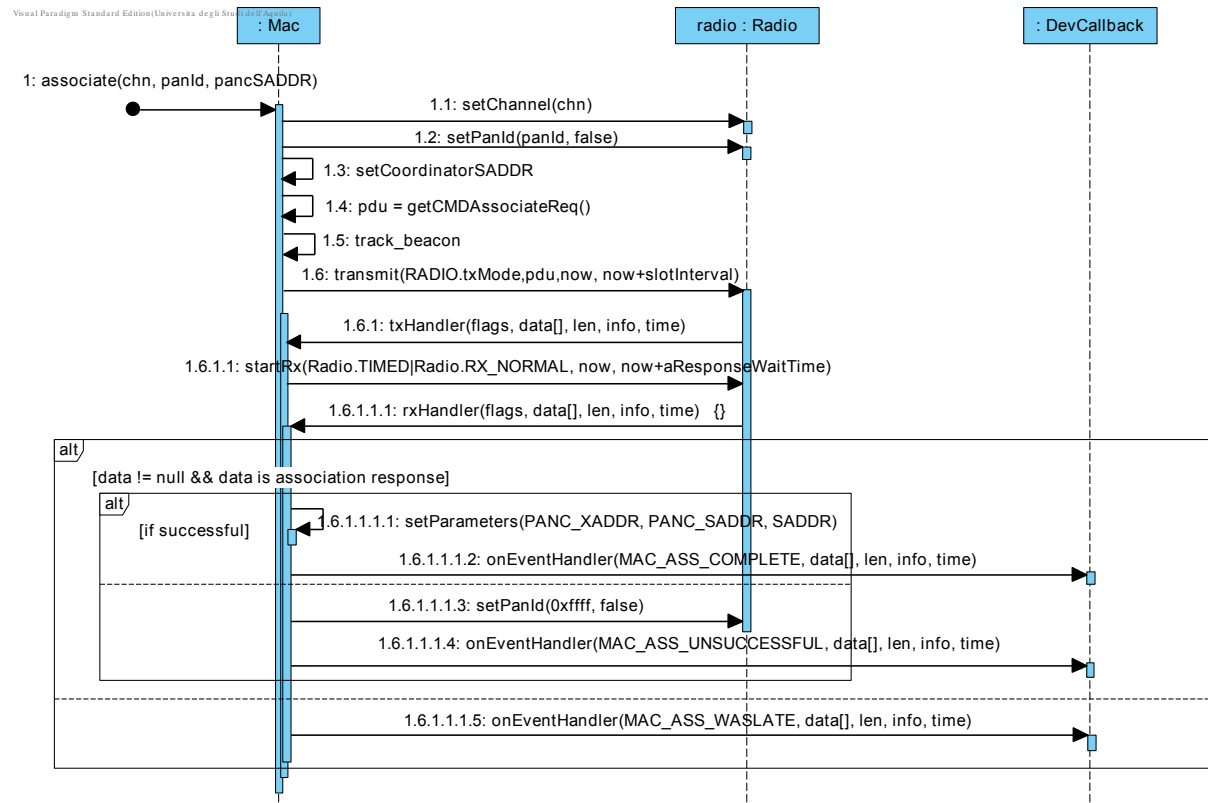


## Sequence Diagram

# Mac associate



## Details



: Mac



radio : Radio



: DevCallback



data != null && data is association response



Operand8



Operand9



if successful



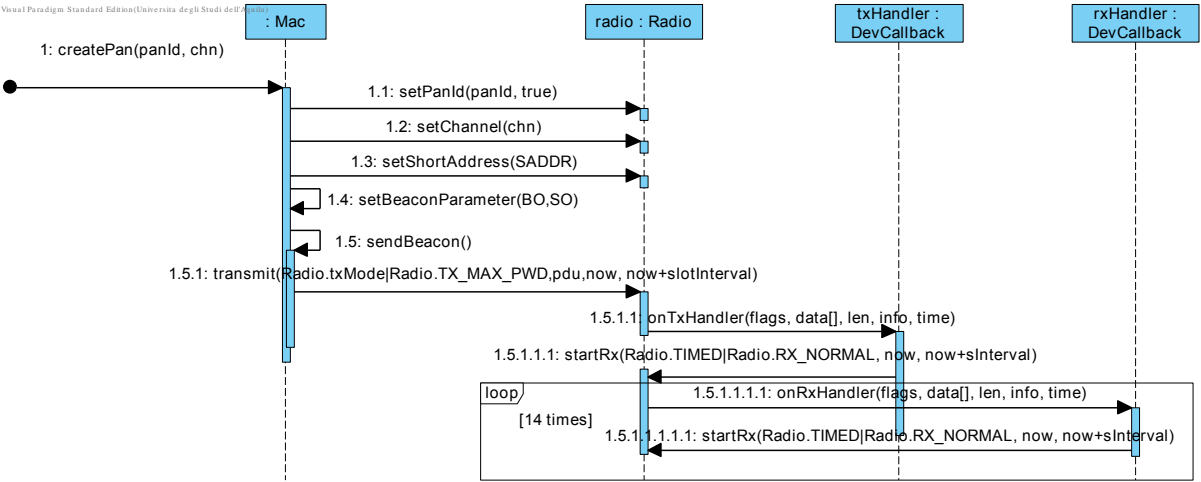
Operand10



Operand11

# Sequence Diagram

## Mac createPan



## Details

- : Mac
- radio : Radio
- txHandler : DevCallback
- rxHandler : DevCallback
- 14 times
- Operand7

