

Section	Comment	Source	Action	Assignee	Types
Global	Replace "requesting router" with client and "delegating router" with server in most of the text.	Lorenzo Colitti and Marcin Siodelski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17479.html https://www.ietf.org/mail-archive/web/dhcwg/current/msg17480.html	See ticket #167. BV - I took a stab at this in https://github.com/dhcwg/rfc3315bis/blob/bev_review_08_2016/rfc3315bis.xml .	Tim will review Bernie's branch changes and report back as to whether it addresses the issues. Tim - I think there might be too much text about Requesting Routers in the DHCP for Prefix Delegation Section, but I can live with it. I would only leave the CPE setup with requesting router.	Nits Clarification 11
5.3	Perhaps we should also update section "5.3. DHCP for Prefix Delegation" to say that prefix delegation is a mechanism that can be used to provide prefixes to routers but also hosts.	Marcin and Lorenzo https://www.ietf.org/mail-archive/web/dhcwg/current/msg17481.html	BV - I did update this some in https://github.com/dhcwg/rfc3315bis/blob/bev_review_08_2016/rfc3315bis.xml ; though perhaps more edits needed.	Tim will review Bernie's branch changes and report back as to whether it addresses the issues. Tim - I think there might be too much text about Delegating Routers in the DHCP for Prefix Delegation Section, but I can live with it. I would only leave the CPE setup with requesting router.	
Appendix A	I would strongly suggest introducing a more readable and well organized "Changes since" appendices (which should stay on publication). That will also help entice more people to review, or at least take a glance of, the doc.	Jinmei, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17524.html	BV - I agree. We should rework this a bit but also need to see how this differs from what is in Section 1.1. Perhaps we should make section 1.1 clearer about what has changed from the previous?	Bernie to revise Appendix to document detailed changes. Explain why RFC 2462 references still exist.	
Global	Throughout the document, "IAPREFIX option" and "IA Prefix option" are both used (e.g. section 17.1.9.), should there be a unified_expression_?	Tianxiang, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17525.html	BV - Seems reasonable to clean up. Also look at IADDR vs "IA Address" usage (17.1.9 and 17.1.10.1).	Bernie - Done	
22	Some wording errors for Section 22 privacy considerations: "This section focuses on the server considerations. For extended discussion about privacy considerations for the client, see [RFC7824]. It(in particular, Section 3 of said(the) document discuss(discusses) various identifiers that could be misused to track the client." replacing "address" with "address or delegated prefix" or most likely "lease" in places we missed (though this is not just a search and replace).	Tianxiang, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17525.html	BV - I think I cleaned this up in https://github.com/dhcwg/rfc3315bis/blob/bev_review_08_2016/rfc3315bis.xml .	Tim - Reviewed	
Global	Remove unused terminology ("DHCP realm" is no longer used; was previously used for Delayed Auth Protocol which has been deprecated).	Bernie, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17530.html	BV - I think I cleaned this up in https://github.com/dhcwg/rfc3315bis/blob/bev_review_08_2016/rfc3315bis.xml .	Tim Reviewed.	
Multiple	remove use of "site-scoped" addresses in sections related to the link-address field (i.e., section 8.1, 18.1.1, 18.1.2).	Bernie, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17530.html	BV - I think I cleaned this up in https://github.com/dhcwg/rfc3315bis/blob/bev_review_08_2016/rfc3315bis.xml .	Tim Reviewed.	
Multiple	in a few cases, there is redundant text that can be removed (one example is in section 14, page 36, 3rd paragraph - last sentence duplicates first and is likely unnecessary).	Bernie, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17530.html	BV - I think I cleaned this up in https://github.com/dhcwg/rfc3315bis/blob/bev_review_08_2016/rfc3315bis.xml .	Tim - This text change removed the following requirement "The retransmitting client MUST NOT resend the original message to the server". This text no longer exist which might indicate that it's ok to retransmit the original message?	This was because the earlier text already says that. The client MUST update ... So was trying to shorten this a bit. - Bernie
20	missed vendor-class and vendor-specific information options as being allowed to appear more than once (with different enterprise-ids).	Bernie, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17530.html	BV - I think I cleaned this up in https://github.com/dhcwg/rfc3315bis/blob/bev_review_08_2016/rfc3315bis.xml .	Tim Reviewed.	
20.7	missed Vendor Class option MUST NOT be in ORO (as this is a client to server option).	Bernie, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17530.html	BV - I think I cleaned this up in https://github.com/dhcwg/rfc3315bis/blob/bev_review_08_2016/rfc3315bis.xml .	Tim Reviewed.	
Multiple	some references were updated from RFC 2462 to 4862, but in some cases that was incorrect (as 4862 has no explicit mention of M- and O-bits processing).	Bernie, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17530.html	BV - I think I cleaned this up in https://github.com/dhcwg/rfc3315bis/blob/bev_review_08_2016/rfc3315bis.xml .	Tim Reviewed, when the O flag is mentioned the correct RFC is referenced..	
3	In 3315 we referenced RFC 2136 for DNS Updates, but perhaps referencing RFC 4704 (The Dynamic Host Configuration Protocol for IPv6 (DHCPv6) Client Fully Qualified Domain Name (FQDN) Option) would be better?	Bernie, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17530.html	BV - Still an open question as to what is best. Perhaps we don't need EITHER RFCs?	BV - Drop 2136 references. Made change in bev_review_08_2016 branch - https://github.com/dhcwg/rfc3315bis/commit/4e12a23665c0b35998c18c4b94c4f5c8a114 Dropped	
17.x	In many of the section 17.1.x (Creation and Transmission of <name> Messages), a forward reference to the corresponding Reply processing section would probably be useful.	Bernie, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17530.html	Drop issue and leave as is.		
17.1.1, 17.1.2	I think something about prefix hints should be added to 17.1.1 and 17.1.2 (such as what is in 17.1.4); alternatively we might want to just add something about that a client may do that and rely on the text already in 20.22 (IAPREFIX option).	Bernie, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17530.html	Open as to how to handle, we should be more consistent (either remove or add in appropriate places)	TBD - See Ticket #114?	
17.2.11, 17.1.4	I'm not sure that the text in section 17.2.11 and 17.1.4 are fully aligned for Reconfigure. 17.2.11's text is a bit unclear in that it says "The server MAY include an ORO" (and then says if it includes IA options in the ORO, it must include the IA options themselves); section 17.1.4 assumes that this is always the case. I'm not sure if a "plain" Reconfigure without any ORO is valid from this as 17.1.4's text doesn't work well then? So, I think we need to clarify this a bit more. (The server I work on just sends a Reconfigure without ORO since we don't provide an administrator any way to say what the client should reconfigure and while I think this was intended to be acceptable behavior, but 17.1.4 needs a tweak to make it work?)	Bernie, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17530.html	Ted, Tim, Ralph, Bernie suggest we drop the ORO piece from Reconfigure	Bernie - Done. 9/21 - No one commented on WG ML, so sent another email that we will make this change. Bernie to generate ticket and send proposal to WG for confirmation. Created ticket 168 for this issue. And, sent email to WG about proposed change and asking for feedback by 9/14. Dropped	
17.1.6	minor issue but I don't think there's any need to delay sending Information-Request when being sent because of a Reconfigure?	Bernie, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17530.html	Ignore		
17.1.10	text is missing text (like in 17.1.9) about processing SOL_MAX_RT/INF_MAX_RT options if present? The earlier section (17.1.x) all said that a client adds the SOL_MAX_RT (or INF_MAX_RT for Information-Request)?	Bernie, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17530.html	1) Clarify when SOL_MAX/INF_MAX are processed in an Advertise. If Advertise selected, process that set of options. If no Advertise selected, process the lowest "reasonable" value(s) from the received Advertise messages. Reasonable here is >= default values. 2) Add text to 17.1.10 to process options.	Bernie I just wonder if this needs WG review given that we had RFC 7083 on these options and this wasn't an issue discussed then. Going back to RFC 7083, in section 7 - DHCPv6 Client Behavior, it had checks to validate the values. These are in 3315bis in the option definitions (section 20.23 and 20.24). And section 7 stated that "If client receives a message contain SOL_MAX_RT option" ... so it wasn't clear there what this exactly means.	
21	rework as it is a bit scattered and jumps between topics. So, moving around some paragraphs to keep the IPsec and Reconfigure topics together as well as discussing "leases" to combine some of the address assigned/prefix delegation issues should be done.	Bernie, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17530.html	BV - I think I cleaned this up in https://github.com/dhcwg/rfc3315bis/blob/bev_review_08_2016/rfc3315bis.xml .	Tim - Reviewed.	

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22	review section 22 as it first says focus will be on server considerations but then enumerates sections of RFC 7824 that are client related. Then remainder focuses on server allocation strategies (after referencing RFC 7284 section 4.3) and then duplicates some of that material. I think we should just refer readers to RFC 7824 for both client and server privacy considerations and leave it at that?	Bernie, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17530.html	BY - I think I cleaned this up in https://github.com/dhcwg/rfc3315bis/blob/bev_review_08_2016/rfc3315bis.xml .	Tim - Reviewed.	
23	Request to IANA to add a new column; should we perhaps provide IANA that data in a more easily used format? And, there is a "Note to IANA" that we need to clarify and remove. And straighten out the links (as some are .xhtml and others .xml).	Bernie, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17530.html	We need to add the details to provide IANA. Also look at adding Singletons or Not	Bernie to update spreadsheet started with these details, will need further review before adding to document	
Global	Question for the WG and co-authors - should we incorporate RFC 4242 (Information Refresh Time Option) into the bis document makes sense as it is a MUST and there is text already in 17.1.6 about it and also in 20.25. This probably is a core piece of the base protocol (for assisting in stateless configuration of clients).	Bernie, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17530.html	Ted agrees. (Tim does too)	Bernie - Added Text. NOTE: We should consider adding a new "Reply for Information-Request" subsection of the "Receipt of Reply Messages"? Perhaps some of the text in the option can then move there?	Stopped here on 8
1	DHCPv6 can also provide only other configuration options (i.e., no addresses or prefixes).	Jermy Reed, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17531.html	Nit - fix	Bernie - DONE	
1	- "provide only other" doesn't read well. Something missing? The remainder of this introduction summarizes relation to the previous DHCPv6 standards Section 1.1, clarifies the stance with regards to DHCPv4 Section 1.2.	Jermy Reed, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17531.html		Tomek - DONE	
1	- The wording made me think that the Section 1.1 and 1.2 were in the old RFCs. Maybe reorder like other sentences, "<xref target='previous-dhcp6'></xref>" summarizes the relationship to the previous DHCPv6 standards, and "<xref target='dhcpv4'></xref>" clarifies the stance in regards to DHCPv4."	Jermy Reed, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17531.html	Nit - fix	Bernie - Done	
3	- also add an "and"	Jermy Reed, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17531.html	Removed section (see #14 above), so ignore issue.	Bernie - nothing to do	
4.2	In the Dynamic Updates to DNS paragraph there is a reference to add about "but also autoregistration in IPv6?"	Jermy Reed, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17531.html	Nit - fix	Bernie - Done (used ", such as ...").	
4.2	" - for example, the information returned to all clients on the same link - does not require a binding."	Jermy Reed, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17531.html	Nit - fix	Bernie - Done (fixed another place where 3 was used and we should have written out	
4.2	- Get rid of the dashes. Start new sentence ". For example, the information returned to all clients on the same link does not require a binding."	Jermy Reed, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17531.html	Nit - fix	Bernie - Done (fixed another place where 3 was used and we should have written out	
4.2	"there are 3 IA types defined"	Jermy Reed, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17531.html	Add reference to message definitions section.	Bernie - Done	
4.2	- spell out numbers like "there are three IA types defined"	Jermy Reed, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17531.html	Don't see issue. Ignore (Bernie).		
4.2	"Reconfigure key" mentions "Reconfigure messages" but that isn't defined in the terminology. It is covered in detail later, but maybe should be summarized in the DHCP terminology section too	Jermy Reed, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17531.html			
4.2	Check XML / HTML for "top-level option" terminology definition	Jermy Reed, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17531.html			
20.25	s/completeness/completeness/	Jermy Reed, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17531.html	Nit - fix	Bernie - Done	
Conflicting files?	Not sure if this is a real issue.	Francis Dupont, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17531.html			
20.5	the "that is, at most one address from each prefix assigned to the link to which the client is attached." was moved to 20.4 IA_NA. Should the text be duplicated instead?	Francis Dupont, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17533.html	For IA_TA, this may be more complex as there could, in theory, be more than one temporary address per prefix? So, I'd be inclined to ignore this comment and leave it be? (Bernie)		
20.7	wording/missing text in: Other top-level Options MUST appear in the Option Request option or the will not be sent by the server.	Francis Dupont, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17533.html	Nit - Fix	Bernie - Done	
20.22	IMHO it is "they will", i.e., the => they the RFC2461 reference must be updated to RFC4861 (BTW the section numbering is the same, i.e., doesn't need to be updated)	Francis Dupont, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17533.html	BV - We have to be careful as in a few cases I remember reverting these back to 2461 as 4861 was different (no M & O). Have to investigate this item.	Bernie to do late during cycle to re-review these references and check that old is appropriate.	
22	I suggest said -> that in "It particular, Section 3 of said document discuss various"	Francis Dupont, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17534.html	Nit - Fix	Bernie - Done	
25	PS: note if the section 25 (acknowledgments) becomes too large perhaps it should be split into 2 parts, one inherited from RFC 3315 (with RFC 3633 merged as it is now), one with the new stuff	Francis Dupont, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17534.html	Note taken, but probably OK as is.	Ted to review and perhaps revise.	
1.4	Paragraph 2 is a repetition of the beginning of paragraph 12.	Ian Farrer, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17535.html	This comment doesn't actually make sense--there is no paragraph 12 in section 1.4. BV - I think he meant first sentence of section 1.4 (1st paragraph). I think we can safely drop this 2nd paragraph of 1.4. And, Ian confirmed. So, remove this 2nd paragraph. Ted to include this in a protocol overview rework.	Review Ted's rewrite and it is handled. https://docs.google.com/document/d/1khTnbBltvNwFTvbrs4UJ_mm1sjw16MpXQJXpeleEDT8/edit?usp=sharing Bernie - Removed paragraph 2 of section 1.4 (now later section).	
13.2	T1/T2 times and how they are selected are discussed in this section, but the purpose of the T1/T2 timers is not described until section 17.1.4. A brief overview of their purpose would help readers.	Ian Farrer, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17535.html		Ted	
16.1	Para 1 - The sentence: "However, the client MAY send the message through another interface if the interface is a logical interface without direct link attachment" is ambiguous, suggested reword: However, the client MAY send the message through another interface if the interface which configuration is being requested for is a logical interface without direct link attachment.	Ian Farrer, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17535.html	Ted	Ted	
17.1	DISCUSSION - Is this really a discussion point? The provided text for considerations regarding the use of unicast with relays seems straightforward enough and the discussion doesn't pose any questions.	Ian Farrer, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17535.html	Ted to include this in a protocol overview rework.	Ted	
17.1.2	The client includes a Reconfigure Accept option indicating whether or not ... The text here is not accurate (the option is only included if it is supported) - Suggested reword: The client includes a Reconfigure Accept option (see Section 20.20) if the client is willing to accept Reconfigure messages from the server.	Ian Farrer, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17535.html	Bernie to make edit	Bernie - Done	

