

 aio-lib / aiohttp Public

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Commit 0c2e9da



 **Dreamsorcerer** authored on Jan 12 · ✓ 34 / 38 · Verified

Add max_headers parameter ([#11955](#)) ([#11959](#)) ([#11960](#))

(cherry picked from commit [ed6440c](#))

(cherry picked from commit [30ec25f](#))

 **master** (#11960) ·  v3.13.5 v3.13.4

1 parent [016e652](#) commit 0c2e9da 

 **12 files changed** +277 -130 lines changed


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✓  **CHANGES**


 11955.feature.rst


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✓  **docs**

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12 files changed +277 -130 lines changed

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CHANGES/11955.feature.rst



@@ -0,0 +1 @@

```
1 + Added ``max_headers`` parameter to limit the number of headers that should be
  read from a response -- by :user:`Dreamsorcerer`.
```

aiohttp/_http_parser.pyx



@@ -279,6 +279,7 @@ cdef class HttpParser:

```
279 279         object _name
280 280         bytes _raw_value
281 281         bint _has_value
```

282 + int _header_name_size

```
282 283
283 284         object _protocol
284 285         object _loop
```



@@ -329,7 +330,7 @@ cdef class HttpParser:

```
329 330         self, cparser.llhttp_type mode,
330 331         object protocol, object loop, int limit,
331 332         object timer=None,
332 333 - size_t max_line_size=8190, size_t max_headers=32768,
333 334 + size_t max_line_size=8190, size_t max_headers=128,
333 334         size_t max_field_size=8190, payload_exception=None,
334 335         bint response_with_body=True, bint read_until_eof=False,
335 336         bint auto_decompress=True,
```



@@ -352,6 +353,7 @@ cdef class HttpParser:

```
352 353         self._raw_name = EMPTY_BYTES
353 354         self._raw_value = EMPTY_BYTES
354 355         self._has_value = False
356 356 + self._header_name_size = 0
355 357
356 358         self._max_line_size = max_line_size
357 359         self._max_headers = max_headers
```



@@ -383,11 +385,14 @@ cdef class HttpParser:

```

383 385         value = self._raw_value.decode('utf-8', 'surrogateescape')
384 386
385 387         self._headers.append((name, value))
388 +         if len(self._headers) > self._max_headers:
389 +             raise BadHttpMessage("Too many headers received")
386 390
387 391         if name is CONTENT_ENCODING:
388 392             self._content_encoding = value
389 393
390 394         self._has_value = False
395 +         self._header_name_size = 0
391 396         self._raw_headers.append((self._raw_name, self._raw_value))
392 397         self._raw_name = EMPTY_BYTES
393 398         self._raw_value = EMPTY_BYTES

```



```
@@ -574,7 +579,7 @@ cdef class HttpRequestParser(HttpParser):
```

```

574 579
575 580     def __init__(
576 581         self, protocol, loop, int limit, timer=None,
577 -         size_t max_line_size=8190, size_t max_headers=32768,
582 +         size_t max_line_size=8190, size_t max_headers=128,
578 583         size_t max_field_size=8190, payload_exception=None,
579 584         bint response_with_body=True, bint read_until_eof=False,
580 585         bint auto_decompress=True,

```



```
@@ -638,7 +643,7 @@ cdef class HttpResponseParser(HttpParser):
```

```

638 643
639 644     def __init__(
640 645         self, protocol, loop, int limit, timer=None,
641 -         size_t max_line_size=8190, size_t max_headers=32768,
646 +         size_t max_line_size=8190, size_t max_headers=128,
642 647         size_t max_field_size=8190, payload_exception=None,
643 648         bint response_with_body=True, bint read_until_eof=False,
644 649         bint auto_decompress=True

```



```
@@ -677,8 +682,8 @@ cdef int cb_on_url(cparser.llhttp_t* parser,
```

```

677 682         cdef HttpParser pyparser = <HttpParser>parser.data
678 683         try:
679 684             if length > pyparser._max_line_size:
680 -                 raise LineTooLong(

```

681	-	'Status line is too long', pyparser._max_line_size, length)
685	+	status = pyparser._buf + at[:length]
686	+	raise LineTooLong(status[:100] + b"...", pyparser._max_line_size)
682	687	extend(pyparser._buf, at, length)
683	688	except BaseException as ex:
684	689	pyparser._last_error = ex
↕		@@ -690,11 +695,10 @@ cdef int cb_on_url(cparser.llhttp_t* parser,
690	695	cdef int cb_on_status(cparser.llhttp_t* parser,
691	696	const char *at, size_t length) except -1:
692	697	cdef HttpParser pyparser = <HttpParser>parser.data
693	-	cdef str reason
694	698	try:
695	699	if length > pyparser._max_line_size:
696	-	raise LineTooLong(
697	-	'Status line is too long', pyparser._max_line_size, length)
700	+	reason = pyparser._buf + at[:length]
701	+	raise LineTooLong(reason[:100] + b"...", pyparser._max_line_size)
698	702	extend(pyparser._buf, at, length)
699	703	except BaseException as ex:
700	704	pyparser._last_error = ex
↕		@@ -711,8 +715,9 @@ cdef int cb_on_header_field(cparser.llhttp_t* parser,
711	715	pyparser._on_status_complete()
712	716	size = len(pyparser._raw_name) + length
713	717	if size > pyparser._max_field_size:
714	-	raise LineTooLong(
715	-	'Header name is too long', pyparser._max_field_size, size)
718	+	name = pyparser._raw_name + at[:length]
719	+	raise LineTooLong(name[:100] + b"...", pyparser._max_field_size)
720	+	pyparser._header_name_size = size
716	721	pyparser._on_header_field(at, length)
717	722	except BaseException as ex:
718	723	pyparser._last_error = ex
↕		@@ -727,9 +732,9 @@ cdef int cb_on_header_value(cparser.llhttp_t* parser,
727	732	cdef Py_ssize_t size
728	733	try:
729	734	size = len(pyparser._raw_value) + length
730	-	if size > pyparser._max_field_size:
731	-	raise LineTooLong(
732	-	'Header value is too long', pyparser._max_field_size, size)
735	+	if pyparser._header_name_size + size > pyparser._max_field_size:

```

736 +         value = parser._raw_value + at[:length]
737 +         raise LineTooLong(value[:100] + b"... ", parser._max_field_size)
733 738         parser._on_header_value(at, length)
734 739     except BaseException as ex:
735 740         parser._last_error = ex

