Customer Support Written Test.

Dear Sir/ Mdm,

I would like to foremost, apologise that you have been going through this issue that you have highlighted. However, please be reassured that I will put in my utmost effort to assist you in resolving this issue.

As I have noted from your email, your issue arises from the timestamp value of your website displaying NaN between the hours of 12 am and 6 am, in the Sauce Virtual Machine.

Let me first explain what a NaN is, and why it is appearing instead of the usual date and time. NaN refers to the term Not a Number. This occurs when a numeric value is expected and a non-numeric is provided. There are two ways that a NaN is generated: a mathematical calculation or non-numeric input.

Since the NaN appears only between 12 am and 6 am, it is more likely that this occurs because of a mathematical calculation. Some examples of mathematical calculations that can cause NaN are:

- Number $\div$ 0
- Number $\times$ ∞ (infinity)
- Number $\div$ ∞
- When calculation involves a non-numeric value, e.g., Number $\times$ "horse"

As mentioned by you, the developers used a common API call to fetch the time from the operating system, therefore; it is unlikely that the issue is of a NaN value being received from the API call. From the screenshot and through our testing, it was made clear that the Time of Date, generates the NaN. We were able to reproduce the error by changing the OS System time. I shall attach a video of how to reproduce the error, for your reference.

Our suite of products offered by Sauce Labs is of the highest quality and we have full faith in their reliability, however, to ensure that the error was not being propagated from Sauce Labs, we tested the issue on a local machine. We could successfully reproduce the error on a local machine. This enabled us to rule out any issues propagating from the Sauce Labs Virtual Machine.

We can thus conclude that the error is produced by the JavaScript code, I know that you cannot give me access or share the source code. Therefore, I would like to provide you with some simple instructions to find the root of the issue.

To the best of my knowledge, it is likely that the date and time, are derived from mathematical calculations, which is the common practice. I shall outline some steps that can be done to check and find the root of this issue and resolve it on your end.

1. Change the OS time to between 12 am and 6 am (Please refer to the attached video for reference)
2. Scan through the source code, to see if any of the above mathematical calculations occur.
3. In the event, that it is not clear from just scanning the code, we can use a simple debugging technique to see the values of the variables used. Use the console.log command to display each variable used in any mathematical computation in the function that derives the Date and Time.
4. Visit the webpage in the Chrome browser, and determine if any variables become, 0, infinity or non-numeric when the webpage is loaded.

I hope these simple steps can resolve this issue for you. In the event, that you may have any questions or are still unable to resolve the issue, please feel free to contact me at any time.

Thank You,

Regards,

Saklani Pankaj