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17.1.10.1	Para beginning 'When a client had received...' - There are a number of grammatical errors in this paragraph. Suggested re-word: When a client receives a configuration option in an earlier Reply, then sends a Renew, Rebind or Information-Request and the requested option is not present in the Reply, the client MUST stop using the previously received configuration information. In other words, the client should behave as if it never received this configuration option and return to the relevant default state. If there is no viable way to stop using the received configuration information, the values received/configured from the option MAY persist if there are no other sources for that data and they have no external impact. For example, a client that previously received a Client FQDN option and used it to set up its hostname is allowed to continue using it if there is no reasonable way for a host to unset its hostname and it has no external impact. As a counter example, a client that previously received an NTP server address from the DHCP server and does not receive it any more, MUST stop using the configured NTP server IPv6 address. The client SHOULD be open to other sources of the same configuration information. This behavior does not apply to any IA containers, as their processing is described in detail in other parts of this document. * Suggest also that the 'MUST stop using' is replaced with SHOULD, as the next paragraph describes an exception to the MUST requirement. * Also, it would be worth extending this to say that if a requested option is received that has an updated value, then use of the previous value should be discontinued and replaced with the new value.	Ian Farrer, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17535.html	Apply changes	Bernie - Done	
17.2	Para 2 - s/server sends Advertise message/server sends an Advertise mes	Ian Farrer, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17535.html	Nit - Fix	Already appears to be done in Bernie's branch (Bernie)	
17.2.1	Para 6 - "Sending this option back to the client may useful using the server selection process." Current text is unclear, propose: Sending this option back to the client may be useful for the server selection process.	Ian Farrer, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17535.html	Nit - Fix	This material has changed in Bernie's branch so this text is now not present.	
17.2.2	Para 6 - The term 'prefixes on included addresses' is used (twice). Suggest 'prefixes of' is used instead.	Ian Farrer, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17535.html	Nit - Fix	Bernie - Done	
17.2.9	Para 6 - "IA_IA" is listed here. Assume IA_TA was meant.	Ian Farrer, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17535.html	Nit - Fix	Bernie - Done	
17.2.11	Para 2-Describes the server including an ORO option to say what is changed/added, but there is no corresponding text in 17.1.11 saying how the client should use a received ORO in a reconf. message. (I see Bernie got this one as well)	Ian Farrer, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17535.html	See ticket #168	Bernie - Removed ORO / IA_* options from reconfigure / not an issue anymore.	
18.1.1	s/If no addresses/If no addresses/	Ian Farrer, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17535.html	Nit	Already fixed (Bernie)	
19, 19.2	Both sections describe that RFC3315 delayed authentication is obsolete. Is the repetition necessary?	Ian Farrer, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17535.html	Nit	Bernie - Done. Removed text from 19.2.	
19.2	BTW "monotonically increasing" is a pleonasm :-	Francis Dupont, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17540.html	Remove monotonically.	Bernie - Done & Undone - back to using term.	That's not correct.
18.1	Relaying Client/Relay-Forward page 77: link-layer -> link-layer	Francis Dupont, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17541.html	Nit - appears to have already been fixed in Bernie's branch (Bernie).	Done	
18.1.1	Relaying Client page 78: in the link-address field -> to (or into? BTW 18.1 uses the word "to" and 18.1.2 "into").	Francis Dupont, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17541.html	Nit - Done.	Done	
18.1.1	wording "may fill in the link-layer" -> "may fill the link-layer"	Francis Dupont, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17541.html	Change to use set/sets	Bernie - Done	
18.1.2	Relaying Relay Agent page 78: perhaps the two "global or site-scoped" must be changed into "global, ULA [RFC4193] or site-scoped"?	Francis Dupont, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17541.html	Already done in Bernie's branch.	Bernie - Done	
16	the titles of 16.1 and 16.2 can't be understood without a good knowledge of DHCPv6. I recommend to explain the "purpose of the configuration" are either "address assignment" or "prefix delegation".	Francis Dupont, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17543.html	Marcin will look at updating it	Marcin	
14	i.e. -> i.e., and e.g. -> e.g.,	Francis Dupont, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17544.html	Nit - Done (entire document) (Bernie)	Bernie - Done	
14	PS: note if the section 25 (acknowledgments) becomes too large perhaps it should be split into 2 parts, one inherited from RFC 3315 (with RFC 3633 merged as it is now), one with the new stuff	Francis Dupont, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17544.html	Note taken, but I don't think it is an issue (Bernie)	Info only; no action	
4.2	"top-level option" entry page 15: i.e. -> i.e.,	Francis Dupont, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17547.html	Nit - Already done (see earlier issue) (Bernie)	Bernie - Done	
17	page 44: IMHO the "MUST NOT be using"/"MUST stop using" is both unrealistic and underspecified, e.g., the "be using" vs "use" suggests an address should not be used as source for new connections (TCP) or datagrams (UDP) but this is only an interpretation... Note further text is clearer so I suggest: * explain than "has chosen to start the server solicitation process" is not the default (which is to use Renew, Confirm and Rebind). * add a reference to 17.1.7 (Release) where the meaning of "stop using" is detailed.	Francis Dupont, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17550.html	Marcin will look at updating it	Marcin	
17	page 44 (last line): i.e. -> i.e.,	Francis Dupont, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17550.html	Nit - Already done (see earlier issue) (Bernie)	Bernie - Done	
17.1.4	page 52 (last line): i.e. -> i.e.,	Francis Dupont, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17550.html	Nit - Already done (see earlier issue) (Bernie)	Bernie - Done	
17.2	page 64: wording: "indicated by the as indicated"	Francis Dupont, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17550.html	Nit - Done (Bernie).	Bernie - Done	
Global	Solicit-Reply -> Solicit/Reply	Francis Dupont, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17555.html	Nit - Done (Bernie).	Bernie - Done	
Global	Spelling issues: completeness -> completeness, acknowledgements -> acknowledgments, IAPD(s) -> IA_PD(s)	Francis Dupont, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17555.html	Nit - Done (Bernie).	Bernie - Done	
id-nits		Francis Dupont, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17556.html			
1	paragraph 5, change: "DHCPv6 can also provide only other configuration options" to: "DHCPv6 can also be used to provide only other configuration options".	Fred Templin, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17559	Nit - Done (Bernie).	Bernie - Done	

