IEEE P802.11
Wireless LANs

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| TGaq Minutes - July 2014 Session |
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Abstract

This document contains the minutes of the TGaq session that was held during the July 2014 IEEE 802.11 Plenarh meeting.

# Monday July 14, 16:00-18:00

### Stephen McCann, BlackBerry – Chair

1. Meeting called to order at 16:02 PDT
2. Agenda Review – approved as document 11-14/734r2
3. Review IEEE Patent Policy and Duty to Inform
* Call for essential patents – No comments.
1. Approval of minutes from May Interim – document 11-14/756r0
* Minutes are approved by unanimous consent
1. Review of current status of TGaq – document 11-14/686r0
2. Editor report on D0.01
* Updates to the TGaq draft need to be based on the latest draft of 802.11REVmc
1. Presentation of document 11-14/877r1 by S.K. Yong, Apple
* The P\_f calculation of the station is the reverse function based on the AP advertisement.
* There are a number of ways that we could represent a particular service. It translates a single service into a single bit.
* The value of P\_f is set for the AP infrastructure based on the deployment.
* We could modify the protocol to provide additional logic operations.
* The proposed element could be part of Beacon, Probe Response, or ANQP/GAS frame.
* The Service Hash(es) and Hash function(s) would be defined at the Service Transaction Proxy.
* Service Type Mask is already in the draft. It isn’t very scalable and Bloom filter may be another.
* We should take a look at this proposal in more detail and figure how it fits into the draft before removing the Service Type Mask.
* Each AP in a single network would advertise the same service.
* If we could agree with a simpler pre-association frame type we could reduce the complexity of the problem. This simplifies the AP ability to advertise many services that a network provides efficiently.
* The author will go away to clarify the benefit of these procedures.
1. Presentation of document 11-14/433r1 by RYU Cheol
* PADP bitmask allows the AP to advertise multiple protocols. However vendor specific behavior needs to be further defined.
* The STA uses the Broadcasting Window to go to sleep until the next time that the AP advertises the service again.
* Cho will update his proposal and bring it back on Thursday.
1. Discussion on the Way Forward of 11-14/876r0 by Stephen McCann
* We need to work with TGah to address text that was added into the P802.11ah draft with a description of Service Type.
* We could define a transparent native discovery that allows other higher layer protocols to function.
* We could use the GAS comeback delay to address the “max response”.
* This presentation should include the “bloom filter” proposal.
1. Chair calls for AOB.
2. Recess at 17:50 PDT.

# Tuesday July 14, 10:30-12:30

### Stephen McCann, BlackBerry – Chair

1. Meeting called to order at 10:30 PDT
2. Agenda Review – approved as document 11-14/734r3
* The group should wait until September before making a call for comment submission.
* The group feels that a teleconference would be needed between the July and September meetings.
* The group should request for time slots for the meeting in Athens.
1. Presentation of document 11-14/912r0 by Yunsong Yang (Huawei)
* This proposal is based on the result of a strawpoll on the proposals contained in document 11-14/618r2.
* TGai has discussed the abbreviation of CAG. CAG refers to all ANQP elements in the ANQP server. TGai has renamed the parameter.
* There seems to be a discrepancy in the understanding of what CAG means based on the TGai text.
* TGai is currently working on this parameter at the same time as TGaq.
* The agreement with the TGai officers is that TGai adds the initial parameter and TGaq extends the definition.
* TGai should define an extensible version that TGaq could use.
* Request to have a joint session in Athens between TGai and TGaq to flush out the definition of CAG.
* The info ID is required so that the STA can query the PADP proxy for the PADP CAG Version.
* The clause numbers in this proposal use clause numbers from TGai. In a submission to TGaq, these clauses should be TGaq-specific clause numbers.
* The information is included in both the Beacon frame and the Probe Request/Response frame. The PADP element would be used as part of a GAS exchange.
* The STA can query the AP to obtain the version contained within the AP. The STA can also query the Proxy for the version.
* The proposal given in document 11-14/433r1 should be modified to align with this proposal.
* Proposed text for TGaq should include new TGaq clause numbers. We could use this current version to discuss the disposition of this proposal with TGai. An update proposal should be presented to TGaq.
* An updated proposal will be posted and discussed on Thursday. It would have to be on the server four hours prior to any motion.
1. Discussion on Editorial comments on D0.01 by Stephen McCann (BlackBerry)
* ***Yunsong Yang, the TGaq Vice Chair acts as Chair while Stephen McCann is presenting.***
* The draft can’t provide a reference to the approved PAR because the approved PAR is stored in a database and cannot be referenced by a URL.
* A PAR change should not be required to report that the TGaq amendment is based on a 802.11REVmc.
* The PADP Token field should be moved from 8.4.6.1. The presenter will create a submission to propose changes to the draft.
* ***Stephen McCann resumes role as the Chair***
1. Chair calls for AOB.
2. Recess at 11:49 PDT.

