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1 Introduction

This document defines an interface for service providers to set upstream and downstream speed rates in AVM FRITZ!OS to configure Quality of Service (QoS) parameters for traffic control and shaping. The Line-ID can also be notified to FRITZ!OS for enduser purposes.

Using the speed rates over this interface is especially useful for service providers if they have customers with line speeds exceeding the speed rates declared in their contract. For instance, on a DSL line the synchronized speed is 100/40 Mbit/s, but the customer signed a contract that offers only 50/10 Mbit/s. In this case the service provider can utilize this interface to set the speed rates to 50/10 Mbit/s, so that FRITZ!OS will automatically adopt these new speed rates and set up the internal shaping parameters accordingly. This will ensure proper QoS configuration in FRITZ!OS for services such as voice or others, even during high data load situations.

In addition to the speed rates, the type of rate will be transferred. The type can be either layer 2 (L2; Ethernet) or layer 3 (L3, IP only). FRITZ!OS will interpret the transferred speed rates with respect to the type provided. L2 means that the speed rate already includes the Ethernet header – this is not the case for L3.

For clarification: Normally, Ethernet frames are transmitted in any case. But the type of rate instructs the FRITZ!OS to interpret the rate as a value either including the Ethernet header(L2) or not(L3).

FRITZ!OS will check the plausibility of the transferred speed rates. If the speed rates are very close to or higher than the line speed, FRITZ!OS will use the line speed rate instead.

This allows the service provider to deliver customers speed rates irrespective of the available line speed.

The Line ID is provided only for information purposes and is displayed in the WebUI of the FRITZ!Box.

The information will be transferred to the FRITZ!OS via PPP authentication and will be set in the PPP-PAP/CHAP ACK/NAK response message (RFC 1334, 1994).
2 Variables

2.1 Speed rate downstream

SRD=xxxx

xxxx = speed rate in Kbit/s (1 Kbit/s = 1000 Bit/s)

2.2 Speed rate upstream

SRU=yyyy

yyyy = speed rate in Kbit/s (1 Kbit/s = 1000 Bit/s)

2.3 Speed rate type

SRT=zz

zz = speed rate type. Possible values are L2 or L3.

If the speed rate type is not delivered, the default value L3 will be used.

2.4 Line ID

LID=line-id

line-id = The Line ID.
3 Syntax

All parameters are optional. The ACK/NAK response message must have the following format:

SRD=xxxx#SRU=yyyy#SRT=zz#LID=line-id#

For example:

SRD=50000#SRU=10000#SRT=L2#LID=PROVXYZ.DEU.VL.ABCD#

or

SRD=50000#SRU=10000#LID=PROVXYZ.DEU.VL.ABCD#

or

LID=PROVXYZ.DEU.VL.ABCD#

Sample trace