IEEE P802.11
Wireless LANs

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| Minutes REVmd Initial F2F mtg - Daejeon |
| Date: 2017-05-10 |
| Author(s): |
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|  |  |  |  |  |

Abstract

REVmd Task Group minutes for the 802 Wireless Interim May 2017 in Daejeon, South Korea.

3 Slots were used (Monday PM1, Tuesday PM1 and Wednesday PM1).

1. 802W Interim Daejeon, South Korea - 802.11 REVmd Monday PM1 (13:30-15:30) 8 May 2017
	1. Called to order at 1:30pm Korea time by the Chair Dorothy STANLEY (HPE)
	2. Patent Policy Reviewed
		1. No Issues noted.
	3. Review Agenda – 11-17/0559r1: <https://mentor.ieee.org/802.11/dcn/17/11-17-0559-01-000m-may-2017-tgmd-agenda.pptx>
		1. Monday PM1
			1. Chair’s Welcome, Policy & patent reminder
			2. Approve agenda
			3. Status, Review of Objectives
			4. Editor appointment
			5. Draft workplan & schedule
			6. Presentation 11-17-740 & 741 Ganesh VENKATESAN
		2. Tuesday PM1
			1. Presentations: 11-17-0666 & 667 Roger Marks & Lily Yunping
			2. 3GPP Liaison response in 11-17/378, discuss plan for additional metrics re: 3GPP liaison [11-17/0315r0](https://mentor.ieee.org/802.11/dcn/17/11-17-0315-00-0000-liaison-statement-from-3gpp-ran2-on-estimated-wlan-throughput.doc)
			3. Chair, editor confirmation, Vice chair election
		3. Wednesday PM1
			1. Presentations
			2. Motions
			3. AOB, Adjourn
		4. Discussion:
			1. Note that the Chair is appointed by the WG Chair and Confirmed at the WG level. No need to take any action at the TG level.
			2. Remove “Chair” from 1.3.2.3
		5. **Motion #D1: Move to approve the Agenda**
			1. Moved by Jon ROSDAHL; 2nd: Michael MONTEMURRO
			2. No discussion – No objection
			3. **Result Motion #D1:** – Agenda Approved without objection
	4. Editor Confirmation
		1. While we will have the vote tomorrow, would like to have the following appointments:
		2. Volunteers to date:
			1. Emily QI editor
			2. Edward AU subeditor
	5. Review Process and status of the Revision Process
		1. (See slide 10 – 11-17/559r1)
		2. There is an 18-month window between P802.11aj and P802.11ax
	6. Editor status report
		1. Created a draft 0.0 which is the initial document from the current published standard
		2. Already rolled in TGai into a draft 0.1
		3. Comment on how great it is that the draft is available at this state.
		4. Expect to have the Chair Check the document and then will post
	7. Plan of Record Discussion
		1. Several Choices:
		2. This Choice includes TGax
			1. **March 2017 – PAR Approval**
			2. **May 2017 – Initial meeting, issue comment collection on IEEE Std 802.11-2016**
			3. **July 2017 – Begin processing CC input, 11ai, 11ah integration**
			4. **March 2018 – Complete 11aq, 11ak integration**
			5. **July 2018 – Initial D1.0 WG Letter ballot**
			6. **Dec 2018 –D2.0 Recirculation LB (11aj integration)**
			7. **March 2019 – D3.0 Recirculation LB**
			8. **June 2019 – Initial SB**
			9. **<11ax & more schedule dependency>**
			10. **March 2020 - D4.0 Recirculation Sponsor Ballot**
			11. **May 2020 – Dec 2020 11ay, 11ba integration**
			12. **March 2021 - D5.0 Recirculation SB recirculation**
			13. **September 2021 - D6.0 Second Recirculation**
			14. **October 2021 – D7.0 Third Recirculation**
			15. **December 2021 – RevCom/SASB Approval**
		3. This proposed plan only considers through TGaj:
			1. **March 2017 – PAR Approval**
			2. **May 2017 – Initial meeting**
			3. **July 2017 – Complete 11ah integration**
			4. **September 2017 – D1.0 Initial WGLB**
			5. **March 2018 – Complete 11aq, 11ak integration, D2.0 Recirculation WGLB**
			6. **July 2018 – Complete 11aj integration**
			7. **September 2018 –D3.0 Recirculation LB**
			8. **November 2018 – D3.0 Initial SB**
			9. **May 2019 – D4.0 Recirculation SB**
			10. **November 2019- RevCom/SASB Approval**
			11. **Would require off-month ad-hoc meetings**
		4. Discussion
			1. Note that TGak shows Nov 2017, but realistically it is Dec as Nov 2017 is the EC approval, and SASB would be Dec 2017.
			2. Comment of the right Number of Amendments
				1. Is 5 or 10 enough?
				2. Having a new Main PHY Project seems to be a nice to have
			3. Things to think about – do we want more or less Amendments?
		5. Plan to have a decision in July as a baseline timeline for REVmd
			1. Discussion on how much effort to put TGah into the revision.
			2. Comment on how the feedback from the various unplug fests to the revision was thought to be a positive feedback
				1. We should not rely on the outside schedules and unplug fest feedback.
				2. We don’t know when products will actually be on the market.
				3. Observation of the current state of TGax – they are still working on new sections to be thought being added. Having a clear revision done prior to adding TGax may be a better starting point for adding TGax.
	8. Presentation 11-17-740- Ganesh VENKATESAN
		1. 11-17-740: <https://mentor.ieee.org/802.11/dcn/17/11-17-0740-00-000m-max-bss-idle-period-description.doc>
		2. Review submission
		3. Proposed change is thought to replace what was there, but not known for sure why it was thought to have been moved.
		4. ACTION ITEM #1: Emily QI - Need to find why the original text was lost. –
	9. Presentation 11-17/741r0 - Ganesh VENKATESAN
