

# IQUILA

SOFTWARE DEFINED NETWORKS

## **iQuila Enterprise VoIP / QoS Support Function**

IQ22087r2

**This Document Applies to:**

**iQuila Cloud**

**iQuila Enterprise**

[www.iQuila.com](http://www.iQuila.com)

## VoIP / QoS Support Function

iQuila Enterprise incorporates advanced priority control technology (VoIP / QoS processing technology) whereby communication packets for IP telephone, such as VoIP packets in the VEN tunnel, can be transmitted at low delay and low jitter even if the networks have low bandwidth.

What is VoIP / QoS Support Function?

Communications that demand low delay / low jitter, such as VoIP packets require priority in processing over ordinary communications packets (such as downloading large files). A generic name for the technology for securing bandwidth and priority control is Quality of Service (QoS) technology. Many conventional network devices such as IP routers and layer 3 switches support QoS.

All Ethernet frames used to receive equal processing (cueing, transmission) in VEN tunnels configured by encapsulating packets by TCP/IP.

Other technologies used with iQuila Enterprise, can be used with QoS processing for communications, the various packets flowing through the iQuila VEN tunnel, by automatically conducting priority control and securing bandwidth that is according to priority information, communication packets demanding low delay and jitter, such as VoIP, can be given priority for VEN transmission over other packets.

Sound quality can be dramatically enhanced when using IP telephone via iQuila Enterprise when networks are mixed with different traffic, such as file downloads, etc.

When QoS is enabled, even if there is large amounts of communication packets (file download, etc.) flowing through the iQuila VEN network, VoIP packets can be provided with high priority for transmission within iQuila Enterprise, thereby dramatically enhancing sound quality when using IP telephone via iQuila Enterprise. This function can be used regardless of the router on the physical network in which the communication packets, are flowing supports QoS.

iQuila Enterprise Layer 2 Bridging enables you to connect multiple separate LANs enabling a single VoIP network across multiple offices in different locations. If the VoIP / QoS support function is enabled, communication for IP telephone (VoIP packets) is always given higher priority than other traffic for bands, even if the network is congested with traffic other than IP telephone, when the priority control header is set for packets that needs to be sent, priority control is automatically conducted on iQuila VEN without requiring any configuration by end users.

VoIP / QoS support function checks the value of the priority rank header in the IP packet, and if the value is to be priority controlled, it has marked as such and priority control is executed.