Wt - Bug #7479

WResource Multipart Request - Error parsing CGI request

03/04/2020 11:46 AM - Michael Spellman

Status:	New		Start date:	03/04/2020
Priority:	Normal		**Due date:**	
Assignee:			**% Done:**	0%
Category:			**Estimated time:**	0.00 hour
Target version:				

Description

When I send a multipart HTTP request with or without a file attached to a Resource class derived from WResource, I receive the following error message before any of my code is run:

@

Error occurred.

Error

occurred.

Error parsing CGI request: CgiParser: reached end of input while seeking end of headers or content. Format of CGI input is wrong

@

That error message appears to come from CgiParser.C and is related to the boundary parsing in multipart requests:
https://github.com/emweb/wt/blob/master/src/web/CgiParser.C

I ran netcat and discovered a `0` at the end of the request, as described by the author of this blog post, who had the same issue:
https://blog.aeste.my/2019/08/12/multipart-form-data/

He was using Poco Http Library, I am using a ktor HTTP client library. It appears that he was able to solve it by setting the HTTP protocol version to 1.0.

HTTP Request:

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POST /api/optimize-pdf HTTP/1.1

Host: 127.0.0.1:8083

Accept-Charset: UTF-8

Accept: /

User-Agent: Ktor client

Content-Type: multipart/form-data; boundary=*__ktor-30844aa4-4a78-44b5-9429-f2ebb1b55165-ktor-1583318482396__*; charset=UTF-8

Transfer-Encoding: chunked

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---*__ktor-30844aa4-4a78-44b5-9429-f2ebb1b55165-ktor-1583318482396__*

Content-Disposition: form-data; name="user"

myuser

---*__ktor-30844aa4-4a78-44b5-9429-f2ebb1b55165-ktor-1583318482396__*

Content-Disposition: form-data; name="password"

password

---*ktor-30844aa4-4a78-44b5-9429-f2ebb1b55165-ktor-1583318482396*---

0

@

History

#1 - 03/04/2020 06:19 PM - Roel Standaert

wthttp at the moment doesn't accept requests that use chunked encoding. We should probably return something else instead when we're getting a request that uses chunked encoding, though.

So we should either:

- Accept chunked encoding. It seems that the RFC does require that chunked encoding is supported by the server.
- Or: reject chunked encoding instead of giving the above error

The reason why he was probably able to solve his issue when switching to HTTP/1.0 is because HTTP/1.0 doesn't support chunked encoding.

I don't know if ktor can be configured to not use chunked encoding in the meantime?