

Association/Reassociation relation to frame classes.

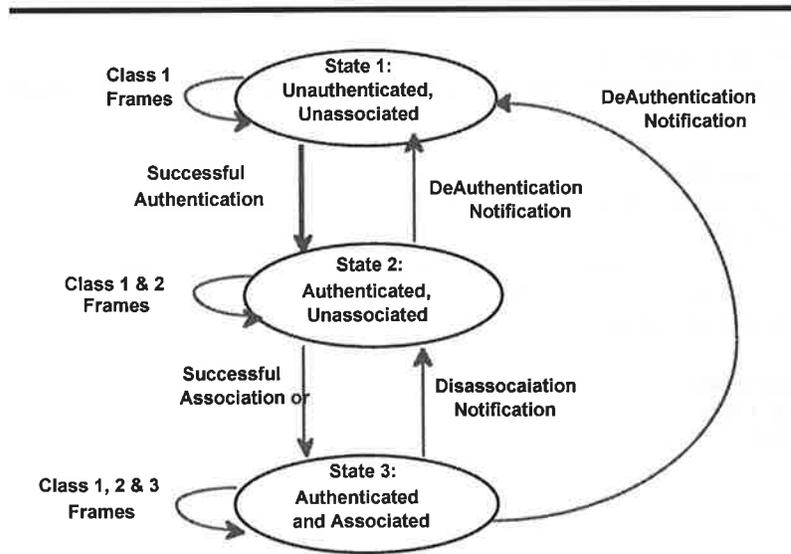
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During the August 802.11 MAC meeting the group realized that there is an error in figure 2-8 which results in a catch-22 situation where it is necessary to be associated with an AP that a STA wants to reassociate to. This results from a confusion of the use of the term "association" to mean both the specific action accomplished by the Association frames and the generic class of actions comprised of both "association" and "reassociation". This paper corrects the figure and some related text.

Please refer to the MAC report and minutes for that meeting for details of the discussion. This paper contains the text changes that would be required to the D2 draft to implement this recommendation. If readers agree with this recommendation they may reference this document as part of their letter ballot comments when reviewing the D2 draft.

Clause 2.5 text changes:



Change label of transition from state 2 to state 3 in figure 2-8 above from "Successful Association" to "Successful Association or Reassociation".

Class 1 frames (Legal from within States 1, 2 and 3):

- a) Control Frames:
- 1) RTS
 - 2) CTS

- 3) ACK
- b) Management Frames:
 - 1) Probe Request/Response
 - 2) Beacon
 - 3) Authentication
 - Successful Authentication enables a station to exchange Class 2 frames. Unsuccessful Authentication leaves the Station in State 1.

Class 2 frames (IFF Authenticated; allowed from within States 2 and 3 only):

- a) Data frames:
 - 1) Asynchronous data
 - Direct data frames only (FC control bits "To DS and From DS" both false).
- b) Management frames:
 - 1) ATIM
 - 2) Association R/R
 - Successful Association enables Class 3 frames.
 - Unsuccessful Association leaves STA in state 2.
 - 2) Reassociation Request/Response
 - Successful Reassociation enables Class 3 frames.
 - Unsuccessful Reassociation leaves STA in state 2 (with respect to the STA which was sent the reassociation message).
 - Reassociation frames shall only be sent if the sending STA is already Associated.
 - ~~3)~~ Deauthentication

Class 3 frames (IFF Associated; allowed only from within State 3):

- a) Data frames:
 - 1) Asynchronous Data
 - Indirect Data frames allowed. I.e. the "To Ds" and "From DS" FC control bits may be set to utilize DS Services.
- b) Management frames:
 - ~~1) Reassociation Request/Response~~
 - 1) Disassociation
 - Disassociation notification changes a Stations state from 3 to 2. Thus a Station must become Associated again if it wishes to utilize the DS.
 - ~~2)~~ Deauthentication
- c) Control frames:
 - 1) CF END
 - 2) Poll