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## Experiment No 10

**Title :**
Simulation of Wireless Personal Area Network using ns2

**Theory :**
Wireless Personal Area Network
A wireless personal area network (WPAN) is a personal area network — a network for interconnecting devices centered on an individual person's workspace — in which the connections are wireless. Wireless PAN is based on the standard IEEE 802.15. The two kinds of wireless technologies used for WPAN are Bluetooth and Infrared Data Association.

A WPAN could serve to interconnect all the ordinary computing and communicating devices that many people have on their desk or carry with them today; or it could serve a more specialized purpose such as allowing the surgeon and other team members to communicate during an operation.

A key concept in WPAN technology is known as "plugging in". In the ideal scenario, when any two WPAN-equipped devices come into close proximity (within several meters of each other) or within a few kilometers of a central server, they can communicate as if connected by a cable. Another important feature is the ability of each device to lock out other devices selectively, preventing needless interference or unauthorized access to information.

**Procedure/ Algorithm :**
cris@cris-VirtualBox:~/ns2$ cd Exp\ 16\ WPAN/
cris@cris-VirtualBox:~/ns2/Exp 16 WPAN$ ls
wpan_demo1.nam wpan_demo2.tr    wpan_demo4b.tcl  wpan_demo5.nam
wpan_demo1.scn wpan_demo3.nam    wpan_demo4_m.tcl wpan_demo5.scn
wpan_demo1.tcl wpan_demo3.scn    wpan_demo4.nam   wpan_demo5.tcl
wpan_demo1.tr wpan_demo3.tcl    wpan_demo4_p.tcl wpan_demo5.tr
wpan_demo2.nam wpan_demo3.tr     wpan_demo4.scn
wpan_demo2.scn wpan_demo4b_m.tcl wpan_demo4.tcl
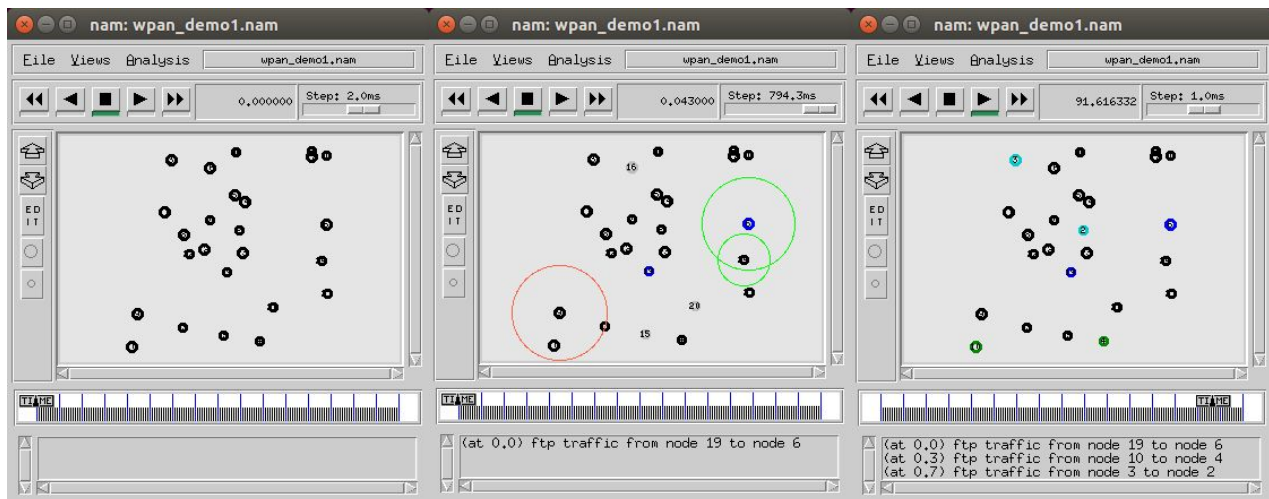wpan_demo2.tcl wpan_demo4b_p.tcl wpan_demo4.tr

**Results :**
cris@cris-VirtualBox:~/ns2/Exp 16 WPAN$ ns wpan_demo1.t

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wpan_demo1.tcl  wpan_demo1.tr
cris@cris-VirtualBox:~/ns2/Exp 16 WPAN$ ns wpan_demo1.tcl
num_nodes is set 25
INITIALIZE THE LIST xListHead

Traffic: ftp
Acknowledgement for data: on

Starting Simulation...
channel.cc:sendUp - Calc highestAntennaZ_ and distCST_
highestAntennaZ_ = 1.5,  distCST_ = 35.9
SORTING LISTS ...DONE!

NS EXITING...



cris@cris-VirtualBox:~/ns2/Exp 16 WPAN$ ns wpan_demo2.tcl
num_nodes is set 7
INITIALIZE THE LIST xListHead

Traffic: ftp
Acknowledgement for data: on

Starting Simulation...
--- startPANCoord [0] ---
[0.000000](node 0) performing active channel scan
[0.000000](node 0) scanning channel 11
channel.cc:sendUp - Calc highestAntennaZ_ and distCST_
highestAntennaZ_ = 1.5,  distCST_ = 35.9
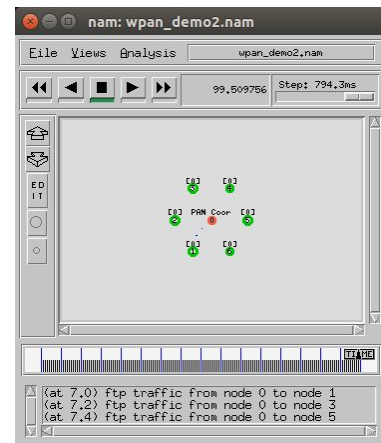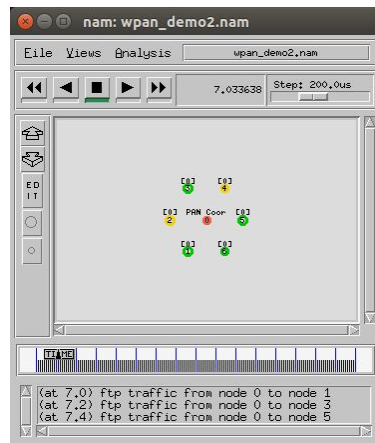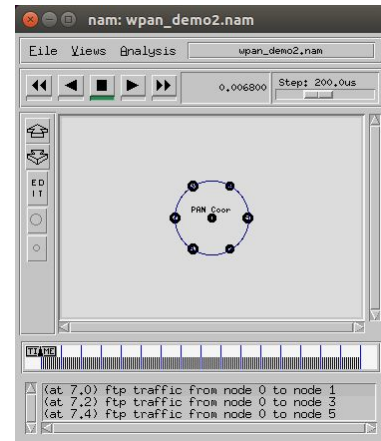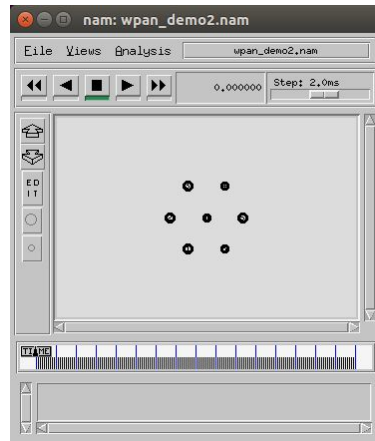
SORTING LISTS ...DONE!
[0.139520](node 0) scanning channel 12
[0.278720](node 0) scanning channel 13
[0.418560](node 0) begin to transmit beacons
[0.419328](node 0) successfully started a new PAN (beacon enabled) [channel:11] [PAN_ID:0]
--- startDevice [1] ---
[0.500000](node 1) performing active channel scan ...
[0.500000](node 1) scanning channel 11
[0.764000](node 1) scanning channel 12
[1.026400](node 1) scanning channel 13
[1.288800](node 1) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:0] ...
[1.290848](node 1) sending association request command ...
[1.292384](node 1) ack for association request command received
--- startDevice [2] ---
[1.500000](node 2) performing active channel scan ...
[1.500000](node 2) scanning channel 11
[1.763680](node 2) scanning channel 12
[1.783904](node 1) sending data request command ...
[1.785184](node 1) ack for data request command received
[1.787648](node 1) association response command received
[1.787648](node 1) association successful (beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:0]
[1.787648](node 1) begin to synchronize with the coordinator
[2.028000](node 2) scanning channel 13
[2.290400](node 2) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:0] ...
[2.292128](node 2) sending association request command ...
[2.293664](node 2) ack for association request command received
--- startDevice [3] ---
[2.500000](node 3) performing active channel scan ...
[2.500000](node 3) scanning channel 11
[2.762720](node 3) scanning channel 12
[2.785184](node 2) sending data request command ...
[2.786464](node 2) ack for data request command received
[2.788928](node 2) association response command received
[2.788928](node 2) association successful (beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:0]
[2.788928](node 2) begin to synchronize with the coordinator
[3.026080](node 3) scanning channel 13
[3.289120](node 3) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:0] ...
[3.290208](node 3) sending association request command ...
[3.291744](node 3) ack for association request command received
--- startDevice [4] ---
[3.500000](node 4) performing active channel scan ...
[3.500000](node 4) scanning channel 11

[3.763040](node 4) scanning channel 12
[3.783264](node 3) sending data request command ...
[3.784544](node 3) ack for data request command received
[3.787008](node 3) association response command received
[3.787008](node 3) association successful (beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:0]
[3.787008](node 3) begin to synchronize with the coordinator
[4.026720](node 4) scanning channel 13
[4.290400](node 4) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:0] ...
[4.291488](node 4) sending association request command ...
[4.293024](node 4) ack for association request command received
--- startDevice [5] ---
[4.500000](node 5) performing active channel scan ...
[4.500000](node 5) scanning channel 11
[4.763360](node 5) scanning channel 12
[4.784544](node 4) sending data request command ...
[4.785824](node 4) ack for data request command received
[4.788288](node 4) association response command received
[4.788288](node 4) association successful (beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:0]
[4.788288](node 4) begin to synchronize with the coordinator
[5.025760](node 5) scanning channel 13
[5.287840](node 5) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:0] ...
[5.290208](node 5) sending association request command ...
[5.291744](node 5) ack for association request command received
--- startDevice [6] ---
[5.500000](node 6) performing active channel scan ...
[5.500000](node 6) scanning channel 11
[5.762400](node 6) scanning channel 12
[5.783264](node 5) sending data request command ...
[5.784544](node 5) ack for data request command received
[5.787008](node 5) association response command received
[5.787008](node 5) association successful (beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:0]
[5.787008](node 5) begin to synchronize with the coordinator
[6.026720](node 6) scanning channel 13
[6.289440](node 6) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:0] ...
[6.291808](node 6) sending association request command ...
[6.293344](node 6) ack for association request command received
[6.784864](node 6) sending data request command ...
[6.786144](node 6) ack for data request command received
[6.788608](node 6) association response command received
[6.788608](node 6) association successful (beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:0]

[6.788608](node 6) begin to synchronize with the coordinator

Transmitting data ...

NS EXITING...



cris@cris-VirtualBox:~/ns2/Exp 16 WPAN$ ns wpan_demo3.tcl
num_nodes is set 11
INITIALIZE THE LIST xListHead
Traffic: ftp
Acknowledgement for data: on

Starting Simulation...
--- startPANCoord [0] ---
[0.000000](node 0) performing active channel scan
[0.000000](node 0) scanning channel 11
channel.cc:sendUp - Calc highestAntennaZ_ and distCST_
highestAntennaZ_ = 1.5, distCST_ = 35.9

SORTING LISTS ...DONE!
[0.140800](node 0) scanning channel 12
[0.282240](node 0) scanning channel 13
[0.421760](node 0) begin to transmit beacons
[0.422528](node 0) successfully started a new PAN (beacon enabled) [channel:11] [PAN_ID:0]
--- startDevice [1] ---
[0.500000](node 1) performing active channel scan ...
[0.500000](node 1) scanning channel 11
[0.763680](node 1) scanning channel 12
[1.026400](node 1) scanning channel 13
[1.289760](node 1) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:0] ...
[1.290848](node 1) sending association request command ...
[1.292384](node 1) ack for association request command received
--- startDevice [2] ---
[1.500000](node 2) performing active channel scan ...
[1.500000](node 2) scanning channel 11
[1.763040](node 2) scanning channel 12
[1.783904](node 1) sending data request command ...
[1.785184](node 1) ack for data request command received
[1.787648](node 1) association response command received
[1.787648](node 1) association successful (beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:0]
[1.787648](node 1) begin to synchronize with the coordinator
[1.787648](node 1) begin to transmit beacons
[1.788416](node 1) beacon transmission successful [channel:11] [PAN_ID:0]
[2.026080](node 2) scanning channel 13
[2.289760](node 2) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:0] ...
[2.291488](node 2) sending association request command ...
[2.293024](node 2) ack for association request command received
--- startDevice [3] ---
[2.500000](node 3) performing active channel scan ...
[2.500000](node 3) scanning channel 11
[2.763040](node 3) scanning channel 12
[2.784544](node 2) sending data request command ...
[2.785824](node 2) ack for data request command received
[2.788288](node 2) association response command received
[2.788288](node 2) association successful (beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:0]
[2.788288](node 2) begin to synchronize with the coordinator
[2.788288](node 2) begin to transmit beacons
[2.789056](node 2) beacon transmission successful [channel:11] [PAN_ID:0]
[3.026400](node 3) scanning channel 13
[3.288800](node 3) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:1] ...
[3.288928](node 3) sending association request command ...