Sequence Diagram

# Mac disassociate

## Details

---

Sequence Diagram

# Mac enable

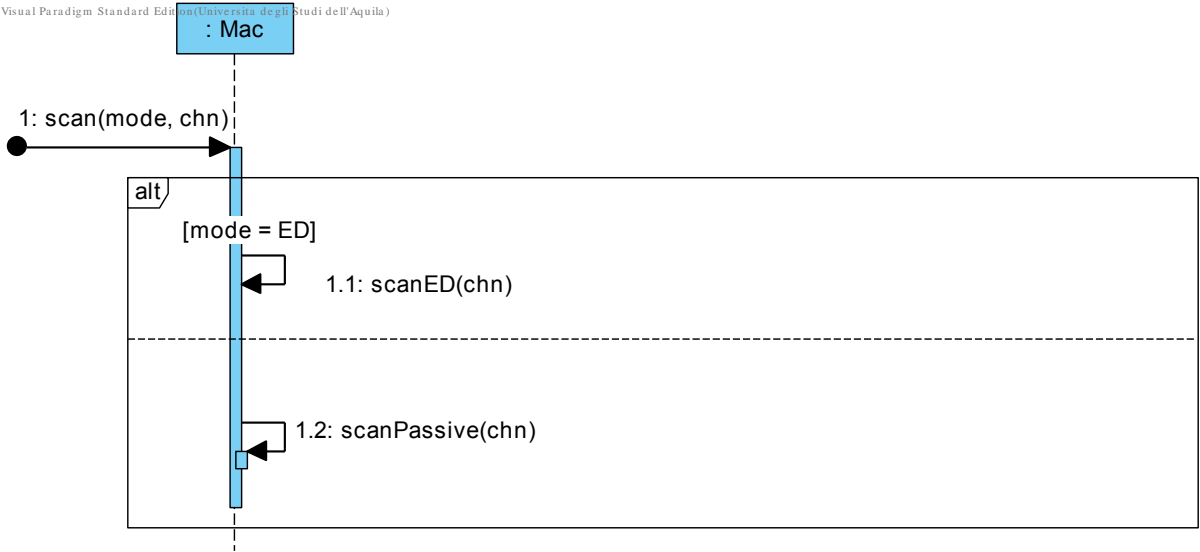
## Details

---

Sequence Diagram

# Mac scan

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## Details

 : Mac

