

# SauceLab Support Writing Test

## Task

With the provided information explain what the problem is and how the customer should address it.

## Problem

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\*Problem: The timestamp value on the website is showing NaN as below:

NaN/NaN/NaN 12:NaNam

\*This issue is intermittent.

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## Update to a Customer

Hello Mr. ABC,

Thank you for connecting with Sauce Labs Support. I will be assisting you with this problem.

Kindly find an update below regarding the issue you are presently running into:

Looking at the nature of the issue and description, it seems to be a javascript problem. Just for information I'm sharing a background of what NaN is and why it occurs?

Missing data is labeled NaN. NaN (Not a Number) is a numeric data type that means an undefined value or value that cannot be represented, especially the results of floating-point calculations.

For example, NaNs can represent infinity, the result of division by zero, missing value, or the square root of a negative (imaginary, whereas a floating-point number is real).

In terms of practical usecase, Ex. If I divide two variables in a JavaScript program, the result may be NaN, predefined in JavaScript as "undefined".

Please refer below article link for more details about NaN and list of operations that results into NaN.

[https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global\\_Objects/NaN](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/NaN)

Coming back to the problem, did you recently make any changes to the code or environment just before you started facing this issue?

What I can see from all the tests and data that you've shared, this issue was observed between a specific timeframe 12 am and 6 am.

And given the time range I tried reproducing the issue at my end and I'm successfully able to reproduce the issue on my local machine by adjusting the system time. It happens only when the machine clock is set to a certain time. It seems that the variable that is causing NaN is the specific Time of Day and therefore the reason behind being intermittent and sporadic in nature.

\*\* Another reason or possibility that leads to such issues would be usage of incorrect Date constructor with invalid format. You may want to verify the API call that you're using to retrieve the Time from the Operating System (system clock).

For instance, If the Date() constructor is called with one parameter which is not a Date instance, it will be coerced to a primitive and then checked whether it's a string.

For Ex.

`new Date(undefined)` - is different from `new Date()`

`console.log(new Date(undefined));` - this is Invalid Date

Here, `undefined` is already a primitive but not a string, so it will be coerced to a number, which is [NaN](#) and therefore not a valid timestamp

As of ECMAScript5, there is one (YYYY-MM-DDTHH:MM:SS, note the T rather than space)

```
*new Date("1995-12-17T03:24:00");
```

```
// This is ISO-8601-compliant and will work reliably
```

Could you please verify the below points at your end?

1. Please help to check with your development team if they are passing any undefined value or unsupported format to the Date constructor?
2. When I tested this in a few other browsers, I observed the same behavior. Can you please confirm if you have tested in any other browser than chrome?
3. Did you face the same issue there?

Apart from this I would suggest you to review the below article link that might be helpful and shed more light on the problem.

[https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global\\_Objects/Date/Date](https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Date/Date)

Also, I have attached the recorded video of my reproducible test-case for your reference, kindly refer to the same and let me know if you're also following similar steps or facing the same issue as outlined in the recorded video?

To put this in summary, I believe this issue is not specific to Sauce Labs Env, but a generic issue specific to browser clients. You should be able to reproduce this on your local machine simply by changing the system time. This appears only inside the browser client and as I mentioned earlier above looking at the behavior & nature of NaN problems, this needs attention and help from your development team to investigate further...

At the end, I would request you to help us:

- Verify with your development team regarding this and share their input with us so that we can work together on this if required further.
- Testing it locally on different browsers and sharing the test results with us? **[Note:** make sure to change the system time, refer to the attached video].

I hope this helps!

Let me know if you have any questions, concerns or feedback. I will be happy to assist.

Thanks and Regards,  
Nirmala Joshi  
Sauce Labs Support (EMEA)