

# Содержание

<b>GTP Tunneling Protocol Settings</b> .....	3
<b>Section "fast-epdg.tunnel.pgw"</b> .....	3
<b>Section "fast-epdg.tunnel.pgw.gtp"</b> .....	3
<b>Section "fast-epdg.tunnel.pgw.gtp.gtp-server-name-n"</b> .....	4
<b>Section "fast-epdg.tunnel.pgw.gtp.gtp-server-name-n.qos"</b> .....	6
<b>Section "fast-epdg.tunnel.pgw.gtp.gtp-server-name-n.gtp-c"</b> .....	8
<b>Section "fast-epdg.tunnel.pgw.gtp.gtp-server-name-n.gtp-u"</b> .....	10



# GTP Tunneling Protocol Settings

## Section "fast-epdg.tunnel.pgw"

Parameter	Description	Value
gtp {}	GTP protocol settings	

### Template:

```
fast-epdg {
  tunnel {
    iface =
    pdn =
    pgw {
      gtp {}
    }
  }
}
```

### Example:

```
fast-epdg {
  tunnel {
    iface = epdg
    pdn = ipv4
    pgw {
      gtp {}
    }
  }
}
```

## Section "fast-epdg.tunnel.pgw.gtp"

Parameter	Description	Value
mcc	Operator's MCC	XXX
mnc	Operator's MNC	YYY
realm	Served realm	epc.mncYYY.mccXXX.3gppnetwork.org
gtp-server-name-1 {}	GTP server settings #1	
gtp-server-name-2 {}	GTP server settings #2	
gtp-server-name-n {}	GTP server settings #n	

### Template:

```
fast-epdg {
  tunnel {
    iface =
    pdn =
```

```

pgw {
    gtp {
        mcc =
        mnc =
        tac =
        cid =
        enbid =
        realm =
        gtp-server-name-1 {}
        gtp-server-name-2 {}
        gtp-server-name-n {}
    }
}

```

### Example:

```

fast-epdg {
    tunnel {
        iface = epdg
        pdn = ipv4
        pgw {
            gtp {
                mcc =
                mnc =
                tac =
                cid =
                enbid =
                realm =
                gtp-server-name-1 {}
                gtp-server-name-2 {}
                gtp-server-name-n {}
            }
        }
    }
}

```

## Section "fast-epdg.tunnel.pgw.gtp.gtp-server-name-n"

Parameter	Description	Value
apn	Served APN	ims
priority	Server priority	0-100
devname	Tunneling device	[tun][gtp]
devmode	Tunneling mode	[soft][kernel]

Parameter	Description	Value
subnet	APN subnet	<b>IPv4:</b> x.x.x.x/m, where x — a decimal number from 0 to 255, m — the subnet mask, a decimal number from 0 to 32 <b>IPv6:</b> y:y:y:y:y:y:y/n, where y — a hexadecimal number from 0000 to FFFF, n — the subnet mask, a decimal number from 0 to 128
qos {}	Default bearer QoS settings	
gtp-c {}	GTP-C settings	
gtp-u {}	GTP-U settings	

### Template:

```

fast-epdg {
  tunnel {
    iface =
    pdn =
    pgw {
      gtp {
        mcc =
        mnc =
        tac =
        cid =
        enbid =
        realm =
        gtp-server-name-1 {
          apn =
          priority =
          devname =
          devmode =
          subnet =
          qos {}
          gtp-c {}
          gtp-u {}
        }
        gtp-server-name-2 {
          apn =
          priority =
          devname =
          devmode =
          subnet =
          qos {}
          gtp-c {}
          gtp-u {}
        }
      }
    }
  }
}

```

### Example:

```

fast-epdg {
  tunnel {
    iface = epdg
    pdn = ipv4
    pgw {
      gtp {
        mcc =
        mnc =
        tac =
        cid =
        enbid =
        realm =
        gtp-server-name-1 {
          apn = ims
          priority = 50
          devname = tun0
          devmode =
          subnet = 10.1.0.0/16,2001:10::0/48
          qos {}
          gtp-c {}
          gtp-u {}
        }
        gtp-server-name-2 {
          apn = ims
          priority = 50
          devname = gtp0
          devmode = kernel
          subnet = 10.1.0.0/16,2001:10::0/48
          qos {}
          gtp-c {}
          gtp-u {}
        }
      }
    }
  }
}

