

# Status of Video Traffic Model Draft

draft-ietf-rmcat-video-traffic-model

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# 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*

	Codec Type	Test Cases		
		Wired	WiFi	LTE
<b>Default</b> →	<b>PerfectCodec</b>	✓	✓	N/A
	<b>SimpleFPSBasedCodec</b>	✓	✓	N/A
	<b>StatisticsCodec</b>	✓	pending	N/A
	<b>TraceBasedCodec</b>	✓	pending	N/A
	<b>SimpleContentBasedCodec</b>	✓	pending	N/A
	<b>HybridCodec</b>	✓	pending	N/A

Results at <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