Updates on RMCAT test cases

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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