Off Air Service Monitoring

Case Study

A major satellite broadcaster benefited from reduced labour costs and rapid fault detection when they chose to utilise Astec's automated monitoring system.

Off Air Service Monitoring

Background

A major UK satellite broadcaster contracted Astec Solutions to provide an off-air service monitoring software package. The broadcaster had previously relied on a multi-viewer based solution, through which four stages (downlink, pre-encoder, post-encoder and off-air) were manually monitored by operators through 'eyes on glass'. Monitoring using traditional manual methods are resource intensive and prone to human error, so this led to the broadcaster's need for a better solution. Along with quality assurance concerns, the physical space required to house numerous multi-viewers hampered the monitoring capability of the broadcaster's team,. This led to a focus being placed on premium channels.

The solution Astec were contracted to provide would offer a way to automate quality assurance for off-air signals that could be extended across all channels, thereby reducing the workload for each of the broadcaster's operators. An automated solution would also be able to detect issues faster than eyeball monitoring, and would report errors well before they evolved into service affecting issues.

## Solution and implementation

The software solution created for the satellite broadcaster automatically monitored the output of several physical set-top boxes for qualitative readings within set parameters. The system measured loss of audio, loss of video, picture blocking along with checking for the presence of a valid satellite signal.

The solution provided by Astec is able to monitor services automatically, which greatly reduces the level of operator attention required, and minimises individual team member's monitoring responsibilities. This was achieved through a 'monitoring by exception' system; operators would be alerted when an issue arose, and provided with the necessary information for appropriate action to be taken.

Functionality was extended to cover some manual verification checks, such as the presence of a PIN when customers wished to access age-restricted content and ensuring the validity of purchases for PPV content. In addition, the system monitored and ensured the integrity of additional services such as 'the red button,' which highlighted issues to operators when content is inaccessible.

All functions of the system run continuously, 24/7 and 365-days a year. Regardless of the time of day or channel, automatic monitoring flags up issues across all broadcast outputs.
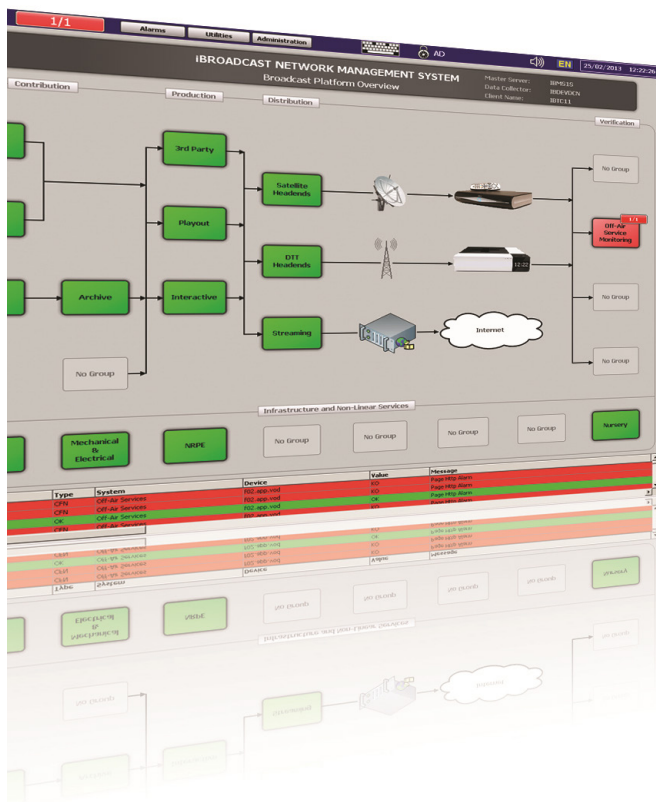
Results

The broadcaster's operators are no longer required to manually monitor multi-viewer screens, and are instead available to complete tasks across a number of responsibilities. Operators can confidently rely on the rapid detection and confirmation of service-affecting issues delivered by Astec's software solution. The broadcaster can now ensure a greater level of service integrity and expand their operation with limited cost investment compared to their previous solution.

Along with these benefits, the system now allows operators to see the impact of emerging issues before they head down the chain to become a customer facing error. By tackling problems earlier, the broadcaster can organise their dynamic resources to create an optimal workload across their entire team. The system constantly logs results, so that team members can analyse historical events. By utilising this data to establish the best and worst performing channels, operators can prevent future technical issues and perform timely maintenance.

Monitoring covers every channel offered by the broadcaster, with the premium channels being checked continually and non-premium channels being monitored on a round-robin basis.

Previously, monitoring was restricted solely to premium channels, and even on these high-value channels monitoring was undertaken purely by eye. Spread over two sites and established on 400 set top boxes, the software solution is now instrumental to the operation and allows for expansion without a significant investment in additional resources.

The system is tied into the broadcaster's electronic program guide, and new channel launches are automatically factored into the system without requiring specialist programming knowledge. The off-air service monitoring system is fully integrated into the end-to-end monitoring systems, closing the loop on the entire operation.

Conclusion

Off-air service monitoring is the final step in creating a complete operational monitoring system that covers all aspects of the satellite broadcaster's needs. Monitoring has expanded to cover all of the the channels on offer, providing suppliers with an increased level of service for no additional resource investment.

Revenue is also protected through the continual monitoring of additional services such as 'the red button', and costs are reduced by alleviating operator workload. The system, as with other products supplied to the broadcaster by Astec, is entirely accessible and configurable by the broadcaster's team. This is solution provides the exact functionality and flexibility required for a premium, dynamic, and expanding broadcasting operation.

Background

Astec Solutions strives to improve operational effectiveness and profitability for clients by delivering specialist management, production, reporting, and monitoring and control solutions.

Our broadcast solutions are trusted by some of the world's leading broadcasters to control and monitor their entire broadcast platform and ensure they continue to provide quality services to meet customers' changing needs.

Solutions

Astec's unrivalled product experience and expertise enables clients to optimise their software investment, with a range of solutions which support existing implementations or new functionality development.

- iBroadcast Network Management System
- Management Information Systems (MIS)
- Data Analysis & Reporting

Further Information

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