[3.290592](node 3) ack for association request command received
--- startDevice [4] ---
[3.500000](node 4) performing active channel scan ...
[3.500000](node 4) scanning channel 11
[3.764320](node 4) scanning channel 12
[3.782112](node 3) sending data request command ...
[3.783392](node 3) ack for data request command received
[3.785856](node 3) association response command received
[3.785856](node 3) association successful (beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:1]
[3.785856](node 3) begin to synchronize with the coordinator
[3.785856](node 3) begin to transmit beacons
[3.786624](node 3) beacon transmission successful [channel:11] [PAN_ID:0]
[4.026720](node 4) scanning channel 13
[4.291040](node 4) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:1] ...
[4.291808](node 4) sending association request command ...
[4.293472](node 4) ack for association request command received
--- startDevice [5] ---
[4.500000](node 5) performing active channel scan ...
[4.500000](node 5) scanning channel 11
[4.764320](node 5) scanning channel 12
[4.784992](node 4) sending data request command ...
[4.786272](node 4) ack for data request command received
[4.788736](node 4) association response command received
[4.788736](node 4) association successful (beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:1]
[4.788736](node 4) begin to synchronize with the coordinator
[4.788736](node 4) begin to transmit beacons
[4.789504](node 4) beacon transmission successful [channel:11] [PAN_ID:0]
[5.026720](node 5) scanning channel 13
[5.289120](node 5) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:2] ...
[5.290528](node 5) sending association request command ...
[5.292192](node 5) ack for association request command received
--- startDevice [6] ---
[5.500000](node 6) performing active channel scan ...
[5.500000](node 6) scanning channel 11
[5.762080](node 6) scanning channel 12
[5.783712](node 5) sending data request command ...
[5.784992](node 5) ack for data request command received
[5.787456](node 5) association response command received
[5.787456](node 5) association successful (beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:2]
[5.787456](node 5) begin to synchronize with the coordinator
[5.787456](node 5) begin to transmit beacons

[5.788224](node 5) beacon transmission successful [channel:11] [PAN_ID:0]
--- startDevice [7] ---
[5.800000](node 7) performing active channel scan ...
[5.800000](node 7) scanning channel 11
[6.025760](node 6) scanning channel 13
[6.063360](node 7) scanning channel 12
[6.121344](node 3) beacon transmission stopped [channel:11] [PAN_ID:0]
[6.288160](node 6) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:3] ...
[6.289248](node 6) sending association request command ...
[6.290912](node 6) ack for association request command received
[6.325760](node 7) scanning channel 13
--- startDevice [8] ---
[6.500000](node 8) performing active channel scan ...
[6.500000](node 8) scanning channel 11
[6.588480](node 7) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:3] ...
[6.590208](node 7) sending association request command ...
[6.591712](node 7) ack for association request command received
[6.764000](node 8) scanning channel 12
[6.782432](node 6) sending data request command ...
[6.783712](node 6) ack for data request command received
[6.786176](node 6) association response command received
[6.786176](node 6) association successful (beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:3]
[6.786176](node 6) begin to synchronize with the coordinator
--- startDevice [9] ---
[6.800000](node 9) performing active channel scan ...
[6.800000](node 9) scanning channel 11
--- startDevice [10] ---
[7.000000](node 10) performing active channel scan ...
[7.000000](node 10) scanning channel 11
[7.027680](node 8) scanning channel 13
[7.064320](node 9) scanning channel 12
[7.083232](node 7) sending data request command ...
[7.084512](node 7) ack for data request command received
[7.262080](node 10) scanning channel 12
[7.291680](node 8) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:4] ...
[7.292128](node 8) sending association request command ...
[7.293600](node 8) ack for association request command received
[7.327360](node 9) scanning channel 13
[7.524288](node 10) scanning channel 13
<!>[7.576032](node 7) association failed -> NO_DATA (beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:3]
[7.591040](node 9) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:4] ...
[7.592448](node 9) sending association request command ...

[7.594080](node 9) ack for association request command received
[7.785120](node 8) sending data request command ...
[7.786400](node 8) ack for data request command received
[7.788608](node 10) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:5] ...
[7.788864](node 8) association response command received
[7.788864](node 8) association successful (beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:4]
[7.788864](node 8) begin to synchronize with the coordinator
[7.789696](node 10) sending association request command ...
[7.791200](node 10) ack for association request command received
[8.000768](node 3) beacon transmission successful [channel:11] [PAN_ID:0]
[8.085600](node 9) sending data request command ...
[8.086880](node 9) ack for data request command received
[8.282720](node 10) sending data request command ...
[8.284000](node 10) ack for data request command received
[8.286464](node 10) association response command received
[8.286464](node 10) association successful (beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:5]
[8.286464](node 10) begin to synchronize with the coordinator

Transmitting data ...
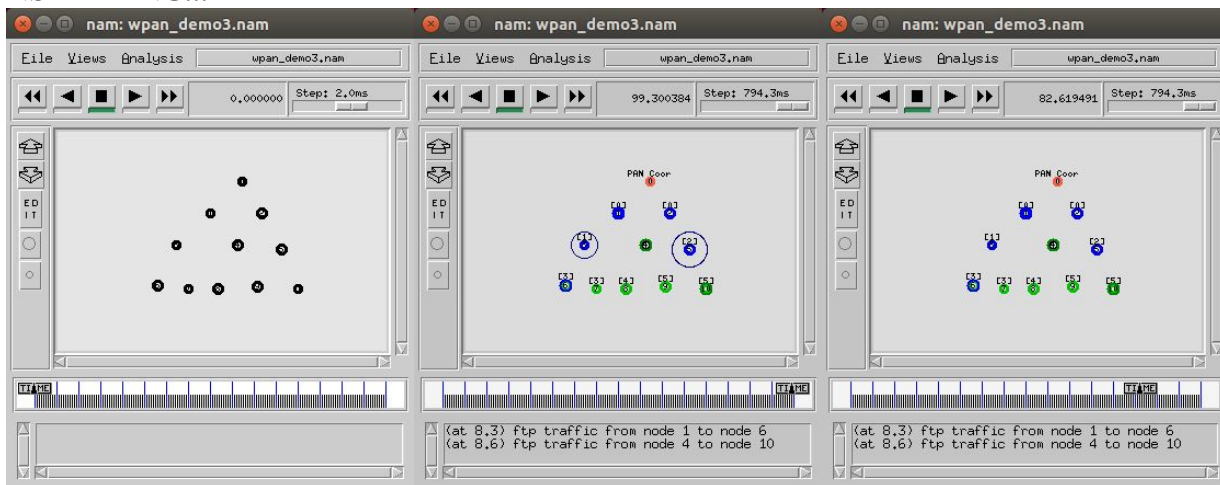
--- startDevice [7] ---
[8.576032](node 7) performing active channel scan ...
[8.576032](node 7) scanning channel 11
<!>[8.578400](node 9) association failed -> NO_DATA (beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:4]
[8.838112](node 7) scanning channel 12
[9.100192](node 7) scanning channel 13
[9.105984](node 5) beacon transmission successful [channel:11] [PAN_ID:0]
[9.364512](node 7) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:3] ...
[9.366560](node 7) sending association request command ...
[9.368224](node 7) ack for association request command received
--- startDevice [9] ---
[9.578400](node 9) performing active channel scan ...
[9.578400](node 9) scanning channel 11
[9.844448](node 9) scanning channel 12
[9.859744](node 7) sending data request command ...
[9.861024](node 7) ack for data request command received
[9.863488](node 7) association response command received
[9.863488](node 7) association successful (beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:3]
[9.863488](node 7) begin to synchronize with the coordinator
[10.073344](node 4) beacon transmission stopped [channel:11] [PAN_ID:0]

[10.108448](node 9) scanning channel 13
[10.371168](node 9) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:5] ...
[10.373216](node 9) sending association request command ...
[10.374880](node 9) ack for association request command received
[10.866400](node 9) sending data request command ...
[10.867680](node 9) ack for data request command received
[10.870144](node 9) association response command received
[10.870144](node 9) association successful (beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:5]
[10.870144](node 9) begin to synchronize with the coordinator
[23.414528](node 4) synchronization loss
[23.414528](node 4) orphan-scanning channel 11
[23.424704](node 4) coordinator relocation successful, begin to re-synchronize with the coordinator
[27.100928](node 4) synchronization loss
[27.100928](node 4) orphan-scanning channel 11
[27.596864](node 4) orphan-scanning channel 12
[28.091072](node 4) orphan-scanning channel 13
[28.585920](node 4) coordinator relocation failed.


NS EXITING...



cris@cris-VirtualBox:~/ns2/Exp 16 WPAN$ ns wpan_demo4.tcl
num_nodes is set 21
INITIALIZE THE LIST xListHead


Traffic: cbr + poisson
Acknowledgement for data: on


Starting Simulation...
--- startPANCoord [0] ---
[0.000000](node 0) performing active channel scan

[0.000000](node 0) scanning channel 11
channel.cc:sendUp - Calc highestAntennaZ_ and distCST_
highestAntennaZ_ = 1.5, distCST_ = 32.2
SORTING LISTS ...DONE!
[0.139840](node 0) scanning channel 12
[0.281280](node 0) scanning channel 13
--- startDevice [1] ---
[0.300000](node 1) performing active channel scan ...
[0.300000](node 1) scanning channel 11
[0.420800](node 0) begin to transmit beacons
[0.421568](node 0) successfully started a new PAN (beacon enabled) [channel:11] [PAN_ID:0]
[0.562400](node 1) scanning channel 12
[0.825760](node 1) scanning channel 13
[1.087840](node 1) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:0] ...
[1.089568](node 1) sending association request command ...
[1.091104](node 1) ack for association request command received
--- startDevice [9] ---
[1.300000](node 9) performing active channel scan ...
[1.300000](node 9) scanning channel 11
[1.563360](node 9) scanning channel 12
[1.582624](node 1) sending data request command ...
[1.583904](node 1) ack for data request command received
[1.586368](node 1) association response command received
[1.586368](node 1) association successful (beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:0]
[1.586368](node 1) begin to synchronize with the coordinator
--- startDevice [13] ---
[1.700000](node 13) performing active channel scan ...
[1.700000](node 13) scanning channel 11
[1.825760](node 9) scanning channel 13
[1.962400](node 13) scanning channel 12
[2.088800](node 9) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:0] ...
[2.090848](node 9) sending association request command ...
[2.092384](node 9) ack for association request command received
[2.225120](node 13) scanning channel 13
--- startDevice [19] ---
[2.300000](node 19) performing active channel scan ...
[2.300000](node 19) scanning channel 11
[2.488800](node 13) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:0] ...
[2.491168](node 13) sending association request command ...
[2.492704](node 13) ack for association request command received
[2.563680](node 19) scanning channel 12
[2.583904](node 9) sending data request command ...
[2.585184](node 9) ack for data request command received

[2.587648](node 9) association response command received
[2.587648](node 9) association successful (beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:0]
[2.587648](node 9) begin to synchronize with the coordinator
[2.825760](node 19) scanning channel 13
[2.984224](node 13) sending data request command ...
[2.985504](node 13) ack for data request command received
[3.089760](node 19) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:0] ...
[3.090848](node 19) sending association request command ...
[3.092384](node 19) ack for association request command received
--- startDevice [2] ---
[3.300000](node 2) performing active channel scan ...
[3.300000](node 2) scanning channel 11
<!>[3.477024](node 13) association failed -> NO_DATA (beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:0]
--- startDevice [7] ---
[3.500000](node 7) performing active channel scan ...
[3.500000](node 7) scanning channel 11
[3.563360](node 2) scanning channel 12
[3.583904](node 19) sending data request command ...
[3.585184](node 19) ack for data request command received
[3.587648](node 19) association response command received
[3.587648](node 19) association successful (beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:0]
[3.587648](node 19) begin to synchronize with the coordinator
--- startDevice [11] ---
[3.600000](node 11) performing active channel scan ...
[3.600000](node 11) scanning channel 11
[3.763680](node 7) scanning channel 12
--- startDevice [16] ---
[3.800000](node 16) performing active channel scan ...
[3.800000](node 16) scanning channel 11
[3.826400](node 2) scanning channel 13
[3.863680](node 11) scanning channel 12
[4.026400](node 7) scanning channel 13
[4.064000](node 16) scanning channel 12
[4.089440](node 2) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:1] ...
[4.091808](node 2) sending association request command ...
[4.093344](node 2) ack for association request command received
[4.126400](node 11) scanning channel 13
[4.290400](node 7) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:9] ...
[4.292448](node 7) sending association request command ...
[4.293984](node 7) ack for association request command received
--- startDevice [3] ---

[4.300000](node 3) performing active channel scan ...
[4.300000](node 3) scanning channel 11
[4.327680](node 16) scanning channel 13
[4.389440](node 11) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:9] ...
[4.390528](node 11) sending association request command ...
[4.392224](node 11) ack for association request command received
--- startDevice [13] ---
[4.477024](node 13) performing active channel scan ...
[4.477024](node 13) scanning channel 11
--- startDevice [6] ---
[4.500000](node 6) performing active channel scan ...
[4.500000](node 6) scanning channel 11
[4.562080](node 3) scanning channel 12
[4.584864](node 2) sending data request command ...
[4.586144](node 2) ack for data request command received
[4.588608](node 2) association response command received
[4.588608](node 2) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:1]
[4.588608](node 2) begin to transmit beacons
[4.589376](node 2) beacon transmission successful [channel:11] [PAN_ID:0]
[4.589760](node 16) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:19] ...
[4.592128](node 16) sending association request command ...
[4.593824](node 16) ack for association request command received
[4.740704](node 13) scanning channel 12
[4.763360](node 6) scanning channel 12
[4.785504](node 7) sending data request command ...
[4.786784](node 7) ack for data request command received
[4.789248](node 7) association response command received
[4.789248](node 7) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:9]
[4.789248](node 7) begin to transmit beacons
[4.790016](node 7) beacon transmission successful [channel:11] [PAN_ID:0]
--- startDevice [12] ---
[4.800000](node 12) performing active channel scan ...
[4.800000](node 12) scanning channel 11
[4.824480](node 3) scanning channel 13
[4.883744](node 11) sending data request command ...
[4.885024](node 11) ack for data request command received
[5.005024](node 13) scanning channel 13
[5.026400](node 6) scanning channel 13
[5.062720](node 12) scanning channel 12
[5.085344](node 16) sending data request command ...
[5.086624](node 16) ack for data request command received
<!>[5.088480](node 3) no coordinator found for association.

