

# ProSiebenSat.1 Produktion

Transitioning to a Tapeless Broadcast Operation

## Customer Profile

The ProSiebenSat.1 Group was founded in 2000 as the largest television company in Germany. Today the Group operates 29 TV channels across 10 countries reaching more than 62 million households, making it one of Europe's leading media companies.

Television is ProSiebenSat.1's core business. With channels SAT.1, ProSieben, kabel eins and sixx, it is the top player in the German television advertising market. In addition to Germany, ProSiebenSat.1 is also strongly positioned in markets in Sweden (Kanal 5, Kanal 9), Norway (TV Norge, MAX) and Hungary (TV2, FEM3) through its free-TV stations.

ProSiebenSat.1 Produktion is a complete subsidiary company of the ProSiebenSat.1 Media AG supplies technology and services for the ProSiebenSat.1 Group in Germany. With the development of a European leading digital platform, ProSiebenSat.1 Produktion is pursuing one of the Group's key strategic goals. Located in Unterföhring, Munich, ProSiebenSat.1 Produktion owns and manages four television studios available for use in the production of several popular television shows.

## Business Challenge

ProSiebenSat.1 Produktion's studio control room equipment was near its end of life, so there was a need to reinvest in infrastructure and convert from standard to high definition. Since the studio control rooms already existed, it would be a relatively simple task to replace the existing standard-definition infrastructure, cameras and production switchers. To benefit from file-based work flows and to reduce the costs associated with tape stock and VTR maintenance, there was also a need to replace VTRs with video servers. In addition, the studio control room needed to accommodate as much editing functionality as possible rather than relying upon external editing suites. ProSiebenSat.1 Produktion required an intuitive control surface that could manage playlist running orders and feeds to studio monitors and projectors, thereby ruling out the use of nonlinear editors. The studios would also need to be as flexible as possible because they would be used for a variety of productions, either for ProSiebenSat.1 or external clients hiring the facilities.

### Customer

- ProSiebenSat.1 Group

### Industry

- Television Company - Operating 28 TV channels in 10 countries

### Challenge

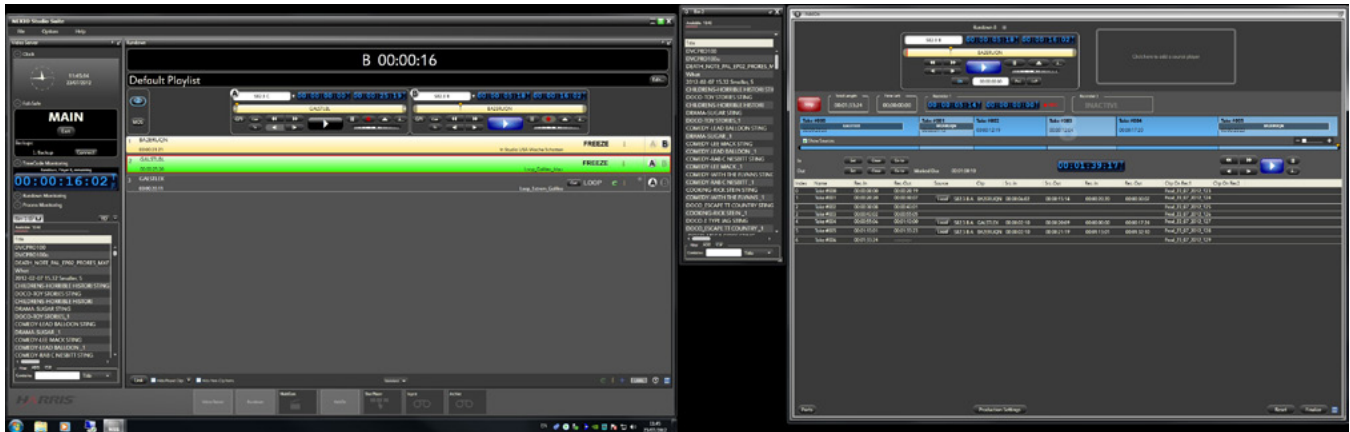
- Cost-effectively and efficiently reinvest in studio control infrastructure; replace VTRs with video servers; accommodate as much editing functionality as possible; require an intuitive control surface that could manage playlist running orders and feeds to studio monitors and projectors; new file-based workflows had to be fast, efficient and file-compatible with existing systems.

