

Section	SubSection	Page	No.	Description	Statu
4		6	1	However, 1800 seconds (30minutes) is <b>RECOMMENDED</b> as the value for the Session-Expires header field.	R
4		6	2	In other words, SIP entities <b>MUST</b> be prepared to handle Session-Expires header field values of any duration greater than 90 seconds, but entities that insert the Session-Expires header field <b>SHOULD NOT</b> choose values of less than 30 minutes.	M
4		6	3		S
4		7	4	However, the 30 minute minimum is listed as a <b>SHOULD</b> , and not as a <b>MUST</b> , since the exact value for this number is dependent on many network factors, including network bandwidths and latencies, computing power, memory availability, network topology, and, of course, the application scenario.	S
		7	5		M

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5		8	1	When present in a request or response, its value <b>MUST NOT</b> be less than 90 seconds.	M
5		8	2	The Min-SE header field <b>MUST NOT</b> be used in responses except for those with a 422 response code.	M

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6		8	1	The 422 response <b>MUST</b> contain a Min-SE header field with the minimum timer for that server.	M

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7	7.1	9	1	A UAC that supports the session timer extension defined here <b>MUST</b> include a Supported header field in each request (except ACK), listing the option tag 'timer' [2].	M
7	7.1	9	2	It <b>MUST</b> do so even if the UAC is not requesting usage of the session timer for this session.	M
7	7.1	9	3	However, usage of either Require or Proxy-Require by the UAC is <b>NOT RECOMMENDED</b> .	R
7	7.1	9	4	The Supported header field containing 'timer' <b>MUST</b> still be included, even if the Require or Proxy-Require header fields are present containing 'timer'.	M
7	7.1	9	5	If a Min-SE header is included in the initial session refresh request, the value of the Session-Expires <b>MUST</b> be greater than or equal to the value in Min-SE.	M
7	7.1	9	6	However, it is <b>RECOMMENDED</b> that the parameter be omitted so that it can be selected by the negotiation mechanisms described below.	R
7	7.2	10	7	If it does, the UAC <b>MUST</b> look for the Session-Expires header field to process the response.	M
7	7.2	10	8	UACs <b>MUST</b> be prepared to receive a Session-Expires header field in a response, even if none were present in the request.	M
7	7.2	10	9	The UAC <b>MUST</b> set the identity of the refresher to the value of this parameter.	M

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7	7.2	10	10	If the UA seeks to continue with the session beyond the session expiration, it <b>MUST</b> generate a refresh before the session expiration.	M
7	7.2	11	11	It is <b>RECOMMENDED</b> that this refresh be sent once half the session interval has elapsed.	R
7	7.3	11	12	This new request constitutes a new transaction and <b>SHOULD</b> have the same value as the Call-ID, To, and From of the previous request, but the CSeq should contain a new sequence number that is one higher than the previous.	S
7	7.4	11	13	The values of Supported, Require, and Proxy-Require used in the initial Session refresh request <b>MUST</b> be used.	M
7	7.4	14	14	The UAC <b>MUST</b> insert the Min-SE header field into a session refresh request for a particular dialog if it has ever received a 422 response to a previous session refresh request on the same dialog, or if it has received a session refresh request on that dialog that contained a Min-SE header field.	M
7	7.4	11	15	Similarly, if no dialog has been established yet, a UAC <b>MUST</b> insert the Min-SE header field into an INVITE request if it has ever received a 422 response to a previous INVITE request with the same Call-ID.	M
7	7.4	11	16	The value of the Min-SE header field present in a session refresh request <b>MUST</b> be the largest value among all Min-SE header field values returned in all 422 responses or received in session refresh requests, on the same dialog, if a dialog has been established.	M
7	7.4	12	17	In a session refresh request sent within a dialog with an active session timer, the Session-Expires header field <b>SHOULD</b> be present.	S
7	7.4	12	18	When present, it <b>SHOULD</b> be equal to the maximum of the Min-SE header field (recall that its default value when not present is 90 seconds) and the current session interval.	S