[5.089088](node 16) association response command received
[5.089088](node 16) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:19]
[5.089088](node 16) begin to transmit beacons
[5.089856](node 16) beacon transmission successful [channel:11] [PAN_ID:0]
--- startDevice [17] ---
[5.100000](node 17) performing active channel scan ...
[5.100000](node 17) scanning channel 11
[5.268064](node 13) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:0] ...
[5.269152](node 13) sending association request command ...
[5.270624](node 13) ack for association request command received
<!>[5.290080](node 6) no coordinator found for association.
[5.325440](node 12) scanning channel 13
[5.362400](node 17) scanning channel 12
<!>[5.376544](node 11) association failed -> NO_DATA (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:9]
<!>[5.589440](node 12) no coordinator found for association.
--- startDevice [20] ---
[5.600000](node 20) performing active channel scan ...
[5.600000](node 20) scanning channel 11
[5.624800](node 17) scanning channel 13
[5.762144](node 13) sending data request command ...
[5.763424](node 13) ack for data request command received
[5.765888](node 13) association response command received
[5.765888](node 13) association successful (beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:0]
[5.765888](node 13) begin to synchronize with the coordinator
--- startDevice [5] ---
[5.800000](node 5) performing active channel scan ...
[5.800000](node 5) scanning channel 11
[5.862080](node 20) scanning channel 12
[5.887520](node 17) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:16] ...
[5.889248](node 17) sending association request command ...
[5.890912](node 17) ack for association request command received
--- startDevice [10] ---
[6.000000](node 10) performing active channel scan ...
[6.000000](node 10) scanning channel 11
[6.064320](node 5) scanning channel 12
--- startDevice [3] ---
[6.088480](node 3) performing active channel scan ...
[6.088480](node 3) scanning channel 11
[6.125120](node 20) scanning channel 13
[6.264000](node 10) scanning channel 12
--- startDevice [6] ---

[6.290080](node 6) performing active channel scan ...
[6.290080](node 6) scanning channel 11
--- startDevice [14] ---
[6.300000](node 14) performing active channel scan ...
[6.300000](node 14) scanning channel 11
[6.328640](node 5) scanning channel 13
[6.352160](node 3) scanning channel 12
--- startDevice [11] ---
[6.376544](node 11) performing active channel scan ...
[6.376544](node 11) scanning channel 11
[6.382432](node 17) sending data request command ...
[6.383712](node 17) ack for data request command received
[6.386176](node 17) association response command received
[6.386176](node 17) association successful (beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:16]
[6.386176](node 17) begin to synchronize with the coordinator
[6.387200](node 20) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:19] ...
[6.388608](node 20) sending association request command ...
[6.390304](node 20) ack for association request command received
[6.528000](node 10) scanning channel 13
[6.553120](node 6) scanning channel 12
[6.563360](node 14) scanning channel 12
--- startDevice [12] ---
[6.589440](node 12) performing active channel scan ...
[6.589440](node 12) scanning channel 11
[6.590720](node 5) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:1] ...
[6.590848](node 5) sending association request command ...
[6.592544](node 5) ack for association request command received
[6.616480](node 3) scanning channel 13
[6.640224](node 11) scanning channel 12
[6.791360](node 10) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:9] ...
[6.793728](node 10) sending association request command ...
[6.795424](node 10) ack for association request command received
--- startDevice [18] ---
[6.800000](node 18) performing active channel scan ...
[6.800000](node 18) scanning channel 11
[6.817440](node 6) scanning channel 13
[6.826400](node 14) scanning channel 13
[6.851520](node 12) scanning channel 12
[6.880800](node 3) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:2] ...
[6.881824](node 20) sending data request command ...
[6.882656](node 3) sending association request command ...
<!>[6.888672](node 20) association failed -> NO_DATA (non-beacon enabled) [channel:11]
[PAN_ID:0] [CoordAddr:19]

[6.888864](node 3) sending association request command ...
[6.890592](node 3) ack for association request command received
[6.903904](node 11) scanning channel 13
--- startDevice [4] ---
[7.000000](node 4) performing active channel scan ...
[7.000000](node 4) scanning channel 11
[7.064000](node 18) scanning channel 12
[7.080160](node 6) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:7] ...
[7.082208](node 6) sending association request command ...
[7.083872](node 6) ack for association request command received
[7.084064](node 5) sending data request command ...
[7.085344](node 5) ack for data request command received
[7.087808](node 5) association response command received
[7.087808](node 5) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:1]
[7.089120](node 14) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:13] ...
[7.090208](node 14) sending association request command ...
[7.091744](node 14) ack for association request command received
[7.114560](node 12) scanning channel 13
<!>[7.168224](node 11) no coordinator found for association.
[7.262080](node 4) scanning channel 12
[7.286944](node 10) sending data request command ...
[7.288224](node 10) ack for data request command received
[7.290688](node 10) association response command received
[7.290688](node 10) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:9]
--- startDevice [8] ---
[7.300000](node 8) performing active channel scan ...
[7.300000](node 8) scanning channel 11
[7.327360](node 18) scanning channel 13
<!>[7.378240](node 12) no coordinator found for association.
[7.382112](node 3) sending data request command ...
[7.383392](node 3) ack for data request command received
[7.385856](node 3) association response command received
[7.385856](node 3) association successful (beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:2]
[7.385856](node 3) begin to synchronize with the coordinator
[7.525760](node 4) scanning channel 13
[7.563680](node 8) scanning channel 12
[7.575392](node 6) sending data request command ...
[7.576672](node 6) ack for data request command received
[7.579136](node 6) association response command received
[7.579136](node 6) association successful (beacon enabled) [channel:11] [PAN_ID:0]
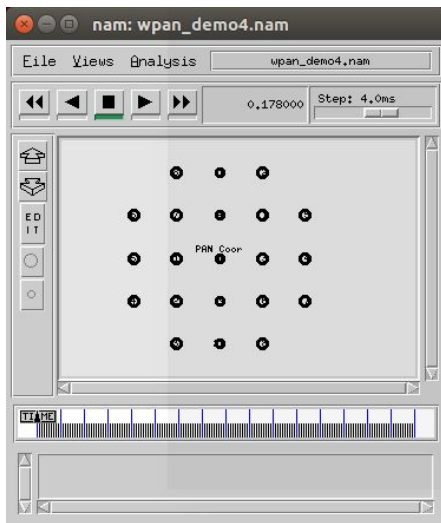[CoordAddr:7]

[7.579136](node 6) begin to synchronize with the coordinator

[7.583264](node 14) sending data request command ...

[7.584544](node 14) ack for data request command received

[7.587008](node 14) association response command received

[7.587008](node 14) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:13]

[7.591680](node 18) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:16] ...

[7.592768](node 18) sending association request command ...

[7.594272](node 18) ack for association request command received

--- startDevice [15] ---

[7.700000](node 15) performing active channel scan ...

[7.700000](node 15) scanning channel 11

[7.789440](node 4) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:2] ...

[7.790528](node 4) sending association request command ...

[7.792032](node 4) ack for association request command received

[7.826080](node 8) scanning channel 13

--- startDevice [20] ---

[7.888672](node 20) performing active channel scan ...

[7.888672](node 20) scanning channel 11

[7.963360](node 15) scanning channel 12

[8.085792](node 18) sending data request command ...

[8.087072](node 18) ack for data request command received

[8.089120](node 8) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:10] ...

[8.089536](node 18) association response command received

[8.089536](node 18) association successful (beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:16]

[8.089536](node 18) begin to synchronize with the coordinator

[8.089568](node 8) sending association request command ...

[8.091040](node 8) ack for association request command received

[8.152992](node 20) scanning channel 12

--- startDevice [11] ---

[8.168224](node 11) performing active channel scan ...

[8.168224](node 11) scanning channel 11

[8.225440](node 15) scanning channel 13

[8.283552](node 4) sending data request command ...

[8.284832](node 4) ack for data request command received

[8.287296](node 4) association response command received

[8.287296](node 4) association successful (beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:2]

[8.287296](node 4) begin to synchronize with the coordinator

--- startDevice [12] ---

[8.378240](node 12) performing active channel scan ...

[8.378240](node 12) scanning channel 11

[8.416992](node 20) scanning channel 13

[8.431584](node 11) scanning channel 12

[8.488480](node 15) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:14] ...

[8.490208](node 15) sending association request command ...

[8.491680](node 15) ack for association request command received

[8.582560](node 8) sending data request command ...

[8.583808](node 8) ack for data request command received

[8.586176](node 8) association response command received

[8.586176](node 8) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:10]

[8.640640](node 12) scanning channel 12

[8.680352](node 20) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:19] ...

[8.681760](node 20) sending association request command ...

[8.683424](node 20) ack for association request command received

[8.694944](node 11) scanning channel 13

[8.904320](node 12) scanning channel 13

[8.957664](node 11) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:9] ...

[8.958112](node 11) sending association request command ...

[8.959584](node 11) ack for association request command received

[8.983200](node 15) sending data request command ...

[8.984448](node 15) ack for data request command received

[8.986816](node 15) association response command received

[8.986816](node 15) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:14]

[9.167680](node 12) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:10] ...

[9.168768](node 12) sending association request command ...

[9.170240](node 12) ack for association request command received

[9.174944](node 20) sending data request command ...

[9.176224](node 20) ack for data request command received

[9.178688](node 20) association response command received

[9.178688](node 20) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:19]

[9.451104](node 11) sending data request command ...

[9.452384](node 11) ack for data request command received

[9.454848](node 11) association response command received

[9.454848](node 11) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:9]

[9.454848](node 11) begin to transmit beacons

[9.455616](node 11) beacon transmission successful [channel:11] [PAN_ID:0]

[9.661760](node 12) sending data request command ...

[9.663008](node 12) ack for data request command received

[9.665376](node 12) association response command received

[9.665376](node 12) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:10]

Transmitting data ...

[10.319616](node 7) beacon transmission successful [channel:11] [PAN_ID:0]
[10.364736](node 2) beacon transmission successful [channel:11] [PAN_ID:0]
[10.374848](node 0) beacon transmission stopped [channel:11] [PAN_ID:0]
[15.033408](node 3) synchronization loss
[15.033408](node 3) orphan-scanning channel 11
[15.033408](node 4) synchronization loss
[15.033408](node 4) orphan-scanning channel 11
[15.527616](node 3) orphan-scanning channel 12
[15.528576](node 4) orphan-scanning channel 12
[16.020736](node 3) orphan-scanning channel 13
[16.022144](node 4) orphan-scanning channel 13
[16.515264](node 3) coordinator relocation failed --> try to reassociate ...
--- startDevice [3] ---
[16.515264](node 3) performing active channel scan ...
[16.515264](node 3) scanning channel 11
[16.516672](node 4) coordinator relocation failed --> try to reassociate ...
--- startDevice [4] ---
[16.516672](node 4) performing active channel scan ...
[16.516672](node 4) scanning channel 11
[16.778752](node 4) scanning channel 12
[16.778944](node 3) scanning channel 12
[17.041792](node 4) scanning channel 13
[17.042624](node 3) scanning channel 13
[17.305344](node 3) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:20] ...
[17.305792](node 4) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:5] ...
[17.307392](node 3) sending association request command ...
[17.308160](node 4) sending association request command ...
[17.308864](node 3) ack for association request command received
[17.309632](node 4) ack for association request command received
[17.800384](node 3) sending data request command ...
[17.801152](node 4) sending data request command ...
[17.801632](node 3) ack for data request command received
[17.802400](node 4) ack for data request command received
[17.804000](node 3) association response command received
[17.804000](node 3) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:20]
[17.804768](node 4) association response command received
[17.804768](node 4) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:5]

NS EXITING...

cris@cris-VirtualBox:~/ns2/Exp 16 WPAN$ ns wpan_demo5.tcl
num_nodes is set 101
INITIALIZE THE LIST xListHead

Traffic: cbr + poisson
Acknowledgement for data: on

Starting Simulation...
--- startPANCoord [0] ---
[0.000000](node 0) performing active channel scan
[0.000000](node 0) scanning channel 11
channel.cc:sendUp - Calc highestAntennaZ_ and distCST_
highestAntennaZ_ = 1.5,  distCST_ = 27.8
SORTING LISTS ...DONE!
[0.140480](node 0) scanning channel 12
[0.280960](node 0) scanning channel 13
[0.422400](node 0) successfully started a new PAN (non-beacon enabled) [channel:11]
[PAN_ID:0]
--- startDevice [1] ---
[0.500000](node 1) performing active channel scan ...
[0.500000](node 1) scanning channel 11
[0.762080](node 1) scanning channel 12
--- startDevice [2] ---
[0.800000](node 2) performing active channel scan ...
[0.800000](node 2) scanning channel 11
[1.025120](node 1) scanning channel 13
[1.064000](node 2) scanning channel 12
[1.288800](node 1) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:0] ...
[1.291168](node 1) sending association request command ...