Section	Comment	Source	Action	Assignee	Types
1.2	the sentences: "[RFC3315] suggested that future work might be to extend DHCPv6 to carry IPv4 address and configuration information. However, the current consensus of the IETF is that DHCPv4 should be used rather than DHCPv6 when conveying IPv4 configuration information to nodes." This text is at odds with the AERO spec, where DHCPv6 is used to carry IPv4 configuration info in environments where DHCPv4 mechanisms cannot be applied. Suggestion is to remain silent on this subject and remove these two sentences, then leave it for other documents to define mechanisms for carrying IPv4 information in DHCPv6 messages.	Fred Templin, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17559 and https://www.ietf.org/mail-archive/web/dhcwg/current/msg17560.html	Ignore this comment.		
4.2	suggested reword for the definition of "lease": "A contract representing an address assigned by the DHCP server to the client or a delegated prefix assigned by the delegating router to the requesting router."	Fred Templin, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17559	"A lease is an agreement between client and server that the client has possession of an address or delegated prefix for a period of time."	Bernie - Done Others - PLEASE REVIEW	
4.2	definition of "requesting router" - change to: "A node that acts as a DHCP client and requests prefix delegations."	Fred Templin, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17559 and also https://www.ietf.org/mail-archive/web/dhcwg/current/msg17561.html	Review later to confirm that this matches intent of mostly deprecating "requesting router". May also want to review delegating router.	Later	
5.2	first sentence, s/[RFC2462]/[RFC4862]	Fred Templin, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17559	Needs review as I think 4862 has little to say about "stateful address autoconfiguration protocol". There are other places where I explicitly left the 2462 reference (such as for M & O bits) as 4862 was silent on these.	Bernie - See above. will do in a late pass before submitting 06.	
5.2	second sentence, reword as: "It is appropriate for situations where stateless address autoconfiguration alone is insufficient or impractical, e.g. because of network policy, additional requirements such as dynamic updates to the DNS, client-specific requirements, etc."	Fred Templin, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17559	Bernie to review	Bernie - Done	
5.2	sentence beginning "Typically clients request", change "domain server addresses" to "DNS server addresses".	Fred Templin, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17559	Bernie to review	Bernie - Done, used "DNS name servers"	
12.1	the paragraph beginning: "Any address assigned by a server that is based on an EUI-64 identifier MUST - does this alternative still match with operational experience? I.e., do real-world DHCPv6 servers create EUI-64 based IA_NAs? If not, this paragraph could be removed.	Fred Templin, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17559	See ticket #166	Done - This was updated already for ticket #166.	
12.2, 12.3	Should the order of Sections 12.2 and 12.3 be reversed? I.e., talk about IA_NA first, then IA_TA and then IA_PD. In other words, talk about all address assignment methods first before talking about prefix delegation.	Fred Templin, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17559	Already done from earlier review comments.	Done.	
13.1	the sentence "This method of bounding burstiness also guarantees that the long-term transmission rate will not exceed." is a sentence fragment that needs to be resolved before the period. Suggestion is to merge it with the following line as "This method of bounding burstiness also guarantees that the long-term transmission rate will not exceed a Transmission Rate Limit (TRT)."	Fred Templin, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17559	Already done earlier - sentence was missing "be" - This method of bounding burstiness also guarantees that the long-term transmission rate will not be exceeded.	Done.	
13.2	second paragraph, this is the only place in the document that "renew" and "rebind" are used w/o capitalization. Should change to "Renew" and "Rebind".	Fred Templin, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17559	Bernie - propose to use T1 and T2 instead of renew/rebind times?	Bernie - Done	
17	the sentence beginning: "In particular, if the client had some valid bindings and has chosen...". Remove this sentence. Reason - it should be OK for the client to receive bindings from multiple servers if it has some way to keep track of which bindings it received from which servers.	Fred Templin, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17559 and also https://www.ietf.org/mail-archive/web/dhcwg/current/msg17562.html	10/12 - Tim, Tomek, and Bernie feel that current text is appropriate. Client that wants to retain bindings, should be using Renew/Rebind. Solicit means starting over.	Nothing to do.	10/12 - Started rev
17.1.5	add a trailing sentence to this section: "The client MAY send a Rebind message if its link-layer address(es) have changed, e.g., to update any cached link-layer address information."	Fred Templin, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17559 and also https://www.ietf.org/mail-archive/web/dhcwg/current/msg17563.html	10/12 - Discussed and we need to add to document a notice that if client is willing to accept Reconfigure, that it MUST "inform" server if previous link-local address is no longer active (view Renew, Rebind).	Bernie - Done (added to 17.1.4)	
17.1.10.1	final paragraph, delete this paragraph since the client should be able to associate with multiple servers if it wants to.	Fred Templin, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17559 and also https://www.ietf.org/mail-archive/web/dhcwg/current/msg17562.html	10/12 - If anything, we should put a statement somewhere earlier in the document that "client" (such as when client restarts server discovery) really applies to an interface on the client and even in some cases perhaps a SUBSET of the IAs the client is using (such as if it has separate state machines to deal with IA_NA and IA_PD). The default of a client says "on a link". Need to figure out where to put this and who should do it.	TO DO: Need to figure out where to put this and who should do it.	
17.1.11	the sentence: "How does this mechanism work in the face of duplicated or retransmitted Reconfigure messages?" It seems odd to see this text phrased in the form of a question, which is then immediately answered in the rest of the paragraph. Simply deleting this question will shorten the paragraph while still retaining its integrity.	Fred Templin, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17559	Bernie - Removed sentence	Bernie - Done	
17.1.12	add the following as a new last item in the bulleted list: o The requesting router's link-layer address(es) change.	Fred Templin, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17559 and also https://www.ietf.org/mail-archive/web/dhcwg/current/msg17563.html	10/12 - See row #80. Same issue. Add to allowed list. Also, 17.1.12 text should be revised to include IA_NA, IA_TA (everything) when "confirmed" via a Rebind.	Bernie - 17.1.12 was removed from other comments and consolidated with 17.1.3. As we now have addressed #80 by adding this to Renew (17.1.4), I didn't make any other changes. I don't think the link-local address change means to trigger a Rebind (Renew is more appropriate). Also, I think "link-layer address" is not correct; that doesn't matter as ND should handle that; it is the client's link-local address that matters!	
18.1.1	the sentence: "That is not recommended as it requires additional information to be provided in the server configuration." - suggest deleting this sentence. There may be many deployments that rely on this kind of configuration where a "not recommended" qualification does not apply. this whole Section needs to either import 'draft-ietf-dhc-sedhcpv6' or simply say that a new DHCP authentication mechanism will be specified in a future document.	Fred Templin, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17559	10/12 - Replace "it requires" with "it may require".	Bernie - Done	
19		Fred Templin, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17559 and also https://www.ietf.org/mail-archive/web/dhcwg/current/msg17564.html	10/12 - Add reference to sedhcpv6 (informational)	Bernie - Done (but only added to section 21, see row 87)	
20.11	again should mention 'draft-ietf-dhc-sedhcpv6' or simply say that a new DHCP authentication mechanism will be specified in a future document.	Fred Templin, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17559 and also https://www.ietf.org/mail-archive/web/dhcwg/current/msg17564.html	10/12 - Add reference to sedhcpv6 (informational)	Bernie - Done (but only added to section 21, see row 87)	
21	again should mention 'draft-ietf-dhc-sedhcpv6' or simply say that a new DHCP authentication mechanism will be specified in a future document.	Fred Templin, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17559 and also https://www.ietf.org/mail-archive/web/dhcwg/current/msg17564.html	10/12 - Add reference to sedhcpv6 (informational)	Bernie - Done - added to end of section.	
na	no changes to doc, in favor of publishing	Sheng Jiang, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17572.html	Not an issue	Nothing to do.	

Section	Comment	Source	Action	Assignee	Types
1.1	Use more detailed title, stateless DHCPv6 service, instead of just stateless, for RFC 3736.	Marcin Siodelski, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17576.html	Note: It's actually better to use the entire RFC title, so I would change this to Stateless DHCP Service for IPv6 and IPv6 Prefix Options for DHCPv6 for RFC 3633. (Ted)	Bernie - Done	
1.4, 1.5	Didn't we at some point consider removing sections 1.4 and 1.5 as they present exchanges of messages before we even got to the terminology?	Marcin Siodelski, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17576.html	I think the general idea here is good, but at the same time we do want to have a protocol overview. So I think should this be in a new section, "Protocol Overview," after the terminology section? Second, is this redundant—is there already a good overview later in the document? I think the answer to the first question is yes, and the second question, no. It's pretty clear that this is it. So I'd be in favor of moving these two sections forward past the Terminology section. (Ted)	Bernie - Done. Inserted before section 5. New section 5 titled "Client-server exchanges" with a short intro (using and moving text from 1.3), followed by 5.1 (which is 1.4) and 5.2 (which is 1.5). So 1.3, 1.4, 1.5 are "removed" and moved into new section 5. Note to update section 1.0 as it references 1.3-1.5.	
1.4	Consider adding at the end: "If the server is unable to extend the lifetime of an address or delegated prefix it indicates that by returning the address or delegated prefix with lifetimes of 0. At the same time, the server may assign another address or delegated prefix instead."	Marcin Siodelski, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17576.html	Bernie - Seems reasonable to add (though we can't have 100% of details in "intro" material). Review with Row #90 changes and determine if appropriate.	Bernie - Done. Inserted before section 5. New section 5 titled "Client-server exchanges" with a short intro (using and moving text from 1.3), followed by 5.1 (which is 1.4) and 5.2 (which is 1.5). So 1.3, 1.4, 1.5 are "removed" and moved into new section 5. Note to update section 1.0 as it references 1.3-1.5.	
4.2	binding: this should be updated to also include delegated prefixes. Currently it says: "A binding (or, client binding) is a group of server data records containing the information the server has about the addresses in an IA" and further it says: "... where IA-type is the type of address in the IA ..." So again, no mention of delegated prefixes. Similarly, for the IA, is this ok to say: "Each IA holds one type of address ..." ? It implies that the prefix is an address.	Marcin Siodelski, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17576.html	Bernie - Fixed from earlier comment	Macin - please review	
4.2	IA_PD: I think the following can be removed: "Each IA_PD has an associated IAID. A requesting router may have more than one IA_PD assigned to it; for example, one for each of its interfaces." as it duplicates the text for "IA".	Marcin Siodelski, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17576.html	Bernie - Fixed from earlier comment	Macin - please review	
4.2	singleton option: this seems to be underspecified. In particular, "appear only once". The question is where? In a message or other option.	Marcin Siodelski, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17576.html	Suggest adding reference to Section 16 of RFC 7227? Though not explicit there either, it may add more context. Tomek would like some more clarification as 7227 isn't really clear on context.	Bernie - Done. A singleton option is an option where it may only appear once as a the top-level option or at any encapsulation level.	
6.3	Message descriptions should probably be updated to use the term "leases", instead of addresses.	Marcin Siodelski, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17576.html	Bernie - Fixed from earlier comment	Macin - please review	
7	msg-type: In wonder if we should add that: "additional message types are defined in other specifications", to not create impression that those in section 6.3 are the only valid messages. For example those in RFC7341.	Marcin Siodelski, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17576.html	Bernie - Huh? Text in 05 already said: "Additional message types are defined in [RFC5007], [RFC5460], [RFC6977], [RFC7341], [RFC7563]. Additional message types may be defined in the future."	Macin - please review	
13.1	OLD: "This method of bounding burstiness also guarantees that the long-term transmission rate will not exceed." NEW: "This method of bounding burstiness also guarantees that the long-term transmission rate will not exceed." (colon, rather than period at the end).	Marcin Siodelski, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17576.html	Bernie - Not sure colon is appropriate here.	Ignore.	
15	OLD: UnSpecFail NEW: UnSpecFail	Marcin Siodelski, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17576.html	Nit	Bernie - Done	
17	Some paragraphs of this section require fixing punctuation. The enumeration of reasons why the client would start DHCP message exchange could be better placed earlier in this section. Perhaps, right after the first paragraph. The paragraph starting with: "A server may initiate a message exchange with a client by sending a Reconfigure message to cause the client to send a Renew, Rebind or..." could be moved to the end of the section, after the paragraphs describing client-initiated exchanges.	Marcin Siodelski, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17576.html	Add #5 for Reconfigure to list in section 17. Move paragraph indicated to end of section.	Macin to look at punctuation issues. 10/12 - Stopped here Bernie - Done -- EXCEPT not sure which paragraphs required fixed punctuation?	
17.1.3	"In any situation when a client may have moved to a new link and the client does not have any delegated prefixes obtained from the DHCP server..." This assumes that the client has delegated prefixes and is interested in continuing to use them. But, is this also possible that the client switching to a new link is no longer interested in using delegated prefixes and simply wants to Confirm the addresses assigned? Is this ok to send Confirm to verify that the addresses it has are correct, even though it had received prefixes in previous transaction?	Marcin Siodelski, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17576.html		10/19 - Ignore this issue, we don't have a use case.	10/19 - Started here
17.1.4	"The server determines new lifetimes for the leases according to the administrative configuration of the server. The server may also add leases to the IAs. The server can remove leases from the IAs by returning IA Address options (for IA_NA and IA_TA) and IA Prefix options (for IA_PD) with preferred and valid lifetimes set to 0." This text is server specific and should be better moved to the server section, or alternatively we may want to consider updating this text to be more of a client-side type, e.g. "The client MUST be prepared that the server removes or adds new leases to the IAs. The leases are removed when server sets their preferred and valid lifetimes to 0, in which case the client MUST stop using them immediately." I'd suggest we put this paragraph at the beginning of the section: "Upon receipt of one or more valid Advertise messages, the client selects one or more Advertise messages based upon the following criteria." as it is the first for the client to select the Advertise message. Then, it should be followed by: "The client MUST ignore any Advertise... with the exception of SOL_MAX_RT and INF_MAX_RT", because we want the client to process SOL_MAX_RT and INF_MAX_RT from a selected Advertise message, not from all messages.	Marcin Siodelski, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17576.html	10/19 - Tomek, Marcin, and Bernie agreed that this was a good change to make 17.1 text client specific; perhaps move server specific actions into 17.2 as appropriate.	10/19 - Marcin TODO.	
17.1.9		Marcin Siodelski, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17576.html		10/19 - Marcin TODO.	