		1. <https://mentor.ieee.org/802.11/dcn/17/11-17-0741-00-000m-dialog-token-in-timing-measurement-action-frames.doc>
		2. Review Submission
		3. 802.1AS does not use this feature
		4. Discussion on the use of the sentence that is considered to use the proposed deleted sentence. The fix seems to be more complicated than just to delete this sentence. Is the value of being non-zero vs zero reference all considered?
		5. It was thought that there was only one “zero” reference.
		6. Question is what is the meaning of zero?
		7. There is both a “Fine Timing” and “Timing” measurement types.
		8. Deleting this case of the “Zero”, will need more clarification of when it is zero.
		9. What is the actual problem that is being noted here?
			1. In 6.3.57 of 802.11-2012 – it shows that the valid value is 1-255. (Also in 2016).
			2. So in the table it states that the value is 1-255, but in clause 9 it has the zero.
		10. Does zero mean reserve? – no Reserved means zero, but the reverse is not the same.
		11. Ganesh will take this input and bring back later.
		12. The use in the marketplace has been certified to not use the Dialog Token value of zero.
			1. Zero has a different behavior –
			2. No, the tests flagged the zero as an error case.
			3. What does the value of zero really mean.
		13. Discussion on the protocol of the DialogToken
	10. Response on Action Item #1 – Emily QI:
		1. The sentence “The time period is specified in unites of 1000Tus. The value of 0 is reserved” was deleted during the comment resolution.
		2. This should be put back into clause 9
	11. Review what will be on the agenda for Tuesday.
	12. Proposed Motions reviewed
		1. The Comment Collection motion:
			1. Should 30 days be enough, or should we have it be longer?
			2. The end of the Comment Collection should be determined by when you want to process the comments, if you want to start with the July session to process comments, then 30 days may be the right answer.
	13. Meeting Planning discussion.
		* 1. **Conference calls 10am Eastern 2 hours**
			2. Scheduled with 10 day notice as needed
			3. Tuesday May 30th 11am or noon Eastern to hear presentations, including <https://www.ietf.org/proceedings/98/slides/slides-98-intarea-80211-multicast-testbed-and-results-00.pdf>
			4. The authors of the IETF paper would be willing to join and present to REVmd.
	14. Recess at 2:30pm
2. 802W Interim Daejeon, South Korea - 802.11 REVmd Tuesday PM1 (13:30-15:30) 9 May 2017
	1. Called to order at 1:30pm Korea time by the Chair Dorothy STANLEY (HPE)
	2. Patent Policy Reminder
		1. No Issues noted.
	3. Review Agenda:
		1. Add discussion from ARC on MIB Pattern design work and potential impact to TGmd work – Mark HAMILTON; 11-15/255r4, 11-09/533, 11-17/
		2. No objections, Approved without objection
	4. Presentation – 11-17/666 Roger Marks (Huawei)
		1. <https://mentor.ieee.org/802.11/dcn/17/11-17-0666-00-000m-tbtt-information-field-type-tift-clarification-for-802-11revmd.pdf>
		2. TBTT Information Field Type (TIFT)
		3. Review the field description
		4. Review how TIFT was changed over the course of REVmc and TGai.
		5. Present proposed change
		6. How TIFT might be used – walk through options and values on slide 10.
		7. Questions for slide 10 --
			1. Question on the difference from what is there now and what is proposed?
				1. Before we had a 2-bit field, and the 2 and 3 value was reserved, but the value of 0 and 1 is not defined.
			2. Was this discussed in TGai?
				1. Roger did not participate in TGai, and so this was not proposed by him.
			3. Comment that this may be fixing a bug, but it is also addressing a few new feature sets.
			4. Question on the backward compatibility? What will legacy device do when they receive the encodings?
				1. The Current standard does not define what to do with the values 0 or 1.
				2. There is not a conclusion to draw with the possible values.
				3. There are various proposals on how to get more info from the TBTT, but there was not a final proposal that was put into the amendment.
				4. The RNR may be stronger with the defined information.
			5. Question – 0 and 1 is not defined, so the need to define is ok, but this proposal does not seem to define the values.
				1. The bits are now defined instead of the value of the field.
			6. We did test for the TBTT neighbor report when 11r was being done, and you can limit who to scan for due to the neighbor report. So from slide 10, if you are scanning, you know who your neighbor is, and then you can reduce the number of scans.
				1. How to determine the correct AP from the report is sped up with the definitions.
			7. Would you be sending out 4 neighbor reports?
				1. No you would send one report with the bits set to indicate which neighbor is preferred or is the same ESS.
				2. Reviewed the frame format on which bits refer to the neighbor identification.
			8. Filter neighbor process?
				1. If the bit is set in the probe or beacon, it helps indicate if this is the correct AP or not. The ability to identify that the SSID is in the same ESS, and the SSID is not as useful.
				2. The issue is that within the standard the ESS vs SSID and DS are still need to be clarified more.
			9. Looking at the AI history, did you review the minutes that went with the proposals to see what the issues that were discussed.?