```

```

v aiohttp/client.py

```

```

@@ -195,6 +195,7 @@ class _RequestOptions(TypedDict, total=False):
195 195     auto_decompress: Union[bool, None]
196 196     max_line_size: Union[int, None]
197 197     max_field_size: Union[int, None]
198 +     max_headers: Union[int, None]
198 199     middlewares: Optional[Sequence[ClientMiddlewareType]]
199 200
200 201

```

```

@@ -259,6 +260,7 @@ class ClientSession:
259 260         "_read_bufsize",
260 261         "_max_line_size",
261 262         "_max_field_size",
263 +         "_max_headers",
262 264         "_resolve_charset",
263 265         "_default_proxy",
264 266         "_default_proxy_auth",

```

```

@@ -303,6 +305,7 @@ def __init__(
303 305         read_bufsize: int = 2**16,
304 306         max_line_size: int = 8190,
305 307         max_field_size: int = 8190,
308 +         max_headers: int = 128,
306 309         fallback_charset_resolver: _CharsetResolver = lambda r, b: "utf-8",
307 310         middlewares: Sequence[ClientMiddlewareType] = (),
308 311         ssl_shutdown_timeout: Union[_SENTINEL, None, float] = sentinel,

```

```

@@ -402,6 +405,7 @@ def __init__(
402 405         self._read_bufsize = read_bufsize
403 406         self._max_line_size = max_line_size
404 407         self._max_field_size = max_field_size
408 +         self._max_headers = max_headers

```

```

405 409
406 410     # Convert to list of tuples
407 411     if headers:
    ↓
    ↑ @@ -518,6 +522,7 @@ async def _request(
518 522         auto_decompress: Optional[bool] = None,
519 523         max_line_size: Optional[int] = None,
520 524         max_field_size: Optional[int] = None,
525 +         max_headers: Optional[int] = None,
521 526         middlewares: Optional[Sequence[ClientMiddlewareType]] = None,
522 527     ) -> ClientResponse:
523 528
    ↓
    ↑ @@ -607,6 +612,9 @@ async def _request(
607 612         if max_field_size is None:
608 613             max_field_size = self._max_field_size
609 614
615 +         if max_headers is None:
616 +             max_headers = self._max_headers
617 +
610 618         traces = [
611 619             Trace(
612 620                 self,
    ↓
    ↑ @@ -750,6 +758,7 @@ async def _connect_and_send_request(
750 758
        timeout_ceil_threshold=self._connector._timeout_ceil_threshold,
751 759             max_line_size=max_line_size,
752 760             max_field_size=max_field_size,
761 +             max_headers=max_headers,
753 762         )
754 763         try:
755 764             resp = await req.send(conn)
    ↓

```

▼ aiohttp/client_proto.py ...

```

    ↑ @@ -230,6 +230,7 @@ def set_response_params(
230 230         timeout_ceil_threshold: float = 5,
231 231         max_line_size: int = 8190,
232 232         max_field_size: int = 8190,

```

```

233 +         max_headers: int = 128,
233 234         ) -> None:
234 235         self._skip_payload = skip_payload
235 236
@@ -248,6 +249,7 @@ def set_response_params(
248 249         auto_decompress=auto_decompress,
249 250         max_line_size=max_line_size,
250 251         max_field_size=max_field_size,
252 +         max_headers=max_headers,
251 253         )
252 254
253 255         if self._tail:

```

▼ aiohttp/http_exceptions.py

```

@@ -80,11 +80,12 @@ class DecompressSizeError(PayloadEncodingError):
80 80
81 81     class LineTooLong(BadHttpMessage):
82 82         def __init__(
83 -             self, line: str, limit: str = "Unknown", actual_size: str = "Unknown"
83 +             self,
84 +             line: Union[str, bytes],
85 +             limit: Union[str, int] = "Unknown",
86 +             actual_size: str = "Unknown",
84 87         ) -> None:
85 -             super().__init__(
86 -                 f"Got more than {limit} bytes ({actual_size}) when reading {line}."
87 -             )
88 +             super().__init__(f"Got more than {limit} bytes when reading: {line!r}.")
88 89             self.args = (line, limit, actual_size)
89 90
90 91

```

Comments 0



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