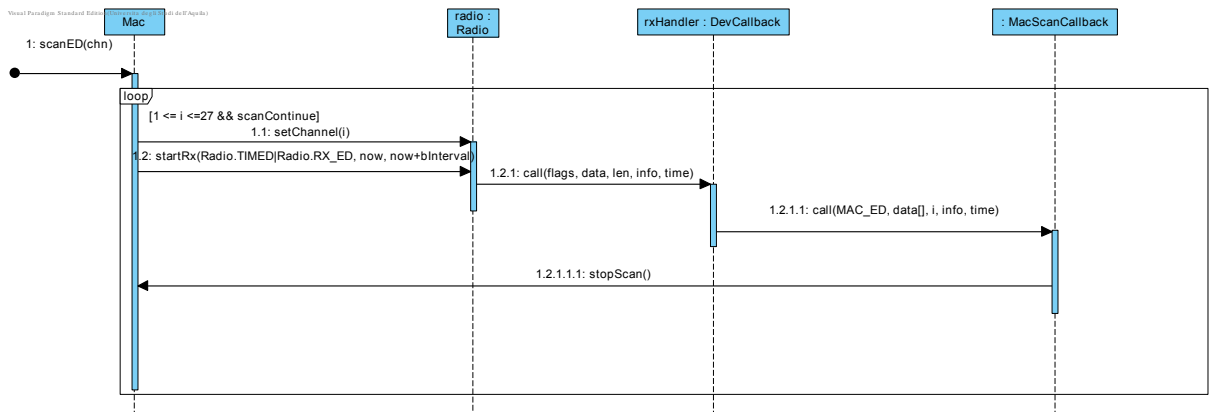
 mode = ED

 Operand12

 Operand13

Sequence Diagram

# Mac scanED

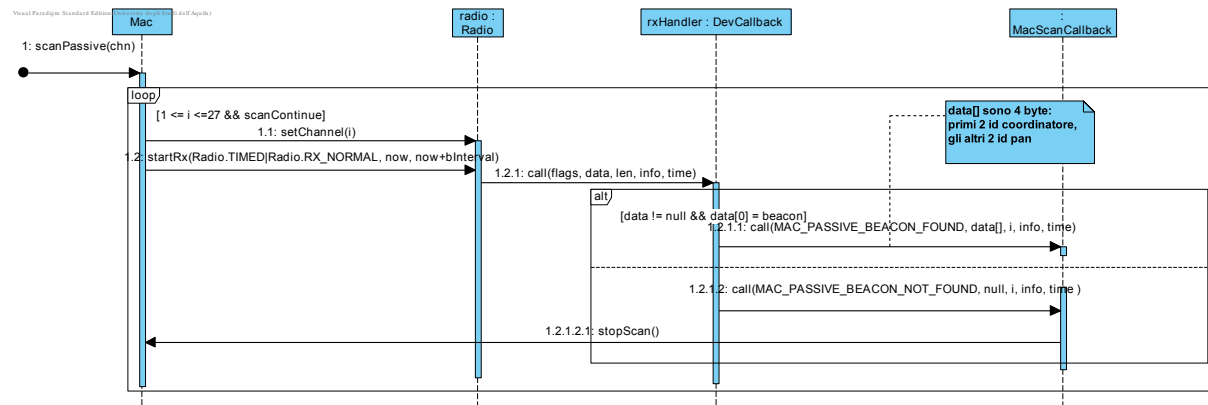


## Details

- Mac
- radio : Radio
- rxHandler : DevCallback
- : MacScanCallback
- 1 <= i <=27 && scanContinue
- Operand