[1.292640](node 1) ack for association request command received
--- startDevice [3] ---
[1.300000](node 3) performing active channel scan ...
[1.300000](node 3) scanning channel 11
[1.326080](node 2) scanning channel 13
[1.563360](node 3) scanning channel 12
[1.588800](node 2) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:0] ...
[1.589888](node 2) sending association request command ...
[1.591360](node 2) ack for association request command received
[1.784160](node 1) sending data request command ...
[1.785408](node 1) ack for data request command received
[1.787776](node 1) association response command received
[1.787776](node 1) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:0]
--- startDevice [4] ---
[1.800000](node 4) performing active channel scan ...
[1.800000](node 4) scanning channel 11
[1.827360](node 3) scanning channel 13
[2.064320](node 4) scanning channel 12
[2.082880](node 2) sending data request command ...
[2.084128](node 2) ack for data request command received
[2.091680](node 3) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:0] ...
[2.094048](node 3) sending association request command ...
[2.095520](node 3) ack for association request command received
--- startDevice [5] ---
[2.300000](node 5) performing active channel scan ...
[2.300000](node 5) scanning channel 11
[2.327040](node 4) scanning channel 13
--- startDevice [6] ---
[2.400000](node 6) performing active channel scan ...
[2.400000](node 6) scanning channel 11
--- startDevice [7] ---
[2.500000](node 7) performing active channel scan ...
[2.500000](node 7) scanning channel 11
[2.563680](node 5) scanning channel 12
<!>[2.575648](node 2) association failed -> NO_DATA (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:0]
[2.587040](node 3) sending data request command ...
[2.588288](node 3) ack for data request command received
[2.589760](node 4) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:0] ...
[2.590656](node 3) association response command received
[2.590656](node 3) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:0]
[2.590848](node 4) sending association request command ...

[2.592320](node 4) ack for association request command received
--- startDevice [8] ---
[2.600000](node 8) performing active channel scan ...
[2.600000](node 8) scanning channel 11
[2.662080](node 6) scanning channel 12
[2.763040](node 7) scanning channel 12
[2.828000](node 5) scanning channel 13
[2.862080](node 8) scanning channel 12
[2.925440](node 6) scanning channel 13
[3.025760](node 7) scanning channel 13
[3.083840](node 4) sending data request command ...
[3.085088](node 4) ack for data request command received
[3.087456](node 4) association response command received
[3.087456](node 4) association successful (non-beacon enabled)
[channel:11] [PAN_ID:0] [CoordAddr:0]
[3.091040](node 5) sending association request to [channel:11]
[PAN_ID:0] [CoordAddr:1] ...
[3.091488](node 5) sending association request command ...
[3.092960](node 5) ack for association request command received
[3.126400](node 8) scanning channel 13
<!>[3.188480](node 6) no coordinator found for association.
<!>[3.289440](node 7) no coordinator found for association.
--- startDevice [9] ---
[3.300000](node 9) performing active channel scan ...
[3.300000](node 9) scanning channel 11
--- startDevice [11] ---
[3.300000](node 11) performing active channel scan ...
[3.300000](node 11) scanning channel 11
<!>[3.390400](node 8) no coordinator found for association.
[3.563360](node 9) scanning channel 12
[3.564320](node 11) scanning channel 12
--- startDevice [2] ---
[3.575648](node 2) performing active channel scan ...
[3.575648](node 2) scanning channel 11
[3.584480](node 5) sending data request command ...
[3.585728](node 5) ack for data request command received
[3.588096](node 5) association response command received
[3.588096](node 5) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
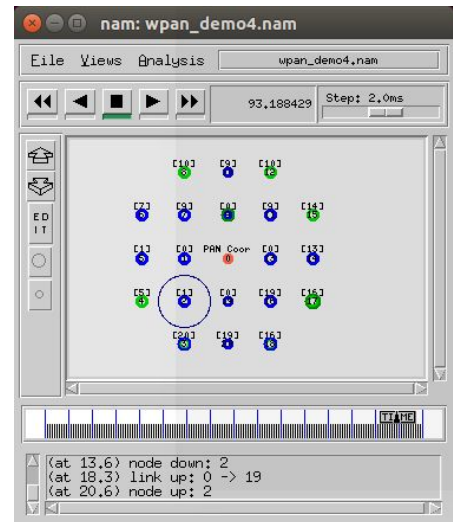[CoordAddr:1]
[3.588096](node 5) begin to transmit beacons
[3.588864](node 5) beacon transmission successful [channel:11] [PAN_ID:0]
--- startDevice [10] ---
[3.800000](node 10) performing active channel scan ...
[3.800000](node 10) scanning channel 11

--- startDevice [12] ---
[3.800000](node 12) performing active channel scan ...
[3.800000](node 12) scanning channel 11
[3.825440](node 9) scanning channel 13
[3.827360](node 11) scanning channel 13
[3.839968](node 2) scanning channel 12
[4.062720](node 10) scanning channel 12
[4.064320](node 12) scanning channel 12
[4.089760](node 9) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:4] ...
[4.090528](node 9) sending association request command ...
[4.091040](node 11) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:3] ...
[4.092000](node 9) ack for association request command received
[4.092768](node 11) sending association request command ...
[4.094240](node 11) ack for association request command received
[4.102368](node 2) scanning channel 13
--- startDevice [6] ---
[4.188480](node 6) performing active channel scan ...
[4.188480](node 6) scanning channel 11
--- startDevice [7] ---
[4.289440](node 7) performing active channel scan ...
[4.289440](node 7) scanning channel 11
--- startDevice [13] ---
[4.300000](node 13) performing active channel scan ...
[4.300000](node 13) scanning channel 11
--- startDevice [14] ---
[4.300000](node 14) performing active channel scan ...
[4.300000](node 14) scanning channel 11
--- startDevice [15] ---
[4.300000](node 15) performing active channel scan ...
[4.300000](node 15) scanning channel 11
--- startDevice [16] ---
[4.300000](node 16) performing active channel scan ...
[4.300000](node 16) scanning channel 11
[4.325760](node 10) scanning channel 13
[4.327040](node 12) scanning channel 13
[4.365728](node 2) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:0] ...
[4.367136](node 2) sending association request command ...
[4.368608](node 2) ack for association request command received
--- startDevice [8] ---
[4.390400](node 8) performing active channel scan ...
[4.390400](node 8) scanning channel 11
[4.452160](node 6) scanning channel 12
[4.552480](node 7) scanning channel 12
[4.562080](node 16) scanning channel 12

[4.564000](node 13) scanning channel 12
[4.564000](node 15) scanning channel 12
[4.564320](node 14) scanning channel 12
[4.583520](node 9) sending data request command ...
[4.584768](node 9) ack for data request command received
[4.585760](node 11) sending data request command ...
[4.587008](node 11) ack for data request command received
[4.587136](node 9) association response command received
[4.587136](node 9) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:4]
[4.589376](node 11) association response command received
[4.589376](node 11) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:3]
[4.590080](node 10) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:1] ...
[4.590848](node 10) sending association request command ...
<!>[4.591360](node 12) no coordinator found for association.
[4.592320](node 10) ack for association request command received
[4.652800](node 8) scanning channel 12
[4.715200](node 6) scanning channel 13
[4.815520](node 7) scanning channel 13
[4.825120](node 16) scanning channel 13
[4.826400](node 13) scanning channel 13
[4.828320](node 15) scanning channel 13
[4.828640](node 14) scanning channel 13
[4.860128](node 2) sending data request command ...
[4.861376](node 2) ack for data request command received
[4.863744](node 2) association response command received
[4.863744](node 2) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:0]
[4.916480](node 8) scanning channel 13
<!>[4.978240](node 6) no coordinator found for association.
[5.079520](node 7) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:3] ...
[5.080288](node 7) sending association request command ...
[5.081760](node 7) ack for association request command received
[5.083840](node 10) sending data request command ...
[5.085088](node 10) ack for data request command received
[5.087456](node 10) association response command received
[5.087456](node 10) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:1]
<!>[5.088160](node 16) no coordinator found for association.
[5.090720](node 13) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:5] ...
[5.091488](node 13) sending association request command ...
<!>[5.091680](node 14) no coordinator found for association.
<!>[5.092320](node 15) no coordinator found for association.

[5.092960](node 13) ack for association request command received
[5.179520](node 8) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:4] ...
[5.181248](node 8) sending association request command ...
[5.182720](node 8) ack for association request command received
--- startDevice [17] ---
[5.300000](node 17) performing active channel scan ...
[5.300000](node 17) scanning channel 11
--- startDevice [18] ---
[5.300000](node 18) performing active channel scan ...
[5.300000](node 18) scanning channel 11
--- startDevice [19] ---
[5.300000](node 19) performing active channel scan ...
[5.300000](node 19) scanning channel 11
--- startDevice [20] ---
[5.300000](node 20) performing active channel scan ...
[5.300000](node 20) scanning channel 11
[5.563040](node 19) scanning channel 12
[5.563040](node 20) scanning channel 12
[5.564320](node 17) scanning channel 12
[5.564320](node 18) scanning channel 12
[5.573280](node 7) sending data request command ...
[5.574528](node 7) ack for data request command received
[5.576896](node 7) association response command received
[5.576896](node 7) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:3]
[5.576896](node 7) begin to transmit beacons
[5.577664](node 7) beacon transmission successful [channel:11] [PAN_ID:0]
[5.584480](node 13) sending data request command ...
[5.585760](node 13) ack for data request command received
[5.588224](node 13) association response command received
[5.588224](node 13) association successful (beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:5]
[5.588224](node 13) begin to synchronize with the coordinator
--- startDevice [12] ---
[5.591360](node 12) performing active channel scan ...
[5.591360](node 12) scanning channel 11
[5.674240](node 8) sending data request command ...
[5.675488](node 8) ack for data request command received
[5.677856](node 8) association response command received
[5.677856](node 8) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:4]
[5.677856](node 8) begin to transmit beacons
[5.678624](node 8) beacon transmission successful [channel:11] [PAN_ID:0]
[5.825120](node 20) scanning channel 13

[5.826720](node 19) scanning channel 13
[5.827040](node 18) scanning channel 13
[5.827680](node 17) scanning channel 13
[5.853760](node 12) scanning channel 12
--- startDevice [6] ---
[5.978240](node 6) performing active channel scan ...
[5.978240](node 6) scanning channel 11
--- startDevice [16] ---
[6.088160](node 16) performing active channel scan ...
[6.088160](node 16) scanning channel 11
[6.089120](node 20) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:9] ...
[6.089760](node 17) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:10] ...
<!>[6.090080](node 19) no coordinator found for association.
[6.090400](node 18) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:11] ...
[6.090528](node 20) sending association request command ...
[6.090848](node 18) sending association request command ...
--- startDevice [14] ---
[6.091680](node 14) performing active channel scan ...
[6.091680](node 14) scanning channel 11
[6.092000](node 20) ack for association request command received
[6.092128](node 17) sending association request command ...
--- startDevice [15] ---
[6.092320](node 15) performing active channel scan ...
[6.092320](node 15) scanning channel 11
[6.092320](node 18) ack for association request command received
[6.093600](node 17) ack for association request command received
[6.117120](node 12) scanning channel 13
[6.240960](node 6) scanning channel 12
--- startDevice [21] ---
[6.300000](node 21) performing active channel scan ...
[6.300000](node 21) scanning channel 11
--- startDevice [22] ---
[6.300000](node 22) performing active channel scan ...
[6.300000](node 22) scanning channel 11
--- startDevice [23] ---
[6.300000](node 23) performing active channel scan ...
[6.300000](node 23) scanning channel 11
--- startDevice [24] ---
[6.300000](node 24) performing active channel scan ...
[6.300000](node 24) scanning channel 11
[6.350880](node 16) scanning channel 12
[6.354400](node 14) scanning channel 12
[6.356320](node 15) scanning channel 12
<!>[6.379200](node 12) no coordinator found for association.

