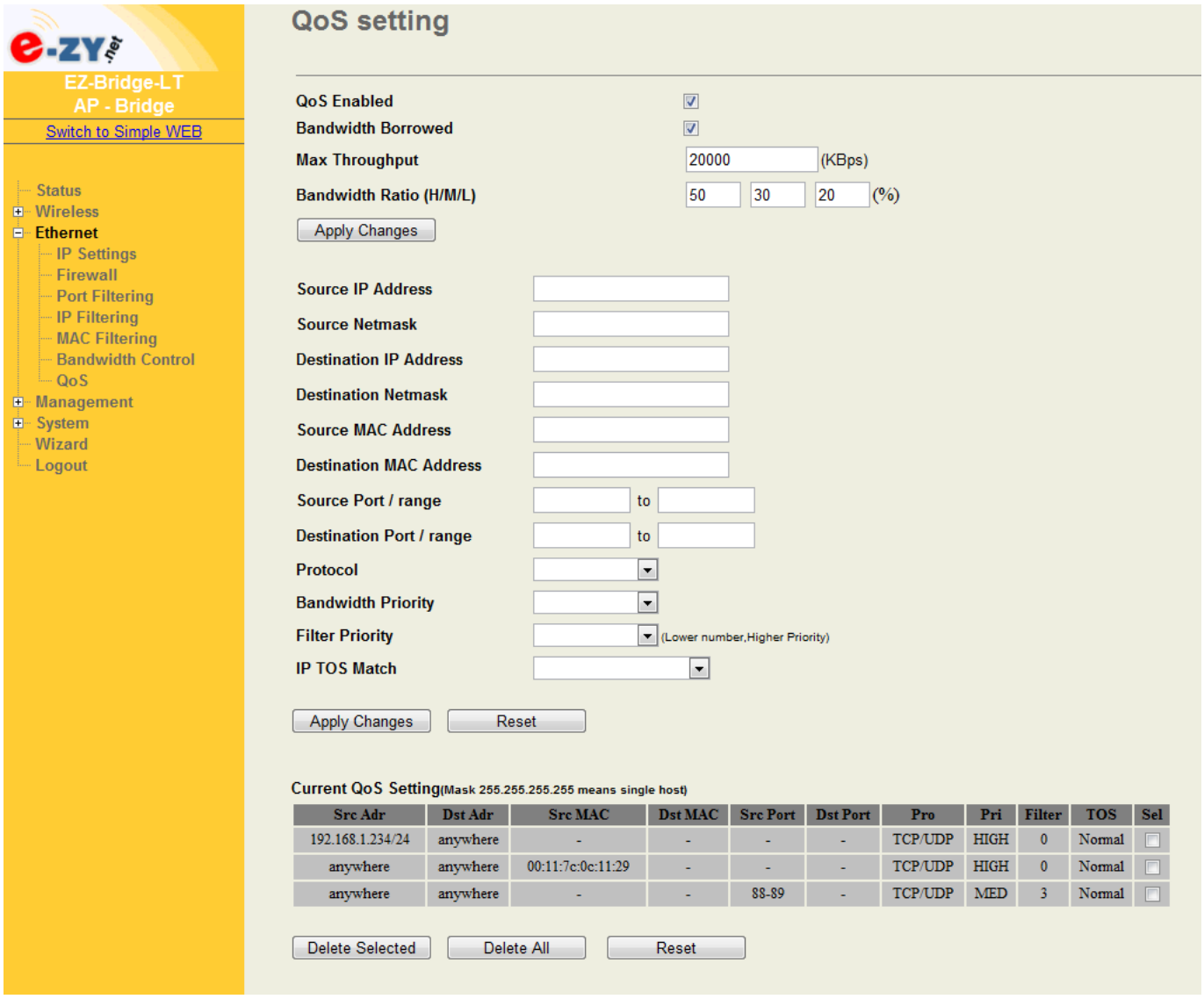
Some Notes on QoS Settings

Summary: In most cases customers use the EZ-Bridge as it is configured out of the box and they get great results with streaming video and VoIP applications. In some cases a customer might want to make sure that services like VoIP have priority in the EZ-Bridge communications. In these cases the customer has to have some in-depth knowledge of his netywork and he can then use the QoS settings in the EZ-Bridge to control priority on different types of IP traffic across the bridge. We are providing these notes to help the advanced customer to understand how QoS can be implemented. First thing is to switch to advanced web in the EZ-Bridge interface.



In order for the bandwidth to be used by anyone when not used by Higher priorities you should check the "Bandwidth Borrowed" checkbox.

Then there is the "Max Throughput" field which, as the name suggests, sets the maximum throughput that will be allowed to pass. We recommend leaving at default.

There are 3 priorities, so you can separate your traffic into 3 categories. For these 3 priorities you can specify the percentage of the total throughput they will get. (Of course if "Bandwidth Borrowed" is checked the bandwidth can

all be used by lower priority if not needed by a higher one)

After you have specified the bandwidth percentage for each priority you will have to assign the traffic for each one. This can be done by several ways as you see in the settings. For example you can assign traffic to each priority by IP address (source and/or destination), MAC address, port, etc. For each rule you can make combinations and select the "Bandwidth Priority" to assign the traffic to.

For VoIP traffic you need to be able to determine how to tell the system that the traffic is VoIP. This could be by assigning the MAC address for each VoIP device or IP address of each VoIP device. You can set the destination IP address so all traffic to a VoIP interface device takes priority. You can you set the TOS bits, or is it some standard protocol used like SIP/RTP that you can specify what ports are used?

For example if the traffic was coming from specific devices that you knew the IPs, you could create rules filling the "Source IP Address" field and setting "Bandwidth Priority" to High.

Or as another example if you could set the TOS bits in your VoIP devices, to 0x10 (Minimize Delay) for example then you could create a rule selecting Minimize Delay in "IP TOS Match" and setting "Bandwidth Priority" to High.

Typically you only need to setup QoS on one side of the bridge. Usually QoS would be setup on the side of the bridge that is generating the traffic that you want to prioritize, which would normally be the remote side.