## Sequence Diagram

# Mac scanPassive



## Details



Mac



radio : Radio



rxHandler : DevCallback



: MacScanCallback



1 <= i <=27 && scanContinue



Operand



data != null && data[0] = beacon



Operand2

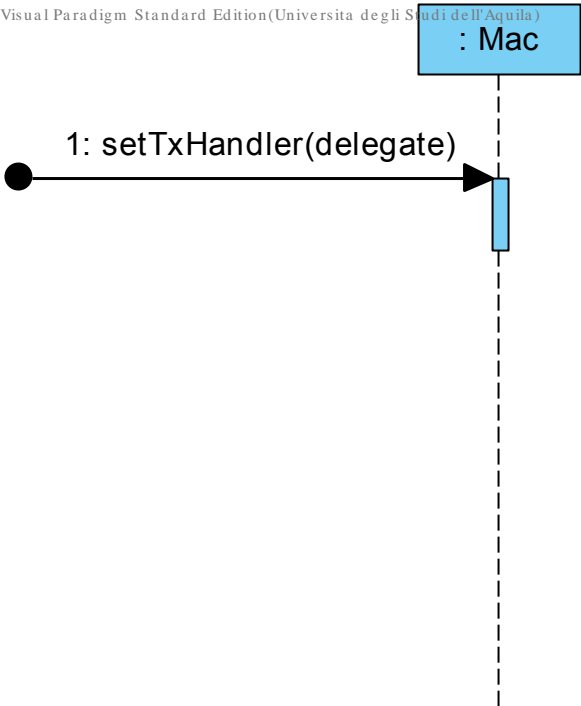


Operand3



N/A

# Mac setTxHandler



## Details

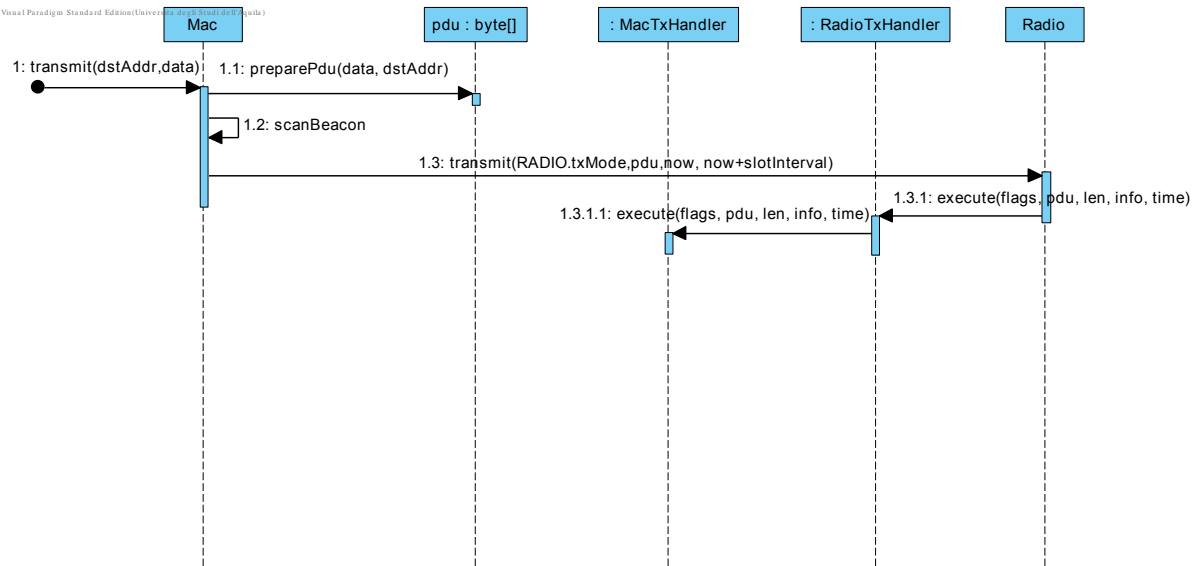
 : Mac



## Sequence Diagram

# Mac transmit

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## Details



Mac



pdu : byte[]