# Thursday July 17, 10:30-12:30

### Stephen McCann, BlackBerry – Chair

1. Meeting called to order at 10:32 PDT
2. Review of Agenda – approved as document 11-14/734r4
3. Discussion on PADP acronym
* Propose that PADP be renamed to PAD
* There is concern that changing the name would be inconsistent with other GAS protocols. For example, ANQP or RLQP.
* Suggest that a comment be added to 11mc to drop the “P” from ANQP and RKQP, etc. from the base draft.
* No objections to changing name.
1. Presentation of document 11-14/877r2 by SK Yong (Apple).
* It’s an interesting proposal but it has limited practicality.
* A bitmask is much more efficient compared with a service hash
* The solution is independent of the underlying system architecture.
* If the STA has to launch an individual query, then there isn’t much efficiency.
* This solution may be more advantageous in a stadium environment.
* The proposal is flexible and has no restriction on the deployment scenarios. Parameters can be tailored to the environment.
* If this is proposal is added to the draft, rules need to be defined to govern the deployment.
* It would be good to see an analysis of the Stadium case. However to do this, we would have to understand the assumptions.
* This group should define the hash function. Deployment guidelines can be left to other groups.

STRAW\_POLL: Do you support the dynamic Bloom filter operation described in 877r2 to be included in the 11aq draft?

RESULT: 6 – Yes; 0 – No; 5 – Abstain.

1. Presentation of document 11-14/433r2 by RYU Cheol (ETRI)
* The Update Counter field is the same as the CAG number. The two solutions should be converged.
* The version needs to be maintained by both the AP infrastructure and the Proxy.
* In D0.01, it is assumed that the capabilities element advertises the service discovery protocol (SDP) that the AP supports. The STA would then conform and use it. The PADP IDs indicated these SD protocols So do we want an AP to advertise multiple SDPs or just one?
* That answer determines whether you want to use a list or a mask. No answer.
* Is the broadcast message (Clause 8.4.6.5) is not necessarily transported over GAS.
* The submission needs to be updated to indicate the destination address.
* Likely the AP would then send out this message with a group address frame. You also need to provide a schedule so that the STA knows when to listen to the broadcast. Otherwise the STA will never see the broadcast
1. Presentation of document 11-14/912r2 by Yongsong Yang (Huawei)
* The CAG is not a complete idea in TGai and should not be considered in TGaq. This is not the forum for this submission.
* The feature is useful to TGaq and should involve TGaq members. TGaq time can be spent to perfect the text.
* The CAG definition should be created to be extensible in TGai.
* The format of this proposal is compatible with TGai.
* There’s a request for a joint meeting between TGai and TGaq for September. It would be better to create a straw poll to gage support rather than a motion.

STRAW\_POLL: Do you think that document 11-14/912r2 is suitable for the TGaq draft.

RESULT: 6 – Yes; 1 – No; 4 – Abstain.

1. Presentation of document 11-14/970r0 by RYU Cheol (ETRI)
* The straw poll relates to advertising specific services rather than service hints in Probe Request/Response.
* There could possibly be new criteria for an AP to respond to a Probe Response to a Probe Request

STRAW\_POLL: Do you agree that we have to consider to use probe frames with SIN and SIH as well as GAS frames to discover services?

RESULT: 4 – Yes; 1 – No; 5 – Abstain.

1. Presentation of document 11-14/925r0 by Stephen McCann (BlackBerry)
* ***Yongsong Yang acts as Chair as Stephen McCann makes a submission.***
* This is clearly an editorial change. However the updates to the draft should be motioned.
* ***Stephen McCann resumes role as Chair.***
1. Next Steps
* No updates to the draft are required.
1. Timeline
* No changes
1. Teleconferences
* Tuesday August 26 at 10am ET
1. Preparation for September 2014 Interim
* The joint TGaq/TGai meeting would be considered separate from the TGaq allocation.
1. AOB
2. Meeting Adjourned at 12:05 PDT