Packet Forwarder ne démarre pas sur IXM lorsque la radio est désactivée

Contenu

Introduction

Ce document décrit comment résoudre le problème où le transfert de paquets sur l'IXM ne démarre pas lorsque la radio LoRa est désactivée sur l'IXM.

Problème

Lorsque vous déployez un nouveau IXM et installez le package Actility LRR, vous pouvez voir ce message dans le fichier trace.log LRR :

```
Gateway#show packet-forwarder log name trace 250
...
03:40:45.990  (00834) [../main.c:954] no custom configuration file
'/tmp/mdm/pktfwd/firmware/usr/etc/lrr/dyncalib.ini'
03:40:45.990  (00834) [../main.c:979] search
'/tmp/mdm/pktfwd/firmware/lrr/config/channels_eu868_2015.ini'
03:40:45.990  (00834) [../main.c:2127] load default
'/tmp/mdm/pktfwd/firmware/lrr/config/channels_eu868_2015.ini'
03:40:45.990  (00834) [../main.c:951] search '/tmp/mdm/pktfwd/firmware/usr/etc/lrr/channels.ini'
03:40:45.990  (00834) [../main.c:954] no custom configuration file
'/tmp/mdm/pktfwd/firmware/usr/etc/lrr/channels.ini'
03:40:45.991  (00834) [../main.c:2354] lgw thread is started
03:40:45.991  (02398) [../lgw_gen.c:1820] start lrr.x/lgw th=b63a7380 pid=834 count=1 capture=0
03:40:45.993  (02398) [../lgw_x8.c:1053] BOARD1 RADIO cannot be started ret=-1 'Invalid version
number for the top FPGA'
03:40:45.993  (02398) [../lgw_gen.c:1530] enter Idle loop ... waiting for cancelation
03:41:45.980  (00834) [../main.c:5346] no LRC connection during more than 1200sec => revssh
```

Le transfert de paquet arrête l'initialisation ultérieure et ne tente pas de se connecter au LRC TPE ou TPW.

Solution

La raison, bien que non claire à partir du message d'erreur, pour cette erreur est que la radio n'a pas été démarrée sur l'IXM.

C'est ce qu'on appelle « prêt à l'emploi ».

Vous pouvez vérifier ceci comme suit :

```
Gateway#show radio
LORA_SN: FOC203310DG
LORA_PN: 95.1602T00
LORA_SKU: 868
LORA_CALC: <135,123,115,107,99,95,91,87,78,70,62,53,45,41,37,33-
133,120,112,104,96,92,88,84,75,67,59,51,43,39,35,31>
CAL_TEMP_CELSIUS: 34
CAL_TEMP_CODE_AD9361: 90
RSSI_OFFSET: -204.07,-203.78
LORA_REVISION_NUM: A0+
RSSI_OFFSET_AUS:

radio status:
off
```

Comme vous pouvez le voir sur la dernière ligne, la radio est marquée comme éteinte.

Pour allumer la radio, procédez comme suit :

```
Gateway#configure terminal
Gateway(config)#no radio off
Gateway(config)#exit
*Aug 06 03:45:28: Configured from console by console
Gateway#copy running-config start
!

Copy 333 bytes took 00:00:01 [hh:mm:ss]
```

Ensuite, redémarrez le transfert de paquets :

```
Gateway#configure terminal
Gateway(config)#packet-forwarder restart
Restarted packet-forwarder
Gateway(config)#exit
*Aug 06 03:46:07: Configured from console by console
```

