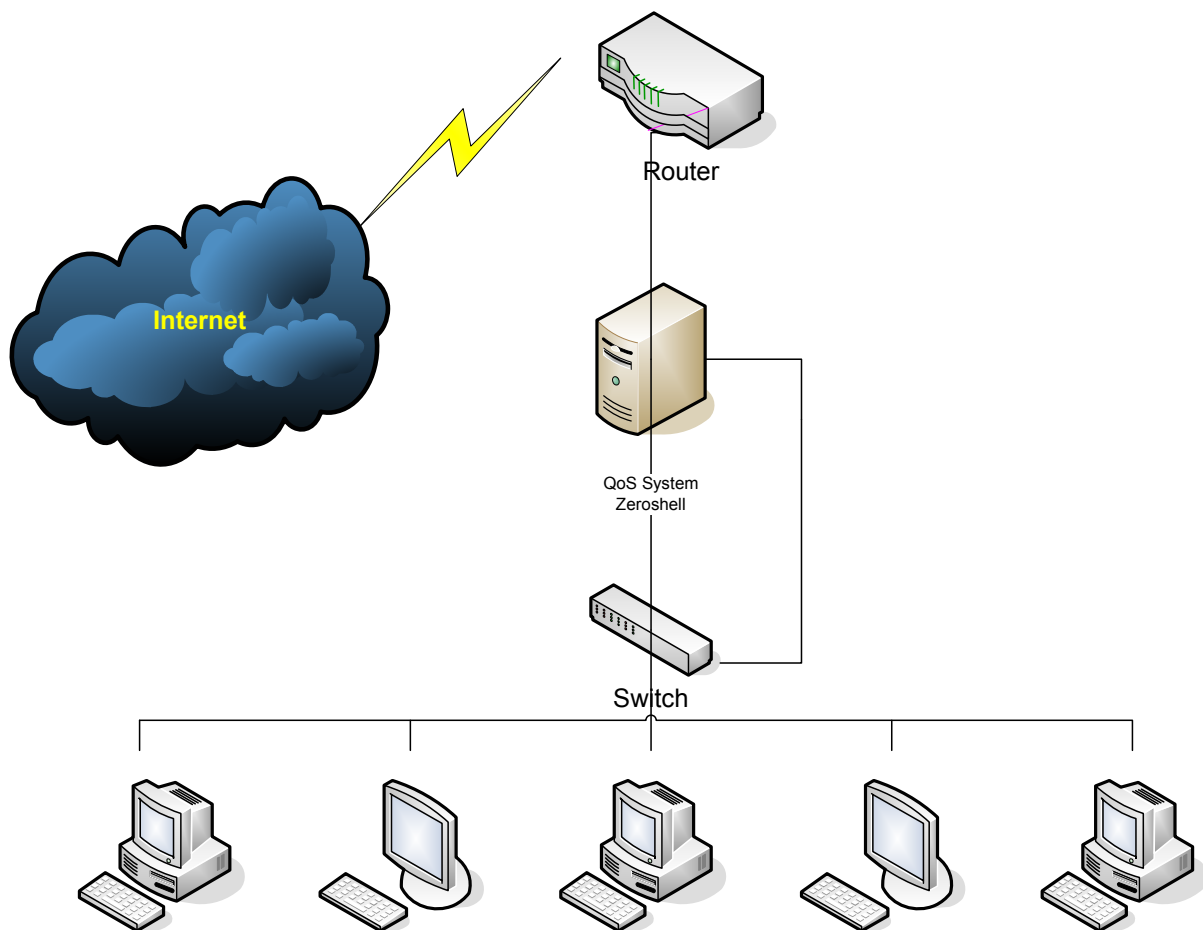
Bridge Components

When the bridge is created you have to activate the QoS service on the two bridge interfaces ETH00 and ETH01.

Your QoS system is installed.

3) Where the QoS system should be placed?

The QoS system have to be placed between your Internet Service Provider router and your LAN Local network just see below.



4) How to create a QoS rule?

To create a QoS rule, you have to go first on the Network > QoS menu, create a class in the Class Manager Menu for instance a SSL class with High Priority.

After that, you should also create a SSL rule with the L7 Manager targeted on the SSL Class in the classifier menu.

And finally, you have to activate the class for each bridge interfaces ETH00 and ETH01.

The screenshot displays the Zeroshell Net Services interface, specifically the Quality of Service (QoS) configuration page. The interface is divided into several sections:

- Header:** Shows the Zeroshell logo, version (1.0.beta12), and system information (CPU, Uptime, Load, Avg).
- Navigation:** Includes tabs for Quality of Service, Interface Manager, Class Manager, Classifier, Statistics, Graphics, and L7 Filter.
- Left Sidebar:** Contains a menu with categories like SYSTEM, USERS, NETWORK, SECURITY, and Todo List.
- Main Content:** Displays configuration for three interfaces: ETH00, ETH01, and ETH02. Each interface section includes:
 - Interface name and speed (e.g., ETH00 100Mb/s Full Duplex).
 - Device information (Intel Corporation 82557/8/9/0/1 Ethernet Pro 100 (rev 05)).
 - QoS Status (Enabled/Disabled) and Max/Guaranteed bandwidth.
 - A table of classes with columns: Class, Description, Priority, DSCP, Max Bandwidth, and Guaranteed.
 - Buttons for Global Bandwidth, Add Class, Modify Class, and Remove Class.
- Log:** A message box at the bottom shows successful configuration updates for the interface ETH01.

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