				1. Yes, the minutes indicated that follow-up was expected, but did not seem to have occurred. Some of the proposals were discussed at length.
				2. For 11-11/1510 submission recognized that there was a problem with not being able to just move to a 5Ghz channel and start transmitting, as you must have received a frame from that channel before you can transmit.
			10. TGak was the point this TBTT was defined, and it was modified by TGai. The point of this was to give the neighbor report, but in TGv there was was a better way BSSTransitionManagement.
				1. The intent of TGai was to find ways to make a sort of this in a faster method, but not sure how it applies to the cited method.
			11. Not to ask what is going on in the Wi-Fi Alliance, but there are active programs that we may want to be aware of.
			12. The point is to reduce the amount of time scanning. The use of Field Discovery frames is to help with this. The neighbor fields also help.
		8. Continue the presentation.
		9. Review the other proposed changes
		10. See doc: 11-17/667 for a word version of the changes.
		11. Would like some feedback and then discuss at the July Plenary in Berlin.
		12. Chair encouraged TG members to talk offline to prepare for July.
	5. 3GPP Liaison response in 11-17/378, discuss plan for additional metrics re: 3GPP liaison [11-17/0315r0](https://mentor.ieee.org/802.11/dcn/17/11-17-0315-00-0000-liaison-statement-from-3gpp-ran2-on-estimated-wlan-throughput.doc) – Dorothy STANLEY and Joseph LEVY
		1. Review 11-17/0315r0:
		2. <https://mentor.ieee.org/802.11/dcn/17/11-17-0315-00-0000-liaison-statement-from-3gpp-ran2-on-estimated-wlan-throughput.doc>
		3. This has been discussed in AANI, and in March there was discussion on the timing of the response to this request. To date we have not responded to this one at this point.
		4. Doc 11-17/378 is the response that has been prepared. Which indicates that the requested work would be done in TGmd.
		5. While this is prepared by AANI, we want REVmd to be aware and to socialize here. The WG will send the Liaison to 3GPP.
		6. The intent is that this work will be taken on by TGmd.
		7. Review a possible motion to initiate a “Call for contributions in response to 3GPP Liaison 11-17/0315”
		8. Discussion –
			1. The desire is to look for the speed of which this work can be done. The need to determine the timeline of when this work can be made available.
				1. The timeline was discussed yesterday, and we should get the call made and some indication of what the scope of the potential changes are and where they could be applied.
				2. Concern if the longer timeline option of REVmd was chose that this would be a potential limitation.
			2. The issue could be conveyed into a Liaison statement, and give a timeline for the possible inclusion into a standard, but we may not have to have it in a standard.
			3. Discussion on the possible timeline of sharing the information back to 3GPP.
			4. Discussion on the process of change to the REVmd and the issues of leftovers from REVmc that may need to be included in REVmd. We need to have some submission to understand what is being asked for.
				1. The information being requested is to help make a more effective handover from the 3GPP perspective for UEs. The schedule may not align well, but because it is just the UE, then the Wireless LAN link is being used just as a link.
				2. There is much that they do not know, so the submissions would be something to look at information that may be relevant.
			5. Having looked at the estimated throughput in the past, we expired our will to change. If we look at finding a different metric that may make more sense in the overall specification.
			6. The Estimate throughput already contains the requested information, but being able to boil this down to a single value to describe multiple variables is a hard proposition. We sent several Liaison letters in the past, and were a bit arrogant in our tone, and so the 3GPP has not responded well to the letters. With the central knowledge, they think that they can make a better decision in a central control, but we tend to think that the UE (STA) is the place to make the decision. We should look for future work.
			7. Annex R.7 has included text to address certain 3GPP comments, and then we were flooded with a lot of comments, but we did not get them addressed well as the original authors were not able to help address the concerns. If we start now, we can look at coming up with the feature description and take our time to do it properly. The Call for contributions should be for description and requirements not just a jump to a final text proposal.
			8. The Main feature that 3GPP selects is CQI, and they are looking for something similar for the WLAN and make a choice in how the data flows. They are looking to do a compare that is as close to an “apples to apples” as possible. They need this comparison to be repeatable, but not necessarily accurate.
		9. What is your plan to bring the Liaison to the WG?
			1. We need to determine if the work will be done in TGmd.
		10. Straw Poll:
			1. I support the work related to 11-17/315 for 3GPP to be done in TGmd:
				1. Yes, No, Abstain
				2. Discussion:

