Secondary Certificate Authentication of HTTP servers

draft-ietf-httpbis-secondary-server-certs

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Current Status

• Recently adopted by the WG
• Non-editorial issues:
  • #2840 - Request and secondary certificate correlation
  • #2841 - Support sending Exported Authenticators in multiple frames over HTTP/2
  • #2842 - Rename CERTIFICATE to SERVER_CERTIFICATE
• Editorial improvements
#2840 - Request and secondary certificate correlation

- If servers need to know which cert was “used” for a given request, there’s currently no mechanism provided to do that
- A field like CERT ID could be reintroduced
  - The server provides it in the frame or certificate request context
  - The client can then indicate the selected cert in a request header
- Is this worth adding to the draft? Are there any actual interested implementors that may care about this?
- Any alternative solutions if we do care?
#2841 - Support sending Exported Authenticators in multiple frames over HTTP/2

- Exported Authenticators could be large enough (especially with post-quantum certs) to not fit in a single frame for HTTP/2
  - Need to provide a way to send them over multiple frames
- No CONTINUATION frames due to certs being on the control stream
- We could add a TO_BE_CONTINUED flag for the frame type
  - If it’s set, the next frame is a continuation of the current one
- Any other solutions?
#2842 - Rename CERTIFICATE to SERVER_CERTIFICATE

• Seems to make more sense from the standpoint of possible client certs in the future

• OK with this name or are there any other suggestions?