Section	Comment	Source	Action	Assignee	Types
17.1.10.1	The new text starting with: "When a client had received a configuration option in earlier Reply, then sent Renew, Rebind or Information-Request and that requested option does not appear in in the Reply any more, it MUST stop using..." includes Information-request but this section is not about the Information-request case. One of the option would be to include Information-request in the section title, but then there is a lot of text in this section that is not relevant to Information-request. Perhaps it would be better to have a separate section that includes this text, e.g. "Lack of Previously Received Options in Reply" Spurious "In most instances".	Marcin Siodelski, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17576.html		10/19 - Marcin TODO.	
17.2	Duplicated "as indicated by the Reconfigure".	Marcin Siodelski, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17576.html	Bernie - Well, for "In most instances" there are some cases where a Reply is not sent? Not sure if we care about that? Bernie - Already addressed duplicated text.	10/19 - Marcin TODO (change "In most instances" to "In most cases").	
17.2.1	OLD: "the servers discard the Solicit message" NEW: "the server discards the Solicit message" OLD: "Sending this option back to the client may useful using server selection process." NEW: "Sending this option back to the client may be useful in server selection process."	Marcin Siodelski, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17576.html	Bernie - Fixed 1st issue; 2nd issue ignored as text removed (I think Advertise section already covered this).	Bernie - Done? Tomek - yes, the first is done and the second refers to text that's removed already.	Tomek: The first or
17.2.8	In the following sentence: "The server includes options containing configuration information to be returned to the client as described in Section 17.2. " It sounds odd to direct the reader to section 17.2. while the reader is in fact in section 17.2. (specifically 17.2.6).	Marcin Siodelski, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17576.html	Bernie - I'm not sure that this is necessarily wrong (there is no 17.2.0), but 17.2 also doesn't say that much so we might want to look at whether more needs to be said about returning "other configuration" options. Note also that this applies to other 17.2.x sections as they also have this same text.	Ignore.	
17.2.9	OLD: "Prefix Excluded" NEW: "Prefix Exclude"	Marcin Siodelski, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17576.html	Nit	Bernie - Done	
24	Together with obsoleting the lifetime hints we obsoleted T1/T2 hints, which we should probably mention here	Marcin Siodelski, https://www.ietf.org/mail-archive/web/dhcwg/current/msg17576.html	Nit	Bernie - Done	
General Comment	I'm okay with deprecating the delayed authentication protocol, but I'm not sure if it's okay to ship the spec with no built-in authentication (the reconfigure key protocol is very limited and too weak). As security/privacy is generally considered to be a critical part of any IETF spec today rather than just an optional "nice thing to have", I imagine this can be a big concern for the IESG. If my observation is simply incorrect, that's fine; I'm not intending to raise this point as a blocking issue. But if I'm right, it will be quite tricky issue. I don't think it's realistic to introduce a new authentication mechanism to rfc3315bis, but then I have no good idea on how to address the concern. My suggestion at this point is to consult a security AD sooner than later (i.e., in this last call period) to see whether the current approach can be a blocking issue or not, and if it is, how we could address it.	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Bernie - We added SEDHCPv6 reference (only to security considerations at this point). Also, since no one is using this, what value is there in documenting something that isn't in use and not likely to be used. I think we'll ignore comment and revisit if we get IESG pushback (not sure what we can do about it, except perhaps wait until SEDHCPv6 has progressed).	Ignore.	
General Comment	I think overall tone of privacy considerations will have to be modernized. It seems rfc3315bis currently still has the same (maybe implicit) assumptions that DHCPv6 is generally free from privacy issues. As we now all know the trend has been significantly changed in the IETF in general, and dhc is not an exception. I've pointed out some specific text on this issue below, but I think it should also be considered a general issue.	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Bernie - We have a privacy considerations section which references the privacy RFCs. This section was updated a bit since the 05. Others are encouraged to review updated text and update further if needed.	Ignore.	
General Comment	I wonder whether we should still keep IA_TA. I don't know whether there's any real-world deployment of it (I personally don't know of any. And, if it's not actually deployed, wouldn't the same argument apply as deprecating the delayed authentication protocol? IA_TA is not just (almost or totally) unused, but can also do harm by introducing tricky corner cases as we discussed in RFC7550.	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Tomek - deprecating IA_TA is a big change. I'm ok with that, but that definitely warrants a discussion on ML.	Ignore - See ticket #124 as previously discussed in WG	
General Comment	On a somewhat related point, it was not clear to me how much of RFC7550 is integrated into rfc3315bis. In particular, it's not clear whether it clearly specifies (and effectively enforces) the concept of using a single DHCPv6 session for all IA types. This is another instance that made me think I can only abstain; if I actually tried to implement the spec I might be able to know it's well already described or identify inconsistency or lack of description. But just by reading this size of doc it's quite difficult to tell for sure.	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Tomek: "There's this text in 13.2: If the client received multiple IA containers, it SHOULD pick renew and/or rebind transmission times so all IA containers are handled in one exchange, if possible.", I'm still working on it.	Tomek: extend the last sentence of 17.0 to add reference to 7550 for justification and make it into separate section (before 17.1). Capital SHOULD. Done.	
1	DHCPv6 is the "stateful address autoconfiguration protocol" and the "stateful autoconfiguration protocol" referred to in "IPv6 Stateless Address Autoconfiguration" [RFC4862]. This paragraph isn't necessary anymore and should be removed. RFC4862 already just refers to DHCPv6 (there's even no reference to the odd phrase of "stateful address autoconfiguration protocol" in RFC4862).	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Bernie - This is an interesting comment; need to discuss.	Tomek: drop the 3rd paragraph in section 1. "DHCPv6 is the "stateful address autoconfiguration protocol" and the "stateful autoconfiguration protocol" referred to in "IPv6 Stateless Address Autoconfiguration" [RFC4862]." Done.	
1.1	number of follow up extensions published over the years. Several notable extensions were published: prefix delegation [RFC3633], stateless [RFC3736], update to SOL_MAX_RT and INF_MAX_RT option	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Bernie - Do we want to make any changes? Perhaps not?	Tomek: "and a number of follow up extensions" => "and a number of follow up documents". Done	
3	A minor point, but I don't think RFC3736 is an "extension" as the RFC pretty clearly says in its abstraction. IPv6 Stateless Address Autoconfiguration [RFC4862] specifies [...] In addition, the protocol interaction by which a node begins stateless or stateful autoconfiguration is specified. Actually, RFC4862 doesn't specify "the protocol interaction" anymore (because we failed to clearly define how M/O bits work).	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Bernie - See above for Jinmei's comment on section 1. How do we want to clean this up?	Tomek; remove "In addition, the protocol interaction by which a node begins stateless or stateful autoconfiguration is specified. DHCP is one vehicle to perform stateful autoconfiguration." from section 3. Done	10/19 - Stopped he
4.1	on the description of "link" IP. Examples are Ethernet (simple or bridged), Token Ring, PPP and PPPoE links, X.25, Frame Relay, or ATM networks; and Internet (or higher) layer "tunnels", such as tunnels over IPv4 or IPv6 itself.	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Nit - Which do we want to remove? Token Ring? X.25, Frame Relay, ATM? then we just have Ethernet (simple or bridged); PPP and PPPoE links; and Internet ...	Bernie - Done - Removed indicated items	10/26 - Started her
4.1	This is not incorrect, but the examples include technologies almost dead today and now look a bit awkward. You might want to modernize the examples. link-local address An IPv6 address having a link-only scope, indicated by having the prefix (FE80::/10). You might want to lower-case the prefix (i.e., to "fe80::/10"). Although not necessarily for cases like RFCs, RFC5952 generally recommends to use lower-case letters. rfc3315bis itself uses lower-case version in other places, so it would at least be better to be consistent.	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Nit	Bernie - Done	

Section	Comment	Source	Action	Assignee	Types
5.2	the "stateful address autoconfiguration protocol" for IPv6 [RFC2462] s/RFC2462/RFC4862/ In general, unless you have a specific reason for referring to the older version all of these references should be updated to the latest version. I won't repeat this sense of comment, but there are several other such cases.	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Bernie - See earlier comments on this. We need old document as 4862 says "Avoided the wording of "stateful configuration", which is known to be quite confusing, and simply used "DHCPv6" wherever appropriate."	Bernie - See earlier as will re-review the 2462 uses to assure they are appropriate. There's also Jinmei's comment on Section 1 to consider.	
5.4	[...] the requesting router MUST set the valid lifetime in those advertisements to be no later than the valid lifetime specified in the IA_PD Prefix option. "no later than" sounds awkward as the lifetime is a duration, not a particular point in time.	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Bernie - Not sure this is worth cleaning up as I would think the intent is clear? If we do need to fix, it is a bit messy since we have to say that the lifetime sent in the RA must not exceed the remaining lifetime of the delegated prefix?	Bernie & Tomek vote to leave as is; lifetimes are either absolute or relative, the intent here seems clearer in using later (rather than greater).	
6.3	RENEW (5) A client sends a Renew message to the server that originally provided the client's addresses and [...] What about prefixes? Same for REBIND, and there seem to be other cases where the integration of address assignment and prefix delegation isn't enough.	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Nit	Bernie - Already addressed from earlier comments	
8.1	link-address An address that will be used by the server to identify the link on which the client is located. This is typically global, site-scoped or ULA [RFC4193], but see discussion in Section 18.1.1. site-scope unicast address has been deprecated. Also, the phrase "global or ULA" is awkward as ULA is a global (scoped) address. You might be interested in draft-carpenier-6man-whats-global-00.	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Nit	Bernie - Already addressed from earlier comments	
10	[...] The DUID is designed to be unique across all DHCP clients and servers, and stable for any specific client or server - that is, the DUID used by a client or server SHOULD NOT change over time if at all possible; I guess this property is now changing because of the privacy concerns.	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Tomek & Bernie - Need to add, "The client may change its DUID as specified in Anonymity Profiles for DHCP Clients".	Tomek - TODO	
12.1	[...] The link address field refers to the link-address field of the Relay-Forward message, and the link-address fields in any Relay-Forward messages that may be nested within the Relay-Forward message. I failed to understand this sentence (especially the part after "and"). If this is not a wording error, I guess some more explanation will be needed.	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Tomek & Bernie: May want to replace with "The link-address in this case may come from any of the Relay-Forward messages encapsulated in the received Relay-Forward, and in general the most encapsulated (closest Relay-Forward to the client) has the most useful value."	Tomek	
14	A client is not expected to listen for a response during the entire period between transmission of Solicit or Information-request messages. I don't understand what this (addition to the original 3315) tries to say.	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)		Bernie - Already addressed from earlier comments (text added to indicate why client need not wait - power usage...)	
15.11	- the message was not unicast to the client. I'm not sure why we bother to say this, and only for Reconfigure. Is there any case where a DHCPv6 message to a client isn't unicast at all?	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Bernie - Because we require this message to be UNICAST.	Bernie - Ignore comment.	
17.1.1	[...] In the case of a Solicit message transmitted when DHCP is initiated by IPv6 Neighbor Discovery, the delay gives the amount of time to wait	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Tomek & Bernie - Remove "by IPv6 Neighbor Discovery".	Tomek - done	
17.1.10.1	IPv6 ND would not "initiate" DHCP anymore (see also the comment on Section 3 above). [...] the requesting router MUST set the valid lifetime in those advertisements to be no later than the valid lifetime specified in the IA_PD Prefix option. "no later than" sounds awkward for these lifetimes (see also Sec 5.4).	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Tomek & Bernie - See earlier	Ignore	
17.1.10.1	This bullet: - Sends a Request message if any of the IAs in the Reply message contains the NoBinding status code. [...] and this sentence seem to contradict each other. [...] This facilitates the client using a single state machine for all bindings. Specifically, the bullet description seems to lead to multiple separate state machines for different bindings.	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Tomek & Bernie: (1) remove sentence about only adding bindings that returned NoBinding; (2) this is only for a Rebind as the server may have been unable to allocate leases as per issue with multiple servers responding to Rebind (aka the Rapid Commit restrictions).	Bernie - Done. Actually, it is for the Renew case as well so (2) is incorrect.	
17.1.12	why can't we simply use CONFIRM for this purpose?	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Bernie - This was a long debate during RFC 7550 and WG agreed to use Rebind for PD. Let's not reopen.	Bernie - Ignore as it was WG consensus	
17.2.2	[...] If the reconfigure mechanism is supported, the server is supposed to send Authentication option with Reconfigure Key (see Section 19.4 for details). What if we re-introduce securer authentication (whether it's sedhcpv6 or not)? Should we still keep using Reconfigure Key, which contains a private key in plain text? (see also comment on Section 19.4)	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Tomek & Bernie - Replace the sentence with something less specific, such as "Use of the reconfigure mechanism requires some kind of authentication ... and see section 19.4 for the default mechanism if no other is available."	Bernie - DONE. ** BUT, I think we may have goofed in removing the Reconfigure Accept from the Reply. Isn't this need when the Reconfigure Key Auth. Protocol isn't in use? Otherwise, how does the client know if the server accepted it (and it should "listen" for Reconfigure messages).	
17.2.9	[...] If the Option Request option includes a container option the server MUST include all the options that are eligible to be encapsulated in the container. Is the term "container option" defined somewhere? If not maybe it should in the terminology section.	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Tomek & Bernie - Add definition of container option - an option that encapsulates other options (such as IA_NA which encapsulates IAADDR options).	Bernie - Done	
17.2.9	"server MUST NOT include this address or delegated prefix in the Advertise message" - incomplete sentence or missing period	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)		Bernie - Done	
18.1.1	If the relay agent received the message to be relayed from a client, the relay agent places a global, ULA [RFC4193] or site-scoped address with a prefix assigned to the link on which the client should be assigned an address in the link-address field. s/global, ULA [RFC4193] or site-scoped/global/ (see comment on Sec 8.1)	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)		Bernie - Already done from earlier comments.	
18.1.1	[...] If not addresses of other scopes are available the relay agent may fill in the link-address field with a link-local address from the interface the original message was received on. That is not recommended as it s/it not/iff no/ (?) Also, the term "other scopes" sounds awkward with deprecation of unicast site-local. I suggest: "if no global address is available." If the source address from the IP datagram header of the received message is a global or site-scoped address (and the device on which	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)		Bernie - Already done from earlier comments.	
18.1.2	s/global or site-scoped/global/ (see above)	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)		Bernie - Already done from earlier comments.	