Where would the work be done if “No” – not the issue here.

* + - * 1. Result: 6-0-15 – (Abstains win)
		1. Request to hold a motion now instead of waiting for later in the Agenda – no objection.
		2. **Motion #D2: – Call for Contributions in response to 3GPP Liaison 11-17/0315:**

Approve a call for contributions on the topic of “adding accuracy requirements to the 802.11 standard for the estimated throughput metric and defining additional metrics to support 3GPP features for

1. LWA activation/deactivation

2. Mobility across WLANs cells and

3. Traffic scheduling decisions such as forwarding to WLAN”

as described in 11-17-0315 and 11-17-0378; Request Contributions by November 2017

* + - 1. Moved: Mark HAMILTON 2nd: Joe LEVY
			2. Discussion:
				1. The Motion proposed did not have a deadline, so asked to have a deadline added to the motion. – proposal November 2017
				2. The process for how to proceed is not the debate now.
				3. The time to start the submissions of November is maybe too long, but having a deadline too soon would be worse.
				4. Speak against the motion. Wait until the next Session to allow a process to be crafted to avoid the issues we have seen before.
				5. Speak to have the motion now, and have the process defined this week. Holding up a response back to 3GPP is going to be detrimental.
				6. The response to 3GPP is independent to this Submission request.
				7. The point was that a specific 3GPP response telling them that a call was made.
			3. **Motion to Table** – moved: Adrian STEPHENS, 2nd: Robert STACY
				1. **Result: 5-6-8 Motion to Table Fails.**
			4. Discussion on main motion Continued
				1. The word contributions would not be just a line change, and would probably contain the justification.
			5. **Result Motion #D2: 7-4-8 – Motion Passes**
		1. Question on Process for submission?
			1. Request to have a small group propose a process for considering the submissions.
			2. ACTION ITEM #2: Adrian STEPHENS to propose a draft process, and he asked for interested help: Joe LEVY, George CALCEV and Edward AU agreed to help.
	1. Editor Confirmation
		1. **MOTION #D3: Editor Confirmation**