[6.504640](node 6) scanning channel 13
[6.563040](node 22) scanning channel 12
[6.563360](node 24) scanning channel 12
[6.563680](node 23) scanning channel 12
[6.564000](node 21) scanning channel 12
[6.583520](node 20) sending data request command ...
[6.583840](node 18) sending data request command ...
[6.584768](node 20) ack for data request command received
[6.585088](node 18) ack for data request command received
[6.585120](node 17) sending data request command ...
[6.586368](node 17) ack for data request command received
[6.587136](node 20) association response command received
[6.587136](node 20) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:9]
[6.587456](node 18) association response command received
[6.587456](node 18) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:11]
[6.588736](node 17) association response command received
[6.588736](node 17) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:10]
[6.614880](node 16) scanning channel 13
[6.618080](node 14) scanning channel 13
[6.620320](node 15) scanning channel 13
[6.767360](node 6) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:2] ...
[6.769088](node 6) sending association request command ...
[6.770560](node 6) ack for association request command received
[6.825440](node 24) scanning channel 13
[6.826080](node 23) scanning channel 13
[6.826720](node 22) scanning channel 13
[6.827360](node 21) scanning channel 13
[6.877280](node 16) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:8] ...
[6.878048](node 16) sending association request command ...
[6.879680](node 16) ack for association request command received
<!>[6.880800](node 14) no coordinator found for association.
[6.882400](node 15) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:7] ...
[6.883168](node 15) sending association request command ...
[6.884640](node 15) ack for association request command received
[7.089120](node 22) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:11] ...
[7.089248](node 22) sending association request command ...
[7.089440](node 24) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:9] ...
[7.089760](node 23) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:8] ...
--- startDevice [19] ---
[7.090080](node 19) performing active channel scan ...
[7.090080](node 19) scanning channel 11

[7.090080](node 21) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:10] ...
[7.090208](node 23) sending association request command ...
[7.090208](node 21) sending association request command ...
[7.090720](node 22) ack for association request command received
[7.091680](node 21) ack for association request command received
[7.091808](node 24) sending association request command ...
[7.091840](node 23) ack for association request command received
[7.093280](node 24) ack for association request command received
[7.262080](node 6) sending data request command ...
[7.263328](node 6) ack for data request command received
[7.265696](node 6) association response command received
[7.265696](node 6) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:2]
[7.265696](node 6) begin to transmit beacons
[7.266464](node 6) beacon transmission successful [channel:11] [PAN_ID:0]
--- startDevice [25] ---
[7.300000](node 25) performing active channel scan ...
[7.300000](node 25) scanning channel 11
--- startDevice [26] ---
[7.300000](node 26) performing active channel scan ...
[7.300000](node 26) scanning channel 11
--- startDevice [27] ---
[7.300000](node 27) performing active channel scan ...
[7.300000](node 27) scanning channel 11
--- startDevice [28] ---
[7.300000](node 28) performing active channel scan ...
[7.300000](node 28) scanning channel 11
--- startDevice [29] ---
[7.300000](node 29) performing active channel scan ...
[7.300000](node 29) scanning channel 11
--- startDevice [30] ---
[7.300000](node 30) performing active channel scan ...
[7.300000](node 30) scanning channel 11
--- startDevice [31] ---
[7.300000](node 31) performing active channel scan ...
[7.300000](node 31) scanning channel 11
--- startDevice [32] ---
[7.300000](node 32) performing active channel scan ...
[7.300000](node 32) scanning channel 11
[7.352480](node 19) scanning channel 12
[7.371200](node 16) sending data request command ...
[7.372480](node 16) ack for data request command received
[7.374944](node 16) association response command received

[7.374944](node 16) association successful (beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:8]

[7.374944](node 16) begin to synchronize with the coordinator

[7.376160](node 15) sending data request command ...

[7.377440](node 15) ack for data request command received

--- startDevice [12] ---

[7.379200](node 12) performing active channel scan ...

[7.379200](node 12) scanning channel 11

[7.379904](node 15) association response command received

[7.379904](node 15) association successful (beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:7]

[7.379904](node 15) begin to synchronize with the coordinator

[7.562080](node 26) scanning channel 12

[7.562080](node 31) scanning channel 12

[7.562720](node 29) scanning channel 12

[7.563680](node 27) scanning channel 12

[7.564000](node 28) scanning channel 12

[7.564000](node 30) scanning channel 12

[7.564000](node 32) scanning channel 12

[7.564320](node 25) scanning channel 12

[7.582240](node 22) sending data request command ...

[7.583200](node 21) sending data request command ...

[7.583360](node 23) sending data request command ...

[7.583488](node 22) ack for data request command received

[7.584448](node 21) ack for data request command received

[7.584640](node 23) ack for data request command received

[7.584800](node 24) sending data request command ...

[7.585856](node 22) association response command received

[7.585856](node 22) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:11]

[7.586048](node 24) ack for data request command received

[7.586816](node 21) association response command received

[7.586816](node 21) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:10]

[7.588416](node 24) association response command received

[7.588416](node 24) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:9]

[7.616160](node 19) scanning channel 13

[7.642560](node 12) scanning channel 12

[7.824800](node 31) scanning channel 13

[7.824800](node 29) scanning channel 13

[7.826080](node 28) scanning channel 13

[7.826400](node 26) scanning channel 13

[7.827360](node 27) scanning channel 13

[7.827360](node 25) scanning channel 13
[7.828320](node 30) scanning channel 13
[7.828320](node 32) scanning channel 13
[7.880160](node 19) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:7] ...
--- startDevice [14] ---
[7.880800](node 14) performing active channel scan ...
[7.880800](node 14) scanning channel 11
[7.882208](node 19) sending association request command ...
[7.883680](node 19) ack for association request command received
[7.904640](node 12) scanning channel 13
<!>[8.076160](node 23) association failed -> NO_DATA (beacon enabled) [channel:11]
[PAN_ID:0] [CoordAddr:8]
[8.088160](node 29) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:17] ...
<!>[8.088480](node 31) no coordinator found for association.
<!>[8.089440](node 26) no coordinator found for association.
[8.089568](node 29) sending association request command ...
<!>[8.090080](node 28) no coordinator found for association.
<!>[8.091040](node 27) no coordinator found for association.
[8.091040](node 29) ack for association request command received
[8.091680](node 25) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:13] ...
[8.092000](node 30) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:18] ...
[8.092000](node 32) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:20] ...
[8.092768](node 32) sending association request command ...
[8.093728](node 30) sending association request command ...
[8.093728](node 25) sending association request command ...
[8.094240](node 32) ack for association request command received
[8.095200](node 30) ack for association request command received
[8.095200](node 25) ack for association request command received
[8.143840](node 14) scanning channel 12
[8.167360](node 12) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:4] ...
[8.169728](node 12) sending association request command ...
[8.171200](node 12) ack for association request command received
--- startDevice [33] ---
[8.300000](node 33) performing active channel scan ...
[8.300000](node 33) scanning channel 11
--- startDevice [34] ---
[8.300000](node 34) performing active channel scan ...
[8.300000](node 34) scanning channel 11
--- startDevice [35] ---
[8.300000](node 35) performing active channel scan ...
[8.300000](node 35) scanning channel 11
--- startDevice [36] ---
[8.300000](node 36) performing active channel scan ...
[8.300000](node 36) scanning channel 11

--- startDevice [37] ---

[8.300000](node 37) performing active channel scan ...

[8.300000](node 37) scanning channel 11

--- startDevice [38] ---

[8.300000](node 38) performing active channel scan ...

[8.300000](node 38) scanning channel 11

--- startDevice [39] ---

[8.300000](node 39) performing active channel scan ...

[8.300000](node 39) scanning channel 11

--- startDevice [40] ---

[8.300000](node 40) performing active channel scan ...

[8.300000](node 40) scanning channel 11

[8.375200](node 19) sending data request command ...

[8.376480](node 19) ack for data request command received

[8.378944](node 19) association response command received

[8.378944](node 19) association successful (beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:7]

[8.378944](node 19) begin to synchronize with the coordinator

[8.408160](node 14) scanning channel 13

[8.562400](node 34) scanning channel 12

[8.563360](node 33) scanning channel 12

[8.563360](node 37) scanning channel 12

[8.563360](node 38) scanning channel 12

[8.563360](node 39) scanning channel 12

[8.563360](node 40) scanning channel 12

[8.564000](node 35) scanning channel 12

[8.564000](node 36) scanning channel 12

[8.582560](node 29) sending data request command ...

[8.583808](node 29) ack for data request command received

[8.585760](node 32) sending data request command ...

[8.586176](node 29) association response command received

[8.586176](node 29) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:17]

[8.586720](node 30) sending data request command ...

[8.586720](node 25) sending data request command ...

[8.587008](node 32) ack for data request command received

[8.587968](node 30) ack for data request command received

[8.588000](node 25) ack for data request command received

[8.589376](node 32) association response command received

[8.589376](node 32) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:20]

[8.590336](node 30) association response command received

[8.590336](node 30) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:18]

[8.590464](node 25) association response command received
[8.590464](node 25) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:13]
[8.590464](node 25) begin to transmit beacons
[8.591232](node 25) beacon transmission successful [channel:11] [PAN_ID:0]
[8.662720](node 12) sending data request command ...
[8.663968](node 12) ack for data request command received
[8.666336](node 12) association response command received
[8.666336](node 12) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:4]
[8.672160](node 14) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:6] ...
[8.673248](node 14) sending association request command ...
[8.674880](node 14) ack for association request command received
[8.825120](node 34) scanning channel 13
[8.826400](node 37) scanning channel 13
[8.826400](node 36) scanning channel 13
[8.826720](node 40) scanning channel 13
[8.827360](node 33) scanning channel 13
[8.827360](node 38) scanning channel 13
[8.827680](node 39) scanning channel 13
[8.827680](node 35) scanning channel 13
--- startDevice [23] ---
[9.076160](node 23) performing active channel scan ...
[9.076160](node 23) scanning channel 11
--- startDevice [31] ---
[9.088480](node 31) performing active channel scan ...
[9.088480](node 31) scanning channel 11
[9.088800](node 34) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:18] ...
--- startDevice [26] ---
[9.089440](node 26) performing active channel scan ...
[9.089440](node 26) scanning channel 11
[9.089440](node 37) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:21] ...
[9.089760](node 39) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:16] ...
--- startDevice [28] ---
[9.090080](node 28) performing active channel scan ...
[9.090080](node 28) scanning channel 11
[9.090080](node 38) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:22] ...
[9.090208](node 37) sending association request command ...
<!>[9.090400](node 35) no coordinator found for association.
[9.090528](node 34) sending association request command ...
<!>[9.090720](node 36) no coordinator found for association.
--- startDevice [27] ---
[9.091040](node 27) performing active channel scan ...
[9.091040](node 27) scanning channel 11

[9.091040](node 40) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:24] ...
[9.091680](node 33) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:17] ...
[9.091680](node 37) ack for association request command received
[9.091808](node 39) sending association request command ...
[9.091808](node 38) sending association request command ...
[9.092000](node 34) ack for association request command received
[9.093088](node 40) sending association request command ...
[9.093088](node 33) sending association request command ...
[9.093280](node 38) ack for association request command received
[9.094368](node 39) sending association request command ...
[9.094560](node 40) ack for association request command received
[9.094560](node 33) ack for association request command received
[9.096000](node 39) ack for association request command received
[9.166400](node 14) sending data request command ...
[9.167680](node 14) ack for data request command received
[9.170144](node 14) association response command received
[9.170144](node 14) association successful (beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:6]
[9.170144](node 14) begin to synchronize with the coordinator
--- startDevice [41] ---
[9.300000](node 41) performing active channel scan ...
[9.300000](node 41) scanning channel 11
--- startDevice [42] ---
[9.300000](node 42) performing active channel scan ...
[9.300000](node 42) scanning channel 11
--- startDevice [43] ---
[9.300000](node 43) performing active channel scan ...
[9.300000](node 43) scanning channel 11
--- startDevice [44] ---
[9.300000](node 44) performing active channel scan ...
[9.300000](node 44) scanning channel 11
--- startDevice [45] ---
[9.300000](node 45) performing active channel scan ...
[9.300000](node 45) scanning channel 11
--- startDevice [46] ---
[9.300000](node 46) performing active channel scan ...
[9.300000](node 46) scanning channel 11
--- startDevice [47] ---
[9.300000](node 47) performing active channel scan ...
[9.300000](node 47) scanning channel 11
--- startDevice [48] ---
[9.300000](node 48) performing active channel scan ...
[9.300000](node 48) scanning channel 11
[9.340160](node 23) scanning channel 12

[9.352800](node 31) scanning channel 12
[9.353120](node 26) scanning channel 12
[9.354400](node 28) scanning channel 12
[9.354720](node 27) scanning channel 12
[9.562080](node 44) scanning channel 12
[9.562080](node 46) scanning channel 12
[9.562400](node 42) scanning channel 12
[9.563040](node 48) scanning channel 12
[9.563360](node 41) scanning channel 12
[9.563680](node 43) scanning channel 12
[9.563680](node 45) scanning channel 12
[9.564000](node 47) scanning channel 12
[9.583200](node 37) sending data request command ...
[9.583520](node 34) sending data request command ...
[9.584448](node 37) ack for data request command received
[9.584768](node 34) ack for data request command received
[9.584800](node 38) sending data request command ...
[9.586048](node 38) ack for data request command received
[9.586080](node 40) sending data request command ...
[9.586080](node 33) sending data request command ...
[9.586816](node 37) association response command received
[9.586816](node 37) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:21]
[9.587136](node 34) association response command received
[9.587136](node 34) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:18]
[9.587328](node 40) ack for data request command received
[9.587328](node 33) ack for data request command received
[9.587520](node 39) sending data request command ...
[9.588416](node 38) association response command received
[9.588416](node 38) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:22]
[9.588800](node 39) ack for data request command received
[9.589696](node 40) association response command received
[9.589696](node 40) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:24]
[9.589696](node 33) association response command received
[9.589696](node 33) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:17]
[9.591264](node 39) association response command received
[9.591264](node 39) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:16]
[9.602880](node 23) scanning channel 13
[9.615520](node 31) scanning channel 13

[9.617120](node 26) scanning channel 13
[9.617120](node 27) scanning channel 13
[9.618720](node 28) scanning channel 13
[9.825120](node 44) scanning channel 13
[9.825120](node 48) scanning channel 13
[9.826400](node 46) scanning channel 13
[9.826400](node 42) scanning channel 13
[9.826720](node 43) scanning channel 13
[9.826720](node 47) scanning channel 13
[9.827040](node 41) scanning channel 13
[9.828000](node 45) scanning channel 13
[9.866560](node 23) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:12] ...
[9.867328](node 23) sending association request command ...
[9.868800](node 23) ack for association request command received
[9.878240](node 31) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:19] ...
[9.878368](node 31) sending association request command ...
<!>[9.879840](node 26) no coordinator found for association.
[9.879840](node 31) ack for association request command received
[9.880160](node 27) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:15] ...
[9.881568](node 27) sending association request command ...
<!>[9.882720](node 28) no coordinator found for association.
[9.883040](node 27) ack for association request command received
<!>[10.087200](node 44) no coordinator found for association.
[10.087200](node 48) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:32]
...
[10.088480](node 46) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:30]
...
[10.089120](node 41) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:25]
...
[10.089248](node 48) sending association request command ...
<!>[10.089760](node 42) no coordinator found for association.
[10.089888](node 41) sending association request command ...
[10.090080](node 45) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:29]
...
<!>[10.090400](node 43) no coordinator found for association.
--- startDevice [35] ---
[10.090400](node 35) performing active channel scan ...
[10.090400](node 35) scanning channel 11
<!>[10.090400](node 47) no coordinator found for association.
[10.090528](node 46) sending association request command ...
--- startDevice [36] ---
[10.090720](node 36) performing active channel scan ...
[10.090720](node 36) scanning channel 11
[10.090720](node 48) ack for association request command received