Comme vous pouvez le voir dans TRACE.log maintenant, le transfert de paquets peut démarrer :

```
Gateway#show packet-forwarder log name trace 250
...
############################################################
### restart(1) : 20160806  03:45:43
### pid=2741 szmax=unlimited (config files not yet read)
############################################################
03:45:43.479  (02741) Traces activated for startup
03:45:43.515  (02741) search '/tmp/mdm/pktfwd/firmware/usr/etc/lrr/bootserver.ini'
03:45:43.515  (02741) no custom configuration file
'/tmp/mdm/pktfwd/firmware/usr/etc/lrr/bootserver.ini'
03:45:43.515  (02741) search '/tmp/mdm/pktfwd/firmware/usr/etc/lrr/_system.sh'
03:45:43.515  (02741) load custom '/tmp/mdm/pktfwd/firmware/usr/etc/lrr/_system.sh'
03:45:43.516  (02741) search '/tmp/mdm/pktfwd/firmware/usr/etc/lrr/_parameters.sh'
03:45:43.516  (02741) load custom '/tmp/mdm/pktfwd/firmware/usr/etc/lrr/_parameters.sh'
03:45:43.516  (02741) search '/tmp/mdm/pktfwd/firmware/lrr/config/defines.ini'
03:45:43.516  (02741) load default '/tmp/mdm/pktfwd/firmware/lrr/config/defines.ini'
```

```
03:45:43.516  (02741) search '/tmp/mdm/pktfwd/firmware/lrr/config/defines.ini'
03:45:43.516  (02741) load default '/tmp/mdm/pktfwd/firmware/lrr/config/defines.ini'
03:45:43.516  (02741) search '/tmp/mdm/pktfwd/firmware/lrr/config/lrr.ini'
03:45:43.516  (02741) load default '/tmp/mdm/pktfwd/firmware/lrr/config/lrr.ini'
03:45:43.519  (02741) search '/tmp/mdm/pktfwd/firmware/usr/etc/lrr/lrr.ini'
03:45:43.519  (02741) load custom '/tmp/mdm/pktfwd/firmware/usr/etc/lrr/lrr.ini'
03:45:43.519  (02741) search '/tmp/mdm/pktfwd/firmware/usr/etc/lrr/gpsman.ini'
03:45:43.519  (02741) no custom configuration file
'/tmp/mdm/pktfwd/firmware/usr/etc/lrr/gpsman.ini'
03:45:43.519  (02741) search '/tmp/mdm/pktfwd/firmware/usr/etc/lrr/custom.ini'
03:45:43.519  (02741) load custom '/tmp/mdm/pktfwd/firmware/usr/etc/lrr/custom.ini'
03:45:43.519  (02741) search '/tmp/mdm/pktfwd/firmware/usr/etc/lrr/_state.ini'
03:45:43.519  (02741) no custom configuration file
'/tmp/mdm/pktfwd/firmware/usr/etc/lrr/_state.ini'
03:45:43.522  (02741) [trace.c:128] TRACE used szmax: 1000000
03:45:43.522  (02741) [../main.c:7781] start lrr.x/main th=b6adc010 pid=2741 sickrestart=0
03:45:43.522  (02741) [../main.c:7782] @(#) Actility lrr 2.4.21 07/09/18 target=ciscoms
host=Ubuntu14-dev
03:45:43.522  (02741) [../main.c:7783] SX1301_AR
03:45:43.522  (02741) [../main.c:7785] HAL 5.1.0
03:45:43.522  (02741) [../main.c:7788] lrrid=68480c3f lrridext=0000 lrridpref=04
03:45:43.522  (02741) [../main.c:979] search '/tmp/mdm/pktfwd/firmware/lrr/config/lowlvlgw.ini'
03:45:43.522  (02741) [../main.c:2020] load default
'/tmp/mdm/pktfwd/firmware/lrr/config/lowlvlgw.ini'
03:45:43.522  (02741) [../main.c:979] search
'/tmp/mdm/pktfwd/firmware/lrr/config/lowlvlgw_ciscoms.ini'
03:45:43.522  (02741) [../main.c:2030] load default
'/tmp/mdm/pktfwd/firmware/lrr/config/lowlvlgw_ciscoms.ini'
03:45:43.523  (02741) [../main.c:979] search
'/tmp/mdm/pktfwd/firmware/lrr/config/lgwx8_eu868_2015.ini'
03:45:43.523  (02741) [../main.c:2041] load default
'/tmp/mdm/pktfwd/firmware/lrr/config/lgwx8_eu868_2015.ini'
03:45:43.523  (02741) [../main.c:951] search '/tmp/mdm/pktfwd/firmware/usr/etc/lrr/lowlvlgw.ini'
03:45:43.523  (02741) [../main.c:2065] load custom
'/tmp/mdm/pktfwd/firmware/usr/etc/lrr/lowlvlgw.ini'
03:45:43.523  (02741) [../main.c:951] search '/tmp/mdm/pktfwd/firmware/usr/etc/lrr/lgw.ini'
03:45:43.523  (02741) [../main.c:954] no custom configuration file
'/tmp/mdm/pktfwd/firmware/usr/etc/lrr/lgw.ini'
03:45:43.523  (02741) [../main.c:951] search '/tmp/mdm/pktfwd/firmware/usr/etc/lrr/dyncalib.ini'
03:45:43.523  (02741) [../main.c:954] no custom configuration file
'/tmp/mdm/pktfwd/firmware/usr/etc/lrr/dyncalib.ini'
03:45:43.523  (02741) [../main.c:979] search
'/tmp/mdm/pktfwd/firmware/lrr/config/channels_eu868_2015.ini'
03:45:43.523  (02741) [../main.c:2127] load default
'/tmp/mdm/pktfwd/firmware/lrr/config/channels_eu868_2015.ini'
03:45:43.524  (02741) [../main.c:951] search '/tmp/mdm/pktfwd/firmware/usr/etc/lrr/channels.ini'
03:45:43.524  (02741) [../main.c:954] no custom configuration file
'/tmp/mdm/pktfwd/firmware/usr/etc/lrr/channels.ini'
03:45:43.525  (02741) [../main.c:7119] IfaceDaemon disabled
03:45:43.525  (02741) [../main.c:2296] gps thread is started
03:45:43.525  (02741) [../main.c:2354] lgw thread is started
03:45:43.525  (02741) [../shellcmd.c:155] cmd thread is started
03:45:43.525  (02741) [../rttping.c:406] thread itf idx=0 name='eth0' is started
03:45:43.525  (02741) [../main.c:7831] TRACE LEVEL IS SET TO 0
03:45:43.525  (02746) [../rttping.c:342] thread itf idx=0 name='eth0' is looping
03:45:43.526  (02744) [../lgw_gen.c:1820] start lrr.x/lgw th=b62da380 pid=2741 count=1 capture=0
03:45:43.527  (02743) [../gps.c:148] start lrr.x/gps th=b6adb380 pid=2741 count=1
```