ServerIPAddress	The LAN side IP address to forward the packet to when it is received at a port on the WAN side within the port range in this rule with matching transport protocol	

QoS Settings

QoS only applies to upstream traffic to the WAN side. The QoS settings described here takes effect in router mode only. It is based on Traffic Control(TC) and Hierarchy Token Bucket (HTB). Refer to the HTB home pages for details on TC and HTB (http://luxik.cdi.cz/~devik/qos/htb/).

Four priority classes of upstream traffic are defined in the OBi QoS policy: The Restricted class has the highest priority, followed by the High, the Medium, and the Low classes. To fully utilize the upstream bandwidth, it is important to have a relatively accurate upstream bandwidth estimation configured in the UpStreamBandwidth parameter; this tells the OBi the total upstream bandwidth to allocate to the four priority classes.

The guaranteed uplink bandwidth for Restricted class traffic is configured in the RestrictedBandwidth parameter. The rest of the upstream bandwidth (the UpStreamBandWidth less the RestrictedBandwidth) is divided among the High, Medium,and Low classes proportionally according to the assigned weighting factor for each class in the configuration. Let W_{high}, W_{medium}, and W_{low} be the respective weight assigned to the High, Low, and Medium classes, the corresponding guaranteed uplink bandwidth for each class is calculated using the following formulae:

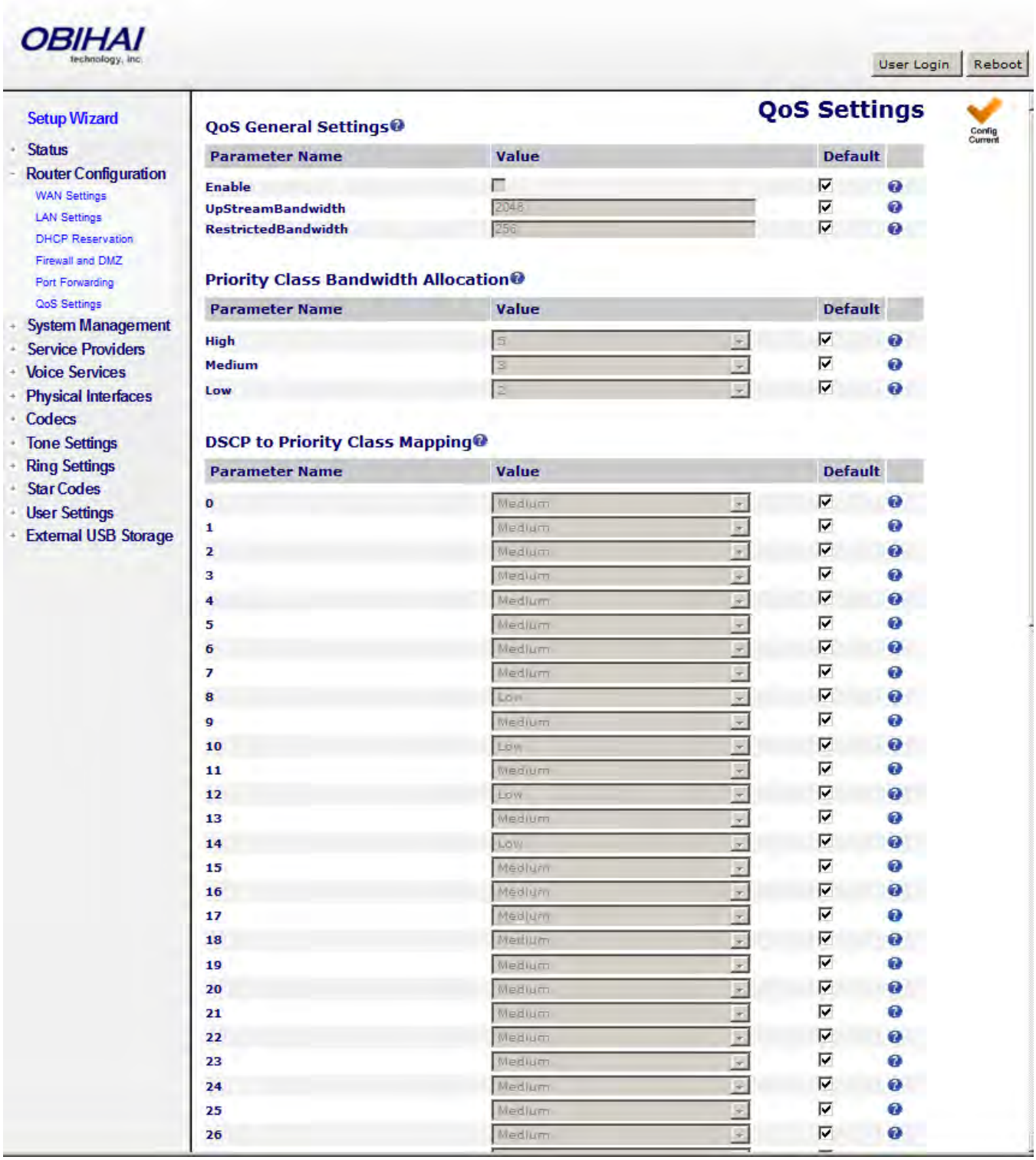
BW_{high} = (UpstreamBandwidth – RestrictedBandwidth) * W_{high} / (W_{high} + W_{medium} + W_{low}) (Kbps)