[10.091488](node 41) ack for association request command received
[10.092000](node 46) ack for association request command received
[10.092448](node 45) sending association request command ...
[10.093920](node 45) ack for association request command received
--- startDevice [49] ---
[10.300000](node 49) performing active channel scan ...
[10.300000](node 49) scanning channel 11
--- startDevice [50] ---
[10.300000](node 50) performing active channel scan ...
[10.300000](node 50) scanning channel 11
--- startDevice [51] ---
[10.300000](node 51) performing active channel scan ...
[10.300000](node 51) scanning channel 11
--- startDevice [52] ---
[10.300000](node 52) performing active channel scan ...
[10.300000](node 52) scanning channel 11
--- startDevice [53] ---
[10.300000](node 53) performing active channel scan ...
[10.300000](node 53) scanning channel 11
--- startDevice [54] ---
[10.300000](node 54) performing active channel scan ...
[10.300000](node 54) scanning channel 11
--- startDevice [55] ---
[10.300000](node 55) performing active channel scan ...
[10.300000](node 55) scanning channel 11
--- startDevice [56] ---
[10.300000](node 56) performing active channel scan ...
[10.300000](node 56) scanning channel 11
[10.354400](node 35) scanning channel 12
[10.355040](node 36) scanning channel 12
[10.360320](node 23) sending data request command ...
[10.361568](node 23) ack for data request command received
[10.363936](node 23) association response command received
[10.363936](node 23) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:12]
[10.371360](node 31) sending data request command ...
[10.372640](node 31) ack for data request command received
[10.374560](node 27) sending data request command ...
[10.375104](node 31) association response command received
[10.375104](node 31) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:19]
[10.375840](node 27) ack for data request command received
[10.378304](node 27) association response command received

[10.378304](node 27) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:15]
[10.378304](node 27) begin to transmit beacons
[10.379072](node 27) beacon transmission successful [channel:11] [PAN_ID:0]
[10.562400](node 53) scanning channel 12
[10.562400](node 55) scanning channel 12
[10.562720](node 50) scanning channel 12
[10.563040](node 49) scanning channel 12
[10.563680](node 51) scanning channel 12
[10.564000](node 54) scanning channel 12
[10.564320](node 52) scanning channel 12
[10.564320](node 56) scanning channel 12
[10.582240](node 48) sending data request command ...
[10.583008](node 41) sending data request command ...
[10.583488](node 48) ack for data request command received
[10.583520](node 46) sending data request command ...
[10.584288](node 41) ack for data request command received
[10.584768](node 46) ack for data request command received
[10.585440](node 45) sending data request command ...
[10.585856](node 48) association response command received
[10.585856](node 48) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:32]
[10.586688](node 45) ack for data request command received
[10.586752](node 41) association response command received
[10.586752](node 41) association successful (beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:25]
[10.586752](node 41) begin to synchronize with the coordinator
[10.587136](node 46) association response command received
[10.587136](node 46) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:30]
[10.589056](node 45) association response command received
[10.589056](node 45) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:29]
[10.618400](node 35) scanning channel 13
[10.618400](node 36) scanning channel 13
[10.824480](node 53) scanning channel 13
[10.825120](node 55) scanning channel 13
[10.825760](node 51) scanning channel 13
[10.826400](node 50) scanning channel 13
[10.826400](node 54) scanning channel 13
[10.826720](node 49) scanning channel 13
[10.826720](node 52) scanning channel 13
[10.828320](node 56) scanning channel 13
--- startDevice [26] ---

[10.879840](node 26) performing active channel scan ...
[10.879840](node 26) scanning channel 11
[10.881440](node 36) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:16]
...
[10.882080](node 35) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:19]
...
--- startDevice [28] ---
[10.882720](node 28) performing active channel scan ...
[10.882720](node 28) scanning channel 11
[10.883168](node 36) sending association request command ...
[10.883808](node 35) sending association request command ...
[10.884800](node 36) ack for association request command received
[10.885280](node 35) ack for association request command received
--- startDevice [44] ---
[11.087200](node 44) performing active channel scan ...
[11.087200](node 44) scanning channel 11
[11.087520](node 53) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:33]
...
[11.088160](node 55) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:27]
...
[11.088288](node 53) sending association request command ...
[11.088800](node 50) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:38]
...
[11.089120](node 51) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:39]
...
[11.089568](node 55) sending association request command ...
--- startDevice [42] ---
[11.089760](node 42) performing active channel scan ...
[11.089760](node 42) scanning channel 11
[11.089760](node 53) ack for association request command received
[11.089888](node 50) sending association request command ...
[11.090080](node 54) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:34]
...
--- startDevice [43] ---
[11.090400](node 43) performing active channel scan ...
[11.090400](node 43) scanning channel 11
[11.090400](node 49) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:37]
...
--- startDevice [47] ---
[11.090400](node 47) performing active channel scan ...
[11.090400](node 47) scanning channel 11
[11.090400](node 52) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:40]
...
<!>[11.090400](node 56) no coordinator found for association.

[11.090848](node 51) sending association request command ...
[11.090848](node 49) sending association request command ...
[11.091168](node 54) sending association request command ...
[11.091360](node 50) ack for association request command received
[11.092128](node 52) sending association request command ...
[11.092320](node 51) ack for association request command received
[11.092320](node 49) ack for association request command received
[11.092640](node 54) ack for association request command received
[11.093408](node 55) sending association request command ...
[11.093600](node 52) ack for association request command received
[11.095008](node 55) ack for association request command received
[11.144160](node 26) scanning channel 12
[11.146080](node 28) scanning channel 12
--- startDevice [57] ---
[11.300000](node 57) performing active channel scan ...
[11.300000](node 57) scanning channel 11
--- startDevice [58] ---
[11.300000](node 58) performing active channel scan ...
[11.300000](node 58) scanning channel 11
--- startDevice [59] ---
[11.300000](node 59) performing active channel scan ...
[11.300000](node 59) scanning channel 11
--- startDevice [60] ---
[11.300000](node 60) performing active channel scan ...
[11.300000](node 60) scanning channel 11
[11.350880](node 44) scanning channel 12
[11.351840](node 42) scanning channel 12
[11.352480](node 43) scanning channel 12
[11.354400](node 47) scanning channel 12
[11.376320](node 36) sending data request command ...
[11.376800](node 35) sending data request command ...
[11.377600](node 36) ack for data request command received
[11.378080](node 35) ack for data request command received
[11.380064](node 36) association response command received
[11.380064](node 36) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:16]
[11.380544](node 35) association response command received
[11.380544](node 35) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:19]
[11.408160](node 26) scanning channel 13
[11.410400](node 28) scanning channel 13
[11.562720](node 60) scanning channel 12
[11.563040](node 57) scanning channel 12
[11.563680](node 59) scanning channel 12

[11.564000](node 58) scanning channel 12

[11.581280](node 53) sending data request command ...

[11.582528](node 53) ack for data request command received

[11.582880](node 50) sending data request command ...

[11.583840](node 51) sending data request command ...

[11.583840](node 49) sending data request command ...

[11.584128](node 50) ack for data request command received

[11.584160](node 54) sending data request command ...

[11.584896](node 53) association response command received

[11.584896](node 53) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:33]

[11.585088](node 51) ack for data request command received

[11.585088](node 49) ack for data request command received

[11.585120](node 52) sending data request command ...

[11.585408](node 54) ack for data request command received

[11.586368](node 52) ack for data request command received

[11.586496](node 50) association response command received

[11.586496](node 50) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:38]

[11.586528](node 55) sending data request command ...

[11.587456](node 51) association response command received

[11.587456](node 51) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:39]

[11.587456](node 49) association response command received

[11.587456](node 49) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:37]

[11.587776](node 54) association response command received

[11.587776](node 54) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:34]

[11.587808](node 55) ack for data request command received

[11.588736](node 52) association response command received

[11.588736](node 52) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:40]

[11.590272](node 55) association response command received

[11.590272](node 55) association successful (beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:27]

[11.590272](node 55) begin to synchronize with the coordinator

[11.614240](node 44) scanning channel 13

[11.615200](node 43) scanning channel 13

[11.616160](node 42) scanning channel 13

[11.618080](node 47) scanning channel 13

[11.670560](node 26) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:14]
...

[11.671008](node 26) sending association request command ...

[11.672640](node 26) ack for association request command received

<!>[11.673120](node 28) no coordinator found for association.

[11.826400](node 60) scanning channel 13

[11.826720](node 59) scanning channel 13

[11.827040](node 57) scanning channel 13

[11.828000](node 58) scanning channel 13

<!>[11.876960](node 44) no coordinator found for association.

[11.878560](node 43) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:27]
...

[11.879328](node 43) sending association request command ...

<!>[11.879840](node 42) no coordinator found for association.

[11.880480](node 47) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:31]
...

[11.880928](node 47) sending association request command ...

[11.880928](node 43) ack for association request command received

[11.882400](node 47) ack for association request command received

[12.088800](node 59) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:39]
...

[12.089248](node 59) sending association request command ...

--- startDevice [56] ---

[12.090400](node 56) performing active channel scan ...

[12.090400](node 56) scanning channel 11

[12.090400](node 58) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:38]
...

[12.090720](node 57) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:29]
...

<!>[12.090720](node 60) no coordinator found for association.

[12.090720](node 59) ack for association request command received

[12.091168](node 58) sending association request command ...

[12.092128](node 57) sending association request command ...

[12.092640](node 58) ack for association request command received

[12.093600](node 57) ack for association request command received

[12.164160](node 26) sending data request command ...

[12.165440](node 26) ack for data request command received

[12.167904](node 26) association response command received

[12.167904](node 26) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:14]

[12.167904](node 26) begin to transmit beacons

[12.168672](node 26) beacon transmission successful [channel:11] [PAN_ID:0]

--- startDevice [61] ---

[12.300000](node 61) performing active channel scan ...

[12.300000](node 61) scanning channel 11

--- startDevice [62] ---

[12.300000](node 62) performing active channel scan ...

[12.300000](node 62) scanning channel 11
--- startDevice [63] ---
[12.300000](node 63) performing active channel scan ...
[12.300000](node 63) scanning channel 11
--- startDevice [64] ---
[12.300000](node 64) performing active channel scan ...
[12.300000](node 64) scanning channel 11
--- startDevice [65] ---
[12.300000](node 65) performing active channel scan ...
[12.300000](node 65) scanning channel 11
--- startDevice [66] ---
[12.300000](node 66) performing active channel scan ...
[12.300000](node 66) scanning channel 11
--- startDevice [67] ---
[12.300000](node 67) performing active channel scan ...
[12.300000](node 67) scanning channel 11
--- startDevice [68] ---
[12.300000](node 68) performing active channel scan ...
[12.300000](node 68) scanning channel 11
--- startDevice [69] ---
[12.300000](node 69) performing active channel scan ...
[12.300000](node 69) scanning channel 11
--- startDevice [70] ---
[12.300000](node 70) performing active channel scan ...
[12.300000](node 70) scanning channel 11
--- startDevice [71] ---
[12.300000](node 71) performing active channel scan ...
[12.300000](node 71) scanning channel 11
--- startDevice [72] ---
[12.300000](node 72) performing active channel scan ...
[12.300000](node 72) scanning channel 11
[12.354720](node 56) scanning channel 12
[12.372448](node 43) sending data request command ...
[12.373728](node 43) ack for data request command received
[12.373920](node 47) sending data request command ...
[12.375168](node 47) ack for data request command received
[12.376192](node 43) association response command received
[12.376192](node 43) association successful (beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:27]
[12.376192](node 43) begin to synchronize with the coordinator
[12.377536](node 47) association response command received
[12.377536](node 47) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:31]
[12.562080](node 61) scanning channel 12

[12.562080](node 66) scanning channel 12
[12.562400](node 63) scanning channel 12
[12.562400](node 65) scanning channel 12
[12.562400](node 69) scanning channel 12
[12.562400](node 71) scanning channel 12
[12.562720](node 67) scanning channel 12
[12.563040](node 72) scanning channel 12
[12.563360](node 70) scanning channel 12
[12.563680](node 64) scanning channel 12
[12.564320](node 62) scanning channel 12
[12.564320](node 68) scanning channel 12
[12.582240](node 59) sending data request command ...
[12.583488](node 59) ack for data request command received
[12.584160](node 58) sending data request command ...
[12.585120](node 57) sending data request command ...
[12.585408](node 58) ack for data request command received
[12.585856](node 59) association response command received
[12.585856](node 59) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:39]
[12.586368](node 57) ack for data request command received
[12.587776](node 58) association response command received
[12.587776](node 58) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:38]
[12.588736](node 57) association response command received
[12.588736](node 57) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:29]
[12.616800](node 56) scanning channel 13
--- startDevice [28] ---
[12.673120](node 28) performing active channel scan ...
[12.673120](node 28) scanning channel 11
[12.824480](node 66) scanning channel 13
[12.824800](node 67) scanning channel 13
[12.825120](node 61) scanning channel 13
[12.825120](node 72) scanning channel 13
[12.825440](node 69) scanning channel 13
[12.825760](node 65) scanning channel 13
[12.825760](node 71) scanning channel 13
[12.825760](node 64) scanning channel 13
[12.826400](node 63) scanning channel 13
[12.826720](node 70) scanning channel 13
[12.826720](node 62) scanning channel 13
[12.828320](node 68) scanning channel 13
--- startDevice [44] ---
[12.876960](node 44) performing active channel scan ...