Radio



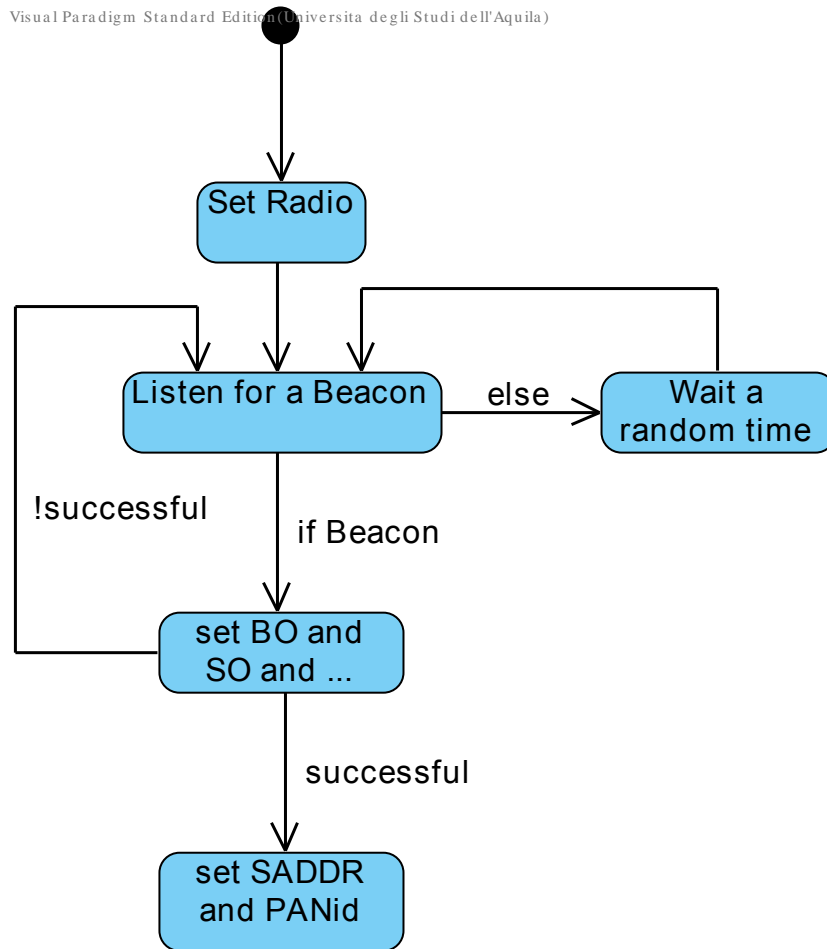
: RadioTxHandler



: MacTxHandler

# Base MAC

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## Details

---

● N/A

▢ Set Radio

▢ Listen for a Beacon

▢ set BO and SO and require association

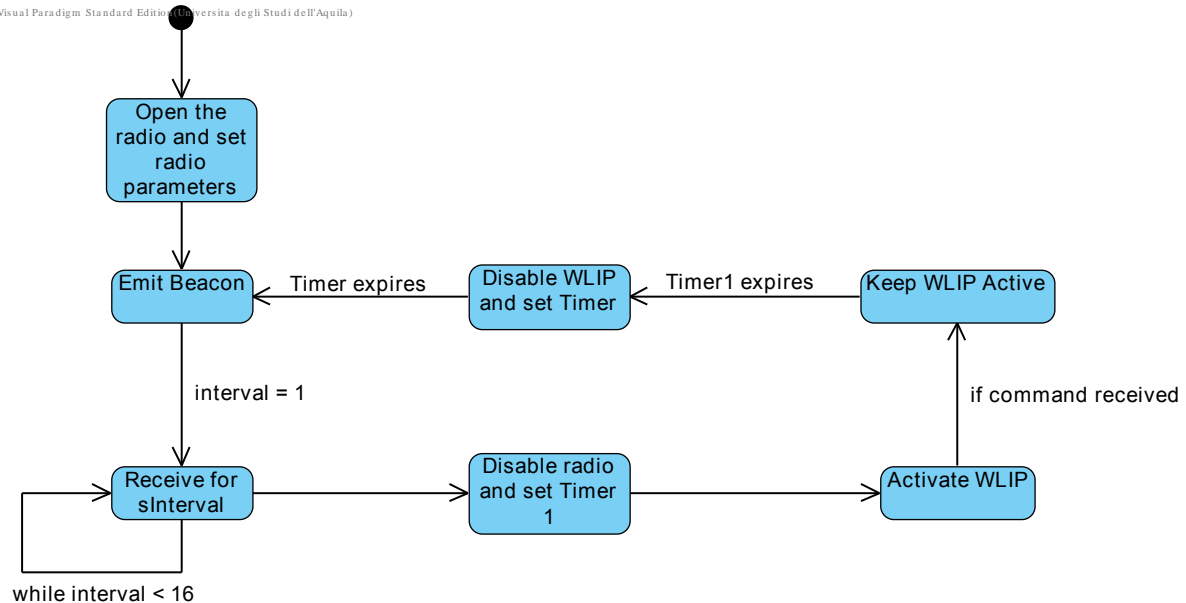
▢ set SADDR and PANid

▢ Wait a random time

## State Machine Diagram

# Mac Evolution

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## Details

