

Case Study: Glashart Media (Now part of KPN)



EXECUTIVE SUMMARY

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Customer Name: Glashart Media (Now part of KPN)
Industry: IPTV
Location: The Netherlands
Total Subscribers: >140,000

BUSINESS CHALLENGES

- Continue growth of cloud-based services to IPTV set-top boxes with limited processing resources
- Minimize cost and time-to-market for transition to new cloud-based platform, and prevent stranding of previous investment in STB client development
- Ensure support for original and new platforms to provide seamless transition for customers

BUSINESS SOLUTION

- Installed servers for CloudTV™ H5 software platform from ActiveVideo in parallel with servers supporting original cloud-based platform
- Upgraded existing set-top box client to support both CloudTV H5 and original cloud-based platform, and transferred apps to HTML5
- STB client determines whether application is running on CloudTV H5 or original platform, and requests a session from the appropriate server
- Viewers engage with the interface via keyclicks on their existing remote control, just as they did on the previous platform

BUSINESS RESULTS

- Cloud-based platform has enabled creation of new services that have driven growth of subscriber base to approximately 140,000 homes
- Transition of all services from the original platform to the CloudTV™ H5 software platform began at start of 2013, and is expected to be complete by end of year
- Throughout the seamless transition to CloudTV H5, Glashart Media has continued to add approximately 1,200 homes per week

Background

Glashart Media, now part of KPN, is an IPTV provider that delivers linear and on-demand television services in partnership with service providers in Netherlands markets. The company offers 160 television and 70 radio channels to a customer base that is approaching 150,000 users.

Founded in 2006, Glashart Media began offering video services in 2007 to customers of Lijbrandt Telecom, a Dutch provider of residential and business telecommunications services. The following year, Glashart began delivering wholesale IPTV services on Reggefiber, a fiber network operator that today is in 175 communities.

In 2011, KPN announced its intention to acquire a variety of fiber service providers, with the goal of improving and differentiating its television and broadband offerings, as well as expanding its addressable market with a hybrid VDSL/FTTH strategy. KPN last year acquired Glashart Media, Lijbrandt Telecom and Reggefiber Wholesale, as well as several other Dutch fiber providers.

Glashart Media's service offerings include linear IPTV, ATV and DVB-C services, as well as an interactive on-demand library that includes time-shifted TV (uitzendinggemist), TV applications and video stores. Services are delivered on optical fiber and xDSL networks through the following service providers: Fype; Lijbrandt Telecom; Scarlet; and Tweak.

Business Challenges

From the start, Glashart Media has been a leader in recognizing how cloud-based technologies would be needed to provide advanced user experiences and greater diversity of content to its customer base. The company recognized that a traditional approach of developing device-based UIs would be hindered by several key factors, notably:

- The limited ability of its set-top box fleet to process rich, graphically-appealing applications;
- The cost and time-to-market of developing applications that would provide a consistent user experience on every STB; and
- The potential for instability and errors within device-based applications that would lead to STB crashes and impact service availability.

In 2006, Glashart began working with Avinity Systems, a Dutch pioneer in cloud-based interactivity, to deploy interactive user experiences to all 8,000 customers in its initial footprint. Using the cloud-based processing of Avinity's Rendercast platform, Glashart would be able to stream UIs to any STB. Glashart created a thin STB client and worked with Avinity to integrate the client into the Rendercast platform, allowing customers to navigate the UIs using buttons on their existing remote controls.

The Rendercast platform enabled Glashart to drive subscriber growth by offering a variety of differentiating applications, including: a navigation mosaic; news applications from nu.nl and De Telegraaf; a Buienradar weather radar application; Moviemax, a VOD rental store; and VOD portals for HBO as well as for NPO, RTL and SBS Media Group, the three major broadcasters in the Netherlands.

Following the acquisition of Avinity Systems by ActiveVideo in 2009, Glashart Media and ActiveVideo continued to scale deployment to a customer base that would exceed 100,000 homes by the beginning of 2013. At the same time, the two companies began planning for a new business challenge, the transition of services from the Rendercast platform to ActiveVideo's next-generation platform, CloudTV™ H5.

The CloudTV software platform moves the complexity and the load of the rich, graphical UI from the digital receiver to the network cloud. CloudTV H5, the latest version of the platform, enables user interfaces and other content created in HTML5 to be streamed from the cloud as MPEG-2 or H.264 video to the digital receiver, set-top box or other connected device. A thin software client in the device is used to send certain keyclicks from standard remote controls upstream to the cloud. CloudTV determines which actions are required and controls all systems that are involved in executing the desired action.