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7	7.4	12	19	As such, a UA should only ignore the <b>SHOULD</b> in unusual and singular cases where it is desirable to change the session interval mid-dialog.	S
7	7.4	12	20	If the session refresh request is not the initial one, it is <b>RECOMMENDED</b> that the refresher parameter be set to 'uac' if the element sending the request is currently performing refreshes, and to 'uas' if its peer is performing the refreshes.	R
7	7.4	12	21	If a UAC knows that its peer supports the UPDATE method, it is <b>RECOMMENDED</b> that UPDATE be used instead of a re-INVITE.	R
7	7.4	12	22	It is <b>RECOMMENDED</b> that the UPDATE request not contain an offer [4], but a re-INVITE <b>SHOULD</b> contain one, even if the details of the session have not changed.	R
7	7.4	12	23		S
7	7.4	12	24	In that case, the offer <b>MUST</b> indicate that it has not changed.	M
7	7.4	12	25	The same is true for an answer exchanged as a result of a session refresh request; if it has not changed, that <b>MUST</b> be indicated.	M

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8	8.1	12	1	Stateless proxies <b>MUST NOT</b> attempt to request session timers.	M
8	8.1	12	2	Proxies that ask for session timers <b>SHOULD</b> record-route, as they won't receive S refreshes if they don't.	S
8	8.1	13	3	The proxy <b>MUST NOT</b> include a refresher parameter in the header field value.	M
8	8.1	13	4	If the request already had a Session-Expires header field, the proxy MAY reduce its value but <b>MUST NOT</b> set it to a duration lower than the value in the Min-SE header field in the request, if it is present.	M
8	8.1	13	5	If the value of the Session-Expires header field is greater than or equal to the value in the Min-SE header field (recall that the default is 90 seconds when the Min-SE header field is not present), the proxy <b>MUST NOT</b> increase the value of the Session-Expires header field.	M
8	8.1	13	6	If the value of the Session-Expires header field is lower than the value of the Min-SE header field (possibly because the proxy increased the value of the Min-SE header field, as described below), the proxy <b>MUST</b> increase the value of the Session-Expires header field to make it equal to Min-SE header field value.	M
8	8.1	13	7	The proxy <b>MUST NOT</b> insert or modify the value of the 'refresher' parameter in the Session-Expires header field.	M
8	8.1	13	8	When sending the 422 response, the proxy <b>MUST</b> include a Min-SE header field with the value of its minimum interval.	M
8	8.1	13	9	That minimum <b>MUST NOT</b> be lower than 90 seconds.	M

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8	8.1	13	10	Rather, the proxy <b>SHOULD</b> insert a Min-SE header field containing its minimum interval.	S
8	8.1	13	11	If a Min-SE header field is already present, the proxy <b>SHOULD</b> increase (but <b>MUST NOT</b> decrease) the value to its minimum interval.	S
8	8.1	13	12		M
8	8.1	13 14	13	The proxy <b>MUST</b> then increase the Session-Expires header field value to be equal to the value in the Min-SE header field, as described above.	M
8	8.1	14	14	A proxy <b>MUST NOT</b> insert a Min-SE header field or modify the value of an existing header field in a proxied request if that request contains a Supported header field with the value 'timer'.	M
8	8.1	14	15	Assuming that the proxy has requested a session timer (and thus has possibly inserted the Session-Expires header field or reduced it), the proxy <b>MUST</b> remember that it is using a session timer, and also remember the value of the Session-Expires header field from the proxied request.	M
8	8.1	14	16	This <b>MUST</b> be remembered for the duration of the transaction.	M
8	8.1	14	17	The proxy <b>MUST</b> remember, for the duration of the transaction, whether the request contained the Supported header field with the value 'timer'.	M
8	8.1	14	18	However, this is <b>NOT RECOMMENDED</b> . This allows the proxy to insist on a session timer for the session.	R



