

## Case Study

### About us

TEMA Ltd is among the first companies in Bulgaria specialized in development and installation of media management systems, nonlinear video editing and special video effects based on Apple Macintosh (MacOS X).

For more than 20 years we have been providing state-of-the-art professional systems for the use of postproduction studios and advertising agencies, their high productivity guaranteed by working with the video materials in real time. Our clients' production (both for home market and abroad) proves our systems' high quality on a regular basis.

Having our clients' best interests at heart we have set a Demonstration Center where the technological solutions we offer are fully operational and function as an integrated system. Anyone interested can be informed in detail about the technologies we offer as well as get professional advice by our consultants.

In order to show the full potential of the said technology and keep up the expertise level of our consultants in the Demonstration Center we work daily on the video editing of two weekly TV shows and one TV series.



*Video Editing Workstation*

TEMA company also provides design and integration of compression systems for contribution, distribution and broadcasting of video, audio and data over IP, Digital cable and Satellite networks.

TEMA company is the official Business Partner of ERICSSON Television, BRIDGETECH, AVIWEST, Apple, AJA Video Systems, Media100 and Reflecmmedia.

### **The problem:**

When we started setting up the Demonstration Center seven years ago we had the ambition to cover as much as possible of a video processing – digitalization of video material, video editing, color corrections, special video effects, computer graphics, sound, mastering. Having optimized the activities we needed five workstations. Usually the volume of video materials per project is in the frame of several hours, taking up terabytes disk space. It is utterly inefficient for this material to be copied on different workstations both as a waste of time and disk space. The only possible solution in this case would be high performance shared storage with low latency. Thus we started searching for a suitable solution where 5 to 7 workstations could work simultaneously.



*Video Color Correction Workstation*

Our research took about six months and a number of variants were tested: Fiber Channel Storage Area Network (SAN), Removable Direct Attached Storage (DAS) and several versions of Network Attached Storage (NAS).

**The solution:**

SAN based solutions proved to meet the technical requirements but needed setting up of specific infrastructure hence turning out to be economically inefficient for such small systems. With DAS based solutions the main problems came from information reliability and management. So we turned to NAS based solutions. Testing different variants, however, we encountered different problems – with RAID controller's drivers, the impossibility of bonding of network adaptors, throughput performance, etc.



*Open-E based storages*

So the only solution that met all our requirements was the one offered by Open-E. Thus it became the core around which we set up our Demonstration Center for digital video technologies. Now we have two disk arrays of 16TB that have been working faultlessly for years. Thanks to Open-E we can demonstrate the full potential of our products and offer our clients a highly efficient solution for shared access.

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