

MTX-GATEWAY

MTX-GTW

AppNote 1:

Creating a PPP connection

This document describes the process of creating a PPP connection using an MTX-GATEWAY or MTX-GTW device in their 2G or 3G versions.

Initial Configuration

Using the device's default image, the following nodes will become available once the 3G modem has started up:

| 2G Version | 3G Version |
|--------------|--------------|
| /dev/ttyUSB0 | /dev/ttyACM0 |
| | /dev/ttyACM1 |
| | /dev/ttyACM2 |
| | /dev/ttyACM3 |
| | /dev/ttyACM4 |
| | /dev/ttyACM5 |
| | /dev/ttyACM6 |

Required files

The following files are necessary in order to correctly establish a PPP connection:

- **/etc/ppp/options:** This file specifies the interface that is to be used and some of its characteristics. The most important part of this file is the node that is indicated given that each modem has a different one according to the driver that it uses. For example, in the case of the 2G version, the node to be used is /dev/ttyUSB0 whilst in the 3G version /dev/ttyACM0.
- **/etc/ppp/peers/gsm:** This file specifies all the connection parameters and executes the commands for modem interaction. Important: the *user* line has to correspond with the user that the operator has assigned to the SIM card being used.
- **/etc/ppp/peers/gsm_chat:** This file specifies the commands for modem interaction. The parameters used must be changed in the configuration of AT+CGDCONT, in accordance with the operator. If a SIM card with a PIN number is used, the unblocking command must be included in this file.

In this document's Annex, an example of each of these files is available.

Starting the PPP connection

Once the files in the previous section are correctly configured, the PPP connection can be started by executing the following command:

```
pppd call gsm
```

Annex: Configuration files

/etc/ppp/options:

```
#nodetach
#debug
/dev/ttyACM0
crtscts
lock
```

/etc/ppp/peers/gsm:

```
linkname ppp0
115200
defaultroute
ipcp-max-failure 4
ipcp-restart 10
usepeerdns
noauth
novj
user MOVISTAR
connect '/usr/sbin/chat -v -t 90 -f /etc/ppp/peers/gsm_chat'
```

/etc/ppp/peers/gsm_chat:

```
SAY "GSM chat\n"
ECHO OFF
ABORT 'NO DIAL TONE'
ABORT 'NO DIALTONE'
ABORT 'NO ANSWER'
ABORT 'NO CARRIER'
ABORT 'DELAYED'
ABORT 'VOICE'
ABORT 'BUSY'
'' 'AT'
OK 'ATZ'
OK 'AT+CSQ'
OK 'AT+CGDCONT=1,"IP","movistar.es"'
SAY "Dialing...\n"
OK 'ATD*99***1#'
SAY "Waiting for CONNECT...\n"
TIMEOUT 120
CONNECT ''
SAY "Connected\n"
```