

Polling Protocol TOSSIM Script

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Simulation output example

```
Initializing mac....
Initializing radio channels....
  using topology file: topology.txt
  using noise file: meyer-heavy.txt
Initializing simulator....
Activate debug message on channel init
Activate debug message on channel boot
Activate debug message on channel radio
Activate debug message on channel radio_send
Activate debug message on channel radio_ack
Activate debug message on channel radio_rec
Activate debug message on channel radio_pack
Activate debug message on channel role
Activate debug message on channel data
Activate debug message on channel led
Creating bs...
>>>Will boot at time 0 [sec]
Creating node 2...
>>>Will boot at time 1 [sec]
Creating node 3...
>>>Will boot at time 2 [sec]
Creating node 4...
>>>Will boot at time 3 [sec]
Creating node 5...
>>>Will boot at time 4 [sec]
Creating radio channels...
>>>Setting radio channel from node 1 to node 2 with gain -60.0 dBm
>>>Setting radio channel from node 1 to node 3 with gain -60.0 dBm
>>>Setting radio channel from node 1 to node 4 with gain -60.0 dBm
>>>Setting radio channel from node 1 to node 5 with gain -60.0 dBm
>>>Setting radio channel from node 2 to node 1 with gain -60.0 dBm
>>>Setting radio channel from node 3 to node 1 with gain -60.0 dBm
>>>Setting radio channel from node 4 to node 1 with gain -60.0 dBm
>>>Setting radio channel from node 5 to node 1 with gain -60.0 dBm
Initializing Closest Pattern Matching (CPM)...
Reading noise model data file: meyer-heavy.txt
Loading:##Done!
>>>Creating noise model for node: 1
>>>Creating noise model for node: 2
>>>Creating noise model for node: 3
>>>Creating noise model for node: 4
>>>Creating noise model for node: 5
Start simulation with TOSSIM!
```

DEBUG (1): Application booted.
DEBUG (1): Radio ON at time 0:0:0.000000010.
DEBUG (1): I'm Base Station (node 1): start sending periodical request
DEBUG (1): Try to send a request to node 2 at time 0:0:0.976562520
DEBUG (1): Packet passed to lower layer successfully!
DEBUG (1): >>>Pack
 Payload length 5
 Source: 1
 Destination: 2
 AM Type: 6
 Payload
 msg_type: 1
 msg_id: 0
 value: 0

DEBUG (1): Packet sent...but ack was not received at time 0:0:0.987274127
DEBUG (2): Application booted.
DEBUG (2): Radio ON at time 0:0:1.000000010.
DEBUG (2): I'm node 2.
DEBUG (1): Try to send a request to node 3 at time 0:0:1.953125020
DEBUG (1): Packet passed to lower layer successfully!
DEBUG (1): >>>Pack
 Payload length 5
 Source: 1
 Destination: 3
 AM Type: 6
 Payload
 msg_type: 1
 msg_id: 1
 value: 0

DEBUG (1): Packet sent...but ack was not received at time 0:0:1.958892808
DEBUG (3): Application booted.
DEBUG (3): Radio ON at time 0:0:2.000000010.
DEBUG (3): I'm node 3.
DEBUG (1): Try to send a request to node 4 at time 0:0:2.929687520
DEBUG (1): Packet passed to lower layer successfully!
DEBUG (1): >>>Pack
 Payload length 5
 Source: 1
 Destination: 4
 AM Type: 6
 Payload
 msg_type: 1
 msg_id: 2
 value: 0

DEBUG (1): Packet sent...but ack was not received at time 0:0:2.934219353
DEBUG (4): Application booted.
DEBUG (4): Radio ON at time 0:0:3.000000010.
DEBUG (4): I'm node 4.
DEBUG (1): Try to send a request to node 5 at time 0:0:3.906250020
DEBUG (1): Packet passed to lower layer successfully!

DEBUG (1): >>>Pack
Payload length 5
Source: 1
Destination: 5
AM Type: 6
Payload
msg_type: 1
msg_id: 3
value: 0

DEBUG (1): Packet sent...but ack was not received at time 0:0:3.909622192

DEBUG (5): Application booted.

DEBUG (5): Radio ON at time 0:0:4.000000010.

DEBUG (5): I'm node 5.

DEBUG (1): Try to send a request to node 2 at time 0:0:4.882812520

DEBUG (1): Packet passed to lower layer successfully!

DEBUG (1): >>>Pack
Payload length 5
Source: 1
Destination: 2
AM Type: 6
Payload
msg_type: 1
msg_id: 4
value: 0

DEBUG (2): Message received at time 0:0:4.893814042

DEBUG (2): >>>Pack
Payload length 5
Source: 1
Destination: 2
AM Type: 6
Payload
msg_type: 1
msg_id: 4
value: 0

DEBUG (2): Try to send a NO_DATA_response to node 1 at time 0:0:4.893814052

DEBUG (2): Packet passed to lower layer successfully!