### Solution

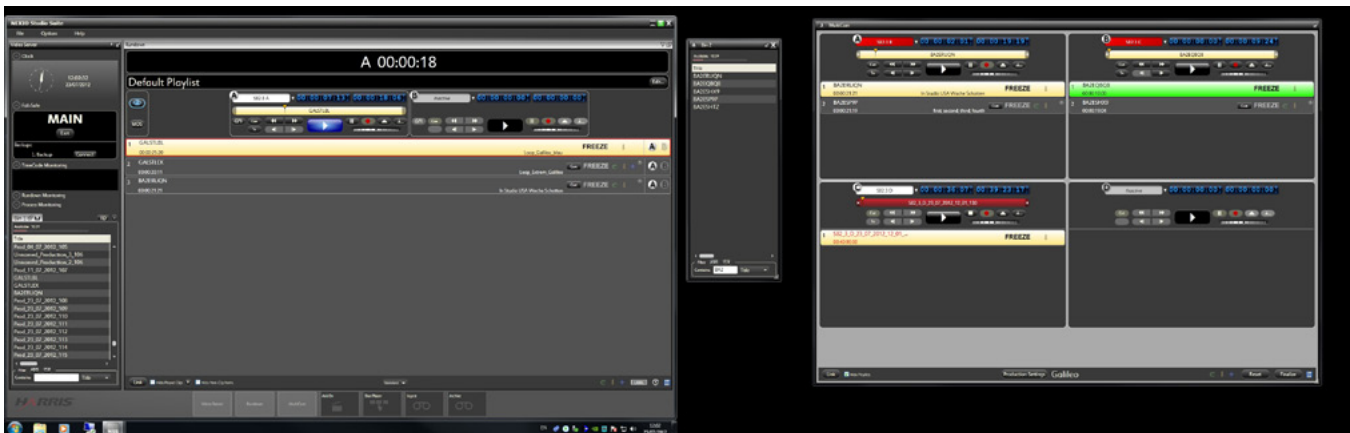
- Imagine Communications delivers a suite of software tools within an application called Nexio® Studio Suite; Nexio AMP® servers.

ProSiebenSat.1 Produktion's new file-based workflows had to be fast, efficient and file-compatible with existing Avid® editing systems and Nexio®-based transmission playout facilities, and, of course, could not be slower than the existing

tape-based solution. Finally, any server-based solution had to be reliable, with recorded assets fully protected against loss, with a level of comfort similar to that of using a material tape or disc.



Screen shot of Multicam and AddOn mode



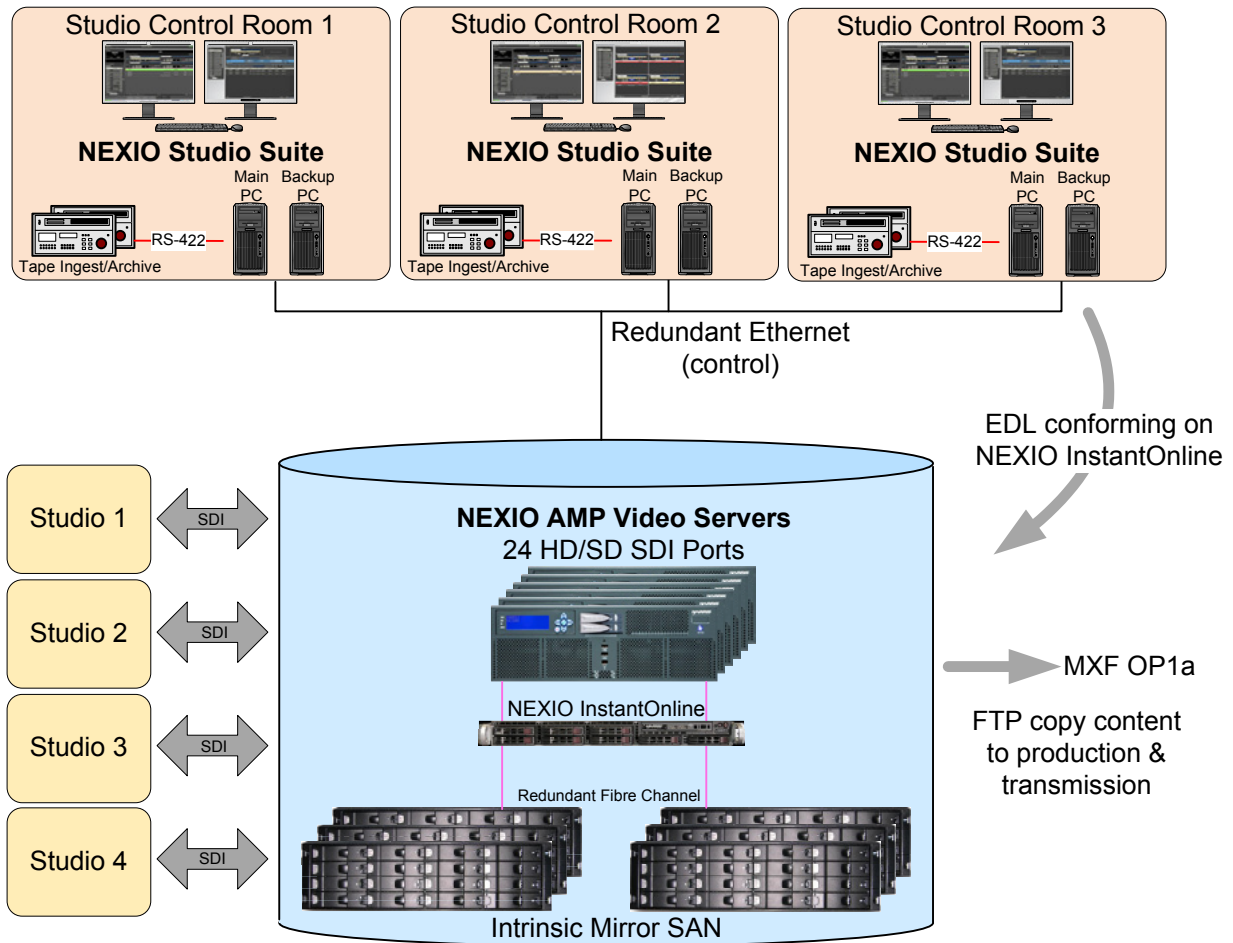
Screen shot of Rundown and Multicam mode

