IBM

Anevia and IBM System x – delivering Video on Demand solutions for Telecom Service Providers

Highlights

- *Distributed architecture delivers optimum bandwidth utilization for a highly scalable solution*

- *Advanced head-end integration for dynamic partner support*

- *High availability services through system redundancy to deliver high quality of service (QoS)*

- *IBM System x family of servers provides a scalable, open standards based platform for next generation networks applications*

The Internet has fundamentally transformed everything. Individuals now have the ability to connect any device, any time, any place. The economics have been fundamentally transformed from scarcity to abundance. Consumers have more choices from more providers using different technologies than ever before.

The full potential of Video on Demand (VoD) can only be unleashed by strategically placing the intelligence into the network platform and that interacts with the customer as an integrated whole, rather than a collection of individual handset, personal computer, personal video recorder or set-top devices. The integration of IPTV into this telecommunications fabric has the potential to deliver a new generation of converged services and revenues that are substantially different from what cable or satellite television can deliver

today. Many of these services will rely on the network's knowledge of the individual, their behavior, location and availability.

As telecommunications service providers expand their next-generation network (NGN) and IP-based services portfolio, many are seeking to deploy new VoD services to expand their consumer offerings as part of their "quadruple" play. As service providers add these VoD services, they will require:

- *Service continuity to minimize service interruption by using advanced load balancing and high availability features*
- *Quality of service using a distributed architecture for optimum bandwidth provisioning and utilization*
- *Head-end integration with other partners and adaptation to the network provider's specific requirements*
- *Highly scalable solution design that can be easily enhanced and upgraded with new features as the subscriber base grows.*

The Anevia VoD solution has been specifically designed to meet these service provider needs.

"By essence, video streaming is the most demanding service in terms of performances. Anevia uses IBM System x servers for its Video On Demand (VOD) service because they are highly reliable, carrier grade and interoperable with IPTV leading players. By using the IBM System x servers, Anevia can leverage its software into a scalable and cost effective VOD solution, with rapid evolution to new video services for telecom service providers, such as network recorder (nPVR), Catch-up TV or Time-Shifting."

*— Tristan Leteurtre
President & Co-founder
Anevia*

Anevia's expertise in video over IP has resulted in the development of the Toucan VOD/nPVR solution. The Anevia Toucan software solution combined with the IBM System x platform delivers a cost-effective VoD solution with carrier-grade performances.

The Anevia solution consists of:

- *Anevia 'Toucan' software which is at the heart of this VoD solution. This software utilizes the IBM System x platform and serves as the cornerstone of the solution by storing and streaming video over IP from the service provider's extensive video catalog.*
- *Anevia 'Apalis' servers functions as the solution's service manager and helps provide additional redundancy in the event of a system failure. This also enables advanced load balancing by dynamically distributing video requests to the appropriate server depending on various attributes including geography, bandwidth, catalog, system load, etc. In addition, this server offers real-time monitoring with centralized administration.*

With the Anevia solution, telecom service providers can deliver new on-demand features, such as:

- *VoD (Video on Demand) allows a subscriber to choose a video at the time and place of their choosing from the service provider's vast video catalog.*
- *nPVR (network Personal Video Recorder) allows a subscriber to "record and play" an earlier television broadcast video without requiring additional hardware at the subscriber's premises (e.g. personal hard disk).*
- *Start Over capability allows the subscriber to watch the beginning of a television broadcast program they may have missed*
- *Pause TV provides the subscriber the ability to completely control their viewing experience by pausing, instant replay, fast rewind and fast forward,*
- *Time Shifted TV enables broadcasters to adapt TV programs to local timezone : TV+1 hour, TV+2hour.*
- *Catch Up TV allows the subscriber to play back an earlier television broadcast the following days.*

As these and other VoD features are added, they require additional storage to store the on-demand content, subscriber content and record processed. To effectively manage theses increased storage requirements, the IBM Storage Systems can provide a comprehensive data management solution to augment the Anevia VoD solution.

With Anevia's innovative solution approach, all of the required Linux operating system and video software is embedded on a simple flash disk or a USB key — instantly turning an IBM System x server into a full-featured VoD and network PVR server. Using this innovative "plug & stream" approach can significantly help reduce integration and maintenance costs.

IBM System x family — for every customer need

The IBM System x is a family of Intel® processor-based servers, designed to deliver exceptional availability, simplified manageability, outstanding performance and revolutionary scalability for next-generation network control, services and transport plane applications. The IBM System x family of servers provides an excellent, low-cost, rack-mounted server platform solution specifically designed for the needs of telecom service providers seeking high performance, carrier grade reliability for NGN services that require 24x7 availability.

Anevia Video on Demand solution
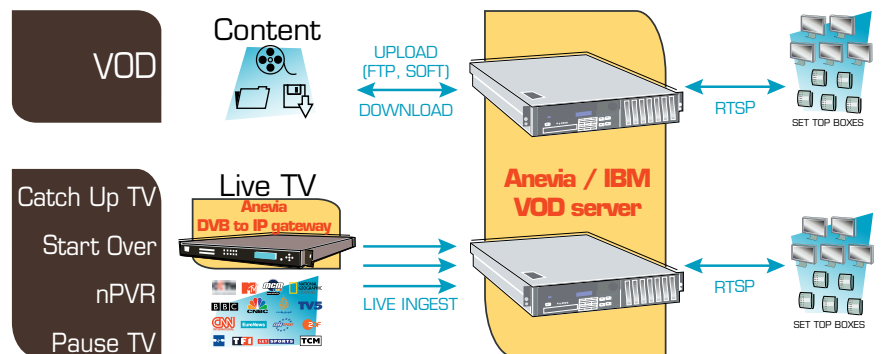
Source: Anevia

The IBM System x3650 is designed as the ideal solution for data center deployments. The IBM System x3650T is an ideal, high performance computing platform for telecom service providers and is specifically designed for telecom central office deployments.

The rigorous Network Equipment Building System (NEBS) Level 3 and European Telecommunications Standard Institute (ETSI) outline requirements typical of telecom central office environments in the areas of electromagnetic compatibility, thermal robustness, fire resistance, earthquake and office vibration resistance, transportation and handling durability, acoustics and illumination, and airborne contaminant resistance. The IBM System x3650T meets the NEBS Level 3 / ETSI requirements[1] and delivers feature rich telecommunications functionality to help service providers reduce cost, complexity and time-to-market, while helping improve customer loyalty and retention.

Anevia and IBM: a winning combination

The combination of Anevia and IBM System x server family delivers the performance, reliability and affordability demanded by mission critical telecommunications applications. The IBM System x is the ideal platform for the deployment of these services providing a single platform to help reduce operating costs and complexity.

For more information

Learn how IBM Systems can help your company achieve more revenue and reduce your costs, while helping you keep your profitable customers.

Have questions? Contact the IBM Telecommunications team today on how we can help you take advantage of our extensive industry expertise. Please visit us on the web at:

ibm.com/telecom/systems

For more information about Anevia, visit:

anevia.com