

RI_Stack Stability-Robustness

We (The CableLabs RI team) are aware of (and concerned) about certain indications of instability (and/or lack of robustness) in the RI_Stack.

This wiki page is intended to provide insight of the issues as we understand them and the efforts that we are taking to address them.

Our current area of concern revolves mainly over multithreading. Symptoms include:

- CTP tests intermittently timing out or unresolved. We speculate that this is due to thread deadlock brought about by subtle timing differences.
- Inability to discover HN devices, particularly when connected to a busy network.

Current efforts:

- Use of FindBugs (a static analysis tool for Java).
- Examination of CTP tests that exhibit intermittent failures.
- Use of additional test/debug cases where warranted.
- Improving our ability to detect thread deadlocks (perhaps via log entries).

Results from scrub all of Jira issues, stopping at OCORI-3000 for now. Grouped them into 4 categories:

1. Intermittent issues found during weekly CTP testing but not seen in the HN lab environment. This is probably what you could deem "the effects of Brownian motion".
2. Device discovery issues. A.K.A. "potential sources of Brownian motion".
3. Cybergarage issues. A.K.A. "potential sources of Brownian motion".
4. Other.

Category "intermittent failures from weekly CTP testing" with occasional "but 'passes' in HN lab env"

Original issues have all been resolved.

Category "Discovery issues"

<https://community.cablelabs.com/browse/OCORI-3606>

<https://community.cablelabs.com/browse/OCORI-3586>

<https://community.cablelabs.com/browse/OCORI-3558>

<https://community.cablelabs.com/browse/OCORI-3501>

<https://community.cablelabs.com/browse/OCORI-3160>

<https://community.cablelabs.com/browse/OCORI-3127>

<https://community.cablelabs.com/browse/OCORI-3004>

Category "Cybergarage"

<https://community.cablelabs.com/browse/OCORI-3925>

<https://community.cablelabs.com/browse/OCORI-3529>

<https://community.cablelabs.com/browse/OCORI-3528>

<https://community.cablelabs.com/browse/OCORI-3518>

<https://community.cablelabs.com/browse/OCORI-3513>

<https://community.cablelabs.com/browse/OCORI-3435>

<https://community.cablelabs.com/browse/OCORI-3410>

Category "Other"

<https://community.cablelabs.com/browse/OCORI-3922>

<https://community.cablelabs.com/browse/OCORI-3585>