## Technology Solution

ProSiebenSat.1 Produktion had been using a server-based transmission system based on Nexio servers for years and was well versed on its capabilities and operation. As a result, it made sense to use Nexio video servers in the studio control rooms – especially because the files created would be compatible with the existing AVID editors and Nexio-based playout center. A suite of software tools within an application called Nexio® Studio Suite manages the server record and play ports and provides the required editing capabilities. It is the key in turning Nexio into a powerful studio production system. The server installation, comprising of six Nexio AMP® servers, provides a pool of 6 record and 18 play ports. IP control of server ports from Nexio Studio Suite facilitates simple assignment of server ports to

any of the three studio control rooms. Imagine Communications-patented Nexio Intrinsic Mirroring™ technology provides security against multiple drive or SAN failures, whilst each Nexio Studio Suite has a synchronized backup system. Altogether, these ensure continued and unimpeded operation during multiple component failures.

From a dual screen interface, the Nexio Studio Suite operator can control up to 12 Nexio ports through a suite of production tools. A running order generated on ProSiebenSat.1 Group's internally developed ProNews system and imported into the Nexio Studio Suite rundown manager can be used to play out packages during a show. These packages can be either file imported or digitized through the Nexio Studio Suite ingest tool. Play ports can be ganged for opening sequences that require key and fills, and record ports can be ganged for multi-camera recording.



## ProSieben Production System Overview

A key feature of Nexio Studio Suite is the AddOn production mode of operation, which emulates a VTR roll-back recording method of operation. AddOn allows a studio recording to be re-wound, an in-point marked and a new take recorded from that point, either as an insert or append edit. With AddOn, it is also possible to slave Nexio play ports, ensuring that video feeding studio monitors, projectors or vision mixer keys remain frame synchronized when rolling back to the in-point. The final output of AddOn is an edit decision list (EDL) that represents the finished production; this can be played directly from Nexio or dubbed to tape or disc, and transported to the client's facility. Alternatively, the EDL can be published to the Nexio InstantOnline III™ high-resolution conforming engine, which will flatten the EDL into a single file that can be pushed via the Nexio Studio Suite FTP manager to different targets for further use.

Nexio InstantOnline is an important part of the workflow. It connects directly to the Nexio SAN and conforms the EDLs that are imported into it at high speed from the Nexio Studio Suite user interface. The output can be changed between different formats depending on the client's requirements. Low-resolution versions can be created in parallel to speed up approval processes when approvers are offsite.

## Business Value

### **Produce high-quality productions in a timely manner**

Nexio server systems deliver unparalleled amounts of SAN bandwidth. This is important when using high-quality, high-bit-rate HD codecs, as well as when the SAN is required to support high numbers of record and play ports. SAN bandwidth is equally important with respect to on-SAN editing, where fast editing and the less obvious, fast rendering of EDLs through InstantOnline facilitates fast completion of ready-to-air productions.

### **Control costs to ensure profitable margins**

Replacing VTRs with Nexio servers can reduce initial capital expenditure, while the operating costs of a Nexio server system compared to tape stock and maintenance of decks are significantly lower.

ProSiebenSat.1 Produktion engineering already had experience supporting Nexio systems in the playout center and, therefore, there was no cost associated with training or spare parts. The Nexio AMP platform supports mixed resolutions and an extensive library of software codecs. Expensive hardware and system upgrades are avoided when new production demands require different codecs. Furthermore, the Nexio Studio Suite AddOn mode reduces the requirement for additional post production suites and includes applications to manage running orders, playlists and multi-camera production – all from one, simple-to-use, user interface.

### **Protect video assets and studio production operations**

Most of a production studio's value is invested in the shows they make, so losing video assets means a loss of value. The unique Nexio Intrinsic Mirroring architecture is designed to secure content following multiple component failures. Even following the most serious failures, Intrinsic Mirroring and Nexio Studio Suites main and backup modes ensure that production work can continue unimpeded.

### **Reduce future risk**

Studios need to ensure that they receive an adequate return on investment for equipment. The Nexio AMP servers' software codec architecture and Nexio InstantOnline offer support for multiple codec types and resolutions, allowing the studios to support new codecs without costly hardware or system replacements. Nexio storage capacity and bandwidth can be expanded to meet changing business and technological needs.

To learn more, please visit [imaginecommunications.com](http://imaginecommunications.com).

