



## The WAN4RP simulink model





- The model implements a TDMA network using a Master/Slave approach
- The Master sends a periodic reference burst defining the TDMA frame and assigning slots to slaves and then switches to RX, waiting for packets from slaves
- Each slave sends packets in its assigned slot
- The model in its final version will support still and moving images transfer (hence the name "RFM73\_Videosurveillance")
- In its current version slaves send bogus data to the master as a proof of feasibility







- Please execute the following steps:
  - 1. Download the following packages from the project website:
    - WAN4RP\_Library and WAN4RP\_Master\_Slave example
    - wiringPi libraries to support the SPI interface
    - Simulink model "RFM73\_videosurveillance"
  - 2. Install the wiringPi library in the /home/pi folder on your Raspberry Pi (you should end up with a /home/pi/wiringPi folder containing the .c and .h files)
  - 3. Run just once the Rpi\_RFM73\_Master script (*this step is required once every time the Raspberry Pi is switched on*)
  - 4. Open the simulink model, configure it as explained in detail in the next slide and run it (either in external mode, or by deploying it to the target Rpi)



Model configuration







## $RFM73_blocks$

























П Enable





## RFM73\_slave