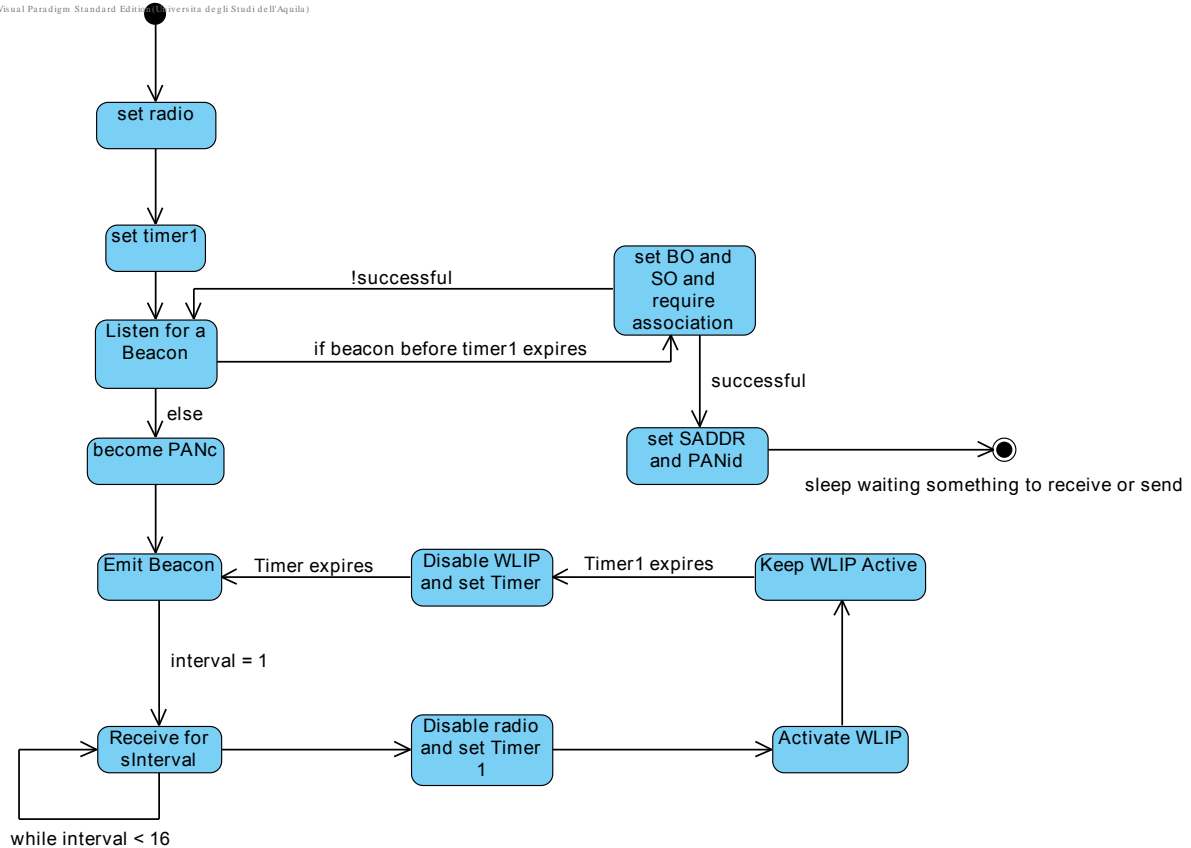
● N/A

- ▢ Open the radio and set radio parameters
- ▢ Emit Beacon
- ▢ Receive for sInterval
- ▢ Disable radio and set Timer 1
- ▢ Activate WLIP
- ▢ Keep WLIP Active
- ▢ Disable WLIP and set Timer

## State Machine Diagram

# PAN Coordinator

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## Details

● N/A

▢ set radio

▢ set timer1

▢ Listen for a Beacon

▢ set BO and SO and require association

▢ set SADDR and PANid

