NetFlex: A Simulation Framework for Networked Control Systems -Pitfalls-

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1 Issue Description

When running the simulation, the following error occurs:

```
1 Error using main (line 33)
2 Error in 'NCS_sim/TrueTime Network': Failed to evaluate mask
    initialization commands.
3 Caused by:
4 Error using main (line 33)
5 Invalid Simulink object name: 'From1/1'.
```

This error suggests that the TrueTime Network block is not correctly recognized by Simulink, potentially due to an internal issue with the block's initialization.

2 Cause

TrueTime may generate issues where the **TrueTime Network Block** in the Simulink model (NCS_sim) fails to evaluate its initialization commands. This issue may arise due to:

- Corruption in the block's internal configuration.

- Compatibility issues with the Simulink model.

- Changes in the project that invalidate the block's state.

3 Solution

The issue can be resolved by replacing the TrueTime Network block with a new one from the provided TrueTime based library.

3.1 Steps to Fix

1. Open Simulink and navigate to your model (`NCS_sim`).

2. Locate the **TrueTime Network block**.

3. Delete the existing **TrueTime Network block**.

4. Open **SimulinkBlocks.slx**:

5. Drag and drop a new **TrueTime Network Block** into your model.

6. Reconnect the block as required.

7. Save the model and try running the simulation again.

4 Outcome

After replacing the block, the simulation should run without triggering the initialization error.

5 Additional Notes

- If the issue persists, ensure that all TrueTime blocks in the model are correctly linked and configured.

- Restarting MATLAB before replacing the block may help clear any internal cache issues.