

StreamMon

*The First Enterprise-Grade Caching
Server for Video Multicasting*

Verify Service Levels ... Confirm Compliance ... Enhance Revenue Capture ...
... all at a cost far lower than traditional solutions

StreamMon is a ground-breaking new product that helps broadcasters, cable operators and other video service providers increase their ability to monitor, assure and verify the quality of content passing through their networks.

More than just a recorder or analytics tool, StreamMon introduces an enterprise-grade Continuous Caching approach to IP multicasting. With StreamMon, operators can validate 100% of their video content 24x7, at a cost far more affordable than today's solutions.

How StreamMon Works

StreamMon was designed in close association with one of the world's largest cable companies and can be deployed throughout the entire distribution chain from content acquisition through aggregation, encoding, transcoding, encryption and distribution.

As a dedicated Caching Server, StreamMon runs continuously in the background, automatically capturing 100% of selected content streams and saving them for a rolling period of time. If a customer calls to report a problem, operators can immediately turn back the clock to review the exact stream feeding that customer at the time in question. Staff can compare the quality of what came into the network with what went out, validating whether the breakdown occurred in your network or some other leg of the distribution path outside of your control. If inside, StreamMon helps determine exactly what went wrong so you can repair it far more quickly.

Enhance IP Multicasting:

- Automatic 24x7 Recording of all Streams
- Enhance Revenue Protection
- Show Proof of Regulatory and SLA Compliance
- ID Problems as Occurring Inside or Outside Your Network
- VOD Content Acquisition
- Rapid, Inexpensive Access to Recorded Content

The screenshot shows the StreamMon web interface. At the top, there's a dashboard with metrics: Disk Space Usage (56% full), Interface 1 Usage (522.67 Mbps), and Interface 2 Usage (467.81 Mbps). Below this is a 'Capture Stream Summary' section with a table of captured streams.

Stream Name	Interface	Source	Multicast	Port	Join	Enabled	Command	Status	Action
ANSTV_HD-SPTS_CatN-20028	1	172.22.161.30	238.129.191.28	20028	true	true	ADD	ADDED	[Icons]
ANSTV_HD-SPTS_Compression-24107	2	172.22.161.33	238.129.214.107	24107	true	true	ADD	ADDED	[Icons]
ESBCVideoNews_HD-SPTS_Compression-50072	1	172.22.151.142	238.129.220.72	50072	true	true	ADD	ADDED	[Icons]
Discovery_HD-SPTS_CatN-20085	2	172.22.161.30	238.129.191.85	20085	true	true	ADD	ADDED	[Icons]
CatN_HD-SPTS_DF-20023	2	172.22.156.36	238.129.23.23	20023	true	true	ADD	ADDED	[Icons]
CatN_HD_M_SAT	1	172.22.201.210	238.129.113.43	13043	true	true	ADD	ADDED	[Icons]
CosmosChannel_HD-SPTS_CatN-20048	1	172.22.161.30	238.129.191.48	20048	true	true	ADD	ADDED	[Icons]
COSMOSChannel_HD-SPTS_Compression-22012	1	172.22.161.31	238.129.205.12	22012	true	true	ADD	ADDED	[Icons]
DiscoveryChannel_HD-SPTS_DF-2354	2	172.22.156.42	238.129.23.54	2354	true	true	ADD	ADDED	[Icons]
DiscoveryChannel_HD-SPTS_CatN-21011	2	172.22.161.30	238.129.191.61	21061	true	true	ADD	ADDED	[Icons]
Discovery_HD-SPTS_Compression-52025	2	172.22.151.231	238.129.222.25	52025	true	true	ADD	ADDED	[Icons]
DISV_HD-SPTS_Compression-24004	1	172.22.164.46	238.129.214.4	24004	true	true	ADD	ADDED	[Icons]
DiscoveryChannel_HD-SPTS_Compression-50035	1	172.22.164.150	238.129.220.35	50035	true	true	ADD	ADDED	[Icons]
DiscoveryChannel_HD-SPTS_Compression-50043	2	172.22.176.131	238.129.220.43	50043	true	true	ADD	ADDED	[Icons]
ESPNOverhead_VOD_Compression-24016	1	172.22.210.166	238.129.214.16	24016	true	true	ADD	ADDED	[Icons]
ESPNChannel_HD-SPTS_CatN-10000	1	172.22.161.72	238.129.220.00	10000	true	true	ADD	ADDED	[Icons]
ESPN Longform Encoder	1	172.22.168.21	238.129.222.36	52036	true	true	ADD	ADDED	[Icons]
ESPN_HD-SPTS_DF-2210	1	172.22.156.30	238.129.23.10	2210	true	true	ADD	ADDED	[Icons]
ESPN_HD-SPTS_Compression-24112	1	172.22.161.30	238.129.214.12	24112	true	true	ADD	ADDED	[Icons]
FIS2_HD-SPTS_Compression-24122	1	172.22.176.131	238.129.214.122	24122	true	true	ADD	ADDED	[Icons]
ESPN_HD-SPTS_DF-23143	2	172.22.156.30	238.129.23.143	23143	true	true	ADD	ADDED	[Icons]

StreamMon's clear, complete and easy-to-use interface streamlines the process of monitoring, capturing, replaying, analyzing and archiving video content.