● sleep waiting something to receive or send

▢ become PANc

▢ Emit Beacon

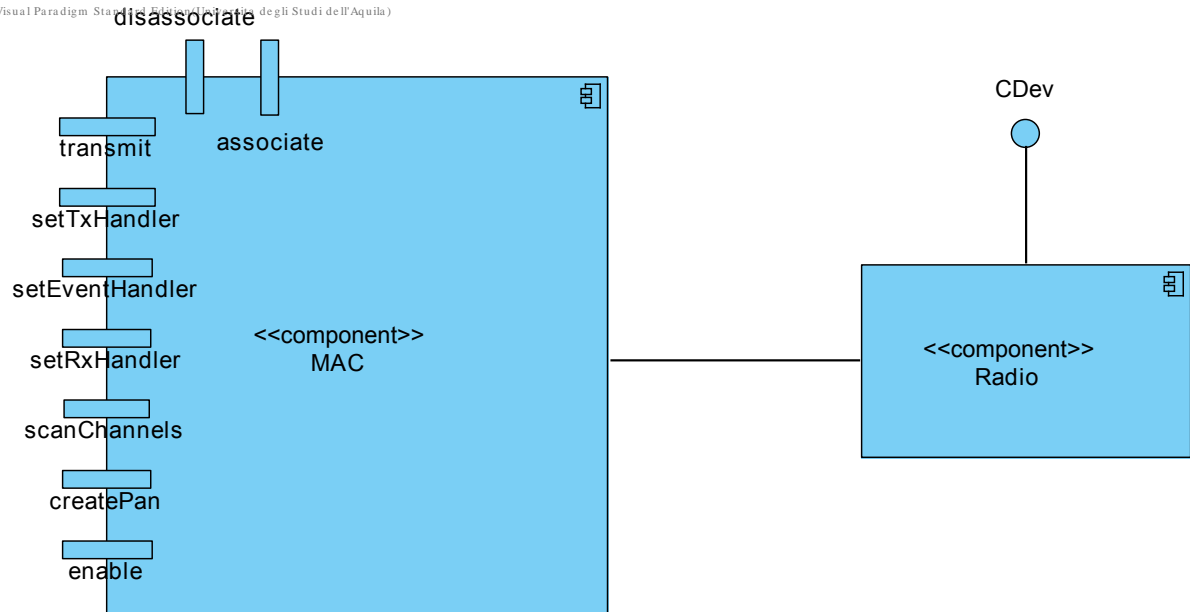
▢ Receive for sInterval

- ☐ Disable radio and set Timer 1
- ☐ Activate WLIP
- ☐ Keep WLIP Active
- ☐ Disable WLIP and set Timer

## Component Diagram

# Mac

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## Details

- disassociate
- associate
- MAC
- transmit
- CDev
- setTxHandler
- setEventHandler
- Radio
- setRxHandler
- scanChannels
- createPan
- enable