DEBUG (2): >>>Pack
Payload length 5
Source: 2
Destination: 1
AM Type: 6
Payload
msg_type: 3
msg_id: 4
value: 0

DEBUG (1): Packet sent...and ack received at time 0:0:4.893981888
DEBUG (1): Message received at time 0:0:4.900421069
DEBUG (1): >>>Pack
 Payload length 5
 Source: 2
 Destination: 1
 AM Type: 6
 Payload
 msg_type: 3
 msg_id: 4
 value: 0

DEBUG (1): Yellow led ON!
DEBUG (1): Green led OFF!
DEBUG (2): Packet sent...and ack received at time 0:0:4.900588915
DEBUG (2): Radio OFF at time 0:0:4.900588925.
DEBUG (2): Red led ON!
DEBUG (1): Radio OFF at time 0:0:4.910156270.
DEBUG (1): Red led ON!
DEBUG (1): Radio ON at time 0:0:5.691406270.
DEBUG (1): Red led OFF!
DEBUG (1): Try to send a request to node 3 at time 0:0:5.859375020
DEBUG (1): Packet passed to lower layer successfully!
DEBUG (1): >>>Pack
 Payload length 5
 Source: 1
 Destination: 3
 AM Type: 6
 Payload
 msg_type: 1
 msg_id: 5
 value: 0

DEBUG (3): Message received at time 0:0:5.866394022
DEBUG (3): >>>Pack
 Payload length 5
 Source: 1
 Destination: 3
 AM Type: 6
 Payload
 msg_type: 1
 msg_id: 5
 value: 0

DEBUG (3): Try to send a NO_DATA_response to node 1 at time 0:0:5.866394032
DEBUG (3): Packet passed to lower layer successfully!
DEBUG (3): >>>Pack
 Payload length 5
 Source: 3
 Destination: 1
 AM Type: 6
 Payload
 msg_type: 3

msg_id: 5
value: 0

DEBUG (1): Packet sent...and ack received at time 0:0:5.866561867

DEBUG (1): Message received at time 0:0:5.875015197

DEBUG (1): >>>Pack

Payload length 5

Source: 3

Destination: 1

AM Type: 6

Payload

msg_type: 3

msg_id: 5

value: 0

DEBUG (1): Yellow led ON!

DEBUG (1): Green led OFF!

DEBUG (3): Packet sent...and ack received at time 0:0:5.875183043

DEBUG (3): Radio OFF at time 0:0:5.875183053.

DEBUG (3): Red led ON!

DEBUG (2): New data in node 2 at time 0:0:5.882812510.

DEBUG (2): Green led ON!

DEBUG (1): Radio OFF at time 0:0:5.884765645.

DEBUG (1): Red led ON!

DEBUG (1): Radio ON at time 0:0:6.666015645.

DEBUG (1): Red led OFF!

DEBUG (1): Try to send a request to node 4 at time 0:0:6.835937520

DEBUG (1): Packet passed to lower layer successfully!

DEBUG (1): >>>Pack

Payload length 5

Source: 1

Destination: 4

AM Type: 6

Payload

msg_type: 1

msg_id: 6

value: 0

DEBUG (4): Message received at time 0:0:6.845291103

DEBUG (4): >>>Pack

Payload length 5

Source: 1

Destination: 4

AM Type: 6

Payload

msg_type: 1

msg_id: 6

value: 0

DEBUG (4): Try to send a NO_DATA_response to node 1 at time 0:0:6.845291113
DEBUG (4): Packet passed to lower layer successfully!
DEBUG (4): >>>Pack
 Payload length 5
 Source: 4
 Destination: 1
 AM Type: 6
 Payload
 msg_type: 3
 msg_id: 6
 value: 0

DEBUG (1): Packet sent...and ack received at time 0:0:6.845458948
DEBUG (1): Message received at time 0:0:6.848495440
DEBUG (1): >>>Pack
 Payload length 5
 Source: 4
 Destination: 1
 AM Type: 6
 Payload
 msg_type: 3
 msg_id: 6
 value: 0

DEBUG (1): Yellow led ON!
DEBUG (1): Green led OFF!
DEBUG (4): Packet sent...and ack received at time 0:0:6.848663285
DEBUG (4): Radio OFF at time 0:0:6.848663295.
DEBUG (4): Red led ON!
DEBUG (1): Radio OFF at time 0:0:6.857421895.
DEBUG (1): Red led ON!
DEBUG (3): New data in node 3 at time 0:0:6.882812510.
DEBUG (3): Green led ON!
DEBUG (1): Radio ON at time 0:0:7.638671895.
DEBUG (1): Red led OFF!
DEBUG (1): Try to send a request to node 5 at time 0:0:7.812500020
DEBUG (1): Packet passed to lower layer successfully!
DEBUG (1): >>>Pack
 Payload length 5
 Source: 1
 Destination: 5
 AM Type: 6
 Payload
 msg_type: 1
 msg_id: 7
 value: 0

DEBUG (5): Message received at time 0:0:7.815307620
DEBUG (5): >>>Pack
 Payload length 5
 Source: 1
 Destination: 5
 AM Type: 6

Payload
msg_type: 1
msg_id: 7
value: 0

DEBUG (5): Try to send a NO_DATA_response to node 1 at time 0:0:7.815307630

DEBUG (5): Packet passed to lower layer successfully!

