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# JOCKEYING TO THEIR ADVANTAGE

A few false starts notwithstanding, Big 92.7 FM's adoption of the 'audio over IP' technology has seen the radio station humming the music of success  
Aditya Kelekar

If ever there were something like the 'last-mover advantage', it definitely goes to Big 92.7 FM, the new generation FM radio station from Adlabs Radio. By deploying audio over IP across its studios, the company has accrued technology benefits and for the same reason, it could differentiate itself from its competitors: slashing installation time and man-power for setting up studios and, at the same time, providing the ease and flexibility of use associated with IP networks.

## Newfound voice

A little more than a year ago, in Feb 2006, Adlabs Radio had successfully bid for 45 stations across the country. What lay ahead was the formidable task of getting the studios up and running within the planned time of one year. Also, boardroom meetings had maintenance issues of the studios on top of their agenda - the stations were to spring up across the length and breadth of the country, many at places with poor technical support.

Around the same time the technology team found out an emerging technology called the 'Audio over IP' that could help do away with the extensive cabling network that forms a part of the conventional TDM technology. A thorough evaluation ensued by the technology team led by Soumen

Chowdhury, Big 92.7 FM's CTO and they realized, that the benefits were manifold. The new technology works on a standard framework of Ethernet hardware to transport high performance audio throughout the entire facility. Chowdhury's analysis showed that installation time and material could be cut dramatically over other methods. Besides, the technology also lent itself to easy maintenance - its dependence on IT made it easy to train standard IT professionals to become studio experts too.

This came as a relief since it addressed one of the nagging troubles faced by the still evolving private radio industry - that of trained radio broadcasting engineers. "However with the spread of IT, even small towns have qualified IT personnel who can, with a little training, work very well on maintaining the network in IP-based studio," says Chowdhury.

## Early jitters

The management was convinced of the value offered by the technology and a go ahead was given. Soon Chowdhury got started with the work

**SHAJU JOSE**

IT manager, Big FM





## The 'audio over IP' installation actually helped BIG 92.7 FM cut down their deployment costs

**SOUMEN CHOUDHURY**

Chief Technology Officer, **Big FM**

of deploying the system. It was decided to base all the BIG 92.7 FM studio facilities on advanced IP technology using real time protocol (RTP) called "Livewire", sourced from Axia Audio/Telos Systems. A 24 bit, 48 khz audio configuration was used, that could travel across the studio facility through a standard Ethernet switch. The CAT5e/CAT 6 cables that were deployed could carry multiple (25 stereo) audio signals simultaneously.

However, Chowdhury was on tenterhooks during the first few installations. His fear was understandable: the conventional TDM technology has proven itself over many years, while audio over IP was still new, at least in India, where such a large scale deployment was unprecedented. "It was nightmarish - the technology's detractors warned us that packets were routinely lost over VoIP," recalls Chowdhury.

Almost as if to validate the critical comments, the radio station found themselves tripping over during the first few trials: the sound quality at the station's full capacity was just not up to the mark. The fault was spotted in the 100 MB switches that were incapable of taking the peak-hours load. Chowdhury directed that the switches be replaced by 1GB ones, and that solved the problem.

### Cost-cutting jingle

The 'audio over IP' installation actually helped BIG 92.7 FM cut down their deployment costs. Chowdhury claims that while a studio with four-microphone would have ordinarily cost \$ 80 - 120,000 if conventional TDM technology was to be

used, the new technology helped trim those expense to \$ 10 - 15,000.

Additionally, Chowdhury stands to save on manpower costs too. The system currently based on interactive web based remote management applications can allow remote configuration and monitoring through Windows Explorer. Chowdhury plans to add another component the system that will automatically troubleshoot and send an alarm to a centralized 'media monitoring center'. "That will help me reduce my technical staff at every station to a one-man, first-level technician workforce," says Chowdhury.

### Next on air

BIG 92.7 FM has already got 14 stations belting out popular music and Chowdhury says that the company is on track to having all 45 of the planned studios wired by year-end. As the company pushes the envelope by adding more programs and petitioning the government for a license for 'news' channel (currently the private radio stations are forbidden from doing so), Chowdhury is ensuring that the technologies implemented are going to be supportive of future endeavors such as a high-definition - Radio 5.1 surround sound channel configuration.

Meanwhile the latest technology deployment has been a strategic one. It has helped BIG 92.7 FM steal a march over its competitors who would have to grapple with complete network overhaul if they decide to migrate from their TDM based network. Also as Chowdhury points out, when digital transmission becomes a reality, BIG 92.7 FM's IP network infrastructure will score again as it would be much easier to support the new transmission technology. ●

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