Confirm Emily QI, Editor and Edward AU Subeditor

* + 1. Moved: George CALCEV 2nd: Adrian STEPHENS
		2. **Result Motion #D3: Unanimous Consent – Motion passes**
	1. Vice Chair Election
		1. Call for Vice Chair position is open –
			1. There were 3 volunteers – Mark HAMILTON, Jon ROSDAHL, Mike MONTEMURRO
			2. Nominations were closed.
			3. Statement from each was requested:
				1. Mark HAMILTON – I have participated since REVma, and have most recently participated as the REVmc MAC Adhoc chair and processed 2/3 of the comments from the last time.
				2. Jon ROSDAHL – ok with just being Secretary, the most important thing is to get the work done and share the load.
				3. Mike MONTEMURRO – I have been involved with multiple revisions as well and was vice-chair of REVmb for a short time and am willing to be active again.
			4. Questions:
				1. Will you be able to attend all the meetings? – all answered affirmative.
		2. **Motion #D4: Vice Chair Motion**

Elect Mark HAMILTON and Michael MONTEMURRO as TGmd Vice Chairs.

* + - 1. Moved: Emily QI 2nd: Jon ROSDAHL
			2. **Result Motion #D4: Unanimous – Motion Passes.**
		1. Confirmation will be done in the WG in Mid-Week Plenary on Wednesday.
	1. Appointment of Secretary
		1. Chair made the appointment of Jon ROSDAHL as Secretary
		2. Ask for Affirmation of the group -- was heard in applause.
	2. **Motion #D5: Comment Collection**

Approve a 30-day comment collection on P802.11REVmd D0.1 (IEEE Std 802.11-2016 and IEEE Std 802.11ai-2016 2nd printing).

* + 1. Discussion –
			1. Need to allow time to get a review of initial comments.
			2. Would like to get a set of comments that can be processed starting in July.
			3. Review of the possible timeline of the Comment collection, and by the time we meet in July, we will have TGah and the output of July ready to roll in.
		2. Moved: Edward AU 2nd: Mark HAMILTON
		3. **Results Motion #D5: 23-0-1 Motion Passes –**
		4. Expected start would be May 15th, and would extend 35 days to allow for 30 days after we get back from Daejeon.
	1. Review Agenda – we have 10 minutes left, so would ask that we move the MIB discussion to Wednesday, and we will have Adrian’s submission on process then also (Report of Action item #2).
	2. Recess at 3:22pm
1. 802W Interim Daejeon, South Korea - 802.11 REVmd Wednesday PM1 (13:30-15:30) 10 May 2017
	1. Called to order at 1:30pm Korea time by the Chair Dorothy STANLEY (HPE)
	2. Patent Policy Reviewed
		1. No Issues noted.
	3. Agenda for last time slot; 11-17/559r3 - <https://mentor.ieee.org/802.11/dcn/17/11-17-0559-03-000m-may-2017-tgmd-agenda.pptx>
		* 1. ARC MIB pattern design work and potential impact to TGmd work – Mark HAMILTON: 11-15-355r4, 11-09-533, 11-17-475
			2. Presentations
			3. AOB
			4. Plans for May – July
			5. Adjourn
		1. No Objection to agenda.
	4. Presentation: ARC MIB pattern design work and potential impact to TGmd work – Mark HAMILTON (Brocadae): 11-15-355r4, 11-09-533, 11-17-475
		1. <https://mentor.ieee.org/802.11/dcn/15/11-15-0355-04-0arc-mib-truthvalue-usage-patterns.docx>
		2. <https://mentor.ieee.org/802.11/dcn/09/11-09-0533-01-0arc-recomendation-re-mib-types-and-usage.ppt>
		3. <https://mentor.ieee.org/802.11/dcn/17/11-17-0475-05-0arc-mib-pattern-analysis.xlsx>
		4. Not all the recommendations in this document have been applied.
		5. Reviewed a few examples for the process ARC has taken in reviewing the MIB
			1. 11-17/0475r5 gives a list of all MIB variables used in IEEE 802.11-2016 and classifies how/when/if they are used.
			2. The group needs to decide whether to take this usage and change the draft to make usage more consistent.
		6. This work will help with decisions on how to apply Yang modelling.
		7. The analysis work is planned to continue in ARC, not TGmd.
		8. Outline the process given and the expectation.
		9. Questions
			1. What is the purpose of identifying the patterns?
				1. To identify what the function of a MIB variable name may help give a clue of a consistent method of what it may be used with.
				2. Also the definition of the MIB Variables are to be consistently formatted to help in describing the variable.
		10. Note that YANG modelling is becoming more popular for Management structuring and may be a new model that we will need to create in the future.
		11. Question
			1. In REVmc there was a lot of work on the Architecture Diagrams work in ARC that was done, and then brought the recommendation to REVmc for adoption, are you looking to do the same for REVmd?
				1. Yes, that was the current plan
			2. Creating new text in ARC, and then bring the work to REVmd is fine, but if the changes being proposed in ARC are not well received in REVmd is a concern?
				1. Well, there are two parts to the ARC work, first is to document what we have, and provide guidance for the future.
				2. Discussion on where the work for fixing MIB issues is done – should it be in ARC or in REVmd?

