

Real-time visualization of analyzed industrial communication network traffic

Testing Report

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1 Testing

1.1 Introduction

This testing report covers changes and bugfixes from the one described in the implementation phase and describes the current state of the project.

1.2 Issues Resolved

1.2.1 Tooltip on Node-Link diagram not working

See GitHub issue [#69](#).

- Symptom
Tooltips don't show up somehow.
- Solution
Heavily modified tooltips code, and applied correct CSS styles to correctly render the tooltips.

1.2.2 Data Store updates break everything

Also see GitHub issue [#69](#).

- Symptom
Calling myNetwork.updateData within the callback passed to MobX autorun function crashed everything.
- Solution
The reason was that hidden deep inside the update() function of the nodelink diagram, there were some "functions" that mutate the passed in parameters themselves, adding in D3 positioning info and modifying other stuff - so in our case it's the data object inside datastore gets mutated and it becomes useless when it gets passed inside myNetwork.updateData(), which is why it all chokes when MobX runs myNetwork.updateData() later on.

1.2.3 Incompatibility issues of data pulling

See discussions under GitHub issue [#69](#) and pull request [#78](#).

- Symptom
Due to some issues, the frontend-backend communication was not working properly. Data pulling was not working.
- Solution
Fixed the incompatible API calls on both server and client side.

1.2.4 Filter and grouping features not working

See discussions under GitHub issue [#86](#), [#74](#) and pull request [#101](#).

- Symptom
The filter and grouping features were not working due to an incomplete implementation.
- Solution
Completed the feature.

1.3 Remaining Issues

- Handle logged-out state better