Section	Comment	Source	Action	Assignee	Types
19.1	<p>[...] The information in DHCP messages is not generally considered confidential, so encryption need not be used (i.e., NULL encryption can be used).</p> <p>This doesn't seem to reflect the our consensus accurately (always enabling encryption in sedhcpv6). I'm not saying rc3315bis should define DHCPv6 encryption, but I believe general statement like this should be consistent with our latest view (or at least not clearly inconsistent with it).</p>	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Tomek & Bernie - Drop this sentence.	Bernie - DONE but I think this is now BROKEN because the encryption algorithms are not specified (it used to say "NULL encryption can be used"). Not sure if need to fix this, but perhaps it will all be fixed by draft-ietf-dhc-relay-server-security if applied to this document?	
19.1	<p>Key management Because the relay agents and servers are used within an organization, public key schemes are not necessary. Because the relay agents</p> <p>This argument sounds weak. With that logic we should also be able to say public key schemes are not necessary between clients and servers. Perhaps the real intent is that both relay agents and servers tend to be managed by the same administrator (or admin group) so managing shared secret is acceptable?</p>	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Tomek & Bernie - Perhaps we just wait for draft-ietf-dhc-relay-server-security and update this entire section with that text.	Bernie - DONE... change "are not necessary" to "may not be necessary". Do this in this document also in draft-ietf-dhc-relay-server-security!	
19.4	<p>The Reconfigure Key protocol is used (initiated by the server) only if the client and server are not using any other authentication protocol and the client and server have negotiated to use Reconfigure messages.</p>	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Tomek & Bernie - See Jinmei's comment on 17.2.2.	Ignore	
20.4	<p>This statement now sounds awkward since this is now the only defined authentication protocol (see also comment on Section 17.2.2)</p> <p>IAID [...] The number space for IA_NA IAIDs is separate from the number space for IA_TA IAIDs.</p>	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)		Bernie - Done (Fixed IA_TA and IA_PD text too)	
20.4	<p>This should also list IA_PD IAIDs. Same for IAID of other types of IAs.</p> <p>In a message sent by a client to a server, the T1 and T2 fields SHOULD be set to 0. The server MUST ignore any values in these fields in messages received from a client.</p> <p>With this, this doesn't make sense to me:</p> <p>If a server receives an IA_NA with T1 greater than T2, and both T1 and T2 are greater than 0, the server ignores the invalid values of T1 and T2 and processes the IA_NA as though the client had set T1 and T2 to 0.</p> <p>Shouldn't the first para simply say the server MUST ignore these values whatever they are? Then the second para is simply redundant; if not, and if the second para means the server can accept such non-0 T1/T2 as long as T1 <= T2, then it's not consistent with the first para.</p>	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)		Bernie - Done (Fixed IA_PD text too)	
20.6	<p>IPv6 address An IPv6 address.</p> <p>Maybe we should note that no "associated prefix length" is implied for this address, and, in particular, that clients MUST NOT assume any length of prefix that matches this address is on-link, referring to RFC7421.</p>	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)		Bernie - Done	
20.6	<p>[...] A server [...] and ignores the values for T1 and T2 set by the client if those values are greater than the preferred lifetime.</p>	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)		Bernie - Done	
20.7	<p>The "if condition seems unnecessary (see comment on 20.4) or perhaps the whole "and ignores..." part is unnecessary. encapsulated in the container MUST NOT by in the Option Request, see</p>	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)		Bernie - Already done from earlier comment.	
20.21	<p>s/MUST NOT by/MUST NOT/ (?) s/Option Request/Option Request option/</p> <p>If a delegating router receives an IA_PD with T1 greater than T2, and both T1 and T2 are greater than 0, the delegating router ignores the invalid values of T1 and T2 and processes the IA_PD as though the requesting router had set T1 and T2 to 0.</p>	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)		Bernie - Already done from earlier comment.	
20.22	<p>So is it okay for a delegating router to accept non-0 T1 or T2? If so, why it's different from the "first para" referred to in my comment on Section 20.4 (see above)?</p> <p>In a message sent by a delegating router the preferred and valid lifetimes should be set to the values of AdvPreferredLifetime and AdvValidLifetime as specified in section 6.2.1, "Router Configuration Variables" (of RFC2461), unless administratively configured.</p> <p>This choice of valid/preferred lifetime in an IA prefix and the (possible) relationship between them and those lifetimes advertised in the delegated site do not make perfect sense to me. Consider a requesting router which has an upstream interface, I1, on which PD is performed, and a downstream interface I2, to which it sends router advertisements for end hosts. Unless there's a specific reason to use different values, I'd expect valid and preferred lifetimes in the router advertisement sent out from I2 to be AdvValidLifetime (30 days) and AdvPreferredLifetime. I'd also expect they do not change in subsequent RAs unless prefix renumbering is taking place.</p> <p>But it's not impossible if we strictly honor the sense of the IA prefix lifetimes, since the lifetimes are (effectively) decreasing to 0 until the next Renew-Reply exchange, and, logically, lifetimes of the RA can't be larger than the lifetimes of the "site prefix".</p> <p>So I think the recommended lifetimes of an IA prefix should at least take into account some margin for the duration until the next renew. It would also be better if we clarify the relationship between these two types of lifetimes more explicitly, but one might think it's beyond the scope of the base DHCPv6 protocol spec.</p>	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Tomek & Bernie - Remove this text as we provide no guidance on IAADDR lifetimes, so why do we need them on IAPREFIX lifetimes.	Tomek - Done	
20.22	<p>A delegating router [...] and ignores the values for T1 and T2 set by the requesting router if those values are greater than the preferred lifetime.</p>	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)		Bernie - Done	
20.23	<p>Same comment as that for 20.21 applies.</p> <p>A DHCP client MUST include the SOL_MAX_RT option code in any Option Request option (see Section 20.7) it sends.</p> <p>I don't understand the need for this MUST. If it's a MUST, can't the server simply assume as if it were actually included in an option request option and respond accordingly? Or, perhaps it's for distinguishing legacy implementations that don't support the SOL_MAX_RT option from newer ones? (If so, I think it's worth noting explicitly, otherwise some other people may wonder the same point).</p>	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Added this text "The requirement for the client to request SOL_MAX_RT serves two purposes. First, it distinguishes between legacy and modern clients. Second, it allows modern clients to take advantage of the configurable SOL_MAX_RT values, even if the server is a legacy one."	Tomek - Done	
20.23	<p>If a DHCP client receives a message containing a SOL_MAX_RT option that has a valid value for SOL_MAX_RT, the client MUST set its internal SOL_MAX_RT parameter to the value contained in the SOL_MAX_RT option.</p> <p>The expected usage is not very clear to me here. Is it intended to be used for Advertise and apply the value to the ongoing Solicit-Advertise exchange? Or is it mainly intended to be used for a possible subsequent restart of a DHCPv6 session?</p>	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Added text: "The purpose of this mechanism is to give network administrator a way to avoid large DHCP traffic if all DHCP servers become unavailable. Therefore this value is expected to be retained for as long as practically possible."	Tomek - Done	

Section	Comment	Source	Action	Assignee	Types
21	Because a requesting router and delegating routers must each have at least one assigned IPv6 address, the routers may be able to use IPsec for authentication of DHCP messages. The statement in the "because" clause seems too strong to me. (Assuming a link-local address is not an "assigned IPv6 address" in this context) isn't it completely possible that a requesting router bootstraps just with a link-local address, starting a fresh DHCPv6 session to get IAPD (and maybe IANA for its own address)? Then "must each have at least one assigned IPv6 address" does not always hold.	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)	Tomek & Bernie - Change "at least one assigned IPv6 address" to "at least a link-local IPv6 address".	Bernie - Text had been changed from earlier comments and thus nothing to do.	
22	[RFC7824]. It particular, Section 3 of said document discuss various	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)		Bernie - Done (earlier comment)	
Appendix A	I strongly suggest this be kept with substantial revise, instead of just instructing the RFC editor to remove it. See https://www.ietf.org/mail-archive/web/dhcwg/current/msg17524.html	Jinmei, Tatuya (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17577.html)		Tomek - Ok, let's keep the appendix.	10/26 - Stopped re
1.2	Seems odd that v4 should be used for v4, not v6, but then RFC7341 is quoted. Left up to the reader to decide what to do? Some guidance might be useful here.	Kim Kinnear (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17586.html)			
5.2	First sentence. Perhaps "... and is the "stateful address autconfiguration protocol" for IPv6 which is discussed in [RFC2462]" would better	Kim Kinnear (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17586.html)			
5.4	Figure 1. I would replace "DSL to subscriber..." with "Network link to subscriber...". Or something like that. I think DSL isn't going to aid understanding now or into the future.	Kim Kinnear (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17586.html)		Bernie - Done	
13.1	First paragraph. "This loops can repeat..." -> "This loop can repeat..."	Kim Kinnear (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17586.html)	Nit	Bernie - Already fixed from earlier comments.	
13.2	"Client MUST choose..." -> "Clients MUST choose..."	Kim Kinnear (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17586.html)	Bernie and Tomek agrees, decided to keep singular form.	Bernie - As client is used through this section, not sure plural would be appropriate here? Tomek - agree, let's keep singular everywhere, unless we want to emphasize multiple clients in specific context.	
15	I think that "A server MUST discard any Solicit..." should be "A server SHOULD discard..." MUST seems overly restrictive to me, despite being in RFC3315. Not that I expect anyone to change it based on this comment...	Kim Kinnear (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17586.html)			
17	Second paragraph after the list. "... solicitation process to obtain the bindings from a..." -> "... solicitation process to obtain the same bindings from a..."	Kim Kinnear (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17586.html)			
17.1	I would remove "DISCUSSION:" and just make this a regular paragraph.	Kim Kinnear (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17586.html)			
17.1.1	"The client MUST include an Option Request option ..." but section 20.7 says "MAY" include an Option Request option. The implication in 17.1.1 is that you have to have an ORO with SOL_MAX_RT in it, or ... what, exactly, will happen? Packet dropped? Seems like either MUST -> MAY, or some additional clarity would be good here. This is in 17.1.2 as well.	Kim Kinnear (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17586.html)	Bernie - Changed MAY to MUST. Also noticed Confirm was in the list of messages and removed it since ORO is not used in Confirm.	Bernie - DONE	
17.1.11	Here the "DISCUSSION" seems appropriate. Not clear why that seems to be the case, as opposed to 17.1.	Kim Kinnear (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17586.html)			
20.7	"... or the will not ..." -> "... or they will not ..."	Kim Kinnear (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17586.html)	Nit	Bernie - Was already done from earlier comments.	
1.2	p.7 RFC4477 discussed dual-stack DHCP issues, and recommended separate servers per protocol (and thus not adding IPv4 options to DHCPv6). It may be worth citing, but some of the discussion may now be dated. The section doesn't discuss how merging of responses from DHCPv4 and DHCPv6 might be done. It should probably be flagged, but marked out of scope for 3315bis. I know we started discussing this years ago (draft-ietf-dhc-dual-stack-merge-01), but no consensus was reached as far as I recall.	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
1.3	p.7 Perhaps say here that DHCP can be initiated by the client when required, or triggered by a server through an authenticated Reconfigure message.	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
3	p.9 Will this draft will be parked until the 2460-bis and 4291-bis documents are completed? The language of the first paragraph in Section 3 is a little clumsy. Is the well-known multicast address (ff05::1:3) in common use? I'm not aware of any sites using it, rather they manually configure dhcp server addresses in relays. The thinking on M/O flags in RFC4861 has moved on since 3315 was written. I guess it still needs to be mentioned, but it says "compatibility with SLAAC is a design requirement of DHCP" and the evidence of draft-ietf-v6ops-dhcpv6-slaac-problem-07 is rather to the contrary! (though not sure what to say here... it would be good to encourage more consistent behaviour - is there anything we can add to 3315bis to address the issues raised in draft-ietf-v6ops-dhcpv6-slaac-problem-07?	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
4.1	p.10 Should this say IP and DHCP or IPv6 and DHCPv6?	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
5.4	p.16 Should this example explain behaviour for PD when there are hierarchical routers within the site (as per RFC7368)? Or that where RAs are then issued by requesting routers their valid lifetime should be less than the lifetime of the PD? (This and address examples are given in 17.1.10.1 which could be forward referenced)	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
5.5	p.19 Is it worth adding a Section 5.6 here that briefly explains the renumbering case and use of Reconfigure messages? It would be nice to capture the work of 6RENUM here, and for the reader to appreciate that support for renumbering is useful. I don't think Reconfigure is otherwise mentioned in Section 5. This could also warn against "infinite" lifetimes. As might RFC4242.	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
6.1	p.19 Add a reference to the IANA Registry here? (http://www.iana.org/assignments/ipv6-multicast-addresses/ipv6-multicast-addresses.xhtml). And again, is site-scope multicast in common use (compared to manual server configuration on relays)?	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
6.6	p.23 T1 and T2 are introduced here with no explanation of what they are. Perhaps forward reference to relevant options in Section 20? It would also be good to repeat the warnings given later about infinite lifetimes here.	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
8.1	p.25 There's many references to "site-scoped" (unicast) addresses in 3315bis. Should these not all be removed? Also, ULAs are Global scope, so not sure they should be differentiated here or not.	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
Page 28	"Despite our best efforts" reads oddly.	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)	Nit		