The Chair noted that we area contribution driven organization.

Note – no one wants to do the work if there is no appetite for making the change in general.

* 1. **Presentation and Report on ACTION ITEM #2: 11-17/806r0 – Adrian STEPHENS (Intel)**
		1. 802.11REVmd Proposed process for contributions related to 11-17-0315
		2. <https://mentor.ieee.org/802.11/dcn/17/11-17-0806-00-000m-process-for-contributions-related-to-11-17-0315.doc>
		3. Review the submission
		4. Questions:
			1. How does this address the need to meet the Needs of 3GPP?
				1. Added a new requirement “to state how the feature addresses the needs of 3GPP.
			2. Can we provide these requirements for any new feature or contributions?
				1. Yes, we can use this for any submission idea.
		5. Discussion on where to put the new item. Moved to be placed in the Goals area.
		6. When we have contributions to be considered, we can use this set of criteria to judge the submissions with.
		7. We can send this document out with the call for submissions.
		8. Question on a general call for other items?
			1. We have no problem with folks bringing in proposals, but we can have the call for comments have many of those type issues identified.
	2. **Motion #D4: Approval of Contribution criteria in 11-17/806r1:**

Approve including 11-17/806r1 in the call for contributions on the topic of “adding accuracy requirements to the 802.11 standard for the estimated throughput metric and defining additional metrics to support 3GPP features.”

* + 1. Moved: Jon ROSDAHL 2nd: Joe LEVY
		2. Discussion:
			1. None
		3. Result: 15-0-1 – Motion Passes
	1. **May-July 2017 Meeting Planning**
		1. **Objectives:**
			1. **Comment collection and IEEE Std 802.11ah-2016 roll-in (Complete roll-in before Sept 2017 Session)**
		2. **Conference calls:**
			1. Scheduled with 10 day notice as needed
			2. Tuesday May 30th 11am Eastern to hear presentations, including <https://www.ietf.org/proceedings/98/slides/slides-98-intarea-80211-multicast-testbed-and-results-00.pdf>
			3. Call for Comments to complete on the 14th of June and then schedule a telecon for the 23rd  June and the 30th  June: 10 EST for one hour each.
	2. **Schedule review**
		1. **See slide 12 11-17/559r4 (**<https://mentor.ieee.org/802.11/dcn/17/11-17-0559-04-000m-may-2017-tgmd-agenda.pptx>**)**
		2. It seemed for more support for Option 2 of the Proposed Schedule and REVmd would be through TGaj only.
		3. The Comment Collection would be on 0.1 which has the roll-in of TGai.
		4. The proposal would have the first WGLB to come after Sept with TGah and the comment collection resolutions applied.
	3. Adjourned at 2:25pm

**References:**

Agenda :

<https://mentor.ieee.org/802.11/dcn/17/11-17-0559-04-000m-may-2017-tgmd-agenda.pptx>

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