DEBUG (5): >>>Pack

Payload length 5

Source: 5

Destination: 1

AM Type: 6

Payload
msg_type: 3
msg_id: 7
value: 0

DEBUG (1): Packet sent...and ack received at time 0:0:7.815475466

DEBUG (1): Message received at time 0:0:7.820785504

DEBUG (1): >>>Pack

Payload length 5

Source: 5

Destination: 1

AM Type: 6

Payload
msg_type: 3
msg_id: 7
value: 0

DEBUG (1): Yellow led ON!

DEBUG (1): Green led OFF!

DEBUG (5): Packet sent...and ack received at time 0:0:7.820953349

DEBUG (5): Radio OFF at time 0:0:7.820953359.

DEBUG (5): Red led ON!

DEBUG (1): Radio OFF at time 0:0:7.830078145.

DEBUG (1): Red led ON!

DEBUG (4): New data in node 4 at time 0:0:7.882812510.

DEBUG (4): Green led ON!

DEBUG (2): Radio ON at time 0:0:8.611328145.

DEBUG (2): Red led OFF!

DEBUG (1): Radio ON at time 0:0:8.611328145.

DEBUG (1): Red led OFF!

DEBUG (1): Try to send a request to node 2 at time 0:0:8.789062520

DEBUG (1): Packet passed to lower layer successfully!

DEBUG (1): >>>Pack

Payload length 5

Source: 1

Destination: 2

AM Type: 6

Payload
msg_type: 1
msg_id: 8
value: 0

DEBUG (2): Message received at time 0:0:8.792510986
DEBUG (2): >>>Pack
 Payload length 5
 Source: 1
 Destination: 2
 AM Type: 6
 Payload
 msg_type: 1
 msg_id: 8
 value: 0

DEBUG (1): Packet sent...and ack received at time 0:0:8.792678831
DEBUG (2): Try to send a DATA_response to node 1 at time 0:0:8.801757822
DEBUG (2): Packet passed to lower layer successfully!
DEBUG (2): >>>Pack
 Payload length 5
 Source: 2
 Destination: 1
 AM Type: 6
 Payload
 msg_type: 2
 msg_id: 8
 value: 245

DEBUG (2): Green led OFF!
DEBUG (1): Message received at time 0:0:8.808898894
DEBUG (1): >>>Pack
 Payload length 5
 Source: 2
 Destination: 1
 AM Type: 6
 Payload
 msg_type: 2
 msg_id: 8
 value: 245

DEBUG (1): Green led ON!
DEBUG (1): Yellow led OFF!
DEBUG (2): Packet sent...and ack received at time 0:0:8.809066739
DEBUG (2): Radio OFF at time 0:0:8.809066749.
DEBUG (2): Red led ON!
DEBUG (1): Radio OFF at time 0:0:8.818359395.
DEBUG (1): Red led ON!
DEBUG (5): New data in node 5 at time 0:0:8.882812510.
DEBUG (5): Green led ON!
DEBUG (3): Radio ON at time 0:0:9.585937520.
DEBUG (3): Red led OFF!
DEBUG (1): Radio ON at time 0:0:9.599609395.
DEBUG (1): Red led OFF!
DEBUG (1): Try to send a request to node 3 at time 0:0:9.765625020
DEBUG (1): Packet passed to lower layer successfully!

DEBUG (1): >>>Pack
Payload length 5
Source: 1
Destination: 3
AM Type: 6
Payload
msg_type: 1
msg_id: 9
value: 0

DEBUG (3): Message received at time 0:0:9.771697982

DEBUG (3): >>>Pack
Payload length 5
Source: 1
Destination: 3
AM Type: 6
Payload
msg_type: 1
msg_id: 9
value: 0

DEBUG (1): Packet sent...and ack received at time 0:0:9.771865828

DEBUG (3): Try to send a DATA_response to node 1 at time 0:0:9.781250010

DEBUG (3): Packet passed to lower layer successfully!

DEBUG (3): >>>Pack
Payload length 5
Source: 3
Destination: 1
AM Type: 6
Payload
msg_type: 2
msg_id: 9
value: 156

DEBUG (3): Green led OFF!

