

Possibility for grading quality of TLS connection

1. Introduction

The possibility to grad quality of TLS connection can be built by integrating certainly-something extension with HTTP Observatory API which currently grade TLS connections quality upon factors like "strength of the symmetric encryption", "strength of the key exchange", "strength of the MAC/AEAD", "forward secrecy", "extended validation", "certificate status",

2. HTTP Observatory API analyze endpoint

The Observatory API analyze endpoint take in the host parameter in its get request and then returns the host TLS connection grade like B+ or A+

3. Example: request

<https://http-observatory.security.mozilla.org/api/v1/analyze?host=www.mozilla.org>

4. Example: response

```
{  
  "algorithm_version": 2,  
  "end_time": "Sun, 10 Mar 2019 04:04:46 GMT",  
  "grade": "B+",  
  "hidden": true,  
  "likelihood_indicator": "MEDIUM",  
  
},
```

5. Proposed implementation

I would like to create an onClick event button which will grab the current host domain from browser and then trigger a get API request which will return the correct grade. In a popup model component.

6. Conclusion

I believe this solution will enable us to implement grading of TLS connection quality into certainly-something extension and this approach will enable us to extend the scope of our work. Last but not least am kindly requesting you to allow me do this task so as to qualify for outreach internship.