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# 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]
subnet	APN subnet	AAA.BBB.CCC.DDD/MM, 1111.2222.3333.4444.5555.6666.7777.8888/MM
qos {}	Default bearer QoS settings	
gtp-c {}	GTP-C settings	

Parameter	Description	Value
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 =
```

## **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 {}
        gtp-u {}

    }

}

}
}
}
}
```

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

Parameter	Description	Value
local	GTP-C client address	AAA.BBB.CCC.DDD, 1111.2222.3333.4444.5555.6666.7777.8888
remote	GTP-C server address	AAA.BBB.CCC.DDD, 1111.2222.3333.4444.5555.6666.7777.8888

**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 {}
                }
            }
        }
    }
}
```

```
    }
```

### 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	AAA.BBB.CCC.DDD, 1111.2222.3333.4444.5555.6666.7777.8888
remote	GTP-U server address	AAA.BBB.CCC.DDD, 1111.2222.3333.4444.5555.6666.7777.8888

### 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
    }
}
}
```