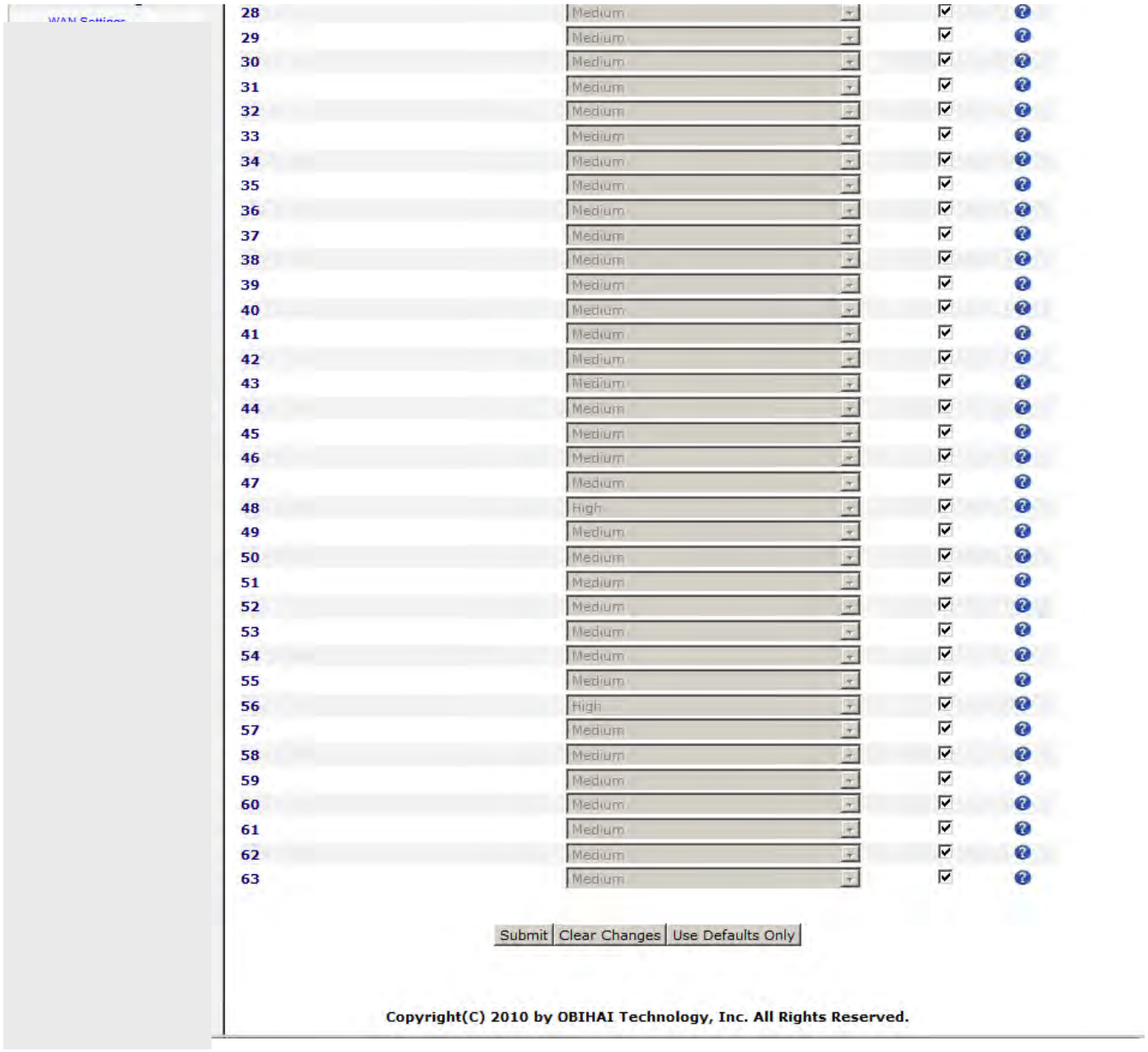
BW_{medium} = (UpstreamBandwidth – RestrictedBandwidth) * W_{medium} / (W_{high} + W_{medium} + W_{low}) (Kbps)