Section	Comment	Source	Action	Assignee	Types
10	p.31 The DUIDs are all explained here. But will 3315bis add any text for the RFC6939 model, whereby MAC addresses can be added as an option that relays will forward? There's growing implementation support for this (e.g. Cisco relays, ISC DHCP), and it's commonly requested by campus admins who I speak to. Or is this considered a "hack"? (RFC6939 is Standards Track, not Experimental...)	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)	Bernie - See ticket #162 as related. Encouraging use of the OPTION_CLIENT_LINKLAYER_ADDR (RFC6939) would be a good way to avoid needing to look into the DUID. Ticket #152 result was (Tomek & I think) to ease the restriction on looking "inside" the DUID. But the privacy issues might also mean that the DUID is less useful (as is the client mac address).		
12.1	p.33 Perhaps add a pointer at the end of this section to RFC7824 and RFC7707 on address allocations from a DHCP pool, or point to discussion of these in Sections 21 and 22.	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
12.3	p.33 Perhaps add that the client may have an IA_NA and an IA_TA. It's an open question as to whether a client may do IA_TA only.	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
13.1	p.35 Maybe move the rate-limiting text (or replicate it) in Section 21.	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
17	p.43 Update reference to RFC2462 to RFC4862, but anyway I think the pointer should be to RFC4861 where the M/O flags are described?	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
17.1	p.45 In the DISCUSSION, it may be worth clarifying whether RFC6939 works via unicast; I recall it only works via a relay, which would be another reason to avoid unicast (if true, and you want to use RFC6939...).	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
17.1.10.1	p.60 There was discussion in 6man/v6ops about using a /64 from the delegated prefix for a site for numbering the uplink. I think Jordi's recent survey of ISPs showed this was more common than expected? So do we want to say MUST NOT assign here? (I have no strong feeling myself...)	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
Page 61	There may be complexities here if a client gets other configuration info from both DHCPv4 and DHCPv6... esp. if it merges without noting the source of the options it prioritised.	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
17.2.9	p.74 Is the "server selection process" described somewhere? If so, cite it, if not, it probably should be?	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
18	p.77 I'd argue that from current usage, the first paragraph should say something stronger about including unicast addresses, mirroring common practice, and limited (is there any?) use of the all-dhcp-servers site-scope multicast address (ff05::1:3). Given a lot of work in the IETF on minimising use of multicast on links, do we want to say something stronger about not using the multicast site-scope WKA?	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
Section 18.1.1 and 18.1.2	p.78 Again, site-scope addresses mentioned three times on this page need to remove. "if no" should be "if not". ULAs are not mentioned here; these can be considered within Globals, or may be called out separately (but it emphasised that they are Global scope).	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)	Bernie - Done (already addressed by earlier comments)		
20.4	Change "client contacts" to "client should contact" (x2) to mirror the text for the PD option?	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
Page 90	The "infinite" lifetime again mentioned here, with a health warning, but should we be stronger in language, as not least it kills renumbering. Worth a SHOULD NOT use infinite lifetime, so those doing it need to think about their specific reason to ignore that?	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
20.5	I'm not sure about the text here on requesting an extension to the lifetime for an IA_TA. Wouldn't the host simply deprecate the current temporary address (so it's still usable by an existing TCP session) and request a new preferred IA_TA? I had assumed DHCP worked the same as RAs here, e.g. generate a new temporary address every 24 hours, but keep the previous N addresses, in a deprecated state? But does the DHCP server then need to keep state on the deprecated addresses to avoid reallocation to another host? Does that mean the host really needs to request N temporary addresses, and it's the host's job to choose which is preferred, with the DHCP server noting all those allocated (whether the host marks them deprecated or not)? (I may be overthinking this!)	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
20.6	Again a mention of infinite lifetimes - perhaps we need a separate section early on with the clear health warning, rather than replicating it each time? Not sure.	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
20.14	Does it really matter in IPv6 that a handful of addresses may be committed by servers but not used by clients? Again this may be a good place to reference the address allocation strategies in RFC7824 and RFC7707, or forward reference to sections 21 and 22.	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
20.22	Does the PD option need a health warning on infinite lifetimes?	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
20.25	p.114 Maybe add it is useful for renumbering.	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
21	"This threat model does not consider the privacy of the contents of DHCP messages to be important" - despite RFC7824? Add a reference to RFC7707 on scanning attacks.	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
22	p.117 Move the para on scanning to section 21 and cite RFC7707. The "Deriving the IID" paragraph repeats advice in RFC7824.	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
24	p.118 is ff05::1:3 obsolete? :)	Tim Chown (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17590.html)			
Abstract	hosts => IPv6 nodes (as the PD is used by routers)	Tomek Mrugalski (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html)	Nit		
1	The text should mention requestor and leasequery mechanism. One paragraph somewhere in the introduction with references to RFC5007, RFC5460 and RFC7653 should do the trick. Maybe somewhere around the text that mentions servers, clients and relays. If you think it's inappropriate to mention it that early, we can add one paragraph long section 1.6 that explains it and then point to that in Section 1. Need parentheses around section references in the last paragraph of Section 1.	Tomek Mrugalski (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html)	Bernie: I disagree. We don't need to mention every DHCPv6 RFC in this document.		
1.1	extensions published => extensions were published	Tomek Mrugalski (https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html)	Nit	Bernie - Done (was done for earlier review comment)	

Section	Comment	Source	Action	Assignee	Types
1.4	seems to mention some more common exchanges (inf-req -> reply), (solicit -> reply), (renew -> reply). It does not mention others: (release -> reply), (rebind -> reply), (decline -> reply), (confirm -> reply). Maybe adding a text similar to: "There are other two message exchanges defined when the client and the server have established a relationship: to renew or rebind existing leases (renew and rebind messages), to release them (release message) or to inform the server that the address leased is being used by other devices (decline message)."? (4 messages exchanges) mentions Renewal mechanism. It shouldn't, because it's a 2 messages exchange.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html	Add: "There are additional two message exchanges between the client and server described later in this document." to end of section.	Bernie - Done	
1.5		Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html	Update text a bit	Tomek - Review Bernie - Done	
4.1	"Every interface has a link-local address." Is this still true these days? I recall some discussion on v6ops (or was it 6man?) about certain tunneling interfaces lacking link-local address. IIRC it was 6rd tunnel, but I may be wrong.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html			
4.2	binding definition should mention prefixes in its first sentence.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html	Already updated from earlier review comments	Bernie - Done	Clarification
4.2	delegating router definition "responding to prefix request". No such thing as prefix request is defined. Need to reword this one slightly.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html	Modify delegated router definition (please check).	Tomek needs to review.	
	"DHCP realm" this definition was used in Delayed Auth protocol, which is now removed. We should remove that definition as well.		DHCP realm was removed (see earlier review comment).	Bernie - Done.	
	DUID definition - it mentions that each client and server has one. Do we want to mention that relays optionally may have one as well (see RFC5460)		DUID definition - as RFC 5460 is not included, suggest we leave this alone.		
	IA definition - "holds one type of address" => "holds one type of addresses or prefixes". I would also add "one IA may hold more than one address or prefix of the same type, e.g. multiple temporary addresses".		IA definition was updated earlier and this issue has already been addresses (please check).		
6	is called DHCP constants, but it does not contain the most frequently used constants - the option codes. I think there should be a pointer to Section 22, which defines the option codes, which are another type of constants.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html	Minor - add new section	Bernie - Done	
6.3	request, renew, rebind, reply, release, inf-request descriptions should mention prefixes as well.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html	Already updated from earlier review comments	Done.	
6.4	The link in section 6.4 is incorrect. Status codes are not defined in 20.12, but in 20.13.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html	Nit - fix link	Bernie - Done	
8.1	link-address definition "An address that will be used" => "An address that may be used". There are cases when it is not used, for example when the relay inserts interface-id or it's not the relay closest to the client. What should be the hop-count set to when a relay forward client's message? Text in 8.1 suggests 1 ("Number of relay agents that have relayed this message", but text in 18.1.1 suggests 0 ("The hop-count in the Relay-forward message is set to 0.")	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html		Bernie - Changed "will" to "may" in 8.1 for link-address. I don't see a conflict for hop-count. 18.1.1 handles the case of relaying a client message where the hop count is set to 0! 18.1.2 handles relaying relayed message (where hop count is set +1).	
10	I think we should have the clients and servers MUST NOT in any other way interpret DUIDs. This is a fiction that many servers are violating for very good reasons. Removing it would settle the issue raised in ticket #162. If you're not comfortable with removing it completely, maybe substituting it with "Servers MAY interpret DUIDs for policy, logging and other purposes, but MUST use the whole DUID to identify clients." would be better?	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html		Bernie - I'd be in favor of changing this to "SHOULD NOT" rather than MUST NOT. I also think adding something about any link-layer address or other fields that were used to generate the DUID may have little to do with what the client is using today (i.e., the DUID may have been generated at some time in the past). If someone wants the real link-layer address, they should really be using RFC 6939 (Client link-layer address option) or extracting this from the packet's source-address (or peer-address field). But even those are likely going to be far less useful as more clients adopt the privacy techniques.	
10.4	"DUID-LL MUST NOT be used by DHCP clients or servers that cannot tell whether or not network interface is permanently attached to the device on which the DHCP client is running." I think we should replace MUST NOT with SHOULD NOT for couple reasons. First, with enough engineering time everything is replaceable. Second, with the advent of virtualization software (and virtualization-like techniques, like docker) it's increasingly difficult to say what is permanently attached and what is not. Who knows what SDN will allow in couple years?	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html		Bernie - I'm OK with SHOULD NOT.	
11.1	"The configuration information in an IA consists of one or more IPv6 addresses along with the times T1 and T2 for the IA." That's not true for IA_TA, which does not have T1/T2 timers.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html		Bernie - Done (Was already updated based on earlier review comment).	
12.1	could use a reference to IETF-dhc-topo-conf (currently in RFC-Ed queue).	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html	Reference	Bernie - Done	
12.3	Add "The same is true for IA_PD." after "The IAID number space for the IA_TA option IAID number space is separate from the IA_NA option IAID number space."	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html		Bernie - Done (Already covered by earlier comments which removed that paragraph as this was already covered elsewhere and best not to repeat it unnecessarily.)	
13	"sends DHCP messages to the All_DHCP_Relay_Agents_and_Servers." => "sends DHCP messages to the All_DHCP_Relay_Agents_and_Servers multicast address."	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html	Nit	Bernie - Done	
13.1	"the server still has the lease that was requested just previously" The word "just" doesn't seem to fit there. The sentence should be rephrased.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html	Nit	Tomek - Review Bernie - Done	
14	"This loops can" => "This loop can"	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html		Bernie - Done.	
	"A client is not expected to listen for a response during the entire period between transmission of Solicit or Information-request messages." I would add "and may turn off listening capabilities after a certain time due to power consumption saving or other reasons."			This paragraph now reads: "A client is not expected to listen for a response during the entire RT period and may turn off listening capabilities after a certain time due to power consumption saving or other reasons. Of course, a client MUST listen for a Reconfigure if it has negotiated for its use with the server."	
15.1	Add this text: "The exception is Reconfigure message, which is sent by the server and the transaction ID is set to zero."	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html		Bernie - Is this really necessary. Text is about client generation of IDs, not servers?	
17	mentions that solicit exchange is called server discovery or server solicitation. Maybe we should stick to one name? "server discovery" phase has 5 occurrences, while "server solicitation" has only 4. Discovery seems to be also intuitively better understood by non-native speakers.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html	Nit	Bernie - Done	

