Status of Video Traffic Model Draft

draft-ietf-rmcat-video-traffic-model

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March 2018 | IETF 101 | London, UK
Status of Draft

• Current version: -04, updated in Jan 2018 with minor edits

• Distinguishes two phases of codec behavior:
  • transient: reaction to abrupt changes in target rate
  • steady state: fluctuation around a constant target rate

• Describes three categories of synthetic traffic models: statistical, trace-driven, hybrid

• Contents now in sync with our open source code implementation

• Ready for review input from WG
Status of Open Source Code: Syncodecs

- List of supported synthetic codecs:
  - PerfectCodec: ideal CBR behavior at fixed packet size
  - SimpleFpsBasedCodec: CBR-like codec at fixed frame-per-second
  - StatisticsCodec: statistical model
  - TraceBasedCodec: trace-based model (sample HD video traces via H.264 encoding in Mozilla browser)
    - TraceBasedCodecWithScaling: supports scaling to a new target rate from the original video traces
  - SimpleContentSharingCodec: mimics slide-sharing behavior as the traffic source
  - HybridCodec: combines statistical model for transient with trace-based model for steady-state
- URL: https://github.com/cisco/syncodecs
## Evaluations of NADA using Syncodecs

<table>
<thead>
<tr>
<th>Codec Type</th>
<th>Test Cases</th>
<th>Wired</th>
<th>WiFi</th>
<th>LTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PerfectCodec</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td>N/A</td>
</tr>
<tr>
<td>SimpleFPSBasedCodec</td>
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<td>✔</td>
<td>N/A</td>
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<tr>
<td>StatisticsCodec</td>
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<td>HybridCodec</td>
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<td>pending</td>
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</tr>
</tbody>
</table>

Results at [https://www.dropbox.com/s/sgrcilpv0ez2vWF/2017-11-20-ietf-rmcat-nada-eval.pdf?dl=0](https://www.dropbox.com/s/sgrcilpv0ez2vWF/2017-11-20-ietf-rmcat-nada-eval.pdf?dl=0)
Next Steps and Call to Action

- Additional evaluations for WiFi test case using more advanced codecs
- Additional evaluations when LTE test case implementations are ready in ns3
- Ready for WGLC: need review input from WG