

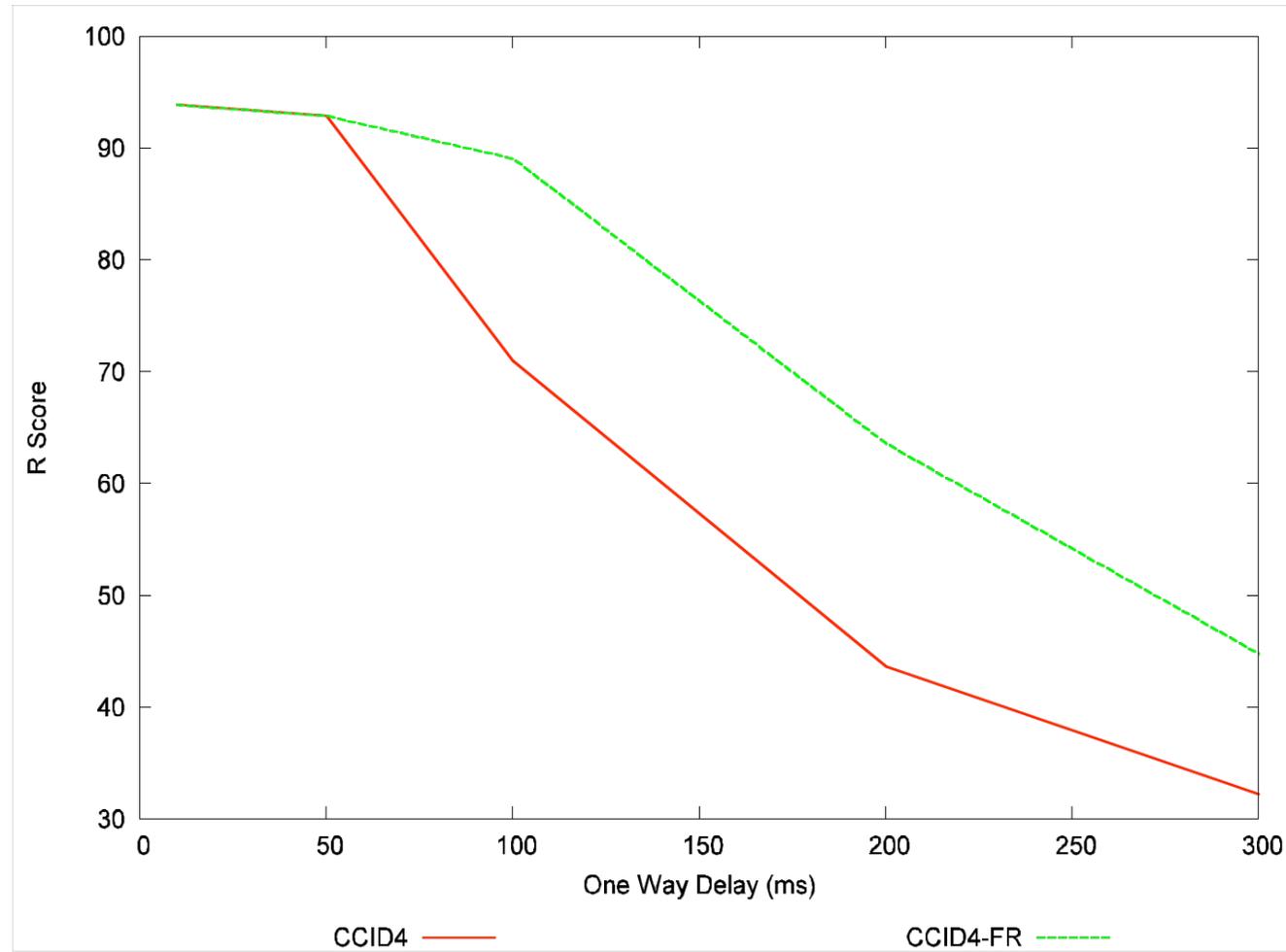
Faster Restart – Suggestions

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- Draft does not specify a receiver adjustment algorithm to use (Section 4)
- Two cases here:
 - Large Idle Period where a nofeedback timer has expired (≥ 4 RTTs)
 - Small Idle Period (< 4 RTTs)
- Suggestion:
 - Large Idle Period : Use first receiver adjustment algorithm.
 - For Small Idle Period : Use second receiver adjustment algorithm.

- First adjustment algorithm – ignoring feedback packet:
 - For the FIRST feedback packet after a nofeedback timer expiry, use the first receiver rate adjustment algorithm i.e. ignore the feedback packet.
 - Also if the receiver length reports one packet, ignore feedback packet.
 - Ignoring feedback packet is OK!
- Second adjustment algorithm:
 - For small idle periods and receiver rate length > 1 , use the second receiver adjustment algorithm.
- Should be able to maintain the minimum sending rate (during congestion free periods) after applying the FR algorithm.

- Simulated using ns-2
- Speech activity: Burst average 1.0 s, silence 1.5s
- Bandwidth 6Mbps, different delays.
- No packet drops.
- Performance found to be still poor for large delays.



- Idle periods with packet drops.
 - What happens if packets get lost after an idle period?
 - Do we still use receiver rate adjustment algorithms?
 - Suggestion: Use receiver rate ONLY in the absence of loss.
- Minimum sending rate: Using 8 packets/RTT with no loss.
 - 4 packets/RTT is OK.
 - 8 packets/RTT - is it OK?

- FR is good for bursty voice traffic.
- Problem occurs with large delays.
- Pre-requisite : Fairness to TCP flows needs to be analyzed.
- Happy to co-author text & add simulation results/
- Draft should be able to take better shape by next IETF.