[12.876960](node 44) scanning channel 11
--- startDevice [42] ---
[12.879840](node 42) performing active channel scan ...
[12.879840](node 42) scanning channel 11
[12.879840](node 56) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:36]
...
[12.880288](node 56) sending association request command ...
[12.881760](node 56) ack for association request command received
[12.935840](node 28) scanning channel 12
[13.086560](node 66) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:46]
...
[13.087520](node 69) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:49]
...
[13.087968](node 69) sending association request command ...
[13.088160](node 61) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:41]
...
[13.088160](node 71) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:51]
...
[13.088480](node 72) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:52]
...
<!>[13.088480](node 63) no coordinator found for association.
[13.088608](node 71) sending association request command ...
[13.088800](node 67) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:55]
...
[13.088928](node 61) sending association request command ...
[13.088928](node 66) sending association request command ...
[13.089120](node 70) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:50]
...
[13.089440](node 69) ack for association request command received
[13.089568](node 67) sending association request command ...
<!>[13.089760](node 64) no coordinator found for association.
<!>[13.089760](node 62) no coordinator found for association.
[13.089888](node 72) sending association request command ...
[13.089888](node 70) sending association request command ...
<!>[13.090080](node 65) no coordinator found for association.
[13.090080](node 71) ack for association request command received
[13.090400](node 66) ack for association request command received
[13.090528](node 61) ack for association request command received
--- startDevice [60] ---
[13.090720](node 60) performing active channel scan ...
[13.090720](node 60) scanning channel 11
[13.091168](node 67) ack for association request command received
[13.091360](node 72) ack for association request command received
[13.091360](node 70) ack for association request command received

[13.092640](node 68) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:48]
...
[13.094368](node 68) sending association request command ...
[13.095840](node 68) ack for association request command received
[13.140000](node 44) scanning channel 12
[13.143200](node 42) scanning channel 12
[13.198880](node 28) scanning channel 13
--- startDevice [73] ---
[13.300000](node 73) performing active channel scan ...
[13.300000](node 73) scanning channel 11
--- startDevice [74] ---
[13.300000](node 74) performing active channel scan ...
[13.300000](node 74) scanning channel 11
--- startDevice [75] ---
[13.300000](node 75) performing active channel scan ...
[13.300000](node 75) scanning channel 11
--- startDevice [76] ---
[13.300000](node 76) performing active channel scan ...
[13.300000](node 76) scanning channel 11
--- startDevice [77] ---
[13.300000](node 77) performing active channel scan ...
[13.300000](node 77) scanning channel 11
--- startDevice [78] ---
[13.300000](node 78) performing active channel scan ...
[13.300000](node 78) scanning channel 11
--- startDevice [79] ---
[13.300000](node 79) performing active channel scan ...
[13.300000](node 79) scanning channel 11
--- startDevice [80] ---
[13.300000](node 80) performing active channel scan ...
[13.300000](node 80) scanning channel 11
--- startDevice [81] ---
[13.300000](node 81) performing active channel scan ...
[13.300000](node 81) scanning channel 11
--- startDevice [82] ---
[13.300000](node 82) performing active channel scan ...
[13.300000](node 82) scanning channel 11
--- startDevice [83] ---
[13.300000](node 83) performing active channel scan ...
[13.300000](node 83) scanning channel 11
--- startDevice [84] ---
[13.300000](node 84) performing active channel scan ...
[13.300000](node 84) scanning channel 11
[13.353760](node 60) scanning channel 12

[13.373280](node 56) sending data request command ...
[13.374528](node 56) ack for data request command received
[13.376896](node 56) association response command received
[13.376896](node 56) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:36]
[13.404320](node 44) scanning channel 13
[13.406880](node 42) scanning channel 13
[13.461280](node 28) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:16] ...
[13.463648](node 28) sending association request command ...
[13.465280](node 28) ack for association request command received
[13.562080](node 79) scanning channel 12
[13.562080](node 81) scanning channel 12
[13.562720](node 83) scanning channel 12
[13.563040](node 82) scanning channel 12
[13.563360](node 76) scanning channel 12
[13.563360](node 77) scanning channel 12
[13.563360](node 78) scanning channel 12
[13.563680](node 74) scanning channel 12
[13.564000](node 75) scanning channel 12
[13.564000](node 80) scanning channel 12
[13.564000](node 84) scanning channel 12
[13.564320](node 73) scanning channel 12
[13.580960](node 69) sending data request command ...
[13.581600](node 71) sending data request command ...
[13.581920](node 66) sending data request command ...
[13.582048](node 61) sending data request command ...
[13.582208](node 69) ack for data request command received
[13.582688](node 67) sending data request command ...
[13.582848](node 71) ack for data request command received
[13.582880](node 72) sending data request command ...
[13.582880](node 70) sending data request command ...
[13.583168](node 66) ack for data request command received
[13.583328](node 61) ack for data request command received
[13.583968](node 67) ack for data request command received
[13.584128](node 72) ack for data request command received
[13.584128](node 70) ack for data request command received
[13.584576](node 69) association response command received
[13.584576](node 69) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:49]
[13.585216](node 71) association response command received
[13.585216](node 71) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:51]
[13.585536](node 66) association response command received

[13.585536](node 66) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:46]
[13.585792](node 61) association response command received
[13.585792](node 61) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:41]
[13.586432](node 67) association response command received
[13.586432](node 67) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:55]
[13.586496](node 72) association response command received
[13.586496](node 72) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:52]
[13.586496](node 70) association response command received
[13.586496](node 70) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:50]
[13.587360](node 68) sending data request command ...
[13.588608](node 68) ack for data request command received
[13.590976](node 68) association response command received
[13.590976](node 68) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:48]
[13.616800](node 60) scanning channel 13
<!>[13.668000](node 44) no coordinator found for association.
[13.670560](node 42) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:26] ...
[13.672928](node 42) sending association request command ...
[13.674688](node 42) ack for association request command received
[13.825440](node 78) scanning channel 13
[13.826080](node 83) scanning channel 13
[13.826400](node 76) scanning channel 13
[13.826400](node 79) scanning channel 13
[13.826400](node 81) scanning channel 13
[13.826400](node 74) scanning channel 13
[13.826720](node 80) scanning channel 13
[13.827040](node 84) scanning channel 13
[13.827360](node 82) scanning channel 13
[13.827360](node 73) scanning channel 13
[13.827680](node 77) scanning channel 13
[13.828320](node 75) scanning channel 13
[13.879520](node 60) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:32] ...
[13.880288](node 60) sending association request command ...
[13.881760](node 60) ack for association request command received
[13.956800](node 28) sending data request command ...
[13.958080](node 28) ack for data request command received
[13.960544](node 28) association response command received

[13.960544](node 28) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:16]
[13.960544](node 28) begin to transmit beacons
[13.961312](node 28) beacon transmission successful [channel:11] [PAN_ID:0]
[14.087840](node 78) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:58]
...
--- startDevice [63] ---
[14.088480](node 63) performing active channel scan ...
[14.088480](node 63) scanning channel 11
[14.088608](node 78) sending association request command ...
[14.088800](node 79) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:59]
...
[14.088928](node 79) sending association request command ...
[14.089120](node 80) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:48]
...
[14.089248](node 80) sending association request command ...
<!>[14.089440](node 76) no coordinator found for association.
[14.089440](node 83) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:51]
...
[14.089440](node 81) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:49]
...
[14.089568](node 83) sending association request command ...
[14.089568](node 81) sending association request command ...
--- startDevice [64] ---
[14.089760](node 64) performing active channel scan ...
[14.089760](node 64) scanning channel 11
--- startDevice [62] ---
[14.089760](node 62) performing active channel scan ...
[14.089760](node 62) scanning channel 11
[14.090080](node 84) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:52]
...
--- startDevice [65] ---
[14.090080](node 65) performing active channel scan ...
[14.090080](node 65) scanning channel 11
[14.090080](node 78) ack for association request command received
[14.090400](node 82) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:50]
...
[14.090400](node 75) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:55]
...
[14.090400](node 79) ack for association request command received
[14.090720](node 74) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:54]
...
[14.090720](node 80) ack for association request command received
[14.090848](node 82) sending association request command ...

[14.091040](node 73) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:53]
...
<!>[14.091040](node 77) no coordinator found for association.
[14.091040](node 83) ack for association request command received
[14.091040](node 81) ack for association request command received
[14.092320](node 82) ack for association request command received
[14.092448](node 84) sending association request command ...
[14.092768](node 75) sending association request command ...
[14.093088](node 73) sending association request command ...
[14.093088](node 74) sending association request command ...
[14.093920](node 84) ack for association request command received
[14.094368](node 75) ack for association request command received
[14.094560](node 74) ack for association request command received
[14.095008](node 73) sending association request command ...
[14.099168](node 73) sending association request command ...
[14.100640](node 73) ack for association request command received
[14.166208](node 42) sending data request command ...
[14.167488](node 42) ack for data request command received
[14.169952](node 42) association response command received
[14.169952](node 42) association successful (beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:26]
[14.169952](node 42) begin to synchronize with the coordinator
--- startDevice [85] ---
[14.300000](node 85) performing active channel scan ...
[14.300000](node 85) scanning channel 11
--- startDevice [86] ---
[14.300000](node 86) performing active channel scan ...
[14.300000](node 86) scanning channel 11
--- startDevice [87] ---
[14.300000](node 87) performing active channel scan ...
[14.300000](node 87) scanning channel 11
--- startDevice [88] ---
[14.300000](node 88) performing active channel scan ...
[14.300000](node 88) scanning channel 11
--- startDevice [89] ---
[14.300000](node 89) performing active channel scan ...
[14.300000](node 89) scanning channel 11
--- startDevice [90] ---
[14.300000](node 90) performing active channel scan ...
[14.300000](node 90) scanning channel 11
--- startDevice [91] ---
[14.300000](node 91) performing active channel scan ...
[14.300000](node 91) scanning channel 11
--- startDevice [92] ---

[14.300000](node 92) performing active channel scan ...
[14.300000](node 92) scanning channel 11
[14.352480](node 63) scanning channel 12
[14.352480](node 64) scanning channel 12
[14.352480](node 62) scanning channel 12
[14.352800](node 65) scanning channel 12
[14.373280](node 60) sending data request command ...
[14.374528](node 60) ack for data request command received
[14.376896](node 60) association response command received
[14.376896](node 60) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:32]
[14.563040](node 86) scanning channel 12
[14.563680](node 88) scanning channel 12
[14.563680](node 92) scanning channel 12
[14.564000](node 87) scanning channel 12
[14.564320](node 85) scanning channel 12
[14.564320](node 89) scanning channel 12
[14.564320](node 90) scanning channel 12
[14.564320](node 91) scanning channel 12
[14.581600](node 78) sending data request command ...
[14.581920](node 79) sending data request command ...
[14.582240](node 80) sending data request command ...
[14.582560](node 83) sending data request command ...
[14.582560](node 81) sending data request command ...
[14.582848](node 78) ack for data request command received
[14.583168](node 79) ack for data request command received
[14.583488](node 80) ack for data request command received
[14.583808](node 83) ack for data request command received
[14.583808](node 81) ack for data request command received
[14.583840](node 82) sending data request command ...
[14.585088](node 82) ack for data request command received
[14.585216](node 78) association response command received
[14.585216](node 78) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:58]
[14.585440](node 84) sending data request command ...
[14.585536](node 79) association response command received
[14.585536](node 79) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:59]
[14.585856](node 80) association response command received
[14.585856](node 80) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:48]
[14.585888](node 75) sending data request command ...
[14.586080](node 74) sending data request command ...
[14.586176](node 83) association response command received

[14.586176](node 83) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:51]
[14.586176](node 81) association response command received
[14.586176](node 81) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:49]
[14.586688](node 84) ack for data request command received
[14.587168](node 75) ack for data request command received
[14.587328](node 74) ack for data request command received
[14.587456](node 82) association response command received
[14.587456](node 82) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:50]
[14.589056](node 84) association response command received
[14.589056](node 84) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:52]
[14.589632](node 75) association response command received
[14.589632](node 75) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:55]
[14.589696](node 74) association response command received
[14.589696](node 74) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:54]
[14.592160](node 73) sending data request command ...
[14.593408](node 73) ack for data request command received
[14.595776](node 73) association response command received
[14.595776](node 73) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:53]
[14.614880](node 63) scanning channel 13
[14.615520](node 64) scanning channel 13
[14.615520](node 62) scanning channel 13
[14.616800](node 65) scanning channel 13
--- startDevice [44] ---
[14.668000](node 44) performing active channel scan ...
[14.668000](node 44) scanning channel 11
[14.826400](node 87) scanning channel 13
[14.826400](node 90) scanning channel 13
[14.827040](node 86) scanning channel 13
[14.827040](node 92) scanning channel 13
[14.827680](node 91) scanning channel 13
[14.828000](node 88) scanning channel 13
[14.828000](node 85) scanning channel 13
[14.828640](node 89) scanning channel 13
<!>[14.877600](node 63) no coordinator found for association.
<!>[14.878240](node 64) no coordinator found for association.
<!>[14.878240](node 62) no coordinator found for association.

