

across regions. For instance, our results show that well connected regions such as Europe expose fewer caching headers than regions such as Africa, where transit is costly. While revealing, it should also be noted that exposing this information is a potential security threat, due to the frequent use of old and vulnerable middlebox software [7].

Our future work will focus on exploring how these trends evolve. Interestingly, many HTTP/2.0 browser implementations are following an encrypt everything model, which will undermine some middlebox functions. This is perhaps concerning as our work indicates a widespread dependence on their functionality. Hence, ISPs may endeavour to find ways around this [27]. This is particularly the case for security and performance oriented middleboxes, which may be considered critical to business operations. Hence, we believe that the continued monitoring of this process could offer fascinating insight into how network operators react and optimise to changes in Web protocols.

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