```

## Section "fast-epdg.tunnel.pgw.gtp.gtp-server-name-n.qos"

Parameter	Description	Value
qci	QCI level	0-9
mbr_ul	Max bitrate uplink	kbits/s
mbr_dl	Max bitrate downlink	kbits/s
gbr_ul	Guaranteed bitrate uplink	kbits/s
gbr_dl	Guaranteed bitrate downlink	kbits/s

### Template:

```
fast-epdg {
```

```

tunnel {
  iface =
  pdn =
  pgw {
    gtp {
      mcc =
      mnc =
      tac =
      cid =
      enbid =
      realm =
      gtp-server-name-1 {
        apn =
        priority =
        devname =
        devmode =
        subnet =
        qos {
          qci =
          mbr_ul =
          mbr_dl =
          gbr_ul =
          gbr_dl =
        }
        gtp-c {}
        gtp-u {}
      }
    }
  }
}

```

### Example:

```

fast-epdg {
  tunnel {
    iface = epdg
    pdn = ipv4
    pgw {
      gtp {
        mcc =
        mnc =
        tac =
        cid =
        enbid =
        realm =
        gtp-server-name-1 {
          apn = ims
          priority = 50
          devname = tun0
          devmode =

```





```
        mbr_ul =
        mbr_dl =
        gbr_ul =
        gbr_dl =
    }
    gtp-c {
        local =
        remote =
    }
    gtp-u {}
}
}
}
}
}
```

### Example:

```
fast-epdg {
    tunnel {
        iface = epdg
        pdn = ipv4
        pgw {
            gtp {
                mcc =
                mnc =
                tac =
                cid =
                enbid =
                realm =
                gtp-server-name-1 {
                    apn = ims
                    priority = 50
                    devname = tun0
                    devmode =
                    subnet = 10.1.0.0/16,2001:10::0/48
                    qos {
                        qci = 5
                        mbr_ul = 128
                        mbr_dl = 128
                        gbr_ul = 128
                        gbr_dl = 128
                    }
                }
                gtp-c {
                    local = 192.168.1.1,2001:1::1
                    remote = 192.168.2.1,2001:2::1
                }
            }
            gtp-u {}
        }
    }
}
}
```

```
}  
}
```

## Section "fast-epdg.tunnel.pgw.gtp.gtp-server-name-n.gtp-u"

Parameter	Description	Value
local	GTP-U client address	<b>IPv4:</b> x.x.x.x, where x — a decimal number from 0 to 255, <b>IPv6:</b> y:y:y:y:y:y:y:y, where y — a hexadecimal number from 0000 to FFFF,
remote	GTP-U server address	<b>IPv4:</b> x.x.x.x, where x — a decimal number from 0 to 255, <b>IPv6:</b> y:y:y:y:y:y:y:y, where y — a hexadecimal number from 0000 to FFFF,

### Template:

```
fast-epdg {  
    tunnel {  
        iface =  
        pdn =  
        pgw {  
            gtp {  
                mcc =  
                mnc =  
                tac =  
                cid =  
                enbid =  
                realm =  
                gtp-server-name-1 {  
                    apn =  
                    priority =  
                    devname =  
                    devmode =  
                    subnet =  
                    qos {  
                        qci =  
                        mbr_ul =  
                        mbr_dl =  
                        gbr_ul =  
                        gbr_dl =  
                    }  
                    gtp-c {  
                        local =  
                        remote =  
                    }  
                    gtp-u {  
                        local =  
                        remote =  
                    }  
                }  
            }  
        }  
    }  
}
```

```
}  
}  
}  
}  
}  
}
```

### Example:

```
fast-epdg {  
    tunnel {  
        iface = epdg  
        pdn = ipv4  
        pgw {  
            gtp {  
                mcc =  
                mnc =  
                tac =  
                cid =  
                enbid =  
                realm =  
                gtp-server-name-1 {  
                    apn = ims  
                    priority = 50  
                    devname = tun0  
                    devmode =  
                    subnet = 10.1.0.0/16,2001:10::0/48  
                    qos {  
                        qci = 5  
                        mbr_ul = 128  
                        mbr_dl = 128  
                        gbr_ul = 128  
                        gbr_dl = 128  
                    }  
                    gtp-c {  
                        local = 192.168.1.1,2001:1::1  
                        remote = 192.168.2.1,2001:2::1  
                    }  
                    gtp-u {  
                        local = 192.168.1.1,2001:1::1  
                        remote = 192.168.2.1,2001:2::1  
                    }  
                }  
            }  
        }  
    }  
}
```