[14.879200](node 65) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:45]
...
[14.879968](node 65) sending association request command ...
[14.881440](node 65) ack for association request command received
[14.932320](node 44) scanning channel 12
[15.088800](node 90) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:70]
...
[15.088928](node 90) sending association request command ...
--- startDevice [76] ---
[15.089440](node 76) performing active channel scan ...
[15.089440](node 76) scanning channel 11
[15.089440](node 86) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:66]
...
[15.090080](node 87) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:67]
...
<!>[15.090400](node 85) no coordinator found for association.
[15.090400](node 90) ack for association request command received
[15.090720](node 92) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:72]
...
[15.090848](node 87) sending association request command ...
--- startDevice [77] ---
[15.091040](node 77) performing active channel scan ...
[15.091040](node 77) scanning channel 11
[15.091040](node 91) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:71]
...
[15.091360](node 88) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:68]
...
[15.091808](node 92) sending association request command ...
[15.091808](node 86) sending association request command ...
[15.092320](node 87) ack for association request command received
[15.092448](node 91) sending association request command ...
[15.092960](node 89) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:69]
...
[15.093280](node 92) ack for association request command received
[15.093280](node 86) ack for association request command received
[15.093408](node 88) sending association request command ...
[15.093728](node 89) sending association request command ...
[15.093920](node 91) ack for association request command received
[15.094880](node 88) ack for association request command received
[15.095200](node 89) ack for association request command received
[15.195680](node 44) scanning channel 13
--- startDevice [93] ---
[15.300000](node 93) performing active channel scan ...
[15.300000](node 93) scanning channel 11

--- startDevice [94] ---
[15.300000](node 94) performing active channel scan ...
[15.300000](node 94) scanning channel 11
--- startDevice [95] ---
[15.300000](node 95) performing active channel scan ...
[15.300000](node 95) scanning channel 11
--- startDevice [96] ---
[15.300000](node 96) performing active channel scan ...
[15.300000](node 96) scanning channel 11
--- startDevice [97] ---
[15.300000](node 97) performing active channel scan ...
[15.300000](node 97) scanning channel 11
--- startDevice [98] ---
[15.300000](node 98) performing active channel scan ...
[15.300000](node 98) scanning channel 11
--- startDevice [99] ---
[15.300000](node 99) performing active channel scan ...
[15.300000](node 99) scanning channel 11
--- startDevice [100] ---
[15.300000](node 100) performing active channel scan ...
[15.300000](node 100) scanning channel 11
[15.351840](node 76) scanning channel 12
[15.354720](node 77) scanning channel 12
[15.372960](node 65) sending data request command ...
[15.374208](node 65) ack for data request command received
[15.376576](node 65) association response command received
[15.376576](node 65) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:45]
[15.458720](node 44) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:28]
...
[15.459168](node 44) sending association request command ...
[15.460928](node 44) ack for association request command received
[15.562080](node 98) scanning channel 12
[15.562400](node 99) scanning channel 12
[15.562720](node 93) scanning channel 12
[15.562720](node 94) scanning channel 12
[15.563040](node 96) scanning channel 12
[15.563360](node 95) scanning channel 12
[15.563360](node 100) scanning channel 12
[15.564320](node 97) scanning channel 12
[15.581920](node 90) sending data request command ...
[15.583168](node 90) ack for data request command received
[15.583840](node 87) sending data request command ...
[15.584800](node 92) sending data request command ...

[15.584800](node 86) sending data request command ...
[15.585088](node 87) ack for data request command received
[15.585440](node 91) sending data request command ...
[15.585536](node 90) association response command received
[15.585536](node 90) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:70]
[15.586048](node 92) ack for data request command received
[15.586048](node 86) ack for data request command received
[15.586400](node 88) sending data request command ...
[15.586688](node 91) ack for data request command received
[15.586720](node 89) sending data request command ...
[15.587456](node 87) association response command received
[15.587456](node 87) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:67]
[15.587648](node 88) ack for data request command received
[15.587968](node 89) ack for data request command received
[15.588416](node 92) association response command received
[15.588416](node 92) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:72]
[15.588416](node 86) association response command received
[15.588416](node 86) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:66]
[15.589056](node 91) association response command received
[15.589056](node 91) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:71]
[15.590016](node 88) association response command received
[15.590016](node 88) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:68]
[15.590336](node 89) association response command received
[15.590336](node 89) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:69]
[15.614880](node 76) scanning channel 13
[15.618720](node 77) scanning channel 13
[15.824480](node 98) scanning channel 13
[15.825440](node 100) scanning channel 13
[15.825760](node 93) scanning channel 13
[15.825760](node 94) scanning channel 13
[15.826080](node 99) scanning channel 13
[15.826400](node 96) scanning channel 13
[15.827680](node 95) scanning channel 13
[15.827680](node 97) scanning channel 13
[15.876960](node 76) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:56]
...
[15.877088](node 76) sending association request command ...

--- startDevice [63] ---
[15.877600](node 63) performing active channel scan ...
[15.877600](node 63) scanning channel 11
--- startDevice [64] ---
[15.878240](node 64) performing active channel scan ...
[15.878240](node 64) scanning channel 11
--- startDevice [62] ---
[15.878240](node 62) performing active channel scan ...
[15.878240](node 62) scanning channel 11
[15.878560](node 76) ack for association request command received
[15.882080](node 77) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:57]
...
[15.882208](node 77) sending association request command ...
[15.883680](node 77) ack for association request command received
[15.952448](node 44) sending data request command ...
[15.953728](node 44) ack for data request command received
[15.956192](node 44) association response command received
[15.956192](node 44) association successful (beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:28]
[15.956192](node 44) begin to synchronize with the coordinator
[16.087520](node 98) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:70]
...
[16.088480](node 100) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:72]
...
[16.088480](node 94) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:78]
...
<!>[16.088800](node 93) no coordinator found for association.
[16.089568](node 98) sending association request command ...
[16.089568](node 94) sending association request command ...
[16.089760](node 97) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:69]
...
[16.090080](node 96) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:68]
...
<!>[16.090080](node 95) no coordinator found for association.
--- startDevice [85] ---
[16.090400](node 85) performing active channel scan ...
[16.090400](node 85) scanning channel 11
[16.090400](node 99) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:71]
...
[16.090528](node 100) sending association request command ...
[16.090528](node 99) sending association request command ...
[16.091040](node 98) ack for association request command received
[16.091040](node 94) ack for association request command received
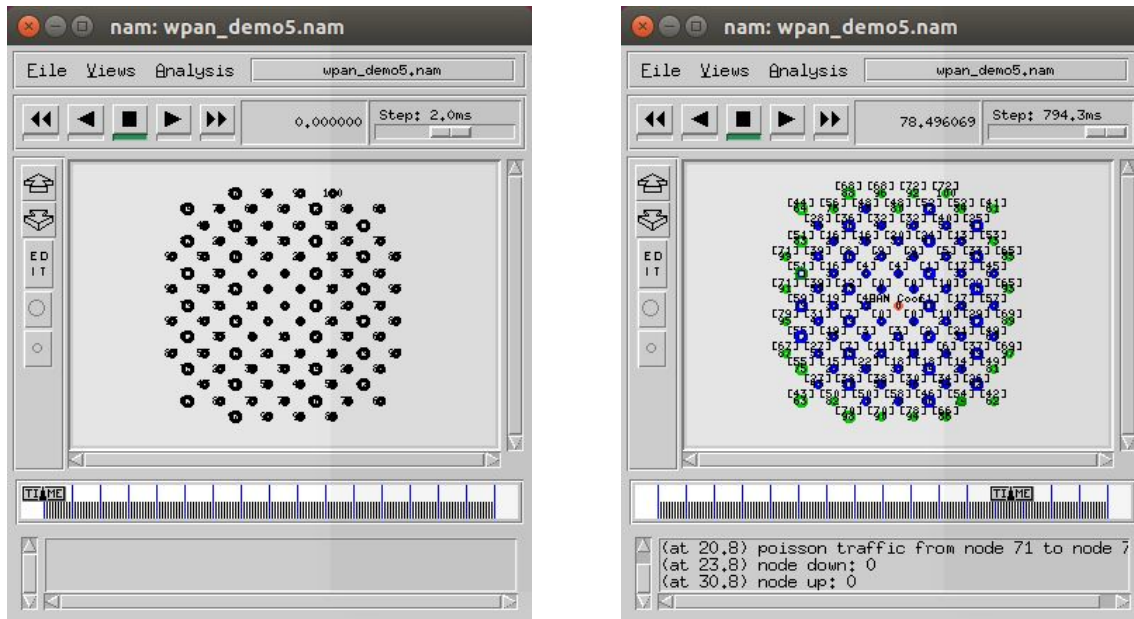[16.091168](node 96) sending association request command ...

[16.091488](node 97) sending association request command ...
[16.092000](node 100) ack for association request command received
[16.092000](node 99) ack for association request command received
[16.092640](node 96) ack for association request command received
[16.092960](node 97) ack for association request command received
[16.141600](node 62) scanning channel 12
[16.141600](node 63) scanning channel 12
[16.142560](node 64) scanning channel 12
[16.354720](node 85) scanning channel 12
[16.370080](node 76) sending data request command ...
[16.371328](node 76) ack for data request command received
[16.373696](node 76) association response command received
[16.373696](node 76) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:56]
[16.375200](node 77) sending data request command ...
[16.376448](node 77) ack for data request command received
[16.378816](node 77) association response command received
[16.378816](node 77) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:57]
[16.403680](node 63) scanning channel 13
[16.405280](node 64) scanning channel 13
[16.405600](node 62) scanning channel 13
[16.582560](node 98) sending data request command ...
[16.582560](node 94) sending data request command ...
[16.583520](node 100) sending data request command ...
[16.583520](node 99) sending data request command ...
[16.583808](node 98) ack for data request command received
[16.583808](node 94) ack for data request command received
[16.584160](node 96) sending data request command ...
[16.584480](node 97) sending data request command ...
[16.584768](node 100) ack for data request command received
[16.584768](node 99) ack for data request command received
[16.585408](node 96) ack for data request command received
[16.585728](node 97) ack for data request command received
[16.586176](node 98) association response command received
[16.586176](node 98) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:70]
[16.586176](node 94) association response command received
[16.586176](node 94) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:78]
[16.587136](node 100) association response command received
[16.587136](node 100) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:72]
[16.587136](node 99) association response command received

[16.587136](node 99) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:71]
[16.587776](node 96) association response command received
[16.587776](node 96) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:68]
[16.588096](node 97) association response command received
[16.588096](node 97) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:69]
[16.618400](node 85) scanning channel 13
[16.665760](node 63) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:43]
...
[16.666208](node 63) sending association request command ...
[16.667680](node 62) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:42]
...
[16.667808](node 63) ack for association request command received
<!>[16.668320](node 64) no coordinator found for association.
[16.669728](node 62) sending association request command ...
[16.671488](node 62) ack for association request command received
[16.881440](node 85) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:65]
...
[16.882848](node 85) sending association request command ...
[16.884320](node 85) ack for association request command received
--- startDevice [93] ---
[17.088800](node 93) performing active channel scan ...
[17.088800](node 93) scanning channel 11
--- startDevice [95] ---
[17.090080](node 95) performing active channel scan ...
[17.090080](node 95) scanning channel 11
[17.159328](node 63) sending data request command ...
[17.160608](node 63) ack for data request command received
[17.163008](node 62) sending data request command ...
[17.163072](node 63) association response command received
[17.163072](node 63) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:43]
[17.164288](node 62) ack for data request command received
[17.166752](node 62) association response command received
[17.166752](node 62) association successful (non-beacon enabled) [channel:11] [PAN_ID:0] [CoordAddr:42]
[17.352160](node 95) scanning channel 12
[17.353120](node 93) scanning channel 12
[17.375840](node 85) sending data request command ...
[17.377088](node 85) ack for data request command received
[17.379456](node 85) association response command received

[17.379456](node 85) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:65]
[17.616160](node 95) scanning channel 13
[17.617440](node 93) scanning channel 13
--- startDevice [64] ---
[17.668320](node 64) performing active channel scan ...
[17.668320](node 64) scanning channel 11
[17.879840](node 95) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:79]
...
[17.879968](node 95) sending association request command ...
<!>[17.880160](node 93) no coordinator found for association.
[17.881440](node 95) ack for association request command received
[17.932320](node 64) scanning channel 12
[18.194720](node 64) scanning channel 13
[18.372960](node 95) sending data request command ...
[18.374208](node 95) ack for data request command received
[18.376576](node 95) association response command received
[18.376576](node 95) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:79]
[18.457120](node 64) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:44]
...
[18.458848](node 64) sending association request command ...
[18.460608](node 64) ack for association request command received
--- startDevice [93] ---
[18.880160](node 93) performing active channel scan ...
[18.880160](node 93) scanning channel 11
[18.952128](node 64) sending data request command ...
[18.953408](node 64) ack for data request command received
[18.955872](node 64) association response command received
[18.955872](node 64) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:44]
[19.143200](node 93) scanning channel 12
[19.405920](node 93) scanning channel 13
[19.668320](node 93) sending association request to [channel:11] [PAN_ID:0] [CoordAddr:65]
...
[19.670688](node 93) sending association request command ...
[19.672160](node 93) ack for association request command received
[20.163680](node 93) sending data request command ...
[20.164928](node 93) ack for data request command received
[20.167296](node 93) association response command received
[20.167296](node 93) association successful (non-beacon enabled) [channel:11] [PAN_ID:0]
[CoordAddr:65]

Transmitting data ...

NS EXITING…



**References :**

1. Tutorial for ns2

https://www.isi.edu/nsnam/ns/tutorial/ns.html