BW_{low} = (UpstreamBandwidth – RestrictedBandwidth) * W_{low} / (W_{high} + W_{medium} + W_{low}) (Kbps)

The native voice related traffic is always classified as Restricted. Other network packets are classified based on the Differentiated Service Code Point (DSCP) in their IP headers. The 64 possible DSCP codes (0 – 63) can be mapped into one of the four priority classes using the configurable DSCP to Priority Class Mapping table.

Below is a screen shot of the QoS Settings web page.





QoS Parameter Guide:

Parameter	Description	Default Setting
QoS General Setting		
Enable	Enable QoS Service (take effect in router mode only)	No
UpStreamBandwidth	The total upstream bandwidth in Kbps	2048
RestrictedBandwidth	The guaranteed bandwidth for Restricted class traffic in Kbps	512
Priority Class Bandwidth Allocation		
High	The guaranteed uplink bandwidth allocation weight for High Priority class traffic. It must be a value between 1 and 10	5
Medium	The guaranteed uplink bandwidth allocation weight for Medium Priority class traffic. It must be a value between 1 and 10	3

Low	The guaranteed uplink bandwidth allocation weight for Low Priority class traffic. It must be a value between 1 and 10	2
DSCP to Priority Class Mapping		
N (*N* = 0 – 63)	The priority class to be assigned to the packet which has the DSCP code equal to *N* in the IP header. The choices are: Restricted High Medium Low Note: Restricted class has the highest priority	For *N* = 8, 10, 12, or 14, the default is Low. For *N* = 48 or 56, the default is High. For all other DSCP codes, the default is Medium

OBiWiFi Wireless USB Adapter

Note: OBiWiFi is available on the OBi2 Series and OBi3 Series models only.

OBiWiFi supports the 8021.11 b/g/n wireless standards so that an OBiWiFi Wireless Adapter may be used with the USB 2.0 port of the OBi2 Series and OBi3 Series devices. From an IP routing point of view, OBiWiFi is an additional WAN interface. If both WAN interfaces are connected (Ethernet port and OBiWiFi), the traffic destined to the WAN side will route through the Ethernet interface only, unless a) the WAN (Ethernet) interface and OBiWiFi are on different subnet and b) the destination address is on the same subnet as OBiWiFi.

If the OBi is set to function as a LAN switch rather than a router, OBiWiFi is disabled internally.