

# Standalone Module of RMCAT Solution Framework in NS3

draft-zhu-rmcat-framework-00  
draft-ietf-rmcat-nada-03

Xiaoqing Zhu, Sergio Mena de la Cruz,  
Jiantao Fu

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# Motivation

- Reference implementation of the rmcats solution framework as described in the draft (draft-zhu-rmcats-framework-00)
- Standalone, extendable code module in ns3:
  - Shared common service for generating and parsing feedback messages
  - Can plug in different congestion controllers
  - Can plug in different traffic sources (e.g., via the Syncodec sub-module)

# Current Supported Functionalities

- Baseline service provided by sender-based controller:
  - Generation of feedback message (pending input from the rmcats-feedback-message draft)
  - Calculation of delay, round-trip-time, packet loss ratio, and receiving rate from feedback messages
- Additional congestion control modules:
  - Dummy fixed-rate controller
  - NADA controller as reference implementation of the draft
- Traffic sources: CBR (default) and Syncodecs
- Test cases: eval-test and wireless-tests (only the WiFi section)

# Ongoing Efforts

- In the process of open sourcing the code following similar procedure as previously for *Syncodecs*
- Migrating all evaluations of NADA to this new codebase
- **Suggestion and contributions welcome!** (After we sort out the legal process for open sourcing this)