Section	Comment	Source	Action	Assignee	Types
17.1	"When a client requests multiple IA option types" => "When a client requests multiple IA option types or multiple instances of the same IA types"	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html	Nit	Bernie - Done	
17.1.1	"this situation should be rare or a temporary operational error." => "this situation should be rare or a result of temporary operational error." we need to reorder the text (basically move paragraph 7 further down, maybe after 9th paragraph). Currently the text says "the client MUST NOT include any other options..." and the following paragraphs continue discussing which extra options to include. Technically the current text is correct (because of the except clause), but it's confusing.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html		Bernie - Done (this was already addressed by earlier review comment)	
17.1.1	replace "an Advertise message" with "a valid Advertise message" in this text: "If the client receives an Advertise message that includes a Preference option with a preference value of 255...". The same is true for the following text "If the first RT elapses and the client has received an Advertise message..." And again in "If the client does not receive any Advertise messages..."	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html	Nit	Bernie - Done (added a bunch of valid in front of Advertise in this section).	
17.1.2	Clarification: After "The client generates a transaction ID and inserts this value in the "transaction-id" field." add "This value is likely to be different than the one used in Solicit". I vaguely recall someone considering the whole solicit-adv-req-reply as a single transaction. We should clarify that these are two separate transactions.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html			
General comment	The maximum time allowed to be specified in Elapsed is 655.35 seconds. The MAX_INF_RT and SOL_MAX_RT are 3600 seconds. What value should the client set in Elapsed option when transmitting after 655 seconds? The text doesn't specify that.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17591.html			
1	>>delegating router can delegate prefixes to requesting routers [YP]Can we make document reflect the DHCPv6 client/server/relay instead of routers. Since Delegating entity can be any device in n/w.	Yogendra Pal https://www.ietf.org/mail-archive/web/dhcwg/current/msg17592.html			
1.1	>>Understanding a protocol which definition is >>spread between large number of documents may be cumbersome. [YP]Could not connect with this text, is there some typo or can be rephrased ?	Yogendra Pal https://www.ietf.org/mail-archive/web/dhcwg/current/msg17592.html	Remove "Understanding a protocol whose definition is spread between a large number of documents is cumbersome. Furthermore, significant operational experience has been gained over the years and certain small elements of the protocol have been reworked."	Group - Review Bernie - Done	
1.4	>>the client can obtain configuration information [YP]Not consistent with text "other configuration information" in many places in this section. Can be consistent w/ text "other configuration information". >>This message includes an indication that the client is >>willing to accept an immediate Reply message from the server. [YP] Can we update above text to: This message includes an indication (i.e. Rapid Commit option (see Section 20.14) that the client is willing to accept an immediate Reply message from the server.	Yogendra Pal https://www.ietf.org/mail-archive/web/dhcwg/current/msg17592.html			
5.4	>>if the requesting router assigns a delegated prefix to a link to >>which the router is attached, and begins to send router >>advertisements for the prefix on the link, the requesting router MUST >>set the valid lifetime in those advertisements to be no later than >>the valid lifetime specified in the IA_PD Prefix option. A >>requesting router MAY use the preferred lifetime specified in the >>IA_PD Prefix option. [YP] Addition of following text for adding operational experience to above: Operator MUST configure requesting router with periodic RA lifetime to be less than preferred lifetime so that renewed prefix(s) can be advertised within limits and there is no operational traffic drop experience to subscribers.	Yogendra Pal https://www.ietf.org/mail-archive/web/dhcwg/current/msg17592.html			
1, para 6	"summarizes relation to" => "summarizes the relation to"	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html	Nit	Bernie - Already fixed (we use "summarizes the relationship to").	
1.1, para 1	"follow up extensions published" => "follow up extensions were published" "Understanding a protocol which definition" => "Understanding a protocol whose definition" or "Understanding a protocol where the definition" "between large number" => "between a large number" "Furthermore, a significant" => "Furthermore, significant"	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html	Nit	Tim - This has all been fixed.	
4.2, item lease	"definition of the DHCPv6 that" => "definition of DHCPv6" This is the only item that starts with "It is". It would be more consistent to simply have "An address assigned ..."	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html	Nit	Bernie - Updated already from earlier comment	
12.3, para 8	"provides such possibility" => "provides for such a possibility"	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html	Nit	Bernie - Done (earlier comment)	
13.1, Para 1	"This loops" => "These loops" or "This loop"	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html	Nit	Bernie - Done (earlier comment)	
13.2, Para 2	"Client MUST" => "The client MUST"	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html	Nit	Bernie - Done (earlier comment)	
16.2, Para 1	"and mentioned" => "as mentioned"	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html	Nit	Bernie - Done	
17, Para 3	"The client does it by" => "The client does this by" "message and selects a server" => "message and selecting a server"	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html	Nit	Bernie - Done (earlier comment)	
17.2, Para 2	"A server sends Advertise message" => "A server sends Advertise messages"	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html	Nit	Bernie - Done (earlier comment)	
17.2, Para 7	"message as indicated by the as indicated by the" => "message as indicated by the"	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html	Nit	Bernie - Done (earlier comment)	
17.2.1 Para 6	"back to the client may useful using" => "back to the client may be useful during"	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html	Nit	Bernie - Done (earlier comment)	
17.2.9, para 3	"by the client during server selection process" => "by the client during the server selection process"	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html	Nit	Bernie - Done	
17.2.9 para 6	"(IA_NA or IA_IA)" => "(IA_NA or IA_TA)"	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html	Nit	Bernie - Done (earlier comment)	
18.1.1 para 1	"If not addresses of" => "If no addresses"	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html	Nit	Bernie - Done (earlier comment)	
20.7, para 3	"or the will not be sent" => "or they will not be sent" "MUST NOT by in the" => "MUST NOT be in the"	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html	Nit	Bernie - Done (earlier comment)	

Section	Comment	Source	Action	Assignee	Types
20.17, para 7	"Servers only" => "Servers only"	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html	Nit	Bernie - Done	
3, para 1 and para 5	This section mentions 2136 should it also include some of 4701, 4703, 4704?	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html		Bernie - Dropped 2136 altogether.	
6.6	Should that be unsigned 32 bit integers?	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html		Bernie - Done	
11.1	This section is titled as "Identity Associations for Address Assignment" which implies it handles both IA_NAs and IA_TAs but it describes an IA as including T1 and T2 and references 20.4 which is only for IA_NAs.	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html		Bernie - Done (earlier comment)	
11.2	In Section 11.1 para 3 mentions that each address in an IA has a preferred and valid lifetime. Why isn't there a similar paragraph for prefixes?	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html		Bernie - Done (earlier comment)	
17.1.2	Should the client be restricted to send basically the same options in a request as it did in the original solicit?	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html	Clarification	Bernie - While I would expect that to be common practice, not sure that we need to enforce it. So, I'd be inclined NOT to say this (if we said anything, I would make it a SHOULD be the same). Tim - I'm also in favor of not saying anything, as the person who end up trying to enforce this.	
17.1.3	Bullet item 1 - If the client is rebooting it doesn't really matter if it has stable storage or not.	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html		Bernie - Huh? If it has no stable storage, it would not send a Confirm. Tim - I agree this can be ignored.	
17.1.4, last para	The description of what to do on timeout in a reconfigure situation is unclear. It reads as if a reconfigure should trigger renew messages until such time as rebinds should be sent. But the text also says reconfigure is handled differently.	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html	Clarification		
17.2.4 para 3	"This paragraph has 'If the server chooses to include the IA address or IA prefix option for such an address or delegated prefix, the server SHOULD set T1 and T2 to the valid lifetime for the IA option ...' This appears to say that T1 & T2 should be equal to the valid lifetime. Is that really what was desired? or should it be something like 'set T1 and T2 based on the value of the valid lifetime'?"	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html	Clarification		
17.2.10	This seems an odd place for this text. It would seem that it would be better before 17.2.9 as before that are the sections that generate replies then 17.2.9 generates advertise messages.	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html	Clarification		
18.1.1, para 1 18.1.2 para 3	I thought site-scoped addresses were killed some time ago. Is this being left in for historical reasons?	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html		Bernie - Already done from earlier comments.	
20.6, para 5	Given that the server is ignoring the lifetimes and T1 and T2 already I'm not sure that ignoring them in special circumstances is useful but I suppose it's not harmful.	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html		Bernie - Already done from earlier comments.	
20.21	IAID - In the descriptions of IAID for IA_NA and IA_TA the text specifies that they are from different name spaces. I assume that IA_PD is from a third namespace. It might be useful to mention that.	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html		Bernie - Already done from earlier comments.	
20.21 para 6	The text states that the delegating router MUST use the values in T1 and T2. Should that be the requesting router? Or is this trying to say that the delegating router must use them to control the requesting router, in which case the text is confusing.	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html	Bernie - Text says MUST ignore? We are dropping T1/T2 hints from clients (requesting routers) in 3315bis.	Bernie - OK as is.	
20.21 para 8	As with section 20.6 I find this paragraph somewhat redundant but mostly harmless.	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html		Bernie - OK as is.	
20.22 para 5	the delegating router is already ignoring lifetimes and T1 and T2	Shawn Routhier https://www.ietf.org/mail-archive/web/dhcwg/current/msg17593.html		Bernie - Already done from earlier comments.	
General Comment	Keywords from RFC 2119 are not consistent throughout the document. For example, I saw quite a few "must's that were not capitalized. i.e. "The motivation for having more than one type of DUID is that the DUID must be globally unique, and must also be easy to generate". The IAID uniquely identifies the IA and must be chosen to be unique among the IAIDs for that IA type on the client. Not all RFC references are linked.	Michayla Newcombe https://www.ietf.org/mail-archive/web/dhcwg/current/msg17594.html	(Bernie) I don't think this is an issue. We use both forms.	Ignore?? Though perhaps a review to make sure lower/upper case is appropriate in all places would not hurt?	
General Comment	Inconsistent use of "Unique Identifier". "Unique Identifier" is used in some references.	Michayla Newcombe https://www.ietf.org/mail-archive/web/dhcwg/current/msg17594.html	(Bernie) I think this usage is fine. We use ID when we're defining DUID and UUID to indicate where ID comes from in the definition.	Ignore	
12.3	The lifetime of the assigned temporary address is set in the IA Address Option (see Section 20.6) with in the IA_TA option. Small type: "...within the IA_TA option".	Michayla Newcombe https://www.ietf.org/mail-archive/web/dhcwg/current/msg17594.html	Nit	Bernie - Done	
17.1.10.1	In other words, client should behave as if it never received this option at all and return to whatever default state regarding that configuration information was. Small type: "In other words, the client..."	Michayla Newcombe https://www.ietf.org/mail-archive/web/dhcwg/current/msg17594.html	Nit	Bernie - Done (was a previous issue)	
17.2	In most reply messages, the server includes options containing configuration information for the client. Small type: "In most Reply messages..."	Michayla Newcombe https://www.ietf.org/mail-archive/web/dhcwg/current/msg17594.html	Nit	Bernie - No, this is lower case reply as in Advertise and Reply messages. Packet size issues apply to Advertise as well.	
17.2.1	Sending this option back to the client may useful using server selection process. Small type: "Sending this option back to the client may be useful..."	Michayla Newcombe https://www.ietf.org/mail-archive/web/dhcwg/current/msg17594.html	Nit	Bernie - Done (was a previous issue)	
17.2.2	The server MAY assign different addresses and/or delegated prefixes to an IA than included in the IA within the Request message sent by the client. This reads a little confusing maybe... "The server MAY assign different addresses and/or delegated prefixes to an IA than those included within the IA of the client's Request message"	Michayla Newcombe https://www.ietf.org/mail-archive/web/dhcwg/current/msg17594.html		Bernie - Done	
18.1.1	If not addresses of other scopes are available the relay agent may fill in the link-address field with a link-local address from the interface the original message was received on. Small type: "If no addresses..."	Michayla Newcombe https://www.ietf.org/mail-archive/web/dhcwg/current/msg17594.html		Bernie - Done (was a previous issue)	
20.7	Other top-level Options MUST appear in the Option Request option or the will not be sent by the server. Only container options MUST appear in the Option Request, options encapsulated in the container MUST NOT be in the Option Request, see [RFC7598] as an example of container options. Small type: "Other top-level Options MUST appear in the Option Request option or will not be sent...options encapsulated in the container MUST NOT be in the Option Request, see [RFC7598] as an example of container options."	Michayla Newcombe https://www.ietf.org/mail-archive/web/dhcwg/current/msg17594.html		Bernie - Done (was a previous issue)	
General Comment	The document would be clearer with if Requesting Router/Delegating Router were updated to Client/Server. Since many IETF documents are moving to this model.	Timothy Winters https://www.ietf.org/mail-archive/web/dhcwg/current/msg17595.html	Bernie - Already being addresses	Bernie - Done	