StreamMon implementations consist of a Management unit which controls and extracts content stored on StreamMon Capture units. This architecture ensures that StreamMon will scale easily and economically as new streams are added or SLA management goals evolve.

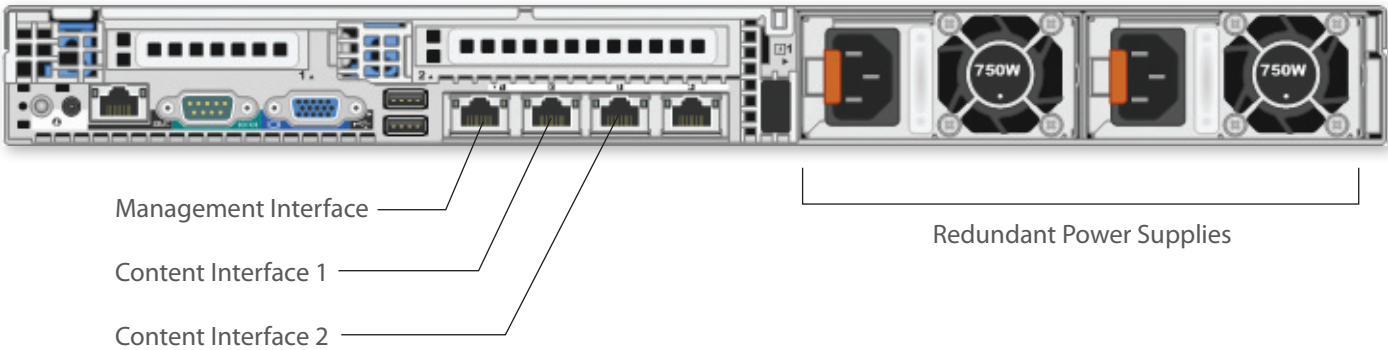
A single Capture unit can cache up to 40 streams of 40Mb/s or 100 streams of 2.5 to 5 Mb/s of video. These can be tailored to your needs based on the number and size of the video streams to be cached, the number of network transition points where video streams are collected and the length of time content is readily available. The Management unit can store up to 500 hours of extracted HD content at 40Mbps and includes an easy to use GUI that shows the status of each Capture unit. In addition, through a simple API, StreamMon can be integrated with network monitoring tools to immediately respond to service or transport disruptions alarms, automatically recording specified content for further review and analysis.

A New Approach to Video Validation

Today, most service providers use the limited capabilities within their traffic analyzers for validation. StreamMon’s caching model is a far better solution:

- Significantly lower cost
- Larger storage capacity
- Continuous storage recycling
- 24x7 coverage of all content
- Tag specific content blocks for archiving
- Streamlined interface

StreamMon easily fits into standard server racks and is architected for enterprise-grade environments, including easy extensibility and scaling as the number of video streams and services expand over time.



Component	1RU Server	2RU Server
Chassis	R620 Powerededge	R720xd Powerededge
Processor	Intel 6-core Xeon E5-2620 2.1GHz	Intel 6-core Xeon E5-2620 2.1GHz
Memory	2x8GB 1600 MHz RDIMMs	Item
RAID Controller	H710	H710
Hard Drives	8x600GB 10K SAS Maximum (8)	8x600GB 10K SAS Maximum (24)
Network	Broadcom 5720 QP	Broadcom 5720 QP
Power Supply	Dual, Hot-plug, 750W	Dual, Hot-plug, 750W
Rackmount Rails	ReadyRails Sliding rails	ReadyRails Sliding rails
Dimensions	682.7 mm (26.88 in) (length) 434.0mm (17.09) (width) 42.8mm (1.69 in) (height)	684.0 mm (26.93 in) (length) 434.0mm (17.09) (width) 87.3mm (3.44 in) (height)
Power Consumption	223.0 watts 760.9 btu/h Input Current: 2.0 amps @110V AC	326.0 watts 1112.4 btu/h Input Current: 3.0 amps @100V AC

For more information about StreamMon, go to www.sat.com/StreamMon