Section	SubSection	Page	No.	Description	Statu
8	8.2	14	19	This proxy <b>MUST</b> insert a Session-Expires header field into the response with the value it remembered from the forwarded request.	M
8	8.2	14	20	It <b>MUST</b> set the value of the 'refresher' parameter to 'uac'.	M
8	8.2	14,15	21	The proxy <b>MUST</b> add the 'timer' option tag to any Require header field in the response, and if none was present, add the Require header field with that value before forwarding it upstream.	M
8	8.2	15	22	This session expiration <b>MUST</b> update any existing session expiration for the session.	M
8	8.2	15	23	The proxy <b>MUST NOT</b> modify the value of the Session-Expires header field received in the response (assuming one was present) before forwarding it upstream.	M
8	8.3	15	24	Unlike the UA, it <b>MUST NOT</b> send a BYE.	M

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9		15	1	When sending the 422 response, the UAS <b>MUST</b> include a Min-SE header field with the value of its minimum interval.	M
9		15	2	This minimum interval <b>MUST NOT</b> be lower than 90 seconds.	M
9		16	3	The UAS response MAY reduce its value but <b>MUST NOT</b> set it to a duration lower than the value in the Min-SE header field in the request, if it is present; otherwise the UAS MAY reduce its value but <b>MUST NOT</b> set it to a duration lower than 90 seconds.	M
9		16	4		M
9		16	5	The UAS <b>MUST NOT</b> increase the value of the Session-Expires header field.	M
9		16	6	The value <b>MUST NOT</b> be set to a duration lower than the value in the Min-SE header field in the request, if it is present.	M
9		16	7	The UAS <b>MUST</b> set the value of the refresher parameter in the Session-Expires header field in the 2xx response.	M
9		16	8	If the refresher parameter in the Session-Expires header field in the 2xx response has a value of 'uac', the UAS <b>MUST</b> place a Require header field into the response with the value 'timer'.	M
9		17	9	If the refresher parameter in the 2xx response has a value of 'uas' and the Supported header field in the request contained the value 'timer', the UAS <b>SHOULD</b> place a Require header field into the response with the value 'timer'.	S

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9		17	10	Since the call will still succeed without the UAC sending a BYE, insertion of the Require is a <b>SHOULD</b> here, and not a <b>MUST</b> .	S
		17	11		M
9		17	12	If UA wishes to continue with the session beyond the session expiration, it <b>MUST</b> generate a refresh before the session expiration.	M
9		17	13	It is <b>RECOMMENDED</b> that this refresh be sent once half the session interval has elapsed.	R

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10		17,18	1	If the session refresh request does not generate a 2xx response (and, as a result, the session is not refreshed), and a response other than 408 or 481 is received, the UAC <b>SHOULD</b> follow the rules specific to that response code and retry if possible.	S
10		18	2	However, the UAC <b>SHOULD NOT</b> continuously retry the request if the server indicates the same error response.	S
10		18	3	Similarly, if the side not performing refreshes does not receive a session refresh request before the session expiration, it <b>SHOULD</b> send a BYE to terminate the session, slightly before the session expiration.	S
10		18	4	The minimum of 32 seconds and one third of the session interval is <b>RECOMMENDED</b> .	R

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11	11.2	19	1	As a result, it is <b>RECOMMENDED</b> that an element send a request with a Session-Expires header field or a Supported header field with the value 'timer' by using TLS.	R
11	11.2	19	2	As adequate protection is obtained only if security is applied on each hop, it is <b>RECOMMENDED</b> that the SIPS URI scheme be used in conjunction with this extension.	R
11	11.2	19	3	This means that proxies that record-route and request session timer <b>SHOULD</b> record-route with a SIPS URI.	S
11	11.2	19	4	A UA that inserts a Session-Expires header into a request or response <b>SHOULD</b> include a Contact URI that is a SIPS URI.	S