For Glashart Media, the transition to CloudTV required the fulfillment of several key considerations, including:

- Leveraging Glashart's previous investment in STB client development to support CloudTV;
- The need for CloudTV and Rendercast applications to be supported simultaneously on Glashart Media's existing STB footprint;
- The importance of the transition being absolutely seamless for customers.

“ It was important that all applications run on all of the deployed set-top box models; otherwise it would have caused a split in our installed base,” said Joost Pjotr Vermeer, software developer and platform architect for Glashart Media. ”

“With set-top box based solutions you inevitably have to leave users with legacy set-top boxes behind, and can’t have all applications available to them. Over time we would have to disappoint more and more of our customers without the latest type of set-top box. With a network-based system, that problem does not exist.”

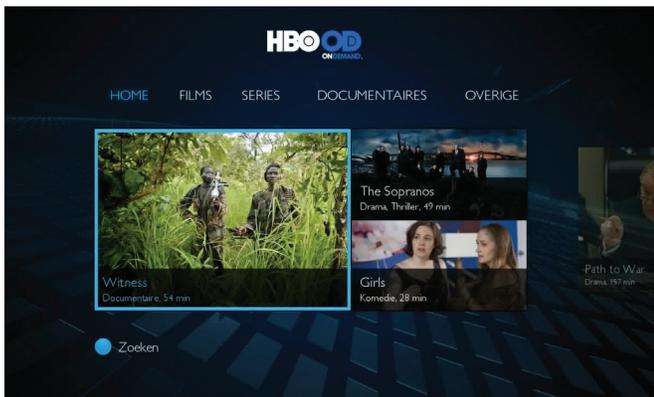
Solution

Because the processing of both Rendercast and CloudTV H5 takes place in the cloud, the transition from one platform to the other has required no new hardware at the end user premises. This has enabled Glashart Media to migrate to the new platform without the cost or time-to-market delays of truck rolls and end user installations that typically accompany solutions that stream only metadata from the cloud.

ActiveVideo and Glashart have installed CloudTV servers alongside the existing Rendercast servers within the Glashart network; the two platforms will coexist throughout the transition period. Glashart also has upgraded the original Rendercast client integrated within its STB middleware to support both the CloudTV and the Rendercast platforms.

“ The same set-top boxes that we started with on the Rendercast platform in 2006 are today running CloudTV user interfaces as well,” said Niels Jonkman, business manager for Glashart Media. “That is a huge improvement over having to replace the set-top boxes and rewrite all of the applications. ”

When a viewer selects an application, the client determines whether the application is running on CloudTV or Rendercast and requests a session from the CloudTV Stitcher or from the Rendercast Renderer. Content — including UIs, applications, movie trailers and previews — is delivered as a standard MPEG or H.264 video stream to the viewer’s STB. When a viewer selects an on-demand title, the CloudTV or Rendercast server transfers control to a VOD server. The VOD server retains control until playout is ended, or until the viewer again requests cloud-based functionality.



The beta version of the CloudTV platform began running in January, 2013. Currently, Glashart has ported four applications to CloudTV: portals for the HBO, RTL and Moviemax VOD services, and the Buienradar weather radar application. Glashart anticipates that the transition to CloudTV will be complete by the end of 2013.

“Creating native applications for our set-top boxes would, from economic and time-to-market perspectives, not be possible,” said Vermeer. “Instead of spending a year or more on a native application, we are developing CloudTV applications in two or three months.”

“CloudTV H5 has also changed the economics of our developer relationships,” Vermeer continued. “Developing for set-top boxes requires a specific set of skills for specific set-top boxes. With CloudTV, we can use HTML5 skill sets, so it is much easier and less expensive to find talented third-parties who can create UIs that would have required a team of high-level developers had it been a native application.”

Business Benefits

Since their launch in 2007, cloud-based services have been instrumental in the growth of Glashart Media’s content library and its customer footprint. Using cloud-based platforms, Glashart Media:

- Has developed multiple VOD portals, a navigation mosaic and other TV apps that have differentiated their service offering;
- Has built a subscriber base of approximately 140,000 homes; and
- Currently is attracting an average of 1,200 new customers per week.

Glashart Media currently is transitioning from an earlier cloud-based solution to an entirely new software platform, CloudTV H5 from ActiveVideo. Because the processing takes place entirely in the cloud, and not in the end device, Glashart has been able to migrate TV apps to the new platform without the cost and time-to-market of deploying new CE equipment and without the operation expenses of truck rolls. Glashart Media expects to complete the transition to CloudTV H5 by the end of 2013.