DEBUG (1): Message received at time 0:0:9.791458080

DEBUG (1): >>>Pack
Payload length 5
Source: 3
Destination: 1
AM Type: 6
Payload
msg_type: 2
msg_id: 9
value: 156

DEBUG (1): Green led ON!

DEBUG (1): Yellow led OFF!

DEBUG (3): Packet sent...and ack received at time 0:0:9.791625926

DEBUG (3): Radio OFF at time 0:0:9.791625936.

DEBUG (3): Red led ON!

DEBUG (1): Radio OFF at time 0:0:9.800781270.

DEBUG (1): Red led ON!

DEBUG (4): Radio ON at time 0:0:10.559570332.
DEBUG (4): Red led OFF!
DEBUG (1): Radio ON at time 0:0:10.582031270.
DEBUG (1): Red led OFF!
DEBUG (1): Try to send a request to node 4 at time 0:0:10.742187520
DEBUG (1): Packet passed to lower layer successfully!
DEBUG (1): >>>Pack
 Payload length 5
 Source: 1
 Destination: 4
 AM Type: 6
 Payload
 msg_type: 1
 msg_id: 10
 value: 0

DEBUG (4): Message received at time 0:0:10.745071414
DEBUG (4): >>>Pack
 Payload length 5
 Source: 1
 Destination: 4
 AM Type: 6
 Payload
 msg_type: 1
 msg_id: 10
 value: 0

DEBUG (1): Packet sent...and ack received at time 0:0:10.745239260
DEBUG (4): Try to send a DATA_response to node 1 at time 0:0:10.753906260
DEBUG (4): Packet passed to lower layer successfully!
DEBUG (4): >>>Pack
 Payload length 5
 Source: 4
 Destination: 1
 AM Type: 6
 Payload
 msg_type: 2
 msg_id: 10
 value: 67

DEBUG (4): Green led OFF!
DEBUG (1): Message received at time 0:0:10.760162327
DEBUG (1): >>>Pack
 Payload length 5
 Source: 4
 Destination: 1
 AM Type: 6
 Payload
 msg_type: 2
 msg_id: 10
 value: 67

DEBUG (1): Green led ON!
DEBUG (1): Yellow led OFF!
DEBUG (4): Packet sent...and ack received at time 0:0:10.760330172
DEBUG (4): Radio OFF at time 0:0:10.760330182.
DEBUG (4): Red led ON!
DEBUG (2): New data in node 2 at time 0:0:10.765625010.
DEBUG (2): Green led ON!
DEBUG (1): Radio OFF at time 0:0:10.769531270.
DEBUG (1): Red led ON!
DEBUG (5): Radio ON at time 0:0:11.531250020.
DEBUG (5): Red led OFF!
DEBUG (1): Radio ON at time 0:0:11.550781270.
DEBUG (1): Red led OFF!
DEBUG (1): Try to send a request to node 5 at time 0:0:11.718750020
DEBUG (1): Packet passed to lower layer successfully!

DEBUG (1): >>>Pack
 Payload length 5
 Source: 1
 Destination: 5
 AM Type: 6
 Payload
 msg_type: 1
 msg_id: 11
 value: 0

DEBUG (5): Message received at time 0:0:11.723388664
DEBUG (5): >>>Pack
 Payload length 5
 Source: 1
 Destination: 5
 AM Type: 6
 Payload
 msg_type: 1
 msg_id: 11
 value: 0

DEBUG (1): Packet sent...and ack received at time 0:0:11.723556510
DEBUG (5): Try to send a DATA_response to node 1 at time 0:0:11.732421885
DEBUG (5): Packet passed to lower layer successfully!
DEBUG (5): >>>Pack
 Payload length 5
 Source: 5
 Destination: 1
 AM Type: 6
 Payload
 msg_type: 2
 msg_id: 11
 value: 234

DEBUG (5): Green led OFF!
DEBUG (1): Message received at time 0:0:11.738098121

DEBUG (1): >>>Pack
 Payload length 5
 Source: 5
 Destination: 1
 AM Type: 6
 Payload
 msg_type: 2
 msg_id: 11
 value: 234

DEBUG (1): Green led ON!
DEBUG (1): Yellow led OFF!
DEBUG (5): Packet sent...and ack received at time 0:0:11.738265967
DEBUG (5): Radio OFF at time 0:0:11.738265977.
DEBUG (5): Red led ON!
DEBUG (1): Radio OFF at time 0:0:11.747070332.
DEBUG (1): Red led ON!
DEBUG (3): New data in node 3 at time 0:0:11.765625010.
DEBUG (3): Green led ON!
DEBUG (2): Radio ON at time 0:0:12.519531270.
DEBUG (2): Red led OFF!

Simulation finished!