

# Table of Contents

|                                       |   |
|---------------------------------------|---|
| <b>Framed-Route</b> .....             | 3 |
| <b><i>Framed-IPv6-Route</i></b> ..... | 3 |
| <b><i>Accounting</i></b> .....        | 3 |



# Framed-Route

Stingray Service Gateway with L2 BRAS/BNG supports Framed-Route attribute in Access-Accept response for small (up to /24) subnets. The attribute format is the string "subnet gateway":

```
# Canonical format according to RFC 2865 p.5.22 - subnet, gateway and
other metrics
Framed-Route:="192.168.1.0/24 192.168.1.1 1 2 -1 3 400"

# Only subnet and gateway can be specified
Framed-Route:="192.168.1.0/24 192.168.1.1"

# If the gateway = 0.0.0.0, then Framed-IP-Address is considered a
gateway
Framed-Route:="192.168.1.0/24 0.0.0.0"
```

You can set no more than 16 attributes Framed-Route in Access-Accept.

All IP-addresses of the specified subnet will be routed through the specified gateway address. This means that gateway IP-address has to be recognized by Stingray Service Gateway - either by authorization ([DHCP](#), [ARP](#), [PPPoE](#)), or by setting L2-properties of gateway [manually](#). Also, the gateway IP address must be allocated to the multi-bind subscriber (when authorizing a gateway, the [VasExperts-Multi-IP-User=1](#) attribute must be returned).

SSG saves the routes in the UDR. There are CLI-commands [framed route](#) for management.

## Framed-IPv6-Route

Framed-IPv6-Route attribute, which sets routing of IPv6-subnet through specified gateway, is processed like IPv4 Framed-Route. Only small subnets are supported (up to /56, or it is better to say up to [ipv6\\_subnetwork](#) - 8):

```
# Canonical format according to RFC 3162 p.2.5 - subnet, gateway and
other metrics
Framed-IPv6-Route:="2000:0:0:106::/60 2000::107:a00:20ff:fe99:a998 1"

# Only subnet and gateway can be specified
Framed-IPv6-Route:="2000:0:0:106::/56 2000::107:a00:20ff:fe99:a998"

# If the gateway = ::, then Framed-IPv6-Address or Framed-IPv6-Prefix is
considered a gateway
Framed-Route:="2000:0:0:106::/56 ::"
```

## Accounting

Counters for a subnet will be transmitted in total in one gateway accounting session for that subnet. For example, for such a task

```
Framed-Route:="192.168.1.0/24 192.168.1.1"
```

total subnet traffic 192.168.1.0/24 will be taken into consideration in the accounting-session for the gateway 192.168.1.1.