Section	Comment	Source	Action	Assignee	Types
Section 17.1.1	Section 17.1.1 following text should probably be removed? * In the case of a Solicit message transmitted when DHCP is initiated by IPv6 Neighbor Discovery, the delay gives the amount of time to wait after IPv6 Neighbor Discovery causes the client to invoke the stateful address autoconfiguration protocol (see section 5.5.3 of [RFC4862]). This random delay desynchronizes clients which start at the same time (for example, after a power outage)."	Timothy Winters https://www.ietf.org/mail-archive/web/dhcwg/current/msg17595.html	Bernie - See comments from Jimmell which are similar to this	Needs team review	
13.2	Text was for RFC 2461, which had M flag text. Probably should be removed with the updated RFC 4861. 13.2 for T1/T2 seems out of place as T1 and T2 are later defined. Suggest moving it to 17.1.	Timothy Winters https://www.ietf.org/mail-archive/web/dhcwg/current/msg17595.html			
17.1.1	The text says "The first Solicit message from the client on the interface MUST be delayed by a random amount of time between 0 and SOL_MAX_DELAY." This mechanism was defined to avoid packet storm after a network recovers from blackout, but it makes no sense when booting wireless device. We should make an exception for wireless devices here, in order avoid => in order to avoid	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17619.html			
17.1.10.1		Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17619.html	Nit	Bernie - Already done.	
17.1.10.3	The references look odd "the client performs DHCP server solicitation, as described in Section 17, and client-initiated configuration, as described in Section 17." More specific sections should be referenced.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17619.html		Bernie - This is a reference to 17.0. Removed "duplicated" text and just left it as "performs server solicitation, as described in section 17." Also, reworked paragraph to put the "success" case first.	
17.1.6	"The client SHOULD include a Client Identifier option to identify itself to the server. If the client does not include a Client Identifier option, the server will not be able to return any client-specific options to the client, or the server may choose not to respond to the message at all." It would be better to use MAY. I'm also not fond of the text that says the server may not respond at all. This is especially important from the privacy context. There may be clients that protect their privacy, don't want to reveal their client-id and expect to get only basic configuration options, like DNS servers information. This is also in conflict with text in 17.2.6 ("the server SHOULD respond"). Note that draft-ietf-dhc-sedhcpv6 draft relies on anonymous information-requests when bootstrapping encryption. As such, I think the text about server dropping the message should be removed.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17619.html	Bernie - I think SHOULD is OK. I think if use MAY most clients will not include and that may harm other cases where privacy is either not a concern or sedhcpv6 is not in use. Bernie - Also the text is may drop message and I think that is perfectly reasonable for a server to do if the policy is such that it should.	Bernie - I changed this sentence to read "The client SHOULD include a Client Identifier option to identify itself to the server (see section 4.3.1 of <ref target="RFC7844"> for reasons why a client may not want to include this option)."	
17.2, third paragraph	"In most instances, the server will send a Reply in response to a Request, Confirm, Renew, Rebind, Decline and Information-request messages sent by a client." Add Release here.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17619.html		Bernie - Already done from earlier comment.	
17.2.1	What should the server do when it receives a unicast Solicit? There's no text for sending back UseMulticast status for Solicit, but there are for other message types. "...send a Request message for those addresses." Add "or prefixes". "may useful using server selection process." => "may be useful during the server selection process." The last paragraph in 17.2.1 is confusing. The text needs to emphasize somehow that the paragraph only applies to case when rapid-commit was sent. Maybe we could move the rapid-commit response paragraphs to a separate sub-section? 17.2.2 "...and a Status Code option containing status code NoAddrAvail.". The text should be clarified as to whether send this status option within IA or as top level option.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17619.html	Bernie - Section 15 already covers this: "A server MUST discard any Solicit, Confirm, Rebind or Information-request messages it receives with a unicast destination address.", so no further text is necessary. Bernie - may useful was already fixed from earlier comment. Bernie - Last paragraph was already reworked from an earlier comment (text moved earlier).	Bernie - Changed "addresses" to "leases".	
17.2.5	There's no text for unicast Rebind and sending UseMulticast. Sending unicast rebind is wrong on so many levels BTW. "Therefore, the server SHOULD only create new bindings during processing of a Rebind message if the server is configured to respond with a Reply message to a Solicit message containing the Rapid Commit option." I disagree with this text. Responding to Solicit with rapid-commit and creating leases when responding to Rebind are two similar scenarios, but they're not the same. I can certainly see deployments that would want to deploy only one or the other, but not both. For specific example, there's one server that does not support rapid commit. The server crashed and lost its database. The server is restarted with empty database, but it knows there are clients in various Renew/Rebind stages and it know it's the only server in the network. There should be a way to recreate the leases (at least those that clients still attempt to rebind) without enforcing clients go get new ones. To conclude, I think the sentence should be removed completely.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17619.html			
17.2.6	There's no text for unicast Information-request and sending back UseMulticast. I can some reasons why we may allow that behavior, so I don't insist strongly on adding such text, but maybe we need to have some explanatory text when unicast Information-request is ok and when it's not.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17619.html			
17.2.9	I have a problem with this text "If the Solicit message from the client included one or more IA options, the server MUST include...", especially with the "If". The conditional nature of that expression may be suggest that it's ok to send Solicit without any IA options. That's definitely not the case. If the Solicit didn't include any IAs, it's a valid Solicit and should be dropped, and the implementer should not be following the section about creation and transmission of Advertise messages. (IA_NA or IA_IA) => (IA_NA or IA_TA) Possible additional text at the end of 17.2.9 and 17.2.10 "The server MAY include additional options if configured to do so or when supporting additional mechanisms, e.g. Relay Supplied Options (RFC6422) or Echo Request Option (RFC4994)." I like the idea of mentioning other existing mechanisms to get better exposure to what is currently defined in other RFCs. Section 18.1.1 RFC3879 deprecated site scope unicast addresses. Do we still want to mention them in the first sentence? The second sentence needs improvement. "If not addresses of other scopes are available the relay agent..." => "If no such addresses are available, the relay agent..." => "as described in the previous paragraph" => "as described in the earlier paragraphs"	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17619.html			
20.1	DHCP options are scoped by using encapsulation. Some options apply generally to the client, some are specific to an IA, and some are specific to the addresses within an IA. This text, while true, it does not cover all cases. We have other encapsulated options that have nothing to do with addresses, e.g. MAP options defined in RFC7598.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17619.html			
20.4 and 20.5	"This option MAY appear in a Confirm message if the lifetimes on the non-temporary addresses in the associated IA have not expired." This sentence appears out of place. We should either mention all other messages it may appear in or not mention Confirm at all.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17619.html			

Section	Comment	Source	Action	Assignee	Types
20.7	I saw quite a few client messages that request Preference and Rapid-Commit options in their Solicit messages. I suspect that by saying that the client MUST NOT request it will make many clients non-conformant. "the container MUST NOT be in the Option Request" => "the container MUST NOT be in the Option Request"	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17619.html		Bernie - "by in the" was already fixed from earlier comments. I think the not in ORO is OK as they do no harm if present; the server is required to add them already (as per protocol).	
20.13	There are more status codes defined than listed in this section. A text similar to "Additional status codes have been defined in other documents. Additional status codes may be defined in the future." and a link to IANA page listing currently defined status codes would be useful here. Somewhere after 20.25 we must put a text similar to "Other options are defined in other documents. Additional options will be defined in the future. For the complete up to date list of currently defined option, see IANA page [link]". This is important, especially due to the remark made in 20.25: "This [Information Refresh Time Option] is listed here for completeness." can be misinterpreted as "these are all the DHCPv6 options that are currently defined".	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17619.html	20.13 - added additional paragraph like in 20[0] - "See Section 23 for additional information about the registry maintained by IANA with the complete list of status codes." 20.25 - I think we SHOULD add this document into this bis document (see earlier comment). That would address this comment. Please also look back at section 20[0] which says "This document describes the options defined as part of the base DHCP specification". NIT	Bernie - 20.13 Done 20.25 work pending (see row 23)	
General Comment	The header appearing on each page is "RFC 3315 bis". It's ok for the time this draft is discussed in WG phase, but we should change this to "DHCP for IPv6" before sending it to the IESG.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17619.html		Bernie - Done	
21	I don't understand this paragraph: "In the case where relay agents add additional options to Relay Forward messages, the messages exchanged between relay agents and servers may be used to mount a "man in the middle" or denial of service attack." It doesn't make sense to me. If a relay agent is compromised (or attackers manages to introduce a node he controls into the path, both DOS and MITM attacks are possible, regardless of the original relay agent inserted any options or not. "In which the DHCP server sends the key to the client." => "in which the DHCP server sends the key in plain text to the client." "A malicious requesting router may be able to mount a denial of service attack by repeated requests for delegated prefixes that exhaust the delegating router's available prefixes.". We should add something similar to: "Some forms of this exhaustion attack can be mitigated by appropriate server policy, e.g. limiting maximum number of leases one client can get". Unless I missed something, we can probably remove this sentence "The details of using IPsec for DHCP are under development.". Or replace it with a link to draft-ietf-dhc-sedhcpv6. "Section 3 of said document discusses..." => "Section 3 of said document discusses..."	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17619.html	Clarification	Bernie - Done (first 4; last was already removed from earlier comments).	
22	Do we want a separate column in IANA registry that explains which options are singletons?	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17619.html	Nit	Bernie - Done	
23	"The following mechanism are..." => "The following mechanisms are..."	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17619.html	Nit	Bernie - Done	
24	I think we have way too many normative references. It's a bit of a judgement call, but in my opinion, the following should be informative rather than normative: 826, 2131, 2132, 2136, 2464, 3646, 4075, 4291, 4301, 4941, 5905, 6724, 7227.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17619.html		Bernie - Done	
26	I'm not sure if removing this is a good idea. There will be lots of implementers and operators that don't participate in IETF at all. Once the RFC is published, they'll be wondering what has changed and having such a list may be of use for them. If we keep that list, we should add a link to the dhcpv6bis tracker, so the ticket numbers would remain to be useful.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17619.html		Left 4291 as normative. 2136 was removed from earlier comments. Bernie - See comment from Jimmie that we need to add a more detailed section about these changes and make it better; we may want to drop ticket numbers and just list the changes made. I do plan to work on this but will likely wait until close to the end of this review round. I was thinking that listing the changes by section would be best.	
Appendix E	We could add a list of options with explicit specification which options are singletons and which are not. This information could be also added to the IANA registry. If anyone objects, I won't insist on that, though.	Tomek Mrugalski https://www.ietf.org/mail-archive/web/dhcwg/current/msg17619.html		Bernie - Yes (already commented on earlier)	
General	There are places where we use "IA_PD Prefix option" vs "IA_PD option" or perhaps the intent was to reference the "IA Prefix option" (i.e., IAPREFIX). We need to clean this up to either use IA_PD option or IA Prefix option depending on which was intended. Also, corrected IA Address and IA Prefix options to be clear that each only holds one address or prefix (respectively). This is in first paragraph of the option definitions sections.	New - added by Bernie during document update.		Bernie - Done	
General, but probably mostly impacts section 17	In https://www.ietf.org/mail-archive/web/dhcwg/current/msg17660.html , Alexandru Petrescu asks some questions that caused me to look at the bis document. And, as it is written today it assumes that all servers know about the IA_* options. This means that a server that never intends to support IA_NA/IA_TA (just IA_PD) has to know about IA_NA/IA_TA and do the appropriate processing (NoAddrAvail status). Similar if it does not support IA_PD. Should we consider whether to address this by saying that a server that does not "support" an IA type could just plain ignore it altogether (consider it like some random known option). This means a client would not get the IA back (in an Advertise). The more important question may be what happens if a future IA_FOO type exists. Also, might be nice to give some clarity to client implementers as to what they should expect.	New - added by Bernie while reviewing comments on prefix-length-hint issues			
General	Address open tickets, such as #163 - Address Michael's comments	https://trac.tools.ietf.org/group/dhcwg/ticket/163			
Count of BLANK CELLS				100	62