

GOBACKTV CASE STUDY:

A+, Denmark

A+ deployed Cable IPTV using GoBackTV's CMTS-Bypass solution

The A+ Group (www.aplus.dk) is major triple-play telecom service provider in Denmark. They sell data and telecommunications on a retail and wholesale basis. The primary focus of the holding is on the supply of broadband, telephony and TV signals for antenna and housing associations. The A+ Group also owns 49% of the shares in FastTV A/S, which supplies internet, telephony and TV signals in the electricity companies' fiber networks.

Increased competition from satellite and DSL providers is forcing A+ to introduce new services so they can keep existing customers, and also to gain new customers. In the last three years, the A+ Group has grown by more than 30% per year within its core business area.

To continue with the growth, A+ wanted to address the demand from its cable customers, antenna societies. These cable customers were demanding not only high-speed Internet and telephony service, but they also wanted have access to FastTV's IPTV service, so they could receive high-quality, digital broadcast content (SD and HD), and also be able to request movies on demand.

The company prides itself on being an early adopter of advanced technologies, and they turned to GoBackTV to help support the expansion of their FastTV service to their cable customers. A+ had been looking for ways to deliver IPTV over cable networks, and they found that GoBackTV's CMTS-Bypass solution met their requirements.

During extensive lab and field trials, A+ verified that GoBackTV's Cable IPTV solution interoperates transparently with the existing FastTV components, including middleware, set top boxes, and conditional access. "Integration with existing network and FastTV components was done quickly, and GoBackTV was very responsive to our needs during installation and network optimization." said Henrik Lind, the CEO of A+.

The Organization

A+ Holding A/S
Roholmsvej 19
2620 Albertslund
Denmark

The A+ Group is Denmark's third largest provider of broadband to households that are connected to a cable TV network. They have 130.000 households passed and over 65.000 subscribers in Denmark.

The Challenge

How to extend – cost effectively – their affiliated FastTV IPTV service to Danish antenna societies' cable customers.

The GoBackTV Solution

With GoBackTV's Cable IPTV solution, A+ seamlessly integrated Cable IPTV into its existing network infrastructure, and introduced the benefits and advantages of FastTV to their cable associates.

Results

Commercial launch of FastTV's IPTV service to cable customers was successfully completed in June, 2008.

"The GoBackTV CMTS-Bypass solution allows us to extend our FastTV IPTV service to cable operators as well as our traditional fibre and DSL customers. We have looked at many alternatives, and CMTS-Bypass is the best fit for cable IPTV."

*Henrik Lind,
Chief Executive Officer of A+*

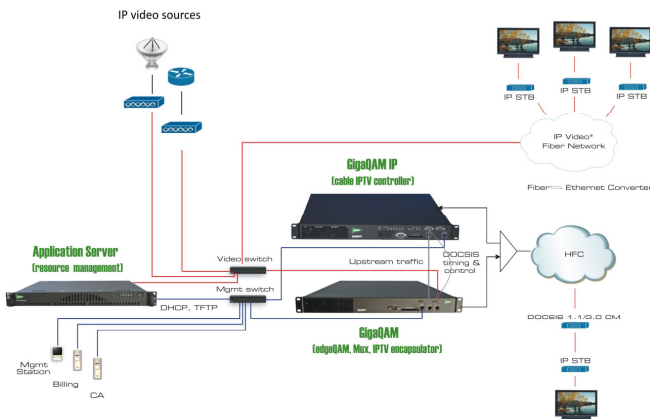


Figure 1. Cable IPTV with CMTS-Bypass

Why CMTS-Bypass?

Although the advantages of IP video are clear, cable companies are finding it difficult to justify the deployment of IP video over cable networks. This position will likely remain unchanged until the cost of delivering IP video over DOCSIS® can drop to a level that is comparable to that of traditional DVB-C.

A major part of the cost of a DOCSIS CMTS is the CMTS core, which performs cable modem management and scheduling, IP-related filtering, and payload privacy functions (BPI/BPI+) on the transiting data stream.

The characteristics of video are much different from that of data! Video traffic is highly asymmetrical, and it does not need the most processing-intensive functions of the CMTS core services.

In addition, cable video sourcing and delivery are much more controlled than the open Internet, and video payloads are already protected by rigorous conditional access solutions.

A CMTS-Bypass solution - where the video traffic bypasses the CMTS core but is still delivered to standard DOCSIS cable modems - can significantly decrease the cost of IP video delivery, and change the economics of delivering downstream IPTV traffic through DOCSIS cable modems.

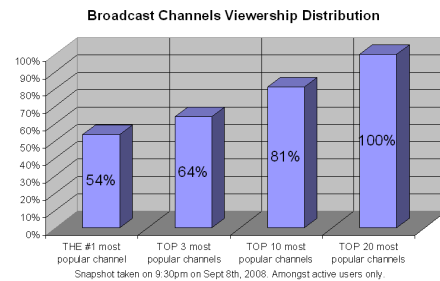
Since the GigaQAM IP's core processor can still support and control the same number of modems as an ordinary CMTS, the operator gets to leverage the cost of a CMTS core processor and upstream channels across multiple QAMs worth of bandwidth - without wasting valuable upstream channels.

GoBackTV's implementation

GoBackTV's Cable IPTV solution comprises the GigaQAM® IP (CMTS core and upstream channel receivers), GigaQAM (edgeQAM and DOCSIS encapsulator), and RetroVue® Application Server (resource manager).

The GigaQAM IP provides DOCSIS timing and control information for up to 192 QAM channels, and enables them to deliver any mix of DOCSIS and traditional MPEG2/MPEG4 video. DOCSIS synchronization information may be carried in every DOCSIS-enabled channel, allowing the use of existing low-cost DOCSIS 1.1 and 2.0 cable modems.

The RetroVue Application Server's resource manager controls the switched assignment of video to QAM resources, and coordinates with the GigaQAM IP to move cable modems to the appropriate frequencies.



	Capacity requirements	Content popularity	Operator benefits
w/o switched broadcast	17 QAM's for the 80+ channels	based on usage-poll's only	-
with switched broadcast	4 QAM's for the 80+ channels	factual statistics on viewership	less money to invest; better negotiating position with content owners

Table 1. The benefits of switched broadcast

Service Launch and Expansion

The FastTV Cable IPTV service was launched in the Danish town of Ishøj in June 2008; initially with 50 SD and 2 HD broadcast channels, in addition to the VoD content. The channel lineup has since been extended, and as of September 2008, customers can select from over 80 broadcast channels.

As a result of real-time usage statistics, further deployments can also take advantage of the benefits of switched broadcast. That is, A+ can allocate less stream capacity to the service than the number of programs actually being offered to the end users. They can also assess the popularity of each channel while relying on factual viewership data. (See Table 1.)

The A+ Group keeps working to expand the delivery of the Cable IP service to other regions, and also has plans to add additional broadcast content and also non-linear TV services to their existing portfolio.



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