

# Updates on RMCAT test cases

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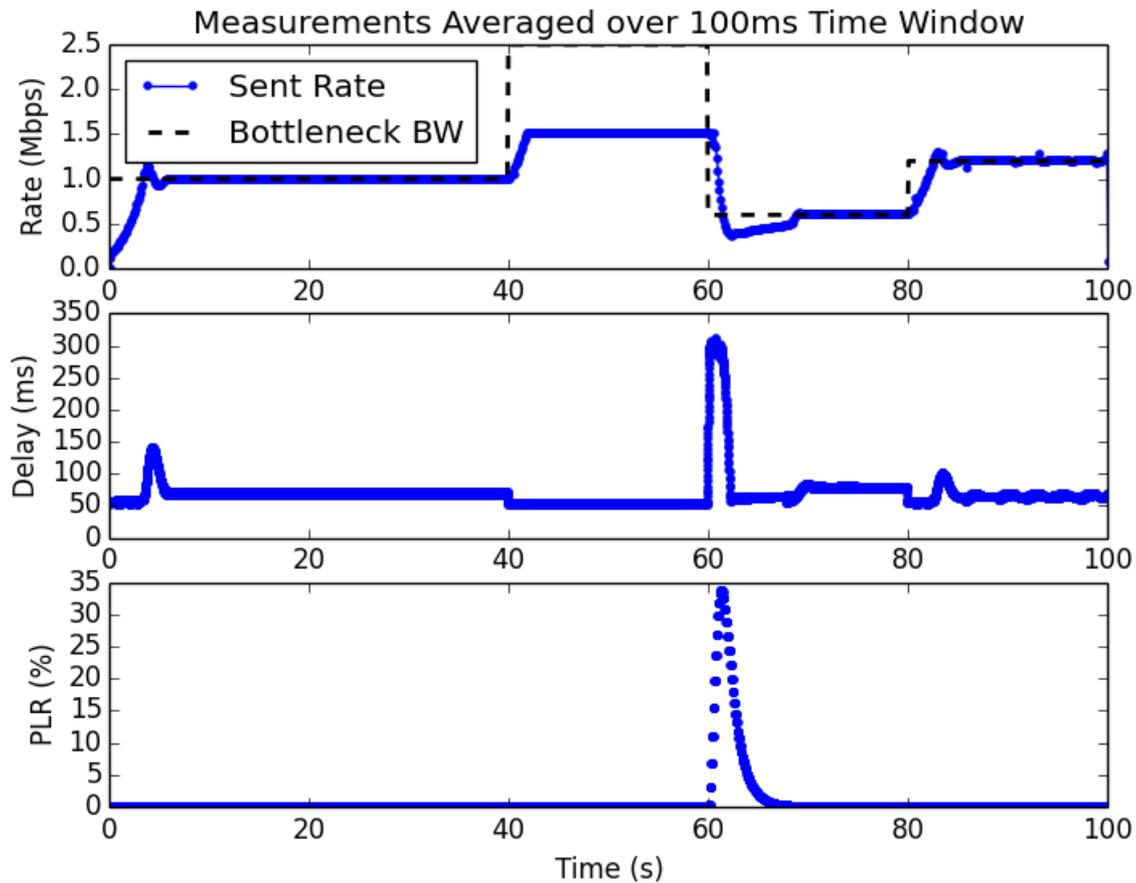
# draft-ietf-rmcat-eval-test-02

- Two major changes
  - Introduced reference bottleneck capacity
    - Any kind of time varying bottleneck is now described with respect to the reference bottleneck
  - Introduced new way of varying path capacity
    - Along with changing the path capacity one can now use non-adaptive UDP stream to fill the path and create bottleneck.
- Other changes
  - Updated reference list

# Methods for Simulating Time-Varying Path Capacity

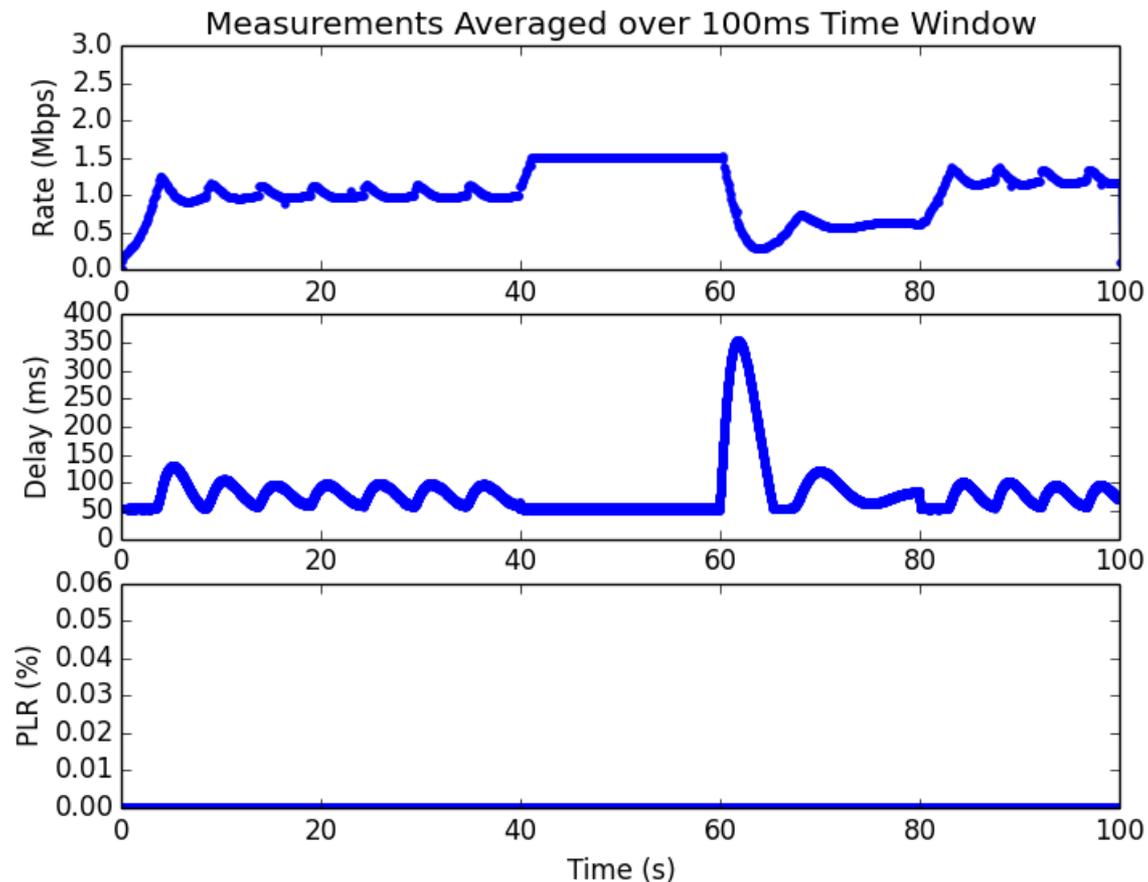
- Time-varying physical link capacity
  - For a fixed queue length in bytes or # of packets, change in link capacity leads to change in maximum queuing delay
  - Challenging for testing low-capacity links or low-delay AQM schemes (e.g., PIE and CoDel targeting for 20ms)
  - E.g., 10 packets@1000B => 400ms of queuing delay at 200Kbps
- Time-varying background UDP traffic
  - Fixed physical link capacity at  $C$
  - Time varying background traffic at  $R_{BG}(t)$
  - Available bandwidth for RMCAT flows:  $BW(t) = C - R_{BG}(t)$
  - Constant bottleneck queue depth in terms of delay and bytes

# Test Case 5.1 Result on NADA w/ Time-varying Physical Link Rate



Maximum delay jitter = 0ms

# Test Case 5.1 Result on NADA w/ Time-varying UDP Background Traffic



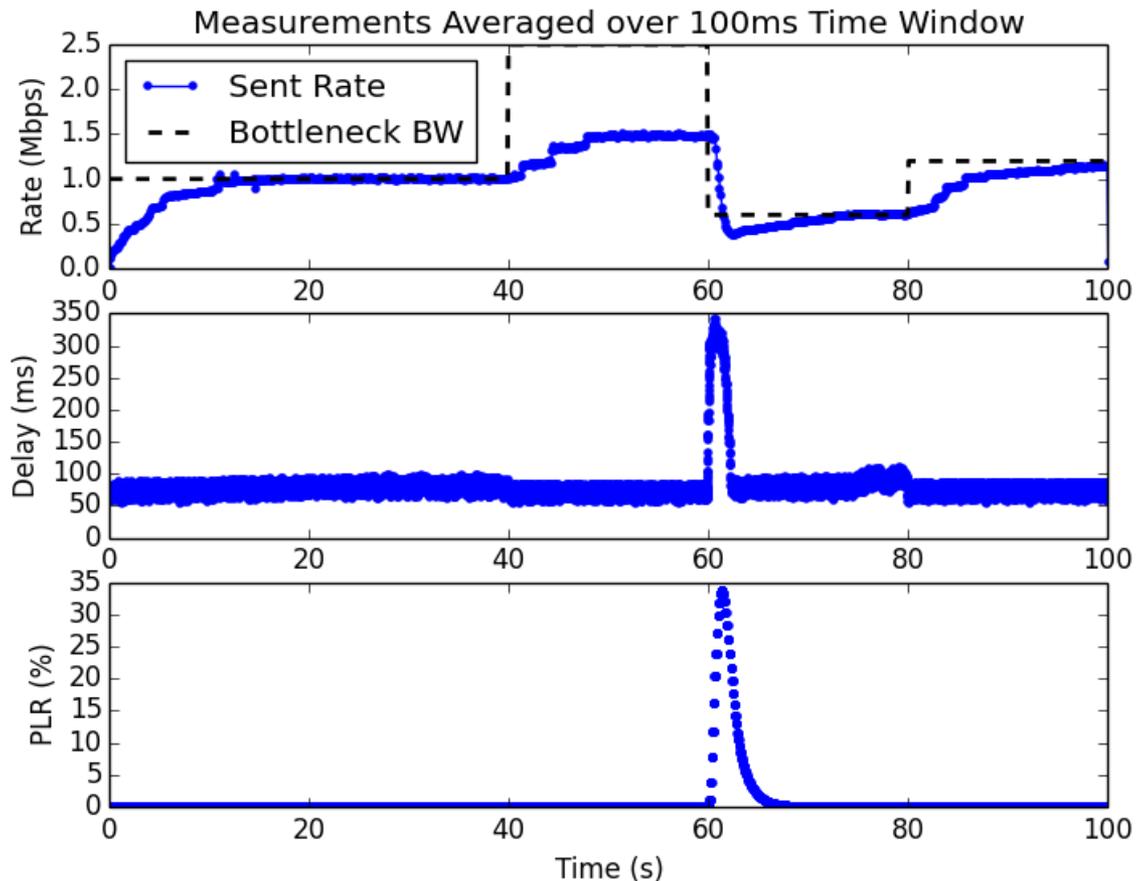
Maximum delay jitter = 0ms

# draft-ietf-rmcat-wireless-tests

- New version merged in Wi-Fi test cases from [draft-fu-rmcat-wifi-test-case-01](#)
  - Will submit during the week of IETF-94 meeting
- Restructured Wi-Fi test case descriptions to follow a framework similar to wired and cellular test cases:
  - Common network topology
  - Test attributes along with default parameters
  - Typical test scenarios and expected behavior

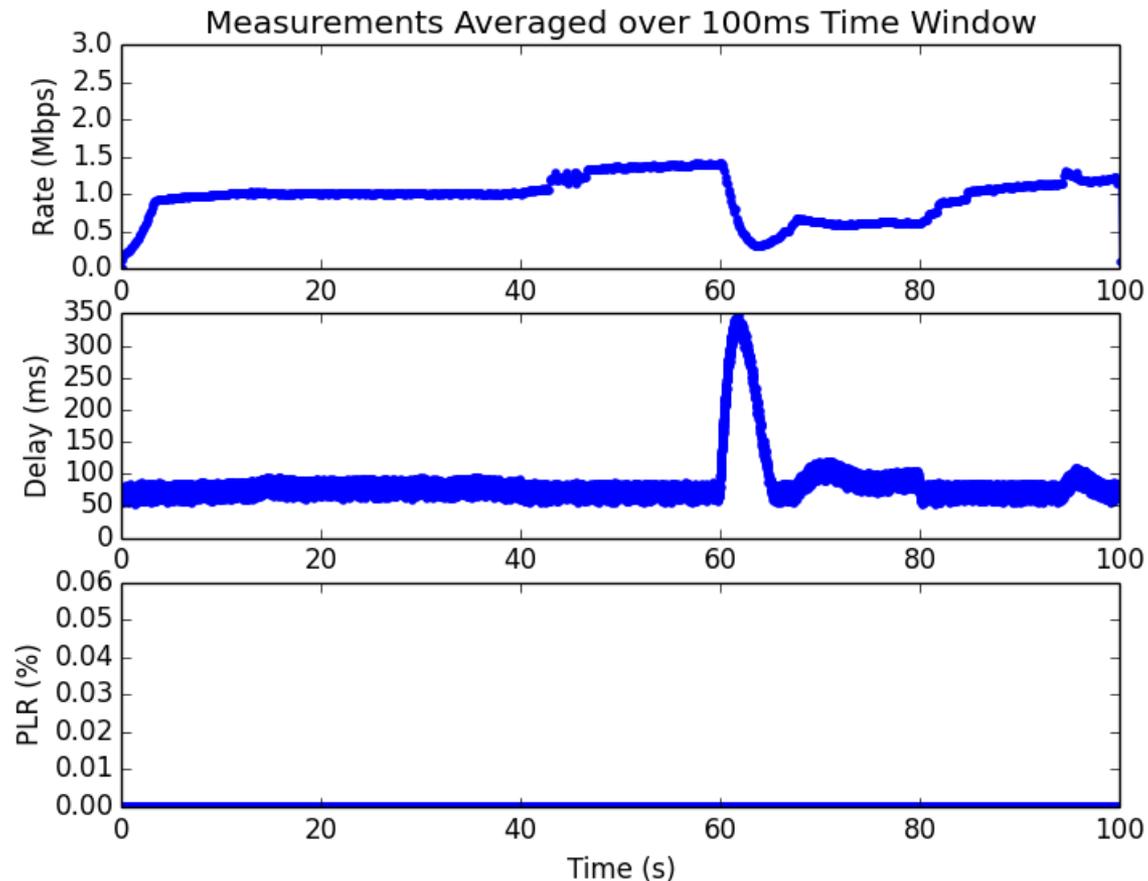
# Backup slides

# Test Case 5.1 Result on NADA w/ Time-varying Physical Link Rate



Maximum delay jitter = 30ms

# Test Case 5.1 Result on NADA w/ Time-varying UDP